

Oracle® E-Business Suite

Upgrade Guide

Release 11*i* to 12.2

Part No. E87011-22

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Oracle E-Business Suite Upgrade Guide, Release 11i to 12.2

Part No. E87011-22

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Oracle E-Business Suite Upgrade Guide, Release 11i to 12.2

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Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document. Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

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Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

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Preface

Intended Audience

Welcome to Release 11*i* to 12.2 of the *Oracle E-Business Suite Upgrade Guide*.

This book provides instructions for upgrading existing Oracle E-Business Suite Release 11*i* systems to Release 12.2. As part of this upgrade, you will run Rapid Install to lay down the Release 12.2 file system. This delivers the unified driver that you use to upgrade the technology stack and products to Release 12.2.

This book is intended as a guide for the database administrator and the application specialists who are responsible for upgrading to Release 12.2 of Oracle E-Business Suite.

See Related Information Sources on page xvi for more Oracle E-Business Suite product information.

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Structure

- 1 Overview of the Upgrade**
- 2 Understanding Upgrade Impact and Changes**
- 3 Planning and Performing Pre-Upgrade Tasks**
- 4 Performing the Upgrade**
- 5 Performing Post-Upgrade Tasks**

A Upgrade By Request

This appendix describes Upgrade by Request options - ways to upgrade historical data omitted from the initial upgrade process (critical downtime window). For example, instead of upgrading all your financial accounting data during downtime, you might include only the last fiscal year. If you want to upgrade other fiscal years - months or even years after - you can do so, at any time after the upgrade.

B Managing Concurrent Processes

C Functional Verification Tasks

Description

D Pre-Upgrade Patch List

This appendix lists the patches that are required as pre-upgrade steps for Release 12.2.

E Product Documentation List

Description

Related Information Sources

This book was current as of the time it was initially published. It is included in the Oracle E-Business Suite Document Library, which is supplied in the Release 12.2 software bundle. Later versions of this and other documents that have changed sufficiently between releases to warrant re-publishing are made available at the following URL:

<http://www.oracle.com/technology/documentation/applications.html>

A full list of documentation resources is also published on *My Oracle Support*. See *Oracle E-Business Suite Documentation Resources, Release 12.2*. You should be familiar with a basic subset of references before you upgrade. Related information sources include:

Oracle E-Business Suite User's Guide

This guide explains how to navigate, enter and query data, and run concurrent requests using the user interface (UI) of Oracle E-Business Suite. It includes information on setting preferences and customizing the UI. In addition, this guide describes accessibility features and keyboard shortcuts for Oracle E-Business Suite.

| If you are looking for information about... | Refer to these documents... |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System setup and procedures | <p><i>Oracle E-Business Suite Concepts</i></p> <p><i>Oracle E-Business Suite Setup Guide</i></p> <p><i>Oracle E-Business Suite Maintenance Guide</i></p> <p><i>Oracle E-Business Suite Security Guide</i></p> <p><i>Oracle Workflow Administrator's Guide</i></p> <p><i>Oracle XML Gateway User's Guide</i></p> |
| Installation and upgrade | <p><i>Oracle E-Business Suite Installation Guide: Using Rapid Install</i></p> <p><i>Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2</i></p> <p><i>Oracle E-Business Suite Installation and Upgrade Notes*</i></p> <p><i>Oracle E-Business Suite Release Notes*</i></p> <p><i>Oracle E-Business Suite NLS Release Notes*</i></p> <p><i>Oracle Applications Release 11.5.10.2 Maintenance Pack Installation Instructions (Doc ID: 316365.1)</i></p> <p><i>Patch Requirements for Sustaining Support for Oracle E-Business Suite Release 11.5.10 (Doc ID: 883202.1)</i></p> |
| Product-specific features | <p><i>Electronic Technical Reference Manual (eTRM)*</i></p> <p>Release Content Documents (RCDs)*</p> <p>Product-specific implementation and upgrade guides</p> |

| If you are looking for information about... | Refer to these documents... |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RDBMS | <p data-bbox="727 331 1378 401"><i>Database Preparation Guidelines for an Oracle E-Business Suite Release 12.2 Upgrade</i> (Doc ID: 1349240.1)</p> <p data-bbox="727 422 1378 453"><i>Oracle Database 11g Release 2 Documentation Set</i></p> <p data-bbox="727 474 1378 543"><i>Interoperability Notes: Oracle E-Business Suite Release 12.2 with Oracle AI Database 26ai</i> (Doc ID: 2962871.1)</p> <p data-bbox="727 564 1378 634"><i>Interoperability Notes: Oracle E-Business Suite Release 12.2 with Oracle Database 19c</i> (Doc ID: 2552181.1)</p> <p data-bbox="727 655 1378 724"><i>Interoperability Notes Oracle E-Business Suite Release 12.2 with Oracle Database 12c Release 1 (12.1.0)</i> (Doc ID: 1926201.1)</p> <p data-bbox="727 745 1378 814"><i>Interoperability Notes Oracle E-Business Suite Release 12.2 with Oracle Database 11g Release 2 (11.2.0)</i> (Doc ID: 1623879.1)</p> |

* Available only on *My Oracle Support*.

Patch readme files may also contain information about additional recommended documentation.

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.

Overview of the Upgrade

This chapter covers the following topics:

- Upgrade and Requirements
- Understanding the Upgrade Flow and Process
- Scheduling Time for an Upgrade
- Testing the Upgrade

Upgrade and Requirements

This guide provides a high-level view of an upgrade of Oracle E-Business Suite technology stack and products from Release 11*i* to Release 12.2.

This and other Release 12.2 documents are updated as required. Ensure that you have the most current version of all guides and documents before you begin your system upgrade.

Additional Resources: Refer to Oracle E-Business Suite Documentation Web Library [http://docs.oracle.com/cd/E26401_01/index.htm] for the latest versions of relevant guides.

Supported Upgrade Paths

This release includes a repackaged Rapid Install that makes it possible to upgrade existing 11.5.10 CU2 systems (minimum baseline patches for Sustained Support) directly to Release 12.2. Refer to *Patch Requirements for Sustaining Support of Oracle E-Business Suite* (Doc ID: 883202.1) to review support requirements.

Oracle E-Business Suite Upgrade Paths

The following table lists the supported upgrade paths for Oracle Applications 11*i*, including releases that require an interim upgrade step. See Related Documents, in the

Preface for links to the documentation mentioned in this table, as well as in other sections of this guide. Upgrades from 11.0 or 11i to Release 12.2 must be from 11.5.10.2. If you are not at 11.5.10.2 code level, then you must first patch or upgrade to 11.5.10.2, and then to 12.2. See the following table for details.

| Release Level | Upgrade Path | Documentation References |
|-----------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11.0 | 11.5.10 CU2 > Minimum Patch Requirements for Sustaining Support for 11.5.10 > Release 12.2 | <p><i>Oracle Applications Release 11.5.10.2 Maintenance Pack Installation Instructions</i> (Doc ID: 316365.1)</p> <p><i>Patch Requirements for Sustaining Support for Oracle E-Business Suite Release 11.5.10</i> (Doc ID: 883202.1)</p> <p><i>Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2</i></p> |
| 11.5.1 - 11.5.9 | 11.5.10 CU2 -> Minimum Patch Requirements for Sustaining Support for 11.5.10 -> Release 12.2 | <p><i>Oracle Applications Release 11.5.10.2 Maintenance Pack Installation Instructions</i> (Doc ID: 316365.1)</p> <p><i>Patch Requirements for Sustaining Support for Oracle E-Business Suite Release 11.5.10</i> (Doc ID: 883202.1)</p> <p><i>Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2</i></p> |
| 11.5.10 CU2 | Minimum Patch Requirements for Sustaining Support for 11.5.10 -> Release 12.2 | <p><i>Patch Requirements for Sustaining Support for Oracle E-Business Suite Release 11.5.10</i> (Doc ID: 883202.1)</p> <p><i>Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2</i></p> |

Database Upgrade Requirements

Upgrading to Oracle E-Business Suite Release 12.2 requires your database to be at the minimum version 11.2.0.4. Before you begin your upgrade to Oracle E-Business Suite Release 12.2, you must upgrade your database to version 11.2.0.4 or higher.

Additional Information: For additional information, see Chapter 4, *Performing the Upgrade*, Preparing the Database for the Upgrade, page 4-2.

Note: Database de-support schedules have important operational and planning implications for Oracle E-Business Suite environments. Oracle recommends that you review the latest database support policies and de-support schedules. See My Oracle Support knowledge Doc ID 742060.1, *Release Schedule of Current Database Patch Sets*.

Understanding the Upgrade Flow and Process

The upgrade process has been enhanced and streamlined in Release 12.2. New features in Rapid Install and AutoPatch increase capabilities.

Rapid Install provides the latest certified versions of Oracle E-Business Suite products, including technology stack components. In an upgrade, Rapid Install creates the new file system for the application tier components and the new file system for the database. After the upgrade, run Rapid Install again to configure the application tier.

An upgrade also includes various manual steps, including some that direct you to run scripts or apply patches. Use AutoPatch (adpatch) to apply Oracle E-Business Suite patches, including the unified driver, which upgrades the Oracle E-Business Suite database objects to Release 12.2.0. After upgrading to 12.2.0 and Online Enablement is complete, adop is used to apply all Oracle E-Business Suite patches.

This guide contains information regarding technical and functional impact and changes due to the upgrade. It is very important that your DBA and your functional specialists work together to review this information carefully as a part of upgrade planning. Doing so will help to prevent unexpected delays during and after the upgrade.

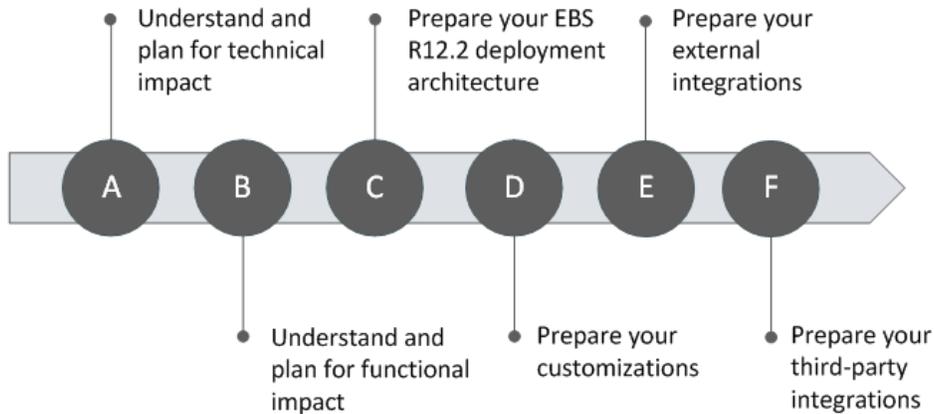
Overview of Planning and Preparing for the Upgrade

There are a number of tasks that must be performed prior to starting the upgrade. Use the following chapters in this guide to help you plan and prepare for upgrade:

- Understanding Upgrade Impact and Changes
- Planning and Performing Pre-Upgrade Tasks

The following diagram illustrates the high-level overview of the tasks described in this guide:

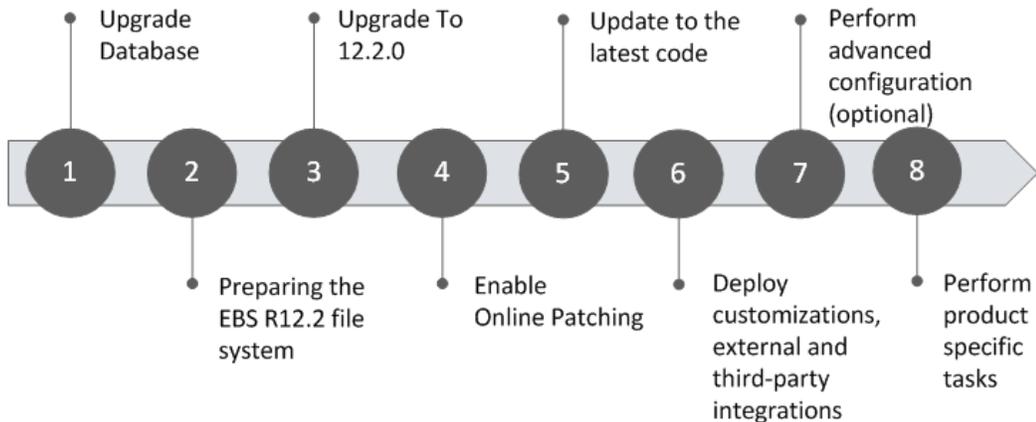
Overview: Preparing for the Oracle E-Business Suite Release 12.2 Upgrade



Overview of the Oracle E-Business Suite Release 12.2 Upgrade Process

For detailed upgrade steps, see the chapter *Performing the Upgrade*, page 4-xv in this guide. Upgrade steps can be categorized into the following stages:

Overview: Upgrading to Oracle E-Business Suite Release 12.2



The following is a summary of the steps for each category:

1. Prepare the database.
 - Upgrade the database to the minimum version or the latest certified version.
 - Migrate to a new platform (optional).

- Apply the latest database patches.
2. Lay down the Oracle E-Business Suite Release 12.2 file system.
 - Download and stage the Release 12.2 media pack.
 - Use Rapid Install to lay down the file system and technology stack.
 - Apply the latest application tier technology stack patches.
 3. Upgrade to Release 12.2.0.
 - Apply the latest AD upgrade patch and Oracle E-Business Suite Consolidated Upgrade Patch (CUP).
 - Apply the latest Oracle E-Business Suite pre-install patches.
 - Apply the 12.2 merged upgrade driver.
 - Run Rapid Install in configure mode.
 4. Enable online patching.
 - Apply the latest Online Patching Readiness Report Patch.
 - Apply required updates to custom code according to the readiness reports.
 - Apply the enablement patch.
 5. Upgrade to the latest code.
 - Apply the latest AD-TXK RUP.
 - Apply the latest Oracle E-Business Suite Release 12.2 Release Update Pack (RUP).

Note: You must apply the 12.2.3 or later RUP to your existing Release 12.2 system for production use.

RUPs are released periodically. Each one is cumulative and delivers error corrections and system updates, not only for the most current release update pack, but also for all the RUPs that precede it. Oracle highly recommends that when planning your upgrade you plan to upgrade to the latest RUP available.

You can stay current on the latest release information, as well as new RUP announcements and other updates that may affect

your upgrade by reviewing the latest version of Oracle Applications Release Notes Release 12.2.0.

- Complete post-upgrade steps.
 - Apply the latest security patches.
 - Apply all recommended patches.
 - Apply NLS patches (conditional).
6. Deploy customizations and external and third-party integrations.
 7. Perform advanced configurations.
 - Scale your system as needed. For example, add managed servers, application tier nodes, or Oracle RAC nodes.

Supported in EURC-DT: Yes

Note: The upgrade process is performed with one application tier and one database tier. If you are using an Oracle RAC environment, then you should run the Release 12.2 upgrade on a single Oracle RAC node. The reason for upgrading with a single Oracle RAC node is that most of the elapsed time in the upgrade will be taken by jobs running DML statements (INSERT, UPDATE, DELETE). These jobs use multiple workers and parallel servers, which typically attempt to access the same objects and blocks concurrently. The consequent additional communication between cluster nodes (and associated cluster waits) significantly outweigh any gains from using the additional CPUs to increase throughput. Scaling out is a post-upgrade step.

- Configure security.
 - Configure your DMZ.
 - Set up disaster recovery.
 - Set up your reporting environment.
8. Perform product specific tasks.

Some products include tasks that must be performed after the upgrade is complete.

The required steps are covered in detail in the following chapters of this upgrade guide:

- Performing the Upgrade
- Performing Post Upgrade Tasks

Scheduling Time for an Upgrade

Before scheduling a time for the upgrade, you should perform several iterations of the upgrade in a non-production environment. The goal of multiple iterations is to confirm the required steps and reduce the time required to perform the upgrade.

In an upgrade, *critical system downtime* refers to the period of time when users cannot log on to the system or use Oracle E-Business Suite. There are several actions you can take to reduce this downtime period.

Suggested Reading: Some tasks and steps in subsequent chapters may be performed in parallel. You can streamline your upgrade, improve performance, and reduce downtime by following certain best practices. For additional information, see the following documents:

- *Best Practices for Minimizing Oracle E-Business Suite Release 12.2.n Upgrade Downtime* (Doc ID: 1581549.1)
- *Express Diagnosis of Oracle E-Business Suite Release 12.2.n Upgrade Performance Issues* (Doc ID: 1583752.1)

After you have optimized your upgrade plan and finalized testing, you will have an estimate for the amount of time required to perform the upgrade in production. You can then schedule the time required for the upgrade to your production environment.

Testing the Upgrade

Oracle recommends that you perform several upgrade tests on a copy (clone) of your existing system with similar hardware. This process enables you to address any issues you encounter and provides an estimate of your actual upgrade times.

When upgrading Oracle E-Business Suite, it is essential to ensure that the performance of key operations continues to meet requirements after the upgrade. Oracle recommends that you upgrade Oracle E-Business Suite in a test environment, and then conduct a benchmark test with the configuration, product mix, and user load that simulates current and expected workloads. Controlled conditions help verify performance prior to the upgrade of your production environment.

Additional Information: For additional information about performance

testing in your post-upgrade test environment, see *Oracle E-Business Suite Performance Best Practices* (Doc ID: 2528000.1).

Understanding Upgrade Impact and Changes

This chapter covers the following topics:

- Understanding Technical Impact and Changes
- Understanding Business Impact and Functional Changes

Understanding Technical Impact and Changes

The upgrade to Oracle E-Business Suite Release 12.2 introduces a number of technical changes to the architecture and technology stack. The method by which Oracle E-Business Suite is patched has also changed with Release 12.2. This section will provide an overview of the key technical impact and changes introduced with Oracle E-Business Suite Release 12.2.

Release 12.2 Architecture

The upgrade process introduces changes to the system architecture and the way you administer and patch the system after the upgrade. This section provides an overview of key technical changes introduced with the upgrade.

Additional Resources: *Oracle E-Business Suite Concepts* contains a complete discussion of the architecture in this release, including information about the Oracle E-Business Suite multi-tiered architecture, enhancements, language support, file system structure, and the basic data model.

Release 12.2 Dual File Systems

Two complete file systems are always present in an Oracle E-Business Suite Release 12.2 environment. It is important to distinguish between the file system (fs1 or fs2) itself

and its current role, which alternates between 'patch' and 'run' with every patching cycle.

The 'run' file system is the current system in use by the running application, while the 'patch' file system is the other system being patched or awaiting the start of the next online patching cycle.

The dual file system approach caters to application code, but applications also use the file system to read and write business data. In Release 12.2, application data files are stored in a third area, the non-editioned file system (fs_ne), which is used to store data that is needed across all file systems. Non-editioned files are not copied or moved during patching. Their location remains constant across online patching cycles.

Oracle E-Business Suite Architecture: The Application Tier

The *application tier* has a dual role: hosting the various servers and service groups that process the business logic, and managing communication between the desktop tier and the database tier. The architecture of this tier (unlike that of the database and desktop tiers) has changed significantly in Oracle E-Business Suite Release 12.2.

Three servers or service groups comprise the basic application tier for Oracle E-Business Suite:

- Web services
- Forms services
- Concurrent Processing server

In Release 12.2, Web and Forms services are provided by *Oracle Application Server*. They are no longer servers in the sense of being a single process.

Web Services

The Web services component of Oracle Application Server processes requests received over the network from the desktop clients, and includes the following major components:

- Web Listener (Oracle HTTP Server powered by Apache)
- Java Servlet Engine (Oracle WebLogic Server, WLS)

The Web listener component of the Oracle HTTP server accepts incoming HTTP requests (for particular URLs) from client browsers, and routes the requests to WLS. When possible, the Web server services the requests itself. For example, returning the HTML to construct a simple Web page. If the page referenced by the URL requires advanced processing, then the listener passes the request on to the servlet engine which contacts the database server as needed.

An important change in Release 12.2 is the employment of the Oracle WebLogic Server for many system management and configuration tasks. Configuration using the Oracle

WLS Console in Release 12.2 supplements, but does not replace the traditional use of the AutoConfig tool. Together, these tools provide comprehensive management capabilities for a Release 12.2 system. It is important to understand the role of each and how they complement one another.

Additional Resources: See the *Oracle E-Business Suite Concepts Guide Release 12.2* and the *Oracle E-Business Suite Release 12.2 Setup Guide* for additional information regarding WebLogic Server and AutoConfig.

Application Tier ORACLE_HOMEs in Release 12.2

Oracle E-Business Suite Release 12.2 uses two application tier ORACLE_HOMEs. The first is the OracleAS ORACLE_HOME, and the second is the Oracle Fusion Middleware (FMW) ORACLE_HOME.. This combination enables Oracle E-Business Suite to take advantage of the latest Oracle technologies.

Notable features of this architecture include:

- The Oracle E-Business Suite modules are deployed out of the OracleAS 10.1.2 ORACLE_HOME, and the `frmweb` executable is also invoked out of this ORACLE_HOME.
- All major services are started out of the FMW ORACLE_HOME.

Key changes from earlier releases include:

- The FMW ORACLE_HOME (sometimes referred to as the Web or Java ORACLE_HOME) replaces the OracleAS 10.1.3.-based ORACLE_HOME used in Oracle E-Business Suite 12.x releases prior to Release 12.2.

Technology Stack Components

On the database tier, the technology stack includes:

- Oracle Database 12c Release 1 (12.1.0.2)

On the application tier, the technology stack includes:

- Oracle Fusion Middleware 11g PS7 (11.1.1.9.0)
 - Oracle WebLogic Server 11g PS5
 - Oracle WebLogic JSP compiler
 - Oracle FMW 11g Java Required Files (JRF) libraries (except the use of ADF and MDS 11g)
- Oracle WebLogic Portlet 11g PS3 Container

- JDK 7.0
- Apache version 2.2
- Oracle 10g (10.1.2) Applications Server for Oracle E-Business Suite Forms based Applications

Online Patching

Oracle E-Business Suite Release 12.2 introduces Online Patching, a new feature that greatly reduces the downtime that was needed in previous releases for application of Release Update Packs (RUPs), Critical Patch Updates (CPUs), and other patches and bug fixes of various kinds.

Key Features

- In Release 12.2, *all* patching operations are carried out while the applications are in use and users are online.
- Patching is performed using the new *adop* (AD Online Patching) utility.
- A short period of downtime is required, but this amounts to little more than a restart of the services: the time the applications are unavailable is measured in minutes rather than hours, and this can be specified to be at the most convenient time.

Note: The classic patching model is designed to minimize downtime by running as fast as possible, using whatever resources are needed. In contrast, the online patching model is designed to minimize downtime by allowing patching operations to be performed while users remain on the system.

Principles

In essence, online patching is performed as follows:

1. A copy is made of the running system.
2. Patches are applied to the copy while users continue to access the running system.
3. Transparently to users, the copy becomes the new running system.
4. What was the original running system (now obsolete) is deleted.

This introduces the concept of a *patching cycle* that consists of several phases, in contrast to the model used in previous releases. These phases are denoted prepare, apply, finalize, cutover, and cleanup.

Note: For more information about online patching principles, see *Oracle E-Business Suite Concepts*.

Implementation

Any mechanism that uses a copy of the running application must take into account that an Oracle E-Business Suite application comprises both code and data, stored in the file system and database.

The file system is the easier of the two to cater for, simply requiring an additional copy to be created and maintained. The resulting *dual file system* consists of one file system that is used by the running system and another one that is either currently being patched, or (as will be the case for most of the time) standing ready to be patched. The two file systems swap roles at the end of each *patching cycle*, with the transition between them being managed by AutoConfig.

Creating a copy of the database portion of the running applications system is more complex. It has been accomplished by taking advantage of the Oracle Database *Edition-Based Redefinition* (EBR) feature. This allows an application to efficiently store multiple copies (*editions*) of its application definition in the same database, and thereby enables online upgrade of the database tier.

The database patch edition only comes into existence during a patching cycle, and becomes the new run edition at end of the cycle. The former database run edition (the old edition) and the obsolete objects it contains are discarded at the end of a patching cycle, and the space reclaimed during the cleanup phase.

Tools

Patching is performed by running the new *adop* (AD online patching) tool. This tool invokes the *adpatch* utility that was run directly in previous releases of Oracle E-Business Suite.

Warning: Running *adpatch* directly is **not supported** in an online patching environment, except under explicit instruction from Oracle.

The *adop* tool orchestrates the entire patching cycle, and can be used to run individual phases as required.

Note: For full details of *adop* features and options, refer to the Patching section of *Oracle E-Business Suite Maintenance Guide*.

There are also implications for general (non-patching) maintenance activities.

Additional Resources: For information on choosing the appropriate file system to run AD tools from, refer to: *Choosing the Correct File System For Maintenance Tasks* in Chapter 7 of the *Oracle E-Business Suite*

Maintenance Guide, Release 12.2.

Additional Information: For additional information, refer to: *Online Patching, Oracle E-Business Suite Concepts, Release 12.2.*

Customizations

Customized environments require additional attention during an upgrade. The instructions in this guide assume that you have followed the standards for customizing Oracle E-Business Suite.

Suggested Reading: See the *Oracle E-Business Suite Release 12.2 Developer's Guide* and the *Oracle E-Business Suite Release 12.2 User Interface Standards* guide for additional information regarding customization standards.

Oracle E-Business Suite Release 12.2 introduces a new set of compliance, code, and patching standards that customizations must adhere to. The Online Patching Readiness Reports provide a set of utilities that report any compliance issues.

Suggested Reading: Refer to *Using the Online Patching Readiness Report in Oracle E-Business Suite Release 12.2* (Doc ID: 1531121.1) to run the Online Patching Readiness Reports.

Tip: Detailed information on preparing your customizations is covered in Chapter 3, *Planning and Performing Pre-Upgrade Tasks, Preparing Customizations*, page 3-28.

There are two levels of compliance that can be targeted:

- **Minimal Compliance (Minimal)** - These checks represent the minimum requirement for correct operation of E-Business Suite Release 12.2. Do not attempt to operate the system if there are P1 minimal compliance violations. Custom code should pass the minimal compliance checks before being used in a Release 12.2 system.
- **Full Compliance (Full)** - These checks indicate whether an object can be patched using Online Patching. Objects which do not meet full compliance may have limitations in how they can be patched, or may need to be patched using downtime patching. Full compliance also requires that all minimal compliance checks are passed. Custom code that will only be patched using downtime patching does not need to meet the full compliance level.

To preserve customizations and minimize the impact during the upgrade:

- Follow *Oracle E-Business Suite Customizations Standards* for customizing your system and upgrading your customizations.
- Maintain complete documentation for customizations
- Back up customizations before the upgrade

Caution: Customizing any concurrent program definitions, menus, value sets, or other seeded data provided by Oracle E-Business Suite is not supported. The upgrade process overwrites these customizations.

Understanding Business Impact and Functional Changes

An Applications upgrade alters both the technical and functional aspects of your Oracle E-Business Suite system. In addition to the technology stack and file system, an upgrade also initiates changes that may affect the functionality and/or look and feel of existing products. These functionality (business-related) changes may have an impact on the way that these products are used as you conduct your daily business.

Action: This section describes a few ways that the upgrade changes your existing products. If you have not done so, Oracle recommends that you review the new features and products delivered in this release. Refer to the product-specific Release Content Documents (RCDs) and TOI, on *My Oracle Support* for new features and product details.

The upgrade also introduces a common data model that improves the quality of your data, simplifies its management, and makes it easier for shared service centers to work across worldwide operations and provide information about your business to decision makers.

Coupled with the common data model are enhanced integrations between Oracle Financials and Oracle Procurement products and other applications. Integrated applications enable pre-defined best practices and empower you to standardize your business processes across organizations and geographic regions. Benefits of standardization include common process methodologies and economies of scale.

Functional topics in this guide that pertain to a Release 12.2 upgrade include:

- Reasons for the change and areas that benefit from new functionality
- Functionality that is temporarily disabled or has been made obsolete
- Changes to user interfaces, terminology or concepts, and menu options
- Steps you can take to verify that all transactional data is upgraded as expected

- Suggestions for reducing downtime

Upgrade By Request

For some Oracle E-Business Suite products, upgrade planning includes choosing the most active set of data for upgrade processing. Then, you can upgrade historical data that was omitted from the upgrade at a later date, or when it is needed. For example, you might include only the last fiscal year in the upgrade to Release 12.2, and then upgrade the remaining data outside the Release 12.2 downtime window.

Additional Information: See Appendix A, *Upgrade by Request*, page A-1 in this guide for additional information.

Obsolete Products in Release 12.2

This section lists obsolete products in Release 12.2.

Product Name

*** Oracle Balanced Scorecard

* Oracle CAD-View 3D

* Oracle Contracts Intelligence

*** Daily Business Intelligence

Demand-Side Product Data Synchronization for GDSN

Document Management and Collaboration

*** Embedded Data Warehouse

Global Accounting Engine

Information Technology Audit

Supply-Side Product Data Synchronization for GDSN

Oracle Customer Intelligence

* Oracle Demand Planning (obsolete in release 12.2.5)

Product Name

* Oracle E-Business Intelligence

* Oracle Enterprise Planning and Budgeting

* Oracle Enterprise Performance Foundation

Oracle Financial Aid

* Oracle Financial Consolidation Hub

* Oracle Financials and Sales Analyzers

* Oracle Financials Intelligence

Oracle Funds Pricing

* Oracle Grants Proposal

* Oracle HR Intelligence

* Oracle Install Base Intelligence

* Oracle Interaction Center Intelligence

* Oracle Internal Controls Manager

* Oracle Manufacturing Scheduling (obsolete in release 12.2.5)

* Oracle Marketing Intelligence

* Oracle Operational Intelligence

Oracle Personal Portfolio

* Oracle Process Manufacturing Intelligence

* Oracle Procurement Intelligence

* Oracle Product Intelligence

Product Name

- * Oracle Product Lifecycle Management
- * Oracle Profitability Manager
- * Oracle Projects Intelligence
- * Oracle Public Sector Budgeting
- * Oracle Sales Intelligence
- * Oracle Service Intelligence
- ** Oracle Student Recruiting
- ** Oracle Student Systems
- * Oracle Supply Chain and Order Management Intelligence
- * Oracle Transportation Execution
- * Oracle Transportation Planning

Web Analytics Daily Business Intelligence for iStore

* A migration plan exists for customers who have purchased these products in earlier releases. Contact your Sales Representative or Account Manager for more information.

** Customers continuing to use Oracle Student Recruiting and Oracle Student Systems should not upgrade to this release.

Support will be provided to existing customers on earlier releases, in accordance with the Oracle Lifetime Support Policy.

*** Oracle's Daily Business Intelligence (DBI), Balanced Scorecard (BSC), and Embedded Data Warehouse (EDW) are not offered with Oracle E-Business Suite Release 12.2. Support will be provided to existing customers on Oracle E-Business Suite Release 12.1.x, 12.0.x and older versions of DBI, BSC, and EDW according to Oracle's published lifetime support policies. For additional information, refer to My Oracle Support Knowledge <Document 1351505.1>*DBI: Announcing the Desupport of Daily Business Intelligence (DBI), Balanced Scorecard (BSC), and Embedded Data Warehouse (EDW)*.

Product-Specific Considerations

The information in this section applies to specific applications products in this release.

Action: Review the Release Content Documents for information regarding other products that are active in your system. Refer to the Product Documentation List, page E-1 appendix in this guide for product-specific documentation.

Cross-Product Functionality

Changes to the products described in this section affect many Oracle Applications products. Before you begin the upgrade, your application specialists should have made plans to accommodate the relevant changes.

Legal Entity Configurator

The Oracle Legal Entity Configurator is a new module that was introduced in Release 12. It is populated with data that is migrated from a number of Release 11i sources. Its purpose is to provide a consistent definition of the legal structure of your enterprise and relate it to other structures within Oracle E-Business Suite.

With the Oracle Legal Entity Configurator, you can manage your legal corporate structure and track data from the legal perspective. This enables detailed reporting at the legal entity, establishment, and registration level.

The concept of Legal Entity has an impact on all customers who use the Human Resources model to define legal entities. Legal entities exist as Trading Community Architecture parties with legal information stored in the Legal Entity (XLE) data model. Subsidiaries of the legal entities are defined as establishments, which are also defined as parties with legal information stored in the Legal Entity data model.

Additional Information: See *Oracle Financials Concepts* for more information. See also *Oracle Financials Implementation Guide*.

GRE/Legal Entity Migration to Legal Entities in Trading Community Architecture

HRMS organizations with a classification of GRE/Legal Entity and with accounting information (for example, Set of Books) assigned are migrated to the new Legal Entity in this release. For each Legal Entity migrated, an Establishment of type (Main Establishment) is created using the same data.

Upgrade Assumptions for Operating Units and Inventory Organizations

HRMS organizations with an operating unit or inventory organization classification are migrated to Establishments in the new Legal Entity model. No other classification of organization other than operating unit or inventory organization classification is migrated as establishment.

Country-specific Information

For some countries (such as Argentina, Greece, Korea, Chile, Italy, Colombia, and Taiwan), VAT Registration Number was entered in Release 11i through the Human Resources Define Organization form, or a registration number was entered in country specific setup fields. These values are migrated to the Legal Entity Identifying Jurisdiction Registration Number. If no valid registration numbers exist, a dummy value of Sys + <Sequence number> is upgraded as the registration number and associated with the seeded Identifying Jurisdiction.

Legal Associations

To enable tax calculation based on existing parameters, the association between a GRE/Legal Entity and an operating unit, inventory organization, ship to location, bill to location are migrated. After the upgrade, you must maintain these associations through the Legal Entity Configurator.

Multiple Organizations (Multi-Org)

In this release, Multiple Organizations Access Control (MOAC) has made significant enhancements to the Multiple Organizations architecture that was used in Release 11i. If your company has implemented a Shared Services operating model, Multi-Org Access Control allows you to process business transactions more efficiently. You can access, process, and report on data across multiple operating units from a single responsibility without compromising data security or system performance.

Multi-Org Security Profile

The Multi-Org Security Profile allows you to access, process, and report on data for an unlimited number of operating units from a single applications responsibility. To take advantage of Multi-Org Access Control, you should set the following profile options:

- **MO: Operating Unit:** Assign your Operating Unit to this profile option for each application responsibility to allow that responsibility to access multiple operating units.
- **MO: Default Operating Unit:** If the MO: Security Profile is set, then you can assign a default operating unit for defaulting purposes.

The Release 11i MO: Operating Unit profile option setting is preserved, and applies if MO: Security Profile is not set.

Enhanced Cross-Organization Reporting

Cross-organization reporting has been enhanced to be more consistent with the new Multi-Org Access Control. You can run reports across multiple operating units that belong to a user's security profile that share the same ledger. You can also run reports for any operating unit that belongs to a user's security profile.

Setting Up Operating Units

Setting up operating units is more streamlined with the integration with Accounting Setup Manager, a new feature in General Ledger that centralizes the setup and maintenance of common financial components, such as legal entities, operating units, and ledgers within an accounting setup.

All Release 11*i* HR Organizations classified as Operating Units are preserved during the upgrade. If operating units are assigned to a set of books, they are associated to a primary ledger in an accounting setup. You can now view all operating units assigned to an upgraded primary ledger using Accounting Setup Manager.

Student System and Student Recruiting

Important: Oracle Student System (IGS) and Oracle Student Recruiting (IGR) are not functional in this release. Customers using IGS and IGR should not upgrade to this release. There are no plans to provide an upgrade from Release 11*i* to Release 12 for IGS and IGR.

Multiple Organizations

Multiple Organizations architecture supports performance improvements across the E-Business Suite, as well as Multiple Organizations Access Control, which enables an Applications responsibility to access multiple operating units if desired. An upgrade requires the conversion of all Single Organization architecture systems to Multiple Organizations. You must define at least one operating unit and assign it to the MO: Operating Unit profile option.

Converting to Multiple Organizations does not require you to use multiple operating units or sets of books, but it does enable you to use these features if you desire. Converting to Multiple Organizations does not produce any noticeable change in behavior - if you do not define multiple operating units and/or sets of books, the conversion is transparent to users.

Additional Information: See *Oracle E-Business Suite Multiple Organizations Implementation Guide*. See also *Use of Multiple Organizations (Multi-Org) in Release 11i* (Doc ID: 210193.1)

Financials Upgrade Impact

The functional aspects of the upgrade described in this section are arranged by products within the Financials and Procurement product family.

Action: Review the product-specific Release Content Documents (RCDs) and TOI on *My Oracle Support* for additional information.

Subledger Accounting Model

Oracle Subledger Accounting provides a common accounting engine that replaces the existing accounting processes in the different subledgers. Consequently, the Subledger Accounting (SLA) upgrade consists of migrating the existing accounting data to ensure

a continuous business operation between the two releases.

Depending on the business and the specific requirements, "existing accounting data" may have different implications for different customers. Additional information regarding the impact of the SLA upgrade on other products is provided in this section.

Multiple Reporting Currencies

Multiple reporting currency functionality has migrated to Reporting Currency functionality in the Oracle Subledger Accounting model. Oracle Subledger Accounting provides a single repository where you can view amounts in reporting currencies. Additional information is provided under General Ledger and SubLedger Accounting in this section.

About Business Impact and Functional Changes

An Applications upgrade alters both the technical and functional aspects of your Oracle E-Business Suite system. In addition to changes to the technology stack and file system, an upgrade also initiates specific changes that affect the way your existing products work after the upgrade and the way they look and feel.

Note: This section describes some of the ways in which the upgrade changes your existing products. Oracle assumes that you have read about the new features and products delivered in this release that are included in the product-specific Release Content Documents (RCDs) and TOI, on *My Oracle Support*.

The discussions of the functional aspects of the upgrade in this section are arranged by products within the Financials and Procurement product family.

Additional Information: See *Oracle Financials and Oracle Procurement Functional Upgrade Guide: Release 11i to Release 12* for more information about upgrading your Financials and Procurement products.

Financials and Procurement Products

Changes to the products in this section affect Financials and Procurement products. Before you begin the upgrade, your Financials and Procurement application specialists should have made plans to accommodate the relevant changes.

Advanced Collections

Changes to Oracle Advanced Collections in the upgrade are described in this section.

Additional Information: See *Oracle Advanced Collections Implementation Guide* for more information.

Administrator UI Redesign

This release introduces a new user interface for entering and maintaining Advanced Collections setup data.

Territory Management Collection Usage

This release introduces a collection usage in the Territory Management application specifically for Advanced Collections. A manual territory migration script has been created to move collection "sales usage" territories to collection "collection usage" territories. This migration is mandatory if you want to assign collection agents/groups to customers using Territory Management.

The IEX: Territory Assignment concurrent program has been rewritten to accommodate the new collection usage. See the *Oracle Territory Management User Guide* and the *Oracle Advanced Collections Implementation Guide* for further details.

Collector Migration

This release displays Advanced Collection menus in the Receivables navigator. An automated script runs during the upgrade to create resources from collectors. In some cases, where the script cannot determine an appropriate resource, it does not create one. If you find that the Collector Navigator menu pages do not work after the upgrade, create the resource manually.

Multiple Level Strategy Support

Advanced Collections allows you to define different strategy levels by Operating Unit separate from the System level. The strategy levels can also be overridden at the Party level. Advanced Collections supports the setting for certain Operating Units by Dunning and certain Operating Units by Strategy.

Stage Dunning Support

Advanced Collections supports the Staged Dunning method separate from the Days Overdue method. In addition, while creating Overdue Dunning Plans, you can specify the Include Current, Include Disputed Items, Include Unapplied Receipts, and Use Grace Days options.

Collections Manager Functionality

Collections Manager functionality has been rewritten using OA Framework which allows sorting and filtering for a particular account.

New Scoring Engines

A new scoring engine is seeded with Pre-delinquency status at Invoice level. In addition, a Quick scoring engine has been added that only processes invoices closed in the last 60 days rather than all invoices. You can test the Scoring Engine for a particular account from the Collections Scoring Admin window rather than running the batch program to verify the score engine setup.

Strategy Improvements

Advanced Collections allows editing of 'To be created' work items. The 'To be created' work items in the current strategy can be overwritten with new Pre-wait/Post-waits and Collector without creating new work items.

Assets

Changes to Oracle Assets in the upgrade are described in this section.

Subledger Accounting

The new Subledger Accounting Architecture upgrade changes Oracle Assets in the following way.

Additional Information: See *Oracle Subledger Accounting Implementation Guide* and *Oracle Financials Implementation Guide*.

- Transactions in Assets books and accounting lines related to these transactions are migrated to Subledger Accounting for a user-specified number of periods during the upgrade. Accounting for current period depreciation is upgraded only if depreciation is already run for the period and the period remains open. After the upgrade, you can run the SLA post-upgrade process to upgrade accounting for the past year's transaction data. See *Assets*, in Appendix G, for more information.
- The value for the new profile option FA: Use Workflow Account Generation is set to Yes during the upgrade. You should analyze current customizations in the workflow setup. There are two options if you need to use the rules in workflow to generate code combinations for asset transactions:
 - Re-implement the custom rules in Subledger Accounting account derivation rules and set the profile option value to No.
 - Use the workflow rules as they are (default).
 - If you do not have customizations to Workflow-based Account Generator and wish to use Subledger Accounting account derivation rules for generating code combinations, set the profile option value to No after the upgrade.
- Create Journal Entries is replaced by Create Accounting.
- The Account Drill Down report is replaced by the new Subledger Accounting report, Account Analysis.
- Journal Source and Journal Category setups are no longer on the Book Controls setup form, and the setup is now located in Subledger Accounting.
- Depreciation Expense Account and the Bonus Expense Account for all category and book combinations in the Asset Category setup form are upgraded from a single segment account value to entire account combinations.
- The intercompany account setup in the Book Controls form is replaced by Intercompany/Intracompany setup in accounting setups. You should review the migrated setups for relevant ledgers upon the upgrade.

- The FA: Include Nonrecoverable Tax in Mass Addition profile option is obsolete. It has been replaced by Post Accounting Programs under Subledger Accounting. These programs manage the setup for all eligible lines from Payables to Assets for the Mass Additions Create program.

Invoice Distributions from Oracle Payables

Invoice distributions from Oracle Payables that interface to Assets are upgraded to display the Invoice Line Number.

Global Descriptive Flexfield Migration for Greece

Information stored in descriptive flexfields for Greece that are commitment and investment law is upgraded to named fields in the Asset Workbench.

Cash Management

Cash Management changes in the upgrade are described in this section. See *Legal Entity Configurator*, under *Cross-Product Functionality*, page 2-11 in Chapter 1, for more information.

Centralized Banks and Accounts

The new centralized bank account model provides a single point for defining and managing internal bank accounts for Oracle Payables, Oracle Receivables, Oracle Payroll, Oracle Cash Management, and Oracle Treasury. A single legal entity is granted ownership of each internal bank account, and one or more organizations are granted usage rights. In addition, banks and branches are migrated to the Oracle Trading Community Architecture (TCA) and defined as parties.

Bank Branches are merged if the following attributes are the same:

- Bank number
- Institution type
- Country (w/default country setting for null)
- Bank name
- Tax reference

During the upgrade, Cash Management grants ownership of each internal bank account to one legal entity. The owning legal entity is derived from the organization that owns it in Release 11*i*.

Internal Bank Account Security

In Release 11*i*, bank accounts were used by a single operating unit, and operating unit security was used to control the maintenance of these accounts. In the new model, bank accounts can be accessed by multiple operating units, but are owned by a single legal entity. Therefore, the bank account maintenance security, which secures the create and update of bank accounts, was moved to the legal entity level. Using the new security wizard, you can grant each responsibility access to create and modify bank accounts owned by one or more legal entities.

During the upgrade, Cash Management sets the Bank Account Maintenance security for each responsibility that had access to the bank account forms in Release 11*i*. For each of these responsibilities, a legal entity is derived from the organization that the responsibility had access to in Release 11*i*. The responsibility is then granted bank account maintenance security for this legal entity.

System Parameters

In order to provide more flexibility and control over the reconciliation process, many of the options that used to be defined as system parameters at the system level (operating unit) have been moved to the bank account level. By placing these controls at the bank account level, both the manual and automatic reconciliation processes can be configured depending on the bank account and its uses. In addition, the remaining system parameter options and controls from Release 11*i* are defined at the legal entity level in this release.

Contract Lifecycle Management

Contract Lifecycle Management (CLM) is a new product in this release for federal government customers. Customers using the traditional Federal Purchasing can upgrade to CLM in Release 12.2.

Oracle E-Business Suite Tax

Oracle E-Business Suite Tax covers "standard" procure to pay and order to cash transaction taxes, with the exception of withholding taxes, India taxes, and those taxes handled by the Latin Tax Engine solution. It is based on a single-point solution for managing transaction-based tax, which uniformly delivers tax services to all E-Business Suite business flows through one application interface.

Oracle E-Business Suite Tax replaces the following Oracle Release 11*i* tax solutions:

- Order to Cash - Global Tax Engine
- Procure to Pay - Automatic Tax Calculation
- Procure to Pay - Brazilian Payables/Purchasing
- General Ledger - General Ledger Automatic Tax Calculation

This fully automated upgrade ensures that your current investment in Release 11*i* Tax Setup is not lost, and you can implement new features at a pace that best suits your business. Additional data is automatically created using a predefined naming strategy.

Additional Information: See *Oracle Financials and Oracle Procurement Functional Upgrade Guide: Release 11*i* to Release 12*.

In current applications, tax functions are typically executed by the operational application, for example, the Accounts Payable clerks perform the definition of tax rules in Payables. In this release, the responsibility of tax setup should be shifted to the tax

manager. All transactions and events where a respective tax rule is relevant are serviced by Oracle E-Business Tax.

See the following product sections for more information on product-specific impact on E-Business Tax upgrade:

- Payables,
- Receivables,
- Financials for the Americas,
- Internet Expenses,
- Public Sector Financials,
- Purchasing,
- Trading Community Architecture,

Financials for the Americas

Changes to Oracle Financials for the Americas are included in this section.

Receivables Bank Transfer

The Latin American Receivables Bank Transfer feature stores amounts for additional accounting entries over standard Oracle Receivables accounting. These amounts are stored at the time the documents are sent to a bank for collection and when the bank sends information about the collection from the customers. Subledger Accounting, bank consolidation and legal entity key initiatives also impact this feature.

Several forms have been modified to include the Operating Unit field. The global descriptive flexfields on the Bank Branches and Bank Accounts forms are available as standard fields on the Global Receipt Method Accounts form.

In this release, to create account data in Subledger Accounting, you execute a concurrent program (Create Accounting) from the Standard Request Submission (SRS) request screen using the Receivables responsibility. It creates subledger accounting for all Receivables transactions, including the Bank Transfer collection documents. You can view and transfer data to General Ledger from the Receivables responsibility.

Latin Tax Engine

E-Business Tax in this release does not replace the Latin Tax Engine. However, the Release 11i Latin Tax Engine is upgraded to use some of the E-Business Tax and Trading Community Architecture setup.

These options are upgraded to E-Business Tax under the Product Options page flow: Tax System Options in the Receivables System Options window (Tax Method, Tax Code, Inclusive Tax Used flag), and Tax System Options / Rounding Options (Reporting Currency, Precision, Minimum Accountable Unit, Allow Override, and Rounding Rule).

In Release 11i, a default Tax Code and Tax Rounding Rule can be assigned to

customers, customer accounts, and customer account site uses in Trading Community Architecture. The setup at the customer level has been moved to Oracle E-Business Tax's Party Tax Profile page flow, which is linked to the Customers page flow. The setup at customer accounts and account site uses levels have been preserved for backward compatibility purposes.

The Latin Tax engine setup forms for Latin Locations, Tax Exceptions by Fiscal Classification, and Tax Exceptions by Items now use the new Trading Community Architecture geography model for picking and showing the location elements instead of the lookup codes.

An Item Category set (FISCAL CLASSIFICATION) is created in Inventory and the values of the Global Descriptive Flexfield (GDF) attribute Fiscal Classification on inventory items are upgraded as a category assignment to the items.

The GDF attribute (Fiscal Classification Code) on the Memo Lines form is disabled and the value is migrated to the Product Category attribute on the same form.

Tax Regime Code, Tax, and Tax Status code fields are added in the Tax Codes form. The Latin Tax Engine's Tax Category attribute value is now the value of the Tax attribute on the Tax Codes form.

Withholding Agent

The Latin American Extended Withholding has a setup step called Company Withholding Applicability, where existing legal entity (or entities) can be selected and defined as the withholding agent for one or more withholding types. In Release 11*i*, HR Locations were displayed for selection. In this release, legal entities upgraded and/or defined in the new legal entity flow are displayed for selection on the Latin American Company Applicability form. This change has very little impact on setting up Company Withholding.

Brazilian Receivables Interest

Multiple Organizations Access Control requires the Latin American profile option JLBR_PAYMENT_ACTION to be upgraded to a named column, which has an impact on the Oracle Receivables interest solution for Brazil. This profile option value has moved to the Payment Action GDF attribute on the System Options form in Receivables.

Colombian NIT

The GDF attribute Third Party ID value on the Enter Journals form is upgraded to the attribute Third Party on the same form.

Chilean Reporting

The GDF Document Type attribute value on the Payables Invoice Workbench form is upgraded to the attribute Intended Use on the same form.

Obsolete Features

The following features are obsolete:

- **Brazilian Company Information** - The Brazilian Companies defined using the Company form are upgraded as establishments under the legal entity of the operating unit, making this form obsolete. Use the Legal Entity Configurator

introduced in this release to define the establishments.

- **Brazilian JLBR Automatically Populate Payment Batch Name Profile (and related logic)** - In this release, the payment batch concept has changed. Moreover, there is no legal requirement to name payment batches sequentially and automatically.
- **Chilean Bills of Exchange** - You should make use of the standard Bill of Receivables feature in Receivables.

Financials for Asia/Pacific

Changes to Oracle Financials for the Asia/Pacific are included in this section.

Legal Entity for Korea, Singapore, and Taiwan

Legal entity information such as name and tax registration number that are defined as Human Resources (HR) locations associated to HR organizations in Release 11i are created in the centralized legal entity model in this release using the same legal entity definition. To define new legal entity information, or to modify definitions created after the upgrade, you must use the new Legal Entity Configurator.

Tax Setup for Korea, Singapore, and Taiwan (non-withholding)

Non-withholding tax codes setup (for example, Value Added Tax (VAT), Goods and Services Tax (GST), Input and Output taxes) defined in Payables Tax Codes and/or Receivables VAT Taxes windows, are upgraded to the Oracle E-Business Tax model. To define new taxes or modify the upgraded ones, you must use the new Regime to Rates.

Korean Withholding Taxes

Business locations and respective tax registration numbers that are not legal addresses can still be defined as HR locations for tax reporting purposes. Withholding tax codes continue to be defined through the Tax Codes window in Oracle Payables.

Taiwanese Government Uniform Invoices

Government Uniform Invoice Type is upgraded to the Document Subtype classification model in Oracle E-Business Tax. Document Subtype can be entered through the Payables Invoice Workbench and Receivables Transaction Workbench using the Tax window. The Source and Types Relationships window is obsolete.

China Accounting Software Data Interface Standard (CNAO)

The following changes apply to the China Accounting Software Date Interface Standard solution for Release 12.1.1.

- The process of assigning specific balancing segment values to each legal entity in the System Option window in Release 11i has been removed from Release 12.1.1. You must use the Accounting Setup Manager to perform the same assignment for balancing segment values to legal entities.
- A new descriptive flexfield item; *Enter Journals: Lines* is added to the Descriptive Flexfield Assignment window in Release 12.1.1. Use this to specify the context and attribute column for the descriptive flexfield; *Enter Journals: Lines* that will be used to mark cash flow items on journal lines.

- In Release 11*i*, the Cash Flow Item Mapping window is used to map Payables invoice categories, Receivable transaction types, and Receivable activities with the corresponding cash flow items. In Release 12.1.1, the functionality of the Cash Flow Item Mapping window has been changed to defining the mapping between supporting reference values and cash flow items.

Financials Common Country Features

Changes to Oracle Financials Common Country Features are described in this section.

Contra Charges

The Contra charges feature is obsolete in this release. It is being replaced by the new Netting solution introduced in the Oracle Financials Common Modules product. The upgrade migrates the setup, but not the transactions to the new solution.

Additional Information: See Financials Common Modules, in this chapter for more information.

Interest Invoices

The Interest Invoices feature is obsolete in this release. The new Late Charges feature introduced in the Oracle Receivables product replaces it.

Additional Information: See Receivables, in this chapter for more information.

Financials Common Modules

Advanced Global Intercompany System

Oracle Advanced Global Intercompany System (AGIS) is a new module that allows companies to streamline intercompany processing and facilitates the reconciliation of intercompany transactions. It replaces the Global Intercompany System (GIS) feature provided by General Ledger in Release 11*i*.

All setup and transaction data is moved to a new data model, and all Oracle forms in the Global Intercompany System are replaced by browser-based user interface pages.

Changes include:

- Subsidiaries are replaced by intercompany organizations. They represent trading partners and can be used as initiators and recipients of Advanced Global Intercompany System transactions.
- As part of the Grant-based Security Model, intercompany trading partners are mapped to users instead of responsibilities. A user may be given access to many different intercompany trading partners regardless of the responsibility used to log in.
- The GIS transaction types are upgraded to the new Intercompany system

transaction types.

- The Intercompany accounts set up in GIS are upgraded as the new Intracompany Balancing rules. Autoaccounting rules set up in GIS are not upgraded and need to be set up in the new Subledger Accounting Transaction Account Builder.
- All GIS new and completed transactions are upgraded as AGIS transaction batches. Generally, for each GIS transaction, a batch is created.
- Release 11*i* GIS profile options are obsolete and are not upgraded. All options are available on the AGIS System Options page.

Payables and Receivables Netting

In Release 11*i* Oracle Financials had three netting solutions: Single Third Party in Oracle Public Sector Financials International Contra Charging in Oracle Financials for Europe, and Receivables and Payables Netting in Oracle U.S. Federal Financials. These are all replaced in this release with the Netting functionality of the Oracle Financials Common Modules.

Setup related to Contra Charging and Receivables and Payables Netting features in Release 11*i* is migrated in the following way:

- Preserves existing customer and supplier relationships and creates new entities known as agreements.
- Preserves existing customer and supplier relationships and creates new entities known as agreements.

Financials for Europe

Changes to Oracle Financials for Europe are included in this section.

EMEA VAT Reporting

The EMEA Value Added Tax (VAT) Reporting feature migrates VAT reporting solutions for EMEA in Release 11*i* to this release. This migration eliminates any existing country specific restriction with improvement wherever possible.

Consolidation of Country-specific Reports

There are many country-specific reports in Release 11*i* that are very similar in their data requirements. EMEA VAT reporting consolidates such reports to retrieve the required data from a single extract implementing XML Publisher technology. All reports are converted into templates and, therefore, allow more flexibility for specific formatting requirements.

E-Business Tax-based Reporting

The basics of tax definition change from Release 11*i* with the introduction of Oracle E-Business Tax. EMEA VAT reporting now includes E-Business Tax for the reporting requirements.

The attribute Tax Registration Number (TRN) for legal establishment becomes very significant for tax reporting with E-Business Tax. A central reporting configuration by

TRN consolidates definition of allocation rules, VAT register, and other configuration attributes into a single setup, referred to as the legal reporting entities.

This release also provides the option of reporting by ledger or balancing segment to support proper reporting of historical transactions. To use this reporting by accounting entities option, you must map the entities to a TRN in order to derive VAT related setups that may apply.

Architecture Changes

As a result of the upgrade, you can move from an accounting setup that includes only one GRE/legal entity to an accounting setup with multiple GRE/legal entities by assigning additional legal entities at any time. If you add additional legal entities to an upgraded accounting setup during a reporting period (for example, calendar year for tax report), reports run by a legal entity parameter do not return complete history for legal entities. Reporting by legal entities helps report the set of transactions in these scenarios.

This release introduces a single Financials Common Country (JG) table for storing tax-related data retrieved from the Tax Reporting Ledger (TRL) and other core tables. This entity gets its data through the selection process, which is the only process to access TRL. Extracts retrieve their data from this JG entity. This enhances the performance of each extract and encapsulates all business logic around TRL only in the selection process.

There are a few extracts that report non-tax details of transactions along with the tax details. They are based directly on the Payables and Receivables core application tables, as TRL processes only tax details. However, these non-JG (non-TRL) extracts are still based on the setup configuration to derive the right data.

Reporting Process Changes

Allocation is an independent process. It encapsulates the Release 11*i* business logic around Belgium and Portugal allocation.

Final reporting is also an independent process. After final reporting, data in the single JG table cannot be modified. This has an interface with E-Business Tax, through which transactions are updated as finally reported in the E-Business Tax repository. This process along with the JG tax entity provides the framework for preliminary and final reporting. This process encompasses the declaration functionality of Release 11*i*.

Financials for India

The following descriptive flexfields have been replaced with alternate approaches:

- India Items
- India Block of Assets
- India Receipts
- India RMA Receipts

- India Return to Vendor
- Additional Line Attribute Information
- India Payment Information
- India Organization Information
- India Distributions
- India VAT
- India Lookup Codes
- India Original Invoice for TDS

General Ledger

Oracle General Ledger has made significant enhancements to support multi-national companies and shared service centers. These changes allow companies to maximize processing efficiencies while maintaining a high level of information and setup security.

You can perform simultaneous accounting for multiple reporting requirements. Companies can also gain processing efficiencies by being able to set up, access, and process data across multiple ledgers and legal entities from a single responsibility. In addition, General Ledger definitions and setup definitions, such as MassAllocations and Financial Statement Generator (FSG) reports, can be more easily shared and secured across your organization by allowing you to restrict certain users from viewing or updating those definitions or using them in processes.

Many global features that were only available in localized versions have been included in General Ledger to allow more customers to take advantage of these features.

Terminology Changes

Note the following changes in the terminology related to General Ledger.

- Sets of books is replaced by ledgers
This is simply a terminology change. All set of books options are now called ledger options. The upgrade retains all Release 11*i* settings.
- Multiple Reporting Currencies is replaced by Reporting Currencies
Reporting sets of books are replaced by reporting currencies. Reporting sets of books assigned to primary sets of books automatically upgrade to reporting currencies that are assigned to a primary ledger. All conversion options for Multiple Reporting Currencies are retained as part of the reporting currency definition.
- Global Intercompany System (GIS) is replaced by Advanced Global Intercompany System (AGIS)

Centralized Accounting Setup

The new Accounting Setup Manager simplifies and centralizes accounting-related setup for common financial components that are shared across financial applications. From a central location, you can define your legal entities and their accounting context, such as the ledgers and reporting currencies that perform the accounting for your legal entities.

Accounting Setup Manager allows global companies that operate in different localities to meet multiple reporting requirements through the use of multiple ledgers and reporting currencies.

Sets of Books

- All sets of books upgrade to ledgers in an accounting setup.

The upgrade creates data access sets for upgraded ledgers to facilitate the creation of advanced data access and data security policies.

- A subledger accounting method, such as Standard Accrual, is automatically assigned to all upgraded ledgers.

A subledger accounting method allows General Ledger to integrate with subledgers via Subledger Accounting.

- The secondary tracking option for revaluation and closing and translation has been streamlined.

Multiple Reporting Currency

Some Release 11*i* options for reporting sets of books have been moved to the reporting currency definition. For example, many MRC profile options have been moved to the reporting currency definition.

Many options for a set of books that were independently defined for the primary and reporting sets of books have been streamlined. In addition, many of the ledger options for the reporting currency default from the primary ledger. The upgrade for MRC sets of books varies depending on the current configuration and conversion options you specify.

Global Accounting Engine

Single posting sets of books with multiple main sets of books upgrade to multiple primary ledgers that share the same secondary ledger.

Period Rates Replaced by Daily Rates

Period rates are replaced with daily rates.

Revaluation

General Ledger modifies revaluation templates to use corresponding daily rates for those that used period rates prior to the upgrade. No user interaction is required.

Revaluation sets are now usable across ledgers that share a common chart of accounts. In some cases, you may need to enter the secondary tracking segment for revaluation sets involving a secondary tracking segment before running revaluations with upgraded templates.

STAT Report-level Currency for Financial Statement Generator Reports

The report-level and runtime currencies for Financial Statement Generator reports now need to represent the ledger currency. If you need to report on statistical balances, modify report definitions to use the STAT currency at the row-level or column-level or use currency control values for the STAT currency.

Global Accounting Engine

In this release, Oracle Global Accounting Engine functionality is obsolete. Both the existing setup options and all the accounting data of Global Accounting is migrated to Oracle Subledger Accounting.

Internet Expenses

Changes to Oracle Internet Expenses are described in this section.

Itemization

Internet Expenses can represent the parent-child relationship of an itemized expense line by creating a new parent line with a unique parent identifier.

Integration with Payments

Integration with Oracle Payments takes advantage of encryption capabilities. Credit card transaction data has been moved to Payment's secure data payment central repository. See Payments, in this chapter for more information.

Per Diem and Mileage

Per diem and mileage transaction data is not migrated. However, data that existed before the upgrade remains intact. Mileage and per diem setup data is automatically upgraded.

Expense reports that were created prior to the upgrade display information in a pre-Oracle Internet Expenses minipack (11i.OIE.K) format. Newly created expense reports use the new user interface.

Integration with E-Business Tax

The integration with Oracle E-Business Tax has no direct tax upgrade impact. Tax lines run through Oracle Payables. See Oracle Payments documentation for details.

iPayment

Oracle iPayment is obsolete In this release, and is replaced by Oracle Payments. See Payments, page 2-36 in this chapter for more information.

iProcurement

Changes to Oracle iProcurement are described in this section.

Catalog Management

Oracle iProcurement provides catalog administrators online authoring capability for content stored in global blanket agreements (GBPA). The existing batch upload process continues to be optimized for handling large catalog data file uploads. It is also available for buyers (from the new Buyer's Work Center) and for suppliers (from the iSupplier Portal).

Bulk-loaded items in iProcurement are migrated to newly created GBPAs. The extractor is obsolete, and the catalog content is updated in real time.

Note: Oracle recommends that you complete the approval process for any agreement pending approval before you begin the catalog upgrade. The content of the approved agreements is available on the iProcurement search page after the upgrade.

Content Security

Release 11i functionality for Realms, Stores, and Catalogs has been combined and is collectively referred to as enhancements in Content Security. In this release, Content Zones have replaced Catalogs.

Catalog administrators can partition local catalog content into Local Content Zones based on items' supplier, supplier site, item category, and browsing category information. Once defined, Content Zones may be made accessible to users with specific responsibilities or operating units. Content Zones may be assigned to multiple stores, and stores may contain multiple Content Zones.

iSupplier Portal

In Releases 11.5.10, iSupplier Portal used Trading Community Architecture to store pending change requests in supplier address and supplier contacts. In this release, these pending change requests are moved into a set of iSupplier Portal tables.

See the iSupplier Portal section in *Oracle Financials and Oracle Procurement Functional Upgrade Guide: Release 11i to Release 12* for the assumptions made during the upgrade.

Lease and Finance Management

Improved Legal Entity Definition

Derivation of Legal Entity from Operating Unit

This release introduces Legal Entity to be defined and used in the transactions. Legal entity is associated with the Operating Unit. During the transaction entry, Legal entity is derived based on the operating unit. However, you are provided with the option to change as needed.

During the upgrade:

- Legal Entity is derived from an operating unit. All transactions that have an operating unit context use the GRE/LE as Legal Entity.
- As part of the upgrade for Legal Entity functionality, the modified objects are upgraded with the Legal Entity value.
- GRE/LE associated to OU is upgraded as the default legal context. The Default Legal Context (DLC) associated with the OU is the value for the upgrade.

Simplify Statutory Compliance for Taxes

This release introduces changes to the Lease and Finance Management tax engine,

setup, and its integration to eBTax.

Upgrade Tax Setup

User-defined Fiscal Classification and Tax Basis Override setup steps are upgraded to use the 'Sales Quote' transaction type in place of the 'Quoting' transaction type.

Upgrade tax source to include tax attributes. Upgrade tax lines - additional attributes are added to tax lines such as TAX_LINE_NUMBER, TAX_REGIME_CODE, TAX, TAX_JURISDICTION_TYPE, TAX_JURISDICTION set the values for these columns.

Migrate Transaction Business Category definitions setup data to new entity OKL_TAX_ATTRIBUTE_DEFINITIONS.

Upgrade Contracts and Transactions

Upgrade existing contracts to assign default value for 'Tax Schedule Applies' Flag. The value is defaulted from system options setup defined for contract's Operating Unit.

Cancel all Rebook transactions that have not been completed. Cancel all termination quotes in draft, rejected, and submitted status.

Set TAX_INVOICE_YN flag on the transaction types table to 'Y' for the following transaction types:

- Release Billing
- Release Credit Memo
- Rollover Billing
- Rollover Credit Memo

Upgrade existing pre-booking transactions for contracts that have not been booked. Try_id for such transactions is changed to try_id of 'Booking' transaction.

Upgrade status of existing Asset Location Change transactions from 'Entered' to 'Processed'.

Upgrade Asset Location Change transactions Lines table. Tal_type for Asset Location Change transactions is upgraded from 'CFA' to 'AGL' and dnz_cle_id of okl_txl_inst_items is upgraded to appropriate value for relevant Asset Location Change transactions.

Upgrade Asset Location Change Transaction header table. Transaction type of header table is updated from 'CFA' to 'ALG' and truncates date transaction occurred for relevant Asset Location Change transactions.

For each Asset Location Change transaction, a request is created in the transaction requests table and Asset Location Change transaction is updated with the corresponding request id.

Integration with eBTax

Include existing values of 'Usage of Equipment' field under Sales and Authoring to

eBTax Source for 'Intended Use'. Upgrade 'Intended Use for Tax' field in Sales, with existing value of 'Usage of Equipment'.

Migrate the following upfront tax lines to eBTax:

- Booking / Rebook Upfront Tax Lines for contracts in status 'Passed', 'Complete' and 'Approved' are migrated from Lease and Finance Management data structures to eBTax with Reportable flag = 'N'.
- Booking / Rebook Upfront Tax Lines for contracts in status 'Booked' are migrated from Lease and Finance Management data structures to eBTax with reportable flag = 'Y'.
- Asset Location Change Tax Lines are migrated from Lease and Finance Management data structures to eBTax with reportable flag = 'Y'.

Enhanced Accounting

Integration with Subledger Accounting (SLA)

This release introduces Oracle Subledger Accounting (SLA) to manage accounting across subledger transactions. Lease and Finance Management no longer creates accounting entries. Existing Lease and Finance Management accounting options and setup remains, and affects the generation of accounting distributions in the Lease and Finance Management data model. However, the accounting distributions are now simply one of many sources for the generation of final accounting in the Subledger Accounting module.

During the upgrade:

- All accounting events, headers, and lines from the Release 11i data model are upgraded to the new Subledger Accounting events, headers, and lines data model, regardless of the period range you set for the upgrade.
- The identifiers of the accounting transaction headers, lines and distributions are re-keyed using a sequence to facilitate integration with the Subledger Accounting module.
- The Representation Code and Representation Name accounting source values for all accounting transactions are set to the primary ledger short code and primary ledger name respectively.

Consistent Accounting Transaction Status

In order to achieve consistency and ensure data integrity between accounting events and accounting transactions, the specific loss provision, general loss provision, miscellaneous and accrual accounting transactions are upgraded with the transaction status of Processed from Entered.

In this release, Lease and Finance Management introduces separation between the termination accounting transaction status and the termination process status. During the upgrade, the termination process status is set to Processed if accounting entries have

been generated for the termination transaction. If accounting entries are not generated, then the termination process status is migrated and set with the appropriate intermediate existing status.

Centralized Accounting Transaction Repository

In this release, all Asset Disposition accounting transactions are automatically migrated to the central accounting transactions entity.

Account Derivation Accounting System Option

This release introduces the Account Derivation accounting system option which is used by Lease and Finance Management to determine if General Ledger account codes must be defined on the accounting template lines. The Account Derivation accounting system option governs whether the account codes, if defined in Lease and Finance Management on the accounting template lines, are supplied as additional accounting sources for generation of final accounting in the Subledger Accounting module.

During the upgrade, Lease and Finance Management sets the value of the Account Derivation accounting system option as Accounting Template Set.

Improved Disbursements and Payables

Lease and Finance Management Disbursement transaction tables must be upgraded - if amounts were negative, invoice type would be Credit Memo.

This release introduces new consolidation tables which need to be populated with consolidation data based on existing data in transaction tables and Oracle Payables invoice header and lines. The link between transaction tables and Oracle Payables invoice header and line tables must also be upgraded. Additionally, Oracle Payables internal transaction tables are upgraded to maintain a new link between transaction tables and AR invoice.

oklupdpasshrupaydate.sql:

This script updates the contracts having NULL pass-through pay start date. It updates the pass-through pay start date with the Effective from date of Fee/Service.

oklcrctptpaygroupmterm.sql:

This script identifies contracts having NULL pay group or payment term for base and evergreen pass-through terms, and updates those values based on supplier and supplier site setup. If the supplier setup does not exist, then it defaults the pay group and payment term appropriately.

Manage Shared Services Efficiently

Multiple Organization Access Control (MOAC)

This release allows multiple operating units for a responsibility. This is achieved by attaching allowed operating units to a security policy and further attach to a responsibility. New synonyms were created and secured by the security policy. This has resulted in changes to many objects.

During the upgrade, the following scripts are used to achieve this:

- OKLTBRNM.sql - Script to rename tables
- OKLSECSM.sql - Script to create synonym and add security policy
- OKLORUPG.sql - Script to upgrade the org_id data for the following tables:
 - OKL_CURE_REPORTS
 - OKL_SERVICE_FEES
 - OKL_TXL_RCPT_APPS_ALL_B
- OKLPRFUPG.sql - This script identifies the profile values for a specific ORG and updates the value set for the profile in the system parameters table. If it does not find any value for ORG in the System Parameter Table it inserts those values in the table.
- OKLPRODEL.sql - This script deletes the profiles from all necessary tables

View Leasing Information on Payable Invoices and Vendor Disbursement Details and Support Supplier Merge into TCA

Upgrade of Payable Bank Accounts

In this release, payable maintained bank accounts are obsolete. Bank accounts are distributed between Cash Management (CE) and Oracle Payments (IBY). Cash Management maintains Internal Bank Accounts. Oracle Payments maintains External Bank Accounts, Contract Party, T&C, VPA, IA, and Billing Setup for Asset. Same Rule reference is used LABACC, IBY upgrade instance.

Leasing uses external bank accounts (maintained by Oracle Payables) only. Queries to retrieve bank account information must be modified to join with IBY tables to retrieve correct information.

Improved Document Creation with XML Publisher

In this release, XML publisher is used for sending documents. The process template associations already created by the customer for one-to-one fulfillment must be upgraded to be used by XML Publisher. This is achieved by upgrading the Process Templates table. Upgrade the value of the XML_TMPLT_CODE to the corresponding seeded Template Code of the process. RECIPIENT_TYPE will be updated to LESSEE for every record.

Improved Customer Billing

Invoices created in Oracle Receivables through Lease and Finance Management must be upgraded to the new architecture by stamping the Leasing Transaction ID on the invoices. With the Lease and Finance Management Advance Receipts made obsolete, the existing and unutilized stream allocations in Lease and Finance Management will be migrated as on-account applications for the corresponding receipt in Oracle Receivables.

Transaction tables will be upgraded to add additional columns, currently hosted in the

consolidation and external tables. The data for these additional columns in the transaction tables will be populated from the equivalent records in the Lease and Finance Management consolidation and external tables. Two level billing transactions are upgraded to three level billing transactions by creating an entry in details table for all records in the lines table.

oklupdinvfrmtid.sql:

This script upgrades the contract billing invoice format rules and replaces the invoice format information from name to id.

Automatic Multi-GAAP

Secondary Representation Method Accounting System Option

This release introduces the Secondary Representation Method accounting system option which is used by Lease and Finance Management to determine whether to generate secondary representation accounting transactions and accounting distributions, or not.

During the upgrade, Lease and Finance Management sets the value of the Secondary Representation Method accounting system option, if not already set to Automated Accounting during the 11i pre-upgrade step, as follows:

- If the operating unit is not a Multi-GAAP operating unit in 11i, then the secondary representation method value is set to Not Applicable.
- If the operating unit is a Multi-GAAP operating unit in 11i, then the secondary representation method value is set to Report.

Representation Type Transaction Attribute

In this release, Lease and Finance Management introduces the Representation Type attribute on the accounting transactions entity. Lease and Finance Management uses the Representation Type attribute while displaying accounting transactions on the Accounting Transactions user interface to identify the accounting transactions belonging to the selected representation.

During the upgrade, Lease and Finance Management sets the value of the Representation Type attribute to Primary for all accounting transaction headers.

Accrued Stream Elements Indicator

During the upgrade, Lease and Finance Management sets the value of the Accrued Yes/No stream element indicator on the stream element entity to Yes, up to the date until which the contract's local product stream elements are accrued. The stream elements which are upgraded, are those:

- That are reporting stream elements belonging to Multi-GAAP contracts
- That belong to an operating unit whose Secondary Representation Method value is set to Automated Accounting
- For which the stream types are defined on the reporting product as accruable

Loans

During the upgrade, Oracle Loans accounting functionality is migrated automatically to Subledger Accounting, and other common data model components.

Integration with Payables and Payments for Loan Disbursement

This release introduces Oracle Payments. It is used by Oracle Payables and Oracle Loans for processing loan payments. Loans creates a payment request in Payables, which, in turn, disburses funds through Oracle Payments.

Integration with Subledger Accounting

This release introduces Subledger Accounting for managing accounting across subledger transactions. Oracle Loans no longer creates any accounting entries. During the upgrade, accounting options and their settings, and the existing accounting entries in the loans data model, are moved to the new accounting data model to ensure a continuous business operation between the two releases. All Loans accounting lines related to the transactions are also migrated.

In Release 11*i*, accounting entries were created in the General Ledger Interface when a loan was approved. The process remains the same, except that the accounting events are created for Subledger Accounting to process. You must run the Create Accounting concurrent program manually or on a scheduled basis to generate journal entries and to transfer them to Oracle General Ledger. Accounting on individual loans can also be created real time from the Loan Accounting Tab.

Loan Types and Products

The Release 11*i* Loan Type lookup is obsolete. In this release, you can use Loan Types, along with loan products, to streamline the loan agents' application process while enforcing company policy across agents and applicants.

Some of the defaulting parameters are:

- Whether a loan has multiple disbursements
- Whether a construction loan can convert to a term loan
- Whether a credit review is required
- Range for the loan requested amount and term
- Rate type
- Floating frequency for variable rate loans
- Payment frequency
- Collateral required and loan-to-value ratio
- Conditions for approval or conversion

- Mandatory fees
- Disbursement schedule for loans with multiple disbursements

In the upgrade, seeded loan types are migrated to the loan types entity. You must set up product(s) as per the deploying company's organization with the upgraded loan types, based on your company requirements.

The Loan Type lookup is obsolete. For verification, query loan types in the loan types user interface from the loan administration responsibility.

Payables

This release introduces Oracle Subledger Accounting, E-Business Tax, Ledgers, Banks, and other common data model components that are used by Oracle Payables.

Suppliers in Trading Community Architecture

Suppliers are now defined as TCA Parties. During the upgrade, TCA Party records are created/updated for all suppliers, they are linked to their records in the existing supplier entities, and the payment and banking details are migrated into the Oracle Payments data model. Although the underlying data model has changed, you still enter and manage suppliers in the Suppliers windows.

Invoice Lines

Oracle Payables introduces invoice lines as an entity between the invoice header and invoice distributions. With the new model, the invoice header remains unchanged, and continues to store information about the supplier who sent the invoice, the invoice attributes, and remittance information.

Invoice lines represent the goods (direct or indirect materials), service(s), and/or associated tax/freight/miscellaneous charges invoiced. Invoice distributions store the accounting, allocation and other detail information that makes up the invoice line. The charge allocation table used in prior releases to manage accounting allocations is obsolete.

During the upgrade, Oracle Payables creates invoice lines for all existing invoices, creating one line for every distribution available in the Release 11*i* distributions table, except in the case of reversal pairs. In those cases, Payables creates one line with a zero amount.

Centralized Banks and Bank Accounts Definitions

All internal banks and bank accounts that you had defined in Release 11*i* are automatically migrated to the central Cash Management entities. The bank accounts and their payment documents are owned by a legal entity rather than by an operating unit. See *Cash Management*, in this chapter for more information.

Also, the banks and bank branches are centralized in Cash Management entities as described in the preceding paragraph. However, the bank accounts you had defined for your suppliers are migrated from the Payables entities to the central Payments entities. Payments centralizes and secures all payment instrument data, including external bank accounts, credit cards, and debit cards. See *Payments*, in this chapter for more

information.

Payment Document Sequencing

If you used document sequencing for payment documents in Release 11*i*, then your document sequence category is migrated from the payment document, which is associated with a bank account and, hence a legal entity, to the bank account uses entity. This change preserves the option of having document sequence categories vary across operating units.

Integration with Payments for Funds Disbursements

Oracle Payments can be used by Oracle Payables for processing invoice payments. See *Payments*, in this chapter for more information.

Payment Features Controlled by Global Descriptive Flexfields

Many European payment features that were implemented using global descriptive flexfields in Release 11*i* are migrated to the Oracle Payables, Oracle Payments, and Oracle Cash Management data models.

Integration with Subledger Accounting (SLA)

This release introduces Oracle Subledger Accounting (SLA) to manage accounting across subledger transactions. Payables no longer creates any accounting entries. During the upgrade, accounting options and their settings, and the existing accounting entries in the Payables data model, are moved to the new SLA accounting data model to ensure a continuous business operation between the two releases.

During the upgrade, all accounting events, headers, and lines from the Release 11*i* data model are upgraded to the new Subledger Accounting events, headers, and lines data model, regardless of the period range you set for the upgrade.

Integration with E-Business Tax

Oracle E-Business Tax manages tax across the E-Business Suite. In prior releases, the setup, defaulting, and calculation of tax for Payables was managed within Payables using tax codes, their associated rates, and a hierarchy of defaulting options. This method is still available in this release. During the upgrade, E-Business Tax migrates the tax codes as appropriate within E-Business Tax so that your tax processing can work the same way after the upgrade as it did before.

New fields are added to the supplier, invoice, and invoice lines entities to track tax attributes used by E-Business Tax. Many of these attributes were implemented with global descriptive flexfields in prior releases and are upgraded to regular fields on these entities.

Payments

In this release, the Oracle E-Business Suite introduces Oracle Payments, a highly configurable and robust engine to disburse and receive payments. In addition to new features, Oracle Payments offers functionality previously released as Oracle iPayment, which is now obsolete.

Configurable Formatting and Validations Framework

Oracle Payments provides a new formatting solution based on standard XML technology. In previous releases, payment formats required creation in proprietary

Oracle reports technology. In this release, formats are created as templates in Oracle XML Publisher, and applied to an XML data file produced by Oracle Payments.

The upgrade transforms each payment format that Oracle Payments supports into two entities: an XML Publisher template and a Payments seeded format. The seeded format is linked to the template. Logic to validate the formatted data has been separated from the format programs, and is upgraded to a prepackaged library of validations. These validations are linked to the seeded Payments format, and are executed during the payment process.

Secure Payment Data Repository

Oracle Payments serves as a payment data repository on top of the Trading Community Architecture data model. This common repository for payment data provides improved data security by allowing central encryption management and masking control of payment instrument information.

The upgrade moves party information into Oracle Trading Community Architecture. The party's payment information and all payment instruments (such as credit cards and bank accounts) are moved into Oracle Payments. Party payment information moves from entities such as customers, students, and Global Descriptive Flexfields and is created as a payer record in Oracle Payments and linked to the party. Party payment information moves from entities such as suppliers and Global Descriptive Flexfields and is created as a payee record in Oracle Payments, again linked to the party. Third-party (customer and supplier) bank accounts held in the Oracle Payables bank account model are migrated to Oracle Payments and linked to the owning payer or payee. Third-party credit card detail is migrated from the Payables data model and applications such as Order Management into Oracle Payments' data repository.

Credit card data held in the following products in Release 11*i* is migrated to Oracle Payments:

- Oracle Payables
- Oracle Order Capture
- Oracle Order Management
- Oracle Service Contracts
- Oracle Student System

Improved Electronic Transmission Capability

Oracle Payments provides secured electronic payment file and payment message transmission and transmission result processing, replacing previously existing electronic transmission features in Oracle iPayment, Oracle Payables, and globalizations. The transmission feature in Oracle Payables was simply a framework to support a customization, so the automatic upgrade cannot migrate this information. If you are using the Payables transmission architecture, you should review Oracle Payments' electronic transmission capability and plan on replacing your customization.

Payables Impact

The process to issue payments from Oracle Payables changes in this release to use the new Oracle Payments funds disbursement process. The changes impact other versions of Payables such as U.S. Federal Financials and country-specific globalizations.

Some of the key areas of impact are:

- **Payment Methods:** Each document to be paid requires a payment method to indicate how it should be handled in the funds disbursement process. Payment methods can now be defined as broadly or narrowly as appropriate, and are not restricted to the seeded values. Rules can be set for when payment methods can be used on documents. Rules can also be specified to default payment methods on documents when they are created. The upgrade seeds payment methods that existed in Oracle Payables and globalizations.
- **Processing Rules:** The payment method on a document links it to processing rules configured in Oracle Payments. These setup rules are held in a key entity called the Payment Process Profile. You can configure as many of these process profiles as you need for payment processes. Each profile holds rules for how documents should be built into payments, how payments should be aggregated into a payment instruction file, and how the payment file should be formatted. Rules for printing checks, transmitting electronic files, generating separate remittance advice notifications, and other options can be easily configured.
- **Payment System:** A payment system holds information about the third party involved in processing payments. The third party may be a financial institution or clearing house that disburses or settles payments. This entity is defined to hold information about transmission and required settings for communication to the payment system.

The upgrade uses various data from Oracle Payables to create the new Payment Process Profiles. Since this entity is so central to the funds disbursement process, an overview of the upgrade process is provided here.

For each Payables payment program that is linked to a format definition, one Oracle XML Publisher template is created and linked to one Oracle Payments format. In Oracle Payables, you can create different format definitions linked to the same payment program. So for each Payables format definition, the upgrade creates one Payment Process Profile linked to the Oracle Payments format.

A key part of the payment process profile is the usage rules. Values set here control when a profile can be assigned to a document for routing through the payment process. There are four categories of usage rules:

- **Deploying company's internal bank account** - the account from which funds will be disbursed. A bank account is assigned as a usage rule when the upgrade finds the appropriate information. First, it looks at the format definition that was used to create the profile. Then, it finds all payment documents assigned to the format definition. Each internal bank account that is a parent of the payment document is

assigned as a usage rule to the profile.

- **First party organization** - values are migrated when they are available, specifically from some globalizations.
- **Payment methods and currencies** - the upgrade determines these values based on information within the format itself.

Another important part of the payment process profile is its link to a payment system and its setup. This information is upgraded based on values set in globalizations and should be understood for payment processing in those countries.

Receivables Impact

Oracle Receivables integrates with Oracle Payments for funds capture processing to electronically receive money owed by debtors, such as customers. Oracle Payments works with Receivables to authorize and capture funds against credit cards, process refunds to credit cards, perform electronic funds transfers from bank accounts, and to format bills receivable. Note that Oracle Receivables retains its existing features for lockbox processing and the electronic upload of remittance messages. Globalization formats and features in this payments area also move to Oracle Payments.

Some of the key areas of impact are:

- **Payee Configuration:** A payee is defined for each entity in the deploying company that will process payments; typically only one setup is needed for the enterprise. The payee configuration holds various processing options that are used to handle transactions. In Release 11*i*, Receivables linked each receipt class with an automatic creation method to the Oracle iPayment Payee. Now operating units are assigned to the payee. This helps ensure consistent payment processing across the applications. The upgrade assigns operating units to the payee based on existing transactions in Receivables.
- **Payment Methods:** Each transaction requires a payment method to indicate how it should be handled in the funds capture process. In Oracle Receivables, this payment method is specified on a receipt class defined with an automatic creation method. Note that in the receipt class setup, Receivables has changed its Release 11*i* payment method term to be called receipt method.
- **Processing Rules:** Rules for processing electronic funds capture transactions are held in a key entity called the Funds Capture Process Profile. Users can configure as many of these process profiles as they need for their payment processes. Each profile holds the configuration for how to format and transmit authorization messages and settlement files. Rules for aggregating settlements into batches, limiting the number or amount of settlements in a batch, notifying payers of settlements, and processing acknowledgements can be easily configured.
- **Payment System:** A payment system holds information about the third party involved in processing payments. The third party may be a payment processor or it

may be a financial institution. This entity is defined to hold information about transmission and required settings for communication to the payment system.

- **Routing Rules:** Routing rules can be configured to specify how a transaction should be processed. A routing rule applies specified criteria and determines the funds capture process profile and the payment system to use. Routing rules are defined as part of the payee configuration.

The upgrade uses various data from Oracle Receivables to create these entities. Since these entities are so central to the funds capture process, an overview of the upgrade process is provided here.

For each of the formats that are upgraded from Receivables or globalizations to Oracle Payments, one Oracle XML Publisher template is created and linked to one Oracle Payments format. A Funds Capture Process Profile is created and the format is linked to the profile.

Other entities are created by the upgrade: 1) one payee to hold master settings for the funds capture payment process; 2) one payment system; and 3) one payment system account.

The upgrade creates new routing rules from Receivables setup. Routing rules are created from each receipt class that has an automatic creation method. For each of these receipt classes, the upgrade creates a routing rule for each combination of the receipt class remittance method, its internal bank account, and the organization derived from the bank account.

iPayment Impact

Oracle iPayment is obsolete In this release, and is replaced by the Oracle Payments architecture. Some of the key entities described in the previous section are used in the funds capture process. They existed in iPayment with the exception of the Funds Capture Process Profile. It holds the processing rules for transactions.

For each iPayment-supported format, the upgrade creates one Oracle XML Publisher template and links it to one Oracle Payments format. A Funds Capture Process Profile is created and the format is linked to the profile. The settings on the process profile are based on various settings in configuration and servlet files.

New seed data is created for the transmission protocols supported by Oracle Payments and the protocols are specified on the payment system setup. This data is also set based on configuration files. The upgrade creates transmission configurations that use the protocols. These transmission configurations are specified on the funds capture process profiles. New payment system accounts are created that hold settings previously held in configuration files. The payment system accounts are also specified on the process profiles.

Moving setup data from technical configuration files to the new setup entities has a benefit of allowing easier review and updates by a business user.

Profitability Manager

Remove (Import) From Migrated Condition Component Display Names

Each time you migrated a Mapping Rule in previous releases, the value; (Import) was prefixed to the version display name of the rule. This occurred for the following rule types:

- Mapping Rule
- Condition
- Condition Dimension Component
- Condition Data Component

As a result, (Import) was prefixed multiple times in the display name of the rule (e.g. "(Import)(Import)(Import)").

The Rule Migration feature limits the number of (Import) values prefixed to a Mapping Rule name to one value, and eliminates the (Import) values from the dimension component names.

Applying this release runs a script to clean up the version display names for Mapping Rules, Conditions, Dimension Components, and Data Components that were imported and contained multiple "(Import)" prefixes. For Mapping Rules and Conditions, the new display names will include one "(Import)" substring prefix. For Dimension Components and Data Components, the display names will not contain the "(Import)" substring.

Note: The display names will not be updated for rule versions where the shortened version display name results in a duplicate name. In such cases, users will need to manually update the version display names via the user interface.

Local Conditions Replaced with Global Conditions

In Release 12.0.3, the concept of a local condition in a mapping rule has been eliminated. The patch installation process upgrades all local conditions to global conditions. The resulting global conditions are created in the same folder as the parent mapping rule.

The resulting condition name will be: LOCAL MAPPING 99999:<Parent Rule Name>.

Profitability Analytics are also impacted. Prior to the release of Profitability Manager 12.0.3, mapping rules allowed for local conditions. The Where Used dashboard provides several answers to help users identify where these local conditions are used.

Post Profitability Manager 12.0.3 no longer has the option to create a local condition. All conditions are considered global to rules. Therefore, the local condition answers do not display any data and should be removed from the dashboard.

Public Sector Financials

Changes to Oracle Public Sector Financials are described in this section.

Contract Lifecycle Management (CLM)

In release 12.1.3 and higher Contract Lifecycle Management (CLM) is available as an alternative version with improved features and latest technology for Public Sector area.

Integration with Subledger Accounting

This release introduces Subledger Accounting for managing accounting across subledger transactions. The subledger's accounting entries are generated and stored in a centralized repository. In Release 11*i* they were created separately by subledgers and General Ledger

Subledger Accounting is delivered with seeded Subledger Accounting Methods and Account Derivation Rules that generate the accounting entries from subledger transactions. The seeded Subledger Accounting Methods for Public Sector customers include Encumbrance Accrual and Encumbrance Cash. These rules derive the appropriate accounting entries specific for Public Sector customers. For example, Oracle Receivables generates Multi Fund Accounting entries and the seeded Subledger Accounting Methods contain Journal Line Definitions and the Account Derivation Rules to generate Multi Fund Accounting Entries.

During the upgrade, the subledger accounting method is determined based on the encumbrance settings in your subledger applications, such as Receivables and Payables. Public Sector sets the correct subledger accounting method for each Primary and Secondary Ledger in General Ledger. Reporting Currencies inherit the same subledger accounting method as their source ledger.

Purchasing

Changes to Oracle Purchasing are described in this section.

Local Contract Purchase Agreements upgrade to Global Contract Purchase Agreements

In this release, the distinction between Global and Local distinction for Contract Purchase Agreements no longer exists. All Contract Purchase Agreements can now be enabled for use across multiple operating units. All existing Contract Purchase Agreements are upgraded to have a single organization assignment. In this assignment, the values of Requesting and Purchasing operating units are that of the operating unit that owned the Local Contract Purchase Agreement, and the value of the Purchasing Site is the Supplier Site on the Local Contract Purchase Agreement.

Unified Catalog for Purchasing and iProcurement

Prior to this release, iProcurement and Purchasing maintained separate catalogs. In this release, these catalogs are combined together in Purchasing. During the upgrade, the items that were bulk-loaded into iProcurement are migrated to Global Blanket Agreements in Purchasing. If you have implemented iProcurement, you may notice new Global Blanket Agreements in Purchasing. See iProcurement, in this chapter for more details.

Integration with E-Business Tax

A fully automated E-Business Tax upgrade migrates setups related to Oracle Purchasing. This ensures that tax-related functions in Purchasing continue to work as before. With the new tax solution, you have the option to centrally manage tax rules and configure them to support local requirements.

All common tax setups are performed through the E-Business Tax module. Tax Defaulting Hierarchy in Purchasing Options is migrated to E-Business Tax.

The Tax Details and Tax Code Summary forms are obsolete. This information is now displayed on the Manage Tax page (accessible through menu options). In addition, the Tax Code field on the Enter Purchase Order, Release, and Requisition forms is obsolete. Tax Code is now referred to as Tax Classification, which you can specify on the Additional Tax Information page (from the Manage Tax page).

The profile options Tax: Allow Override of Tax Code and Tax: Allow Override of Tax Recovery Rate are migrated to eBTax: Allow Override of Tax Classification Code and eBTax: Allow Override of Tax Recovery Rate, respectively.

Receivables

Changes to Oracle Receivables are described in this section.

Integration with E-Business Tax

This release introduces Oracle E-Business Tax to manage tax across the E-Business Suite. During the upgrade, system and customer options used to control tax calculation and tax code defaulting are migrated from Oracle Receivables into Oracle E-Business Tax entities. See E-Business Tax, in this chapter for further details.

Integration with Subledger Accounting

This release introduces Subledger Accounting for managing accounting across subledger transactions. Receivables no longer creates any accounting entries. Existing Receivables accounting options and setups remain and affect the generation of accounting distributions in the Receivables data model. However, the accounting distributions are now simply one of many sources for generation of final accounting in the Subledger Accounting module.

Release 11*i* customizations to Receivables accounting tables still work after the upgrade, provided you do not use any of the new features of Subledger Accounting. Once you use Subledger Accounting to update an accounting rule, or any other aspect of accounting, you must transition your customizations to reference the Subledger Accounting data model.

Transactional data is upgraded for a user-specified number of fiscal years. If you need to run reports or query transactions that are outside the specified upgrade period, you have to launch the upgrade of additional periods. See Subledger Accounting, in this chapter for further details.

Centralized Banks and Bank Accounts Definitions

In this release, all internal banks and bank accounts you had defined for your operations are automatically migrated to the central Cash Management entities. Remittance bank accounts are owned by a legal entity rather than by an operating unit.

Banks and bank branches are centralized in Oracle Cash Management entities, as described in the preceding paragraph. However, bank accounts you had defined for your customers are migrated from the Payables entities to the central Payments entities. Oracle Payments centralizes and secures all payment instrument data, including external bank accounts, credit cards, and debit cards. See *Cash Management*, in this chapter for further details.

Integration with Payments for Funds Capture

This release introduces Oracle Payments, which is used by Oracle Receivables for processing funds capture. See *Payments*, in this chapter for further details.

Balance Forward Billing

The Release 11*i* Consolidated Billing Invoices functionality has been enhanced to include more flexible billing cycles, to consolidate invoices at site or account level, and to present Balance Forward Bills using the user-configurable Bill Presentment Architecture. If you are using Consolidated Billing Invoices in Release 11*i*, your setup is automatically migrated to Balance Forward Billing enabled at the customer site level.

Late Charges Enhancements

The Receivables Late Charges feature has been enhanced to incorporate the Global Interest Invoice setups, charge calculation logic, and charge generation processes. Charges for delinquent payments can now be generated as adjustments, debit memos, or interest invoices. The Interest Invoice Global Descriptive Flexfield is obsolete. Release 11*i* finance charge setup attributes are automatically upgraded to late charge setups at the account and account site levels.

Customer UI Redesign

This release introduces a new HTML user interface for entering and maintaining customer data. See the *Oracle Receivables User Guide* for further details.

Process Changes

The following features are obsolete:

- Collections Workbench - The Oracle Advanced Collections module delivers similar functionality. See the Collections Migration white paper and the Oracle Advanced Collections User Guide for further details.
- Trade Accounting - Similar functionality is delivered by integration with the Oracle Trade Management module. Trade Management integration is available in Release 11*i*.
- Bill of Exchange - This functionality has been replaced with the Bills Receivable feature. Bills Receivables is available in Release 11*i*.

Sourcing

Changes to Oracle Sourcing are described in this section.

Price Factors Upgrade to Cost Factors

In this release, Price Factors is renamed to Cost Factors. Additionally, Cost Factors can now be a Supplier or Buyer type. Depending on the type, buyers or suppliers provide a

value for the Cost Factor.

If you are upgrading from base Release 11i.10 or previous version of Oracle Sourcing, then all cost factors are marked as supplier cost factors. If you are upgrading from Oracle Sourcing Rollup J (also known as Oracle Sourcing minipack 11i.PON.J) or a later version of the product, there should be no effect. Price elements, available in Oracle Sourcing Release 11.5.10 and earlier, are now called Supplier Price Factors.

Negotiation Header Attributes Upgrade to Negotiation Requirements

Oracle Sourcing has significantly improved negotiation header attributes. Buyers can now automatically score the supplier responses and designate teams of scorers to evaluate the bids. The feature has also been renamed to better represent its meaning. Header Attributes is now called Requirements. Header attribute group is now called Section.

The lookup code to create reusable sections is now called Sourcing Requirement Sections. Changes to the predefined section names are not reflected on old documents. For negotiations created before the upgrade, the old header attributes are represented in a hierarchical view grouped by sections.

Auction AutoExtend

Buyers can now specify the lowest bid rank that can trigger AutoExtend. As part of the upgrade process, all existing negotiations are modified to set this rank to first, in order to replicate the previous behavior.

In addition, this release gives buyers increased flexibility to specify the maximum number of automatic extensions by entering any number between 1 and 9999, or choosing unlimited extensions. Auctions created before the upgrade keep the value for the number of extensions after the upgrade.

Online Discussion

Collaboration team members can now exchange messages through online discussions. Additionally, team members with full access can exchange messages with suppliers. In previous releases, only negotiation creators could send messages to external parties.

Collaboration team member access privilege remains the same after the upgrade - team members who have the "View only" check box selected continue to have view-only access, and team members who do not have view-only access have full access.

For supplier messages sent before the upgrade, the supplier company name and user's name are displayed. Suppliers see the buyer enterprise name instead of the individual buyer's name (from the buying organization) on buyer messages sent before the upgrade.

Template Migration

Each template has an owning Operating Unit associated with it. When creating a template, you must specify which operating unit it belongs to. The template is applied to negotiations created within the owning operating unit. It can also be marked as a global template, which can be applied to any negotiation of any operating unit.

There is a new field for Operating Unit on the template creation page. All existing templates created before the upgrade have the default value for this field from profile

option "MO:Operating Unit" at the site level. There is also a new check box for Global Template. Existing templates have this check box selected after the upgrade, allowing you to use the template on negotiations created within any operating unit.

Two Stage Evaluation of RFP

Buyers can now create Two Stage RFQ's. The Two-Stage RFQ process is used by organizations in the public sector or by government enterprises and the negotiation process typically follows submission of quotes by suppliers in two parts - the *technical quote* and the *commercial quote*. All draft RFQ's after upgrade will have a checkbox and *Two-Stage RFQ* displayed on the header page. This check box enables 2 stage bidding process. All RFQ's that were published before upgrade will display an unchecked read only check box with *Two-Stage RFQ* displayed on the View RFQ page.

Quantity Based Price Tiers

Suppliers have flexibility to offer different unit prices depending on the volume of business that the buyer is willing to commit for a given product or service. Typically, a supplier will provide preferential pricing for a larger volume purchase. Quantity based price tiers allow buyers to specify different price points for each quantity range on negotiations with standard purchase order, blanket or contract purchase agreement outcomes. Suppliers can respond to the tier structure defined by the buyer, or they can provide their own price tiers.

For negotiations and templates with Blanket Purchase Agreement or Contract Purchase Agreement outcome prior to the upgrade, the Price Tiers field will be marked as Price Breaks. For negotiations and templates with Standard Purchase Order outcome prior to the upgrade, the Price Tiers field will be marked as None. (This change is applicable for customers who have not applied Oracle Sourcing J Rollup 2 before upgrading to Release 12)

Cost Factor Enhancements

For negotiations that have fixed amount cost factors prior to the upgrade, the new Award Price column will be shown on the Award Summary page with the award price set to the bid/quote price for all the awarded lines. (This change is applicable for customers who have not applied Oracle Sourcing J Rollup 2 before upgrading to Release 12)

Cost factors allow buyers to model the total cost of a product or service. Cost factors operate under one of these three pricing basis: (1) per unit cost (2) percentage of the unit price (3) fixed amount for the line.

This enhancement improves the calculation of the per unit total cost when fixed amount cost factors are used and the buyer awards a supplier a quantity that is either lower or higher than the response quantity. Whereas before Oracle Sourcing used the response quantity to calculate the per unit total cost, the new formula utilizes the award quantity to distribute the fixed amount cost factor resulting in a more accurate award amount calculation.

Sourcing Optimization Enhancements

Sourcing Optimization has several enhancements to assist buyers in making optimal award decisions. Buyers can now determine a constraint priority for award

optimization by indicating the importance of a given constraint. All existing constraints before upgrade will display a priority list beside them with a priority of 1 indicating Mandatory.

Subledger Accounting

Oracle Subledger Accounting provides a common accounting engine that replaces the existing accounting processes in the different subledgers. Consequently, the Subledger Accounting upgrade consists of migrating the existing accounting data to ensure a continuous business operation between the two releases. Depending on the business and the specific requirements, "existing accounting data" may have different implications for each customer.

In this sense, and for the purposes of the present documentation, accounting data is defined as:

- All the data that has accounting relevance for the customer. This includes the journal entries, balances, base transactions that have generated journal entries, and related information, such as accounting events and setup information.

As part of the continuous business operation, the Subledger Accounting upgrade also takes into account the reports and inquiries that are necessary for the daily user activities. In this sense, some other pieces of information must be upgraded to the new instance:

- Data that supports queries and drill down between different products
- Reports and queries

Supplier Data HUB

Oracle Supplier Data Hub is part of a full suite of Master Data Management (MDM) tools that allows organizations to manage supplier records across heterogeneous environments. Oracle Supplier Data Hub requires a separate license.

Supplier Lifecycle Management (SLM)

Oracle Supplier Lifecycle Management (SLM) is a new application that lets organizations execute proper qualification and performance assessment of prospective and existing suppliers. Key features include:

- Extended Supplier Profile enables an unlimited set of attributes to be added to each supplier profile.
- Supplier Qualification supports the collection from suppliers of key qualification details and allows for complex approval routing of each new supplier request.
- Performance Assessment allows feedback from key stakeholders to be gathered and scored.

- Compliance Management provides a repository to store and track key compliance documentation.

Trading Community Architecture

Changes to Oracle Trading Community Architecture are described in this section.

New Trading Community Members

New data appears in user interfaces. It reflects changes related to Trading Community Architecture organization and person parties and contacts.

- Suppliers and Supplier Contacts
- Banks, Bank Branches, Clearing Houses, and Clearing House Branches
- Legal Entities
- Intercompany Organizations

Address Validation

Trading Community Architecture validates address information based on data stored in the Trading Community Architecture Geography Model. This model replaces the validation previously performed by Release 11*i*. Upgrading does not affect address entry and maintenance in Trading Community Architecture. User-defined rules determine how to respond when an invalid address is entered.

Additional Information: See E-Business Tax in *Oracle Financials and Oracle Procurement Functional Upgrade Guide: Release 11i to Release 12* for more information.

DQM Enhancements

The Data Quality Management (DQM) tool delivers enhanced administration interfaces providing a new level of audit detail and maximized out-of-the box performance. A new overview page provides relevant and timely information about the status of important DQM processes and setups, while more consistent attributes and transformations naming conventions improve the user's experience.

D&B passwords are now managed under the Adapters section of the Administration tab and not by profile options. Current D&B passwords migrate during upgrade.

Forms to HTML User Interface Changes

New HTML pages are added for managing roles in Resource Manager. These pages do not replace the existing Forms for the same functionality, but are offered as an alternative to Forms.

Resources, Groups, and Roles JTT pages are obsolete and replaced with equivalent HTML pages. No setup is required, as the HTML pages use the same profile options to render pages. Additional functionality is available, including a small menu change on the Oracle Customers Online Employees tab.

Merge Dictionary and Attributes and Transformations, Word Replacements, and Match Rules setup is managed in the HTML pages of the Administration Tab, and have been removed for DQM setup. The Customer Standard form has been replaced with a streamlined HTML.

Additional Information: See *Oracle Receivables User's Guide* for details.

Treasury

Changes to Oracle Treasury are described in this section.

Bank Account Migration to Cash Management

Prior to this release, you had to define an internal bank account separately in each application that used it (such as Treasury and Payables), even if the account was the same. This created fragmented data and made bank account maintenance complicated and labor-intensive.

In this release, Cash Management provides a common data model and common user interface for creation and maintenance of banks, bank branches, and internal bank accounts. An internal bank account intended for use by different applications can be created just once - in the centralized Cash Management function - and then used in any application or a select group of applications (that you specify).

To accommodate these changes, all existing company and subsidiary bank account information is upgraded as follows:

- All company bank accounts are automatically migrated one-to-one to the new centralized data model.
- All subsidiary bank accounts are automatically migrated one-to-one to the new centralized data model. Please note, however, that although such accounts now reside in the centralized data model, unlike company bank accounts, they will not be visible in the new user interface. They still have to be managed in the Counterparty Profiles form.
- All counterparties that are used as banks before this release in Company or Subsidiary bank accounts are automatically migrated into Banks and Bank Branches in the centralized data mode. Each such counterparty will be upgraded into one Bank and one Bank Branch belonging to this Bank.

Note: While the setup of Treasury bank accounts has changed, there are no changes to the way you use the Treasury bank accounts.

Bank Account Balance Migration to Cash Management

Prior to this release, bank account balance maintenance and interest calculation was only available to Treasury bank accounts. In this release, this feature is available to all bank accounts defined in Cash Management.

Existing bank account balance information is managed as follows during the upgrade:

- All existing bank account balance data and the rates at the balance level are automatically migrated to the new centralized data model.
- Default interest rate setup for bank account balances are not migrated.

U.S. Federal Financials

Oracle U.S. Federal Financials interacts with several products within the Oracle Financials product family (Oracle Payables, Oracle Payments, Oracle General Ledger, Oracle Subledger Accounting, Oracle Receivables, Oracle Purchasing, and Oracle Cash Management). Refer to the appropriate sections of this chapter to understand the high-level impact for these products on U.S. Federal Financials users.

Integration with Subledger Accounting

This release introduces Subledger Accounting for managing accounting across subledger transactions. You no longer need to enter transaction codes for a transaction to create the desired accounting. Instead, Subledger Accounting seeds account derivation rules that use attributes from transactions to determine the correct accounting.

In Release 11*i*, journals in General Ledger were kept in detail, so no transaction code journals are moved into Subledger Accounting. All accounting reports show combined General Ledger and Subledger Accounting data. During normal processing, the Subledger Accounting code detects whether the journal exists in Subledger Accounting or General Ledger (upgrade case or not) and uses the appropriate Subledger Accounting rule to create the accounting.

Integration with General Ledger

All U.S. Federal Financials sets of books are upgraded to ledgers in an accounting setup. Upgraded ledgers can be viewed using General Ledger's Accounting Setup Manager. The upgrade creates data access sets for each upgraded ledger that are assigned to the U.S. Federal Financials user responsibilities, which ensures only the appropriate users gain access to ledger-based setup windows within U.S. Federal Financials.

Implementation of Payables and Receivables Netting

In Release 11*i*, Oracle Financials had three netting solutions – Single Third Party in Oracle Public Sector Financials International, Contra Charging in Oracle Financials for Europe, and AR/AP Netting in U.S. Federal Financials. While these solutions provided netting functionality, each addressed a different specific need.

The new Payables and Receivables Netting solution in Oracle Financials Common Modules provides one total netting solution built into the standard applications. Therefore, the U.S. Federal Financial AR/AP Netting solution is obsolete. The setup data used by the AR/AP Netting solution in U.S. Federal Financials is migrated to the new Payables and Receivables Netting solution.

Summary Schedules and Consolidated Files

With the introduction of Oracle Payments, consolidated payment files for U.S. Federal Financials are now generated directly in Oracle Payments.

Summary Schedules still exist in U.S. Federal Financials after the upgrade. Any Release 11*i* payment batch that is associated with a summary schedule, or a consolidated payment file that has not been generated, must be voided and recreated through Oracle Payments. You can avoid this situation by generating these payment files in Release 11*i* in the Summary Schedule and Consolidated Files window in U.S. Federal Financials.

Customer Relationship Management Upgrade Impact

This section describes how the upgrade affects your existing Customer Relationship Management (CRM) products, and highlights the impact of these functional changes on your day-to-day business. It is arranged alphabetically by products in the Customer Relationship Management product family.

Action: Review the product-specific Release Content Documents (RCDs) and TOI on *My Oracle Support* for additional information.

About Business Impact and Functional Changes

An Applications upgrade alters both the technical and functional aspects of your Oracle E-Business Suite system. Functional changes have an impact on the way you use the products as you conduct your daily business.

Note: this chapter describes some of the ways the upgrade changes your existing products. We assume that you have read about the new features and products delivered in this release, which is included in the product-specific Release Content Documents (RCDs) and Transfer of Information documents (TOIs) on *My Oracle Support*.

The discussions of the functional aspects of the upgrade in this chapter are arranged by products within the Customer Relationship Management product family.

Advanced Inbound

This section outlines changes made to Oracle Advanced Inbound.

Customer Lookup

The customer lookup feature has changed as follows:

- In Release 11*i*, Customer Lookup was defined at the server group level and accessible in the Call Center HTML Setup UI (Classification > Customer Lookup). In this release, navigate to the Classification Rule configuration page to configure Customer Lookup (Admin > Classifications > Rules: Classification tab.)
- After the upgrade, all classifications have a default value of No Customer Lookup. You must set up customer lookup to use the available classification rules.

Basic Telephony

The Basic Telephony feature has changed as follows:

- Profile options CCT: Basic Telephony: ACD ID, CCT: Basic Telephony: ACD Password, and CCT: Basic Telephony: ACD Queue have been obsoleted and removed. The data from these profile options has been migrated to CRM Resource Manager as follows:

(N) CRM Resource Manager Responsibility > Maintain Resources > Resources (B) Resource Details (T) Interaction Center
- To view existing ACD agent configuration, navigate to CRM Resource Manager and select the desired agent. ACD agent parameters are configured for the seeded middleware (BASIC_MIDDLEWARE).

No other changes have been made to profile options used by Basic Telephony.

Active Mode Routing

In this release, Oracle Advanced Inbound does not support active mode routing for inbound calls. If you are currently using this feature, you must use either Enhanced Passive Mode or Passive Mode.

Additional Information: See *Oracle Advanced Inbound Implementation Guide* for more information on setting up your call center to run either of these modes.

You may continue to use active mode routing for web callbacks.

Install Changes

In this release, the install process is changed as follows:

- The `ieoicsm.class` file has moved from `$APPL_TOP/html/download/` to `$INST_TOP/appl/download/ieo/`.
- After an initial installation, or anytime a patch for CCT, IEO, or UWQ is applied, run the following command to regenerate `ieoicsm.class`:

```
$INST_TOP/admin/scripts/ieo/ieozipmain.sh
```

If you are not using the `APPL_TOP` installation for running your ICSM server, then download `ieoicsm.class` and `ieoall.zip` using secure FTP from the location `$INST_TOP/appl/download/ieo/` to the same directory.

Advanced Scheduler

Changes for Oracle Advanced Scheduler are described in this section.

Schedule Task Window

The Schedule Task window Preferences tab Assistance Level region offers three Interactive Scheduling options: Intelligent, Window to Promise, and Assisted. The Unassisted option available in prior releases is obsolete.

Location Time Zone Support

Advanced Scheduler supports customer incident and technician time zones. See Field Service (Core), page 2-56 for more information.

Task Durations Longer Than One Shift

Advanced Scheduler can plan and schedule service tasks that take longer than one work shift to complete. See Field Service (Core), page 2-56 in this chapter for more information.

Customer Confirmation Requirement

See Field Service (Core), page 2-56 in this chapter.

Site Access Hours Restrictions

You can define the times of day and days of the week when access to a customer, customer site, or customer site location is available. These access hours are automatically added to field service tasks generated by the Field Service Preventive Maintenance module, or they can be manually added in the Dispatch Center.

Advanced Scheduler treats task access hours as hard constraints, meaning that task arrival time must occur within one of the specified access time windows. Dispatchers have the ability to relax this constraint if Advanced Scheduler does not identify an acceptable schedule option.

Customer Relationship Management

Your Customer Relationship Management applications specialists should be completely familiar with the information in this section and should have made appropriate plans to accommodate the associated changes before you begin your upgrade.

Email Center

The following topics describe changes to Email Center and suggest where you can find additional information on specific feature-specific changes or what additional steps you may need to take to accommodate the changed functionality.

Oracle Email Server Independence

Email Center can connect to any IMAP4-compliant mail server, download messages into the Email Center schema, and process those messages. New setup and administration screens are associated with this change.

Email Account Administration: Administrators can directly define email account parameters using the new account administration screens available in the Email Center Administrator console. For example

Scenario 1: Email messages are redirected from the corporate mail server as part of Email Center implementation in the current release as follows:

- **Releases 11.5.9 and 11.5.10:** Account myermsaccount@mycompany.com has a redirect-rule that routes the email messages to myermsaccount@oesmailserver.com, which was created from the Email Center Self-Service Administration console.
- **Release 12:** Administrators can directly define the email account details using the account administration screens.

Note: In both the scenarios, if data migration is planned as part of the upgrade, email accounts like myermsaccount@oesmailserver.com will be migrated, along with email data, into the new configuration tables and marked Inactive. You can access this account from the new account administration screens, update the account properties as required, and activate them to work in the Release 12 flows.

Download Processor: The Email Center Download Processor is a mid-tier service that runs at intervals you configure to connect and download email into the Email Center schema. Using configuration data defined in Email Center for an email account, it can connect to the email account and download email messages for further processing.

When an email account is defined in Email Center, the system creates Oracle Processed and Oracle Retry folders in that account. Once a message is downloaded, both the metadata and the content of the email remain in the Email Center schema until an administrator purges it.

Data Migration Tools

The new backend server architecture for Email Center introduces new configuration and transactional tables. Because all prior Email Center releases must have a migration path to the new architecture, this release ships a set of data migration tools. They consist of the following components:

- **Download Processor - migration mode:** In this mode, the Download Processor can connect to email accounts residing in Oracle Email Server and retrieve email from all folders into the Release 12 schema.
- **Email Center Migration concurrent programs:** These programs control the reconciliation of email migration data with the Oracle Customer Interaction History and are responsible for moving email into the right message store.
- **Migration Console:** These screens in the Email Center Administration console allow

administrators to monitor data migration and also to advise on the status of the migration.

Custom Workflow Process

As a part of the shift from a message stored based on Oracle Email Server to one based on a local message store, the out-of-the-box workflow included has been modified to remove from the keys all references to data based on the Email Server. If an implementation has any customer workflow hooks that were used to implement specific flows not available out-of-the-box, you must re-validate, test, and where necessary update the code to reflect these changes.

Live Message Migration

Email messages with actions before the upgrade are known as live messages. After the migration, Email Center agents can access live messages in a pre-migration state and take appropriate action. The messages are generally in a queue waiting to be acquired by the agents or are already acquired by an agent and waiting in the agent's Inbox. The percentage of data in this state in a live Email Center implementation depends on the email volume at the site.

Do not use the Email Center until the live message migration is complete. The downtime is fairly small and depends on the number of emails in a live state.

Historical Message Migration

Email messages processed in Email Center are retained in the Oracle Email Server message store and accessed for auditing and for tracking customer interactions. The percentage of data in this state could be fairly high in an implementation that has been in production for some time.

The Email Center Migration concurrent program provides the Cut-off Date for Historical Emails parameter, which defaults to 30 days. You can decide how much of the historical data is to be migrated. Historical data that is not migrated is no longer available for viewing from the Email Center application. However, large amounts of historical data may result in a lengthy migration process.

Note: The number of email messages that qualify for migration affects the duration of the migration process. To reduce the duration, decide on a cut-off date for historical email data. Once the live message migration is complete, you can use the Email Center while the historical data migration runs in the background. Reduced number search results could result, but they will be accurate after the process is complete.

Field Sales

Release 11.5.10 was the terminal release of Oracle Field Sales (Sales Online). In this release, Field Sales is obsolete. If you are using this product, you must upgrade to the Oracle Sales application. This change results in a functional impact for all users. Oracle recommends that you complete a functional analysis before you migrate Field Sales

(Sales Online) data to Oracle Sales.

Additional Information: See Migrate Sales Credits, in this chapter for more information.

Field Service (Core)

Changes for Oracle Field Service (Core) are described in this section.

Location Time Zone Support

Oracle Field Service core and related products within the Field Service Suite support customer incident and technician time zones. User interfaces provide, where appropriate, fields for specifying the time zone at the technician's location, as well as at the field service incident site. With this capability, call center agents, dispatchers, managers and administrators can communicate with customers and field technicians without having to make mental time zone conversions.

Task Durations Longer Than One Shift

Oracle Field Service core and related products can plan and schedule service tasks that take longer than one work shift to complete. Advanced Scheduler searches for contiguous slots of scheduling options where a technician can perform the task on consecutive workdays. For example, Thursday, Friday, and Monday for a task having a planned effort of 24 hours duration, and the standard shift duration is 8 hours. When this criterion is met, Advanced Scheduler propagates a separate child task for each work shift required.

Subsequently, the dispatcher can use the Dispatch Center user interface to reschedule or reassign individual child tasks if, for example, an unplanned event causes the technician to be unable fulfill the tasks as scheduled, or cancel a child task if it is no longer needed due the technician completing the service early.

Customer Confirmation Requirement

Service Request and Dispatch Center user interfaces make customer confirmation constraint information visible. A dynamic button label indicates whether customer confirmation of a task is required, not needed, or received. Click the Customer Confirmation button to open the Customer Confirmation window, and then update the status of the confirmation, if necessary. Controls are in place to prevent the commit or release of tasks to field technicians when confirmation is required but not received.

Usability

The following features enhance usability:

- An Advance Find feature finds tasks matching combinations of more types of search criteria.

- A Calendar HTML user interface now displays all of a technician's assignments for a given day, week, or month.
- The reworked Dispatch Center user interface makes the Plan Board and Gantt Chart views larger.
- Technicians can drill down to task details from the Calendar.
- Menu options from the main menu and context sensitive right-click menu options have been rationalized to provide similar and relevant options to enhance the user's experience.

Service for Assets

To support service on owned assets as well as customer products, a variety of enhancements have been made to Oracle Teleservice, Mobile Field Service, and Install Base:

- In Release 11*i*, field service tasks could only be created when the service request incident address references a Trading Community Architecture (TCA) Party Site. In this release, Dispatch Center, Scheduler, Technician Portal and Mobile Field Service user interfaces and logic support creation of Field Service Tasks when the Incident Addresses is not associated to a TCA Party.
- Enhancements to the Technician and Administrators Portals allow access to the Install Base user interface to update the record of the equipment being serviced. Note that this functionality is not available for Field Service Mobile Products in this release.

Incentive Compensation

This section outlines changes made to Incentive Compensation.

Out-of-the-Box

Out-of-the-box, Incentive Compensation delivers a set of responsibilities, each with the appropriate business flow permissions. Consequently, menus and responsibilities that existed or were created in Release 11*i* are end-dated. You must assign the new responsibilities to existing users after you complete the upgrade.

The new responsibilities are described in the following table:

| Responsibility | Description |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Incentive Compensation Administrator | <p data-bbox="716 310 1338 405">Responsible for configuring and maintaining OIC application setups, and administering and scheduling OIC concurrent programs.</p> <p data-bbox="716 430 1360 489">A configuration workbench provides a checklist of tasks as a guide for the process of implementing or administering OIC.</p> |
| Plan Administrator | <p data-bbox="716 535 1365 659">Responsible for building compensation plans and plan components, maintaining compensation plans, and maintaining product hierarchies and rule definitions that are used across compensation plans.</p> <p data-bbox="716 684 1365 808">Can access a single page that provides a comprehensive view of a plan. It contains a Design section (plan components and links), an Eligibility section (roles and resources), and a Notes section (history of plan changes).</p> <p data-bbox="716 833 1354 1052">In addition, the plan creation flow supports top-down creation, making it possible to create a plan, and add and create components as needed. The plan elements creation checklist provides simple, discrete steps that can be checked off as the plan elements are completed and validated. The plan administrator also has access to a component library workbench.</p> |
| Compensation Manager/Analyst | <p data-bbox="716 1102 1317 1194">Responsible for managing resource compensation plans, reviewing and handling disputes, and administering the compensation process.</p> <p data-bbox="716 1220 1365 1409">Can access a single page that provides a comprehensive view of a resource. It contains a Roles/Group section (resource maintenance), a Plans section (customization maintenance or payment plan/paygroup assignments), a Compensation section (historical compensation reports), and a Notes section (history of resource changes).</p> <p data-bbox="716 1434 1330 1556">The Analyst can run a validation process to flag any incomplete compensation plan setups, and can use the transaction detail and status details page to aid in dispute resolution.</p> |
| Incentive Compensation User (Manager Self Service) | <p data-bbox="716 1606 1354 1761">Responsible for monitoring resource performance and distributing quotas and contracts to resources. Has access to compensation reports for any resources rolling up to him. The Year-to-Date Summary and Earnings Statement reports have been re-written using the new technology stack.</p> |

| Responsibility | Description |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Incentive Compensation User (Self Service) | Views incentive statements and reconciles payments with expected compensation. Information in reports can be exported to a CSV file. Compensation information can be published as a PDF document. |

Global Administration: Multi-Org Access Control

Multi-Org Access Control (MOAC) allows a single responsibility to access multiple operating units. An Incentive Compensation Administrator can configure system setups for multiple operating units without having to log in using a separate responsibility for each operating unit. OIC Compensation Managers can query and modify transactions and resources for multiple operating units without having to log in using a separate responsibility for each operating unit.

Integration with Oracle Territory Manager

In Release 11*i*, you had to set up mapping for territory qualifiers in order to use the Territory Assignment Engine (TAE) in Sales Crediting and Allocation. In this release, OIC automatically provides the mapping and populates the table with data using one of two mapping options as a part of the post-collection process.

Option 1: Use the seeded OIC attribute/territory qualifier mapping provided in this release.

Option 2: Continue to use the existing OIC attribute/territory qualifier mapping

To schedule collections using the new concurrent program:

Territory Manager allows you to run the concurrent program "Synchronize Territory Assignment Rules" (STAR), which replaces the existing GTP concurrent program. You can run it in total, incremental, and date-effective mode. Total and Incremental mode behave in the same manner as in 11*i* for all consumer applications. Date effective mode is only applicable to OIC.

The "Synchronize Territory Assignment Rules" (STAR) concurrent program accepts the following parameters:

- Usage
- Transaction Type
- Run Mode
- Start Date
- End Date

- Debug Flag

The pre-processing APIs (dynamic packages) created by the "Synchronized Territory Assignment Rules" concurrent program has been decommissioned.

Multi-level Marketing Industry Support

Additional setup parameters support multi-level marketing requirements. For example, it is possible to track the level of rollup for each OIC transaction.

The plan element setup includes a rollup calculation option. When a plan element is configured, you can choose whether to calculate commissions for rolled-up transactions. You can choose to calculate for all resources or only for managers.

Profile Option Changes

Some common system-level profile options are now defined as parameters that can be changed in the OIC Administrator Configuration Workbench. The OIC Administrator will need to use the Configuration Workbench to manually set these parameters.

| Release 11i Profile Option | Workbench Task | Release 12 Parameter Name |
|---------------------------------------------------|------------------------|---------------------------------------------------------------------|
| OSC: Default Custom Flag | Application Parameters | Customize Compensation Plans |
| OSC: Default Conversion Type | Application Parameters | Currency Conversion Type |
| OSC: Reporting Hierarchy | Application Parameters | Reporting Hierarchy for Manager Access to Resources Reports |
| Display Draw | Application Parameters | Display Draw in Year To Date Summary Report? |
| OSC: Apply Non-Revenue Split to Quantity | Collection | Collect Quantity for Non Revenue Credit Receivers |
| OSC: Negate during Revenue Adjustments Collection | Collection | Negate Original Transactions during Revenue Adjustments Collections |
| OSC: Reset Error Transactions | Collection | Re-load Errored Transactions |
| OSC: Collect on Acct Credits | Collection | Collect Credit Memos from Oracle Receivables |

| Release 11i Profile Option | Workbench Task | Release 12 Parameter Name |
|-----------------------------------|-----------------------|---------------------------------------------------------------|
| OSC: Customized Summarization | Calculation | Aggregate Transactions Based on Custom Criteria during Rollup |
| OSC: Prior Adjustment | Calculation | Allow Prior Period Adjustments |
| OSC: Roll Summarized Transactions | Calculation | Aggregate Transactions during Rollup |
| OSC: Commission Rate Precision | Calculation | Numeric Precision for Rate Tables |
| OSC: Income Planner Disclaimer | Collation | Display Projected Compensation Disclaimer? |

The following profile options from 11i have changed.

| Release 11i Profile Option | Release 12 Profile Option | Default |
|------------------------------------------|-------------------------------------------------------|----------------|
| OSC: Validate Payment Worksheet Statuses | OIC: Enforce Payment Worksheet Approval | Y |
| OSC: Payroll Action If Entry Exists | OIC: Approve or Reject Duplicate Payment Transactions | Rejected |
| OSC: Sleep Time in Seconds | OIC: Frequency of Batch Runners Status Check | 30 seconds |
| Total Rev % is Not 100 | OIC: Allow split % less than 100% | Custom |
| OSC: Number of Batch Workers | OIC: Number of Batch Workers for Credit Allocation | 1 |
| OSC: Debug Mode | OIC: Enable Debug Mode | NO/N |
| OSC: Invoice Split Upgrade Start Date | OIC: Invoice Split Upgrade Start Date | Null |
| OSC: Invoice Split Upgrade End Date | OIC: Invoice Split Upgrade End Date | Null |

| Release 11i Profile Option | Release 12 Profile Option | Default |
|----------------------------|---------------------------|---------|
| OSC: LOV Input Validation | OIC: LOV Input Validation | |

*If you want to change this option to Pay By Transaction = Y during the upgrade, you must make sure all Payruns/Worksheets are Paid. If you do not, the resources will no longer be usable as the data will become corrupted.

Terminology Changes

The following table lists changes in terminology:

| Release 11i Term | New Term |
|---------------------|----------------------------------------------|
| Accelerator | Multiplier |
| Direct Resource | Direct Credit Receiver |
| Employee Number | Salesperson Number |
| Functional Currency | Ledger Currency (Terminology change from GL) |
| Incentive Type | Calculation Type |
| Payment Factor | Earnings Factor |
| Pay Periods | Compensation Periods |
| Payrun | Payment Batch |
| Quota Factor | Multiplier |
| Rate Schedule | Rate Table |
| Revenue Class | Product or Eligible Product |
| Sales Credit | Credit Amount |
| Salesperson | Resource |
| Set of Books | Ledger (Terminology change from GL) |

| Release 11i Term | New Term |
|------------------|----------|
| Worksheet | Paysheet |

Decommissioned Features

The Quota Performance report is replaced by the Attainment Summary report, and the Sales Force Planning Module and Income Planner have been decommissioned. See *My Oracle Support* (Doc ID: 338866.1).

Note: The Income Planner projected compensation calculator does not incorporate many of the settings provided in OIC-implemented compensation plans. Consequently, the sales pipeline projections may be inaccurate.

iSupport

Your iSupport applications specialists should be completely familiar with the information in this section and should make plans to accommodate the associated changes before you begin your upgrade

Registration

If you have defined custom user types prior to this release, and you wish to continue to leverage those types during iSupport registration, then you must manually associate the user type keys with the relevant iStore lookup types in the AOL lookups table after the upgrade. If you do not complete this task, then iStore cannot determine the user types, and they will not be available on the registration pages by the registering user. The lookup types include:

- IBE_UM_INDIVIDUAL_USER_TYPES
- IBE_UM_PARTIAL_USER_TYPES
- IBE_UM_PARTNER_USER_TYPES
- IBE_UM_PRIMARY_USER_TYPES
- IBE_UM_SECONDARY_USER_TYPES
- IBE_UM_STORE_USER_TYPES

For example, the seeded iSupport user type IBU_INDIVIDUAL is mapped to the iStore lookup type IBE_UM_INDIVIDUAL_USER_TYPES. You must use the Lookups form to perform the same action for all customized user types.

Multi-Party Setup

1. Profile Setup:

- User Profile Name: Oracle iSupport: Enable Multi Party Access
- Description: Profile to check if Multi Party is, or is not enabled
- Profile Values: Yes or No
- Default Value: No

Note: The profile option must be set to 'Yes' to enable Multi-Party feature.

2. Responsibility:

To make the Party Access menu visible to the administrator and the primary user, you must navigate as follows to open Oracle forms:

(N) System Administrator > Responsibilities

- Administrator:
Search for the iSupport Administrator - JTF Administration responsibility. From the Menu Exclusions tab, remove the function IBU_PARTY_ACCESS_FN and save it.
- Primary User:
Search for the iSupport Primary User responsibility. From the Menu Exclusions tab, remove the function IBU_PARTY_ACCESS_FN and IBU_SWITCH_PARTY_FN and save it.
- Business User:
Search for the iSupport Business User responsibility. From the Menu Exclusions tab, remove the function IBU_SWITCH_PARTY_FN and save it.

3. Assigning permissions:

- **iSupport Administrator:**
Select the IBU_SYSTEM_ADMIN role and assign the following permissions:
 - IBU_PARTY_USERS
 - IBU_SEARCH_PARTY
 - IBU_PARTY_ACCESS

- IBU_ASSOCIATE_PARTY
- IBU_PARTY_ACCOUNT_ACCESS
- IBU_PARTY_ACCOUNTS_VIEW
- IBU_PARTY_ACCESS_VIEW
- IBU_PARTY_REMOVE_VIEW
- IBU_DEFAULT_PARTY_VIEW

Note: Ensure that the role IBU_SYSTEM_ADMIN is assigned to the iSupport Administrator. If it is not, then assign it to the iSupport Administrator.

- **iSupport Primary User:**

Select the IBU_PRIMARY_USER role and assign it the following permissions:

- IBU_PARTY_USERS
- IBU_SEARCH_PARTY
- IBU_PARTY_ACCESS
- IBU_ASSOCIATE_PARTY
- IBU_PARTY_ACCOUNT_ACCESS

The following permissions may or may not be assigned to the primary user. These permissions are for viewing the Accounts, Party Access, and Remove and Default Party column in the Party Access page. For Example, if IBU_PARTY_ACCOUNTS_VIEW permission is not given to the primary user, then the primary user cannot view the accounts column.

- IBU_PARTY_ACCOUNTS_VIEW
- IBU_PARTY_ACCESS_VIEW
- IBU_PARTY_REMOVE_VIEW
- IBU_DEFAULT_PARTY_VIEW

Note: Ensure that the role IBU_PRIMARY_USER is assigned to the iSupport Primary User. If it is not, then

assign it to the iSupport Primary User.

- For iSupport Business User:
Select the IBU_Business_USER role and assign it the following permission:
- IBU_SWITCH_PARTY

Note: Assign the IBU_SWITCH_PARTY permission to the Business User only.

Multi Party Search Setup

In addition to the above setup, you must enable the following region attributes:

| Region Name | Attribute ID | Attribute Code | Label | Data Type | Node Display |
|-------------------------------------------|---------------------|---------------------|-------|-----------|--------------|
| IBU_CF_SR_ VW_FILTER | IBU_CF_SR_ PARTY | IBU_CF_SR_ PARTY | Party | Varchar2 | No |
| IBU_CF_SR_ VW_DSPL_O PTS_VALUE S | IBU_CF_SR_ PARTY | IBU_CF_SR_ PARTY | Party | Varchar2 | No |

If you want to view the party attribute in the selected options by default, then you must enable the following region attribute.

| Region Name | Attribute ID | Attribute Code | Label | Data Type | Node Display |
|-------------------------------------|---------------------|---------------------|-------|-----------|--------------|
| IBU_CF_SR_ VW_SLTD_D SPL_OPTS | IBU_CF_SR_ PARTY | IBU_CF_SR_ PARTY | Party | Varchar2 | Yes |

Knowledge Management

Changes for Oracle Knowledge Management are described in this section.

Search Operators

You can perform exact phrase searches by using double-quotes (" ") operator. The Exact Phrase search option has been removed from the search option drop down menu. The default search operator has been changed to "All of the keywords." This change is limited to simple search only. The default search option for advanced search remains "Any of the Keywords," and is no longer defined by the profile option "Knowledge: Default Searching Method."

Statements Creation from Service Request Notes

Before this release, only the first 500 characters of note data were captured in the statement summary when trying to create a new solution from a service request. Now, complete note data is transferred over to the statement detail, and the first 2000 characters are kept inside the statement summary. An author can arrange the information between the statement summary and details. There is no impact on the existing solutions and statements created in the system.

Search Administration

New administration pages allow you to manage repositories available for simple search for a service provider. You can define custom repositories and associate the repositories with the appropriate contexts from the setup. Existing data defined in the system are upgraded accordingly.

In particular, the profile option "Knowledge: Simple search repository key" is now obsolete, and data defined in this profile (including the JTF advanced properties data) are migrated to different context mappings and custom repositories, if they exist. Data modified in the JTF properties is no longer honored by KM after the upgrade.

Autolink Administration

Autolinks have replaced the Note Token Rules. For any implementation that has already defined Note Token Rules for objects "Knowledge Base Solution" or "Knowledge: OA Solution," and is being upgraded, no additional setup steps are required to use the existing rules, as they are upgraded as autolinks and autolink usage automatically.

The only change is that you should now use the Oracle Knowledge Management administration pages to view and update the setup. As a result, the administrator must have access to the Knowledge Base System Administration responsibility. Access to the Oracle Quality Online (OQO) administrator (DEMS Administrator) responsibility is no longer required. Data modified in OQO is no longer be honored by KM, and the setup screens for token rule are obsolete.

Concurrent Request Access

The KM administrator can submit and monitor concurrent requests directly from the KM menu, using a new request group that has been set up and assigned to the KM administrator.

Setup Menu

The KM setup menu has changed due to the introduction of new setup screens and concurrent request ability. If you have customized the KM setup menu, you must incorporate these changes manually.

Marketing

Campaigns from the previous release are migrated to Release 12. This migration is necessary to ensure that the product reports are accurate. However, the underlying data from the existing campaigns do not change, but data from the following campaign attributes would be affected with the migration:

Campaign Name: If the Campaign has a specific version identified, then the Campaign name is shown as - [Campaign Name]_[Campaign version]. The campaign version is now obsolete, and there might be more than one campaign with an identical name. To keep every campaign unique, the corresponding version needs to be migrated to a Campaign where the name is derived using the Campaign Name and the Version. Campaigns without multiple versions will not change.

Campaign - Product Category Associations: Ensure that the Product categories have already been migrated or upgraded to Single Product catalogs. Product categories associated with an existing campaign will not change due to migration. Hence, the primary flag for these categories remains intact.

Campaign - Product Associations: Ensure that all the Products associated with existing Campaigns belong to a Single Product Catalog. Identify all such products that are associated with the Campaigns, but are not part of the Single Product Catalog. If any, manually include these products into the Single Product Catalog. Subsequently, update these products in the Campaign-Product association schema.

Campaign - Product association (Primary flag) : If the campaigns have associated product categories or product, there might be no product association set as primary. Hence, if there is at least one product category or product associated with the campaign, mark it as the primary association unless the user selects another product category or product association to be set as primary.

For additional information, refer to the *Oracle Marketing Implementation Guide Release 12.2*.

Mobile Field Service

Changes for Oracle Mobile Field Service are described in this section.

Multiple Responsibilities

In Release 11*i*, Mobile Field Service users had to be associated to the Mobile Field Service/Laptop responsibility to access Mobile Field Service Laptop. In Release 12.2, the Multiple Responsibility Model allows users to have different profile settings and different user interfaces. Regardless of the responsibility to which the user is associated,

they have access to the Mobile Field Service Laptop application. Multiple technicians mapped with different responsibilities can be assigned to the same operating unit.

Laptop User Interfaces

Mobile Field Service user interfaces have been redesigned using the User Interface XML (UIX) technology framework, which is based on Browser Look And Feel (BLAF) standards. Additionally, the Mobile Field Service Laptop application can be personalized at either site or responsibility level to show or hide data, reorder fields and regions, change prompts, and so on.

Self-scheduling

In Release 11*i*, Mobile Field Service: Wireless allowed technicians to create service request and follow-up tasks, but did not provide the ability to assign and schedule these tasks to themselves. Release 12.2 provides the ability for technicians to assign tasks to themselves from mobile devices as well as provide a window of time for the customers to choose from. Using these scheduling capabilities, the technicians can either choose to work on the tasks right away or come back at a later time.

Non-TCA Party Incident Addresses

In Release 11*i*, field service tasks can only be created when the service request incident address references a Trading Community Architecture (TCA) Party Site. In Release 12.2, Dispatch Center, Scheduler, Technician Portal, and Mobile Field Service user interfaces and logic support the creation of Field Service Tasks when the Incident Addresses is not associated to a TCA Party.

One-to-One Fulfillment

One-to-One Fulfillment has improved the performance for mass email request fulfillment. The server now uses multiple threads on the Java process, and new server-level flags have been added.

- When installed, the fulfillment server routes mass email requests through the new multi-threaded fulfillment process. You can turn this process off by update the JTO: Server: Use Multithreaded Fulfillment profile option.
- The recording of Interaction History for the mass email requests has been moved out of the main processing thread, and now uses a batch routine. You should schedule the Interaction History Bulk Processor concurrent program so it runs on a regular basis.
- The new JTO: Purge Fulfillment Requests concurrent program lets you purge data related to old fulfillment requests. It uses multiple database workers so that it can process a large number of rows. You can schedule it to run on a periodic basis by setting the relative age of the fulfillment request on the run date.
- The fulfillment server allows Display Name, From and Reply To values that can be

merged in the email header. You must define the default value for Display Name on the email server setup screen.

- Bounce back functionality works with or without the sendmail configuration changes. You no longer have to update the sendmail configuration to direct bounced messages to a single bounce back account.

Order Capture/Quoting

This section describes the changes made to Oracle Order Capture/Quoting.

Integration with Trading Community Architecture

The following actions are changed in Trading Community Architecture:

- Selecting party, account and address together in the Search and Select: Customer flow is not supported by the TCA common components.

Account - the oldest account, if any, is defaulted after the party has been selected. If there are multiple accounts for the party, you must change the account after selecting the party.

Address - only the identifying address is displayed in search results instead of all addresses. This address is not selected when the party is selected. You must select the address after the party is selected. It is possible to select party, account, and contact together.

Contact - contact information is not displayed. You must select the contact after the party is selected. One alternative is to set up defaulting rules to default in an address and contact when the party is selected.
- Contact and Address can no longer be displayed and selected together on the Search and Select: Address flow. However, address search results can be filtered to show addresses for the current quote_to/ship_to/bill_to contact.
- TCA components do not support the standard text box LOVs. Therefore, you can no longer clear the quote to/ship to/bill to customer contact and ship to/bill to customer.

Obsolete Features and Actions

- Saved searches created in earlier releases are not available after the upgrade. You must re-create them in your upgraded system.
- You must re-implement selectable columns in earlier releases and changes to the sidebar menu in quote detail by using Oracle Applications personalization.
- Oracle XML Publisher replaces Oracle Reports. You must re-create any customized Print Quote reports using Oracle XML Publisher.

- Product search does not support non-Intermedia search.
- The new selectable column Adjustment Amount has replaced Line Discount column used in Release 11i. The Line Discount column is no longer necessary since you can now discount by amount as well as percent.
- You cannot drill down for the Account number. Oracle Sales (ASN) no longer has account information in the customer detail pages.

Partner Management

Partners and Partner Users (optional)

When an existing customer of Oracle Partner Management upgrades to release 12.0 from a prior release, it is essential to run the PV: Partner Type Migration concurrent program as one of the post-installation steps. If you do not run this concurrent program, then existing partners will have a blank Primary Partner Type. Also, these partners will not be returned as part of any search result set.

For additional information, refer to the *Oracle Partner Management Implementation and Administration Guide Release 12.2*, Partner Users.

Migrating Partner Type Values (optional)

In previous releases, you could assign multiple partner types to a single partner. In release 12.0, a partner can be assigned one partner type only. If you are upgrading from an earlier Oracle Partner Management release, then you need to perform some administrative functions to successfully migrate your partner type data:

Populate the PV_PARTNER_TYPE_RANKING lookup table with a numerical ranking for each existing partner type. The table is seeded with some partner types and ranking data, and vendors can add to and modify the seeded values. The PV: Partner Type Migration concurrent request uses this lookup table to assign a single type to each partner by evaluating all of the partner's existing types and selecting the top-ranked type (the type with the lowest value).

For example, if a partner is currently assigned both Reseller and OEM partner types, and the value assigned to Reseller is lower than that assigned to OEM, then the partner's new type will be Reseller. Vendors must provide a ranking for each partner type except for the VAD type. The VAD is always considered the top-ranked partner type, regardless of the ranking specified by the vendor.

After establishing the partner type rankings, run the PV: Partner Type Migration concurrent program to assign the new rankings to existing partners. The program can be run in either of the following modes:

- Evaluation (default value): Select Evaluation to run the program without making changes to the partner data. This is useful if you want to get an idea of the changes that will be done to your partner data based on the specified ranking of Partner

Types.

- Execution: Select Execution to upgrade the partner types and store the changes in the underlying database.

You can also choose to Overwrite the existing partner type: There are two possible values:

No: If set to No (default value), the program will not overwrite the existing partner type on a partner record. This value is useful if the concurrent program failed (for whatever reason) to complete and you are rerunning it. The rerun will not update those Partner records that have already been processed the first time and will only update those Partner records that have not yet been processed. Setting the value to No also allows the program to run more efficiently.

The concurrent program generates a log file that provides information about the migration, including the original partner types and the new partner type for each partner.

For additional Information, refer to the *Oracle Partner Management Implementation and Administration Guide Release 12.2, Migrating Partner Type Values*.

Migrating External Sales Team Data (optional)

Earlier implementations of Oracle Partner Management allowed a partner contact to exist on an opportunity, a lead, and a customer sales team after the partner organization was removed from the opportunity, lead, or sales team. As of Release 12, a partner contact is accessed through the partner organization, and thus a contact cannot be accessed if the partner organization has been removed.

The concurrent program PV - External Sales Team migration should be run to make sure that partner organizations are reassociated with opportunities, leads, and customer sales teams if the partner contacts are still associated with the objects after the partner organization has been removed. The concurrent program should be run during the upgrade process to R12 and as part of the Oracle Sales and Oracle Partner Management integration process, and then periodically afterwards.

Additional Information in *Oracle Partner Management Implementation and Administration Guide Release 12.2, Migrating External Sales Team Data*.

Sales

This section describes the changes made to Oracle Sales.

Upgrade Users from Oracle Sales Online to Oracle Sales

In this release, all Sales Online users are migrated and assigned an Oracle Sales responsibility as follows:

- All users with Sales Online User responsibility are assigned the Sales User responsibility

- All users with Sales Online Manager responsibility are assigned the Sales Manager (Sales DBI) responsibility
- All users with the Sales Online Superuser responsibility are assigned the Sales Administrator responsibility

All profile options used by Sales Online (including MO: Operating Unit) are migrated to a corresponding profile option in Oracle Sales.

| This Sales Online profile option... | is replaced with this Sales profile option... |
|--------------------------------------------|------------------------------------------------------|
| OS: Forecast Calendar | ASN: Forecast Calendar |
| OSO: Forecast Calendar Month | ASN: Forecast Calendar Month |
| OSO: Default Forecast Period Type | ASN: Default Forecast Period Type |
| OSO: Default Forecast Category | ASN: Default Forecast Category |
| OS: Forecast Sales Credit Type | ANS: Forecast Sales Credit Type |
| OS: Default Opportunity Win Probability | ASN: Default Opportunity Win Probability |
| OS: Default Sales Channel | ASN: Default Opportunity Sales Channel |
| OS: Default Opportunity Status | ASN: Default Opportunity Sta |
| OS: Default Close Date Days | ASN: Default Close Date Days |
| OSO: Forecast Pipeline Calculation | ASN: Forecast Defaulting Type Basis |
| OS: Default Win/Loss Status | ASN: Default Win/Loss Status |
| OS: Default Status For Leads | ASN: Default Lead Status |
| OS: Manager Update Access | ASN: Manager Update Access |
| OS: Opportunity Access Privilege | ASN: Opportunity Access Privilege |
| OS: Customer Access Privilege | ASN: Customer Access Privilege |
| OS: Sales Lead Access Privilege | ASN: Lead Access Privilege |

| This Sales Online profile option... | is replaced with this Sales profile option... |
|--------------------------------------------|--------------------------------------------------------|
| MO: Operating Unit | MO: Operating Unit |
| OS: Sales Admin Update Access | ASN: Sales Admin Update Access |
| OSO: Default Country | HZ: Reference Territory |
| OS: Sales Team Creator Keep Flag | ASN: Default value for sales team Do Not Reassign flag |

All FND lookup types used by Sales Online are migrated to a corresponding lookup type in Oracle Sales.

| This Sales Online lookup type... | is replaced with this Sales lookup type... |
|-----------------------------------------|---------------------------------------------------|
| LEAD_CONTACT_ROLE | ASN_CONTACT_ROLE |
| CONTACT_RANK_ON_OPPORTUNIT Y | ASN_CONTACT_ROLE |
| CLOSE_REASON | ASN_LEAD_CLOSE_REASON |
| CLOSE_REASON | ASN_OPPTY_CLOSE_REASON |
| VEHICLE_RESPONSE_CODE | ASN_VEHICLE_RESPONSE_CODE |

Sales and Telesales

This section describes changes that are common to both Oracle Sales and Oracle Telesales.

Migrate Sales Credits

In Oracle Sales, an opportunity can have multiple opportunity lines, and for each line, there can be a different sales person receiving revenue credits. However, there can be only one sales person who receives all revenue credits for an opportunity line.

This release upgrades opportunities that have multiple sales people receiving revenue credits for the same opportunity line and ensures that there is only one sales person receiving revenue credits for the line. Opportunities having multiple sales people on a single opportunity line are upgraded.

Similar to Oracle Sales, Oracle Telesales also supports only one sales person receiving

revenue credits for each opportunity line.

Service and Infrastructure

This section describes the enhancements to Oracle Service and Infrastructure in this release.

- Improved Processing of eAM Service Requests

Prior to this release, all item instance-related fields, including the Subject tab, were disabled for eAM service requests. In this release, these fields and the Subject tab are enabled for eAM service requests and a new field (Maintenance Organization) has been added to identify the servicing organization. The field is mandatory for eAM service requests and can be defaulted either from a profile option or from the asset definition

- XML Publisher Service Request Report

HTML service request reports from previous releases have been replaced with the new XML Publisher reports. You now have the option of specifying various parameters to generate a report, including which template to use, the language, and the output format.

- Migration to Multi-Org Access Control (MOAC) for Charges

Prior to this release, the Charges functionality allowed you to create charge lines for all valid operating units. When the charges were submitted to Order Management, the application validated that you had access to the operating units in which each individual charge line was created. This access was maintained in, and verified against, the Extra Information Type (E.I.T.) descriptive flexfields in Oracle Human Resources for each operating unit. These security grants were shared across all users and responsibilities, and thus did not support different security policies for different user groups.

In this release, a migration to the MOAC infrastructure moves this access control to the Security Profile functionality in Oracle Human Resources. Each security profile can be independently defined and associated to an application responsibility, enabling the support for different security policies for different groups of users. Customers currently using E.I.T. must migrate their security policies to the new Security Profile functionality.

Additional Information: See *Oracle TeleService Implementation Guide* for more information.

In addition:

- Service Request default Operating Unit profile option

In Release 11*i*, the MO: Operating Unit profile option used in Release 11*i* to

default the operating unit for service requests is migrated to the new Service: Service Request Default Operating Unit profile option.

- Service Default Operating Unit

In this release, the Operating Unit field (hidden out of the box) has been renamed Service Default Operating Unit. Its value is derived from the Service: Default Operating Unit profile option and stamped on the service request record.

- Automatic Assignment Process

In Release 11*i*, you could specify excluded resources in Service Contracts and Install Base, but these resources, unlike the "preferred" resources, were not used during the automatic assignment process of service requests and service request tasks. In this release, the automatic assignment process validates the resources returned from the Territory Manager and filters out any resources that were defined as "excluded" in Service Contracts and Install Base.

Note: Any resources defined as excluded, and using automatic assignment process, are not picked up as potential owners of the service requests and service request tasks.

- Assignment Manager UI

In Release 11*i*, the Assignment Manager UI (accessible from the Service Request form) exposed only matching attributes (previously called qualifiers) enabled in the Territory Manager for a given Operating Unit. In this release, you can use any of the enabled matching attributes, regardless of the Operating Unit in which they were enabled.

This change can potentially change the assignment if both of these conditions are met:

- The Assignment Manager UI is used to perform the assignment process. This change has no impact on the business logic of automatic assignment process.
- Different sets of matching attributes (qualifiers) have been enabled in different Operating Units.

As the Assignment Manager UI shows the matching attributes across all Operating Units, you can select matching attributes enabled for Operating Units other than the one associated with the Service Request. If the Service territory setup uses those matching attributes, the Assignment Manager UI may present a different set of candidate resources than it would if only matching attributes for a given Operating Unit were used.

- Setup Menu

In Release 11*i*, all Service Request setups were under a single menu (Service Request). In this release, the various setups are categorized into submenus to ease the navigation to individual setup pages as well as to suggest the order in which to perform the various setup steps.

TeleService

Oracle TeleService has improved the processing of services requests, added functionality and configurability options for Contact Center, and added new capabilities for Customer Support.

Contact Center

This section describes enhancements to Oracle Contact Center.

- **Header Configurability** Prior releases had two separate folders for customer and contact information. These folders have been merged into a single folder. The merged customer and contact regions in the Contact Center enable better personalization and utilization of the space. There is no automatic upgrade of modifications you have made to the existing folders. You must reapply the changes to the merged folder.

- **Enhanced Orders and Install Base Tabs**

The enhanced ordering flow process includes a new set of business functions (sub-tabs) within the Orders tab in the Contact Center that facilitates the quick creation of an order or update of an existing order when used in conjunction with the new Installed Base tab capabilities.

Expanded Contact Center capabilities include the ability to add or disconnect products and services (such as Telecommunications ordering) when used in conjunction with the new ordering capabilities in the Contact Center.

The enhanced Install Base tab enables the agent to take action on a selected item instance or set of instances (such as products/services) directly within the Install Base tab in the Contact Center. These actions range from the creation of a service request to updating product details for a specific product item instance or a set of instances. The list of actions is extensible, allowing the administrator to add to the list of pre-defined actions based on business needs. In addition, a search capability within the Install Base tab provides quicker identification of the product instances that need to be updated.

The entire functionality supported for Ordering and Install Base management in earlier releases is supported, however the UI navigation and flow may be different for specific functions.

- **Enhancements to the Multi-Org Access Control (MOAC) Migration**

In earlier releases, data was not filtered by Operating Unit, allowing an agent full visibility into the customer data. Additionally, an agent could not choose the

Operating Unit from the header.

In this release, MOAC compliance in the Contact Center ensures that the data is striped by the Operating Unit. The agent has visibility into all the transactions for all the Operating Units that they can access. Agents transact (Create orders etc.) based on the Operating unit set in the header. This field is hidden by default, but can be displayed to allow the agent to switch between the operation units that they have access to.

Customer Support

The Oracle Customer Support Flexible Layout Regions provide added benefits for implementations, including:

- Page content can be arranged in vertical orientation or horizontal orientation or a combination of both. You can also move content from one region to another.
- A new graphical user interface allows administrators to see how a personalized page will appear and offers intuitive access to regions for personalization.

Other personalization tasks such as renaming, hiding and reordering regions are still performed using the previous personalization UIs that present regions in a hierarchical format.

Note: With the introduction of Flexible Regions, some personalization settings may not be preserved after the upgrade.

Territory Manager

This release implements changes to Territory Administration and Role-based Access Control (RBAC).

Territory Administration

The use of Forms to administer territories has been decommissioned and replaced by HTML-Excel UIs. All pre-existing Forms functionality is supported in this new model, with the exception of Resource Qualifiers and Territory Lookup. The *Oracle Territory Manager Release 12 User Guide* contains complete information.

In addition, the following changes have been implemented.

Concurrent Programs Decommissioned

Prior to this release, Generate Territory Packages (GTP) and Generate Self-Service Territories (GSST) were used to re-compile territory definitions. In this release, GSST has been decommissioned, and GTP has been replaced by Synchronize Territory Assignment Rules (STAR). The *Oracle Territory Manager Release 12 Implementation Guide* contains complete information.

Territory Types

In this release, users must create territories using territory types, which are defined by

transactions (Accounts, Leads, Opportunities, Customers, Service Requests, and so on). The territory type selected restricts the transactions and matching attributes available during the create flow.

Oracle Territory Manager seeds the following types:

- Named Account - used to migrate named account territories. Shipped with all the Sales usage transaction types. Created for each operating unit.
- General <usage name> - used for migrating geography territories and all other non-geographical or non-named account territories. Shipped with all the enabled matching attributes for the particular usage and with only the corresponding transaction types for each operating unit.
- Geography - also used for migrating geography territories and all other non-geographical or non-named account territories. Shipped with all the geographic matching attribute values and all the Sales usage transactions types for each operating unit. Essentially, territories defined with only geographical matching attributes are migrated using the geographic type. If the territory is defined with both geographical and non-geographical matching attributes, the General territory type is used.

Access Levels

You can set up granular-level access type control for transaction types. In particular, you can grant read-only, full, or no access in Sales Usage for transaction types such as leads, opportunities, and quotes. Resources on 11.5.10 territories are granted full-access to the relevant transaction types.

Escalation Territories

Escalation territories are supported through the access flag at the resource level for Service. When adding a resource to a service territory, you can then change the access flag to Escalation for a given resource. There is no longer a need to create an additional Escalation territory.

Custom Matching Attributes

Prior to this release, Oracle Territory Manager provided custom matching attributes for some customers, as the out-of-the-box matching attributes shipped with the product did not fully satisfy their business requirements.

In this release, customers must re-implement these custom matching attributes using the public API solution.

Role-based Access Control (RBAC)

Prior to this release, Territory Administrators (CRM Administrator responsibility) could manage territories for all usages through the Forms UI. Users with Territory HTML Global Sales Administrator responsibility had access to the HTML administrator UIs (for Named Account and Geography Territory Groups), and users with the Territory HTML Sales User responsibility had access to the Territory Self-Service UIs.

In this release, Territory Manager uses the Role-based Access Control (RBAC) security model, with the following impact:

- All users that access Territory Manager must have the Territory Management responsibility and an appropriate Territory role assigned.

| Role | Privileges |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sales Territory Administrator | Manage Sales territories |
| Service Territory Administrator | Manage Service territories |
| Field Service Territory Administrator | Manage Field Service territories |
| Service Contracts Territory Administrator | Mange Service Contract territories |
| Collections Territory Administrator | Manager Collection territories |
| Trade Management Territory Administrator | Manage Trade Management territories |
| Partner Management Territory Administrator | Manage Partner territories |
| Territory Manager Application Administrator | Access to all usages and can enable or disable matching attributes. Can run STAR for all usages. |
| Sales Team Search User | Access to the Sales Team Search page, with stand-alone access. Is inherited by users with the Sales Territory Administrator or the Sales Territory User role. |
| Sales Territory User | Access to the self-service Territory Manager application pages. |

- Users can no longer access the Forms Territory Manager UIs with the CRM Administrator responsibility, but they can access the new HTML UIs.
- The Territory HTML Global Sales Administrator responsibility and the Territory HTML Sales User responsibility still exist, but should be end-dated using the User Management responsibility.
- Users must be granted the Territory Manager Application Administrator role in order to enable or disable matching attributes (formerly known as Qualifiers).

Human Resource Management Upgrade Impact

This section describes the way the upgrade affects your existing Oracle Human Resource Management System (HRMS) products, and highlights the impact of these functional changes on your day-to-day business. This section contains products in the HRMS product family, arranged alphabetically.

Action: Review the product-specific Release Content Documents (RCDs) and TOI on *My Oracle Support* for additional information.

About Business Impact and Functional Changes

An Applications upgrade alters both the technical and functional aspects of your Oracle E-Business Suite system. Functional changes have an impact on the way you use the products as you conduct your daily business.

Note: This section describes some of the ways the upgrade changes your existing products. Oracle assumes that you have read about the new features and products delivered in this release, which is included in the product-specific Release Content Documents (RCDs) and TOI on *My Oracle Support*.

The discussions of the functional aspects of the upgrade in this chapter are arranged by products within the HRMS product family.

Human Resource Management Systems (HRMS)

Your HRMS applications specialists should be completely familiar with the information in this section and should make appropriate plans to accommodate the associated changes before you begin your upgrade.

Oracle Payroll

Sparse Matrix

Sparse matrix functionality is automatically enabled in Release 12.2. This effectively prevents the creation of null run result values if all run result values are null for the given run result. There is no need to run the ENABLE_SPARSE_MATRIX upgrade program.

Review the *Sparse Matrix Null Result Values Upgrade* program.

It is enabled for each legislation and requires a row in the pay_upgrade_legislations table for the definition SPARSE_MATRIX. The process purges old (null) run result values that would not have been created if the Sparse Matrix functionality had been used within the Payroll processes (such as Run, QuickPay, and so on.)

Oracle Performance Management

This section outlines changes made to Oracle Performance Management.

Reference to Talent Management Replaced with Performance Management

Oracle Performance Management is licensed as a separate product as of June 18th, 2007. If you purchased a Self-Service HR license before June 18th, 2007 and have an Oracle Human Resources (HR) license, then you can use Oracle Performance Management. The purchase of a Self-Service HR license on or after June 18th, 2007 does not permit the use of Performance Management. You must purchase a separate Performance Management license in addition to an Oracle Self-Service HR license to use the Appraisals, Questionnaire Administration, and Objectives Management self-service functions. With this change, all references to Talent Management are replaced with Performance Management.

Oracle Succession Planning

UI for Succession Planning

Oracle Succession Planning is a licensable product first available for Oracle E-Business Suite 12.1.1 customers. Oracle Succession Planning includes the following three functions:

1. Succession Plans
2. Suitability Matching
3. Talent Profile

Note: For details, see *Introducing Oracle Succession Planning Release 12.1.1* (Doc ID: 870119.1). See also *Talent Profile and Succession Planning in Oracle Self-Service HR and Oracle Succession Planning – A Comparative Note*. Note ID: 861499.1

Projects Upgrade Impact

This section describes the way the upgrade affects your existing Oracle Projects products, and highlights the impact of these functional changes on your day-to-day business. It is arranged alphabetically by products in the Projects product family.

Action: Review the product-specific Release Content Documents (RCDs) and TOI on *My Oracle Support* for additional information.

About Business Impact and Functional Changes

An Applications upgrade alters both the technical and functional aspects of your Oracle E-Business Suite system. In addition to changes to the technology stack and file system, an upgrade also initiates specific changes that affect the way your existing products work after the upgrade and the way they look and feel. These functional changes have an impact on the way you use the products as you conduct your daily business.

Note: This section describes a few ways how the upgrade changes your existing products.

The discussions of the functional aspects of the upgrade in this chapter are arranged by products within the Projects product family.

Projects

Your Projects applications specialists should be completely familiar with the information in this section and should have made appropriate plans to accommodate the associated changes before you begin your upgrade.

Grants Accounting

This section outlines changes made to Oracle Grants Accounting.

Additional Information: See *Oracle Grants Accounting User Guide*, *Oracle Project Costing User Guide*, *Oracle Projects Implementation Guide*, *Oracle Projects Fundamentals*, and *Oracle Subledger Accounting Implementation Guide* for more information on the changes discussed in this section.

Supplier Cost Integration

Supplier cost integration now uses new functionality introduced by Oracle Payables and Oracle Subledger Accounting. The following changes may impact your implementation.

- If you use Cash Basis Accounting for the primary ledger, supplier invoice payments rather than invoice distributions are interfaced to Oracle Grants Accounting.
- Oracle Payables prepayment invoices are captured as cost commitments and are no longer interfaced to Oracle Grants Accounting as actual cost.
- The expenditure item date on supplier cost transactions is revalidated and in some cases rederived during transaction import.
- Interface processing interfaces all distributions with a supplier invoice expenditure class to Oracle Grants Accounting even when invalid distributions exist in the same batch.

- You can create project-related expense reports in Oracle Internet Expenses or Oracle Payables. However, you can no longer create them as Pre-Approved Batches in Oracle Grants Accounting, and they are no longer interfaced to Oracle Payables.

Supplier Cost Adjustments

Supplier cost adjustment uses new functionality introduced by Oracle Payables and Oracle Subledger Accounting. The following changes may impact your implementation.

- In Release 11*i*, adjustments made to supplier invoices were interfaced to Oracle Payables, which created and interfaced accounting entries to Oracle General Ledger. In this release, Oracle Grants Accounting creates accounting for adjustments made to all supplier cost transactions and interfaces the accounting to Oracle General Ledger. Note that transactions are no longer interfaced to Oracle Payables from Oracle Grants Accounting.
- Most adjustment restrictions that existing in Release 11*i* have been removed or eased in this release, so that supplier cost adjustments are prohibited until you enable the Allow Adjustments option on supplier cost transaction sources.
- Adjustments made in Oracle Payables take precedence over adjustments made in Oracle Grants Accounting. The supplier cost interface automatically creates a reversing entry for the most recent adjustment made in Oracle Grants Accounting whenever an item is reversed in Oracle Payables.
- In some circumstances, Oracle Grants Accounting creates unmatched reversing expenditure items when transactions are reversed in Oracle Payables. You need to routinely monitor your system for unmatched reversing expenditure items as they require manual adjustments in order to correctly account for the reversal.
- Oracle Grants Accounting does not create accounting entries in a secondary ledger when combined basis accounting is in use. If automatic entries to the secondary ledger are required, you must make adjustments in Oracle Payables rather than in Oracle Grants Accounting.

Integration with Subledger Accounting

In Release 11*i*, Oracle Grants Accounting accounted cost and revenue through a set of interface processes. In this release, Oracle Subledger Accounting provides a common accounting engine that replaces the existing accounting processes in the different subledgers and allows you to determine the accounts, lines, descriptions, summarization, and dates of journal entries. Oracle Grants Accounting supports the integration with Oracle Subledger Accounting.

You can also add detailed transaction information to journal headers and lines. Detailed subledger accounting journals are available for analytics, auditing, and reporting. They are summarized, transferred, imported, and posted to Oracle General Ledger.

Account Generation Rules

During the upgrade, Oracle Grants Accounting creates default accounting definitions that allow the system to continue using existing AutoAccounting rules without

additional setup steps. You may choose to create your own accounting definitions using Accounting Methods Builder.

Cost Processing Flows

As part of the Oracle Subledger Accounting integration, existing interface cost processes and tieback processes have been replaced with new processes that raise Oracle Subledger Accounting events, generate accounting entries, and interface them to Oracle General Ledger.

View Accounting Details

With the integration to Oracle Subledger Accounting, you now have the option to define account derivation rules within Oracle Subledger Accounting that will replace the default accounts generated by the Oracle Projects AutoAccounting feature. This changes how you can view accounting information of transaction lines. You can view the default accounting created for specific transaction lines from the details window on Expenditure Inquiry. However, to view the actual accounting that was interfaced to Oracle General Ledger, you must either use the View Accounting option from the Tools menu on Expenditure Inquiry or by using the inquiry pages provided by Oracle Subledger Accounting.

Tax Default Hierarchy Setup

Oracle Grants Accounting is integrated with Oracle E-Business Tax. This module provides the ability to define tax setup centrally. The Projects Tax Default Hierarchy used by Oracle Grants Accounting is migrated to centralized tax setup to ensure a consistent user experience across applications.

Additional Information: See *Oracle E-Business Tax Implementation Guide* and *Oracle E-Business Tax User Guide*. See also the section on E-Business Tax, page 2-18 for information about the Projects Tax Hierarchy migration.

Project Billing

This section outlines changes made to Oracle Project Billing.

Accounting for Revenue

In Release 11*i*, you generated revenue and accounted for it using this set of interface programs:

- Generate Revenue for Single/Range of Projects
- Interface Revenue to General Ledger process
- Journal Import process
- Tieback Revenue to General Ledger process

After the upgrade, the revenue generation process is unchanged. However, new concurrent programs replace the existing ones as part of the integration with Oracle

Subledger Accounting. You run the following programs instead of the Interface Revenue to General Ledger process:

- **Generate Revenue Accounting Events**
Derives the debit accounts and amounts (UBR/UER, Gain/Loss) using Auto Accounting rules.
- **Create Accounting process**
Creates journal entries and optionally transfers them to Oracle General Ledger.

The Tieback Revenue to General Ledger process is now obsolete.

Additional Information: See *Oracle Project Billing User Guide* and *Oracle Projects Fundamentals* for more information.

Accounting for Intercompany Invoices

In this release, the Generate Intercompany Invoices process continues to use AutoAccounting to generate the Revenue account, and the Interface Invoices to Receivables process to generate the Receivables. The Interface Cross Charge Distributions to General Ledger process, which creates accounting events for cross charge transactions, is renamed as Generate Cross Charge Accounting Events.

Additionally, when cost reclassification is enabled, you must run the Tieback Invoices from Receivables process followed by Generate Cross Charge Accounting Events process. The tieback process creates the account events necessary to create provider cost reclassification journal entries. Subsequent submission of the Create Accounting process will create accounting entries for provider cost reclassification.

Additional Information: See *Oracle Project Billing User Guide* for more information.

View Accounting Details

With the integration with Oracle Subledger Accounting, you can define account derivation rules within Oracle Subledger Accounting to replace the default accounts generated by Auto Accounting in Oracle Project Billing. To view the actual accounting that was interfaced to Oracle General Ledger, you must either use the View Accounting option from the Tools menu on Revenue Review, or use the inquiry pages provided by Oracle Subledger Accounting.

Additional Information: See *Oracle Project Billing User Guide* for more information.

MRC Migration Impact

In Release 11*i*, all MRC columns could be defined as part of custom folders. As a result of the migration of MRC to the Oracle Subledger Accounting model, Oracle Projects has eliminated all MRC-related reporting columns from inquiry windows such as Events,

Revenue Review, Invoice Review, and Funding Inquiry.

Tax Default Hierarchy Setup

In this release, Oracle Projects is integrated Oracle E-Business Tax, which provides you with the ability to define tax setup centrally. The Projects Tax Default Hierarchy is migrated to a centralized tax setup to ensure consistent user experience across applications.

Additional Information: See *Oracle E-Business Tax Implementation Guide* and *Oracle E-Business Tax User Guide* for more information. See also *E-Business Tax*, page 2-18 for details about Projects Tax Hierarchy Migration.

Project Costing

This section describes the changes made to Oracle Project Costing.

Supplier Cost Integration

Supplier cost integration functionality in Oracle Project Costing has been modified to use new functionality introduced in this release by Oracle Payables and Oracle Subledger Accounting. The following describes changes that may impact your implementation.

Additional Information: See *Oracle Project Costing User Guide* for more information on these new features. See also *Oracle Projects Implementation Guide* and *Oracle Projects Fundamentals*.

- If purchasing receipt accruals are used to account for project-related expense cost, receipts are always interfaced from Oracle Purchasing to Oracle Projects and only invoice variances and payment discounts are interfaced from Oracle Payables to Oracle Project Costing.
- If Cash Basis Accounting is used for the primary ledger, supplier invoice payments rather than invoice distributions are interfaced to Oracle Project Costing.
- Oracle Payables prepayment invoices are captured as cost commitments and are no longer interfaced to Oracle Project Costing as actual cost.
- The expenditure item date on supplier cost transactions is re-validated and in some cases re-derived during Transaction Import.
- Interface processing has been enhanced to interface all distributions with a supplier invoice expenditure class to Oracle Project Costing even when invalid distributions exist in the same batch.
- Project-related expense reports can be created in iExpenses or Oracle Payables, however, they can no longer be created as Pre-Approved Batches in Oracle Project

Costing and they are no longer interfaced to Oracle Payables.

Supplier Cost Adjustments

Supplier cost adjustment features now use new Oracle Payables and Oracle Subledger Accounting functionality. The following changes may impact your implementation.

- In Release 11*i*, adjustments made to supplier invoices were interfaced to Oracle Payables and Oracle Payables, which, in turn, created and interfaced accounting entries to Oracle General Ledger. In this release, Oracle Project Costing creates accounting for adjustments made to all supplier cost transactions and interfaces the accounting to Oracle Subledger Accounting. Note that transactions are no longer interfaced to Oracle Payables from Oracle Project Costing.
- Most adjustment restrictions that existed in Release 11*i* have been removed or eased. The result is that cost adjustments are prohibited until you enable the Allow Adjustments option on supplier cost transaction sources.
- Adjustments made in Oracle Purchasing and Oracle Payables take precedence over adjustments made in Oracle Project Costing. The supplier cost interface automatically creates a reversing entry for the most recent adjustment made in Oracle Project Costing whenever an item is reversed in either Oracle Purchasing or Oracle Payables.
- In some circumstances, Oracle Project Costing creates accounting entries only in the primary ledger for purchasing receipt accruals when exchange rate variances exist.
- In some circumstances, Oracle Project Costing creates unmatched reversing expenditure items when transactions are reversed in Oracle Purchasing and Oracle Payables. You need to routinely monitor your system for unmatched reversing expenditure items. They require manual adjustments in Oracle Project Costing in order to correctly account for the reversal.
- Oracle Project Costing does not create accounting entries in a secondary ledger when combined basis accounting is in use. If automatic entries to the secondary ledger are required, you must make adjustments in Oracle Payables rather than in Oracle Project Costing.

Integration with Subledger Accounting

In this release, Oracle Subledger Accounting provides a common accounting engine that replaces the existing accounting processes in the different subledgers and allows you to determine the accounts, lines, descriptions, summarization, and dates of journal entries. You can also add detailed transaction information to journal headers and lines. Detailed subledger accounting journals are available for analytics, auditing, and reporting. They are summarized, transferred, imported and posted to Oracle General Ledger. Oracle Project Costing supports the integration with Oracle Subledger Accounting.

Account Generation Rules

During the upgrade, Oracle Project Costing provides Oracle Subledger Accounting with default definitions that allow the system to continue utilizing existing AutoAccounting rules without additional setup steps. You may choose to create your own accounting rules in Oracle Subledger Accounting in order to take advantage of additional flexibility provided by the application.

Cost Processing Flows

As part of the Oracle Subledger Accounting integration, existing interface cost processes and tieback processes have been replaced with new processes that raise Oracle Subledger Accounting events, generate accounting entries, and interface them to Oracle General Ledger.

View Accounting Details

With the integration to Oracle Subledger Accounting, you now have the option to define account derivation rules within Oracle Subledger Accounting that will replace the default accounts generated by Oracle Projects AutoAccounting. This changes how you can view accounting information of transaction lines. You can view the default accounting created for specific transaction lines from the details window on Expenditure Inquiry. However, to view the actual accounting that was interfaced to Oracle General Ledger, you must either use the View Accounting option from the Tools menu on Expenditure Inquiry or by using the inquiry pages provided by Oracle Subledger Accounting.

Migration of Multiple Reporting Currencies (MRC)

Oracle Project Costing multiple reporting currency functionality has migrated to reporting currency functionality in Oracle Subledger Accounting. Oracle Subledger Accounting provides a single repository where you can view amounts in reporting currencies. As a result, Oracle Project Costing no longer needs to separately support MRC functionality. This affects MRC support for costs and capital projects in the following ways:

- Oracle Project Costing has eliminated all MRC-related reporting columns from inquiry windows such as Expenditure Inquiry.
- All MRC implementation options are now obsolete.
- All MRC-related upgrade concurrent programs are now obsolete.
- You cannot view MRC amounts for transactions accounted outside of Oracle Project Costing.

Reporting currency accounting journals for both cost and cross charge transactions are created in Oracle Subledger Accounting by the Create Accounting program. You do not need to run separate programs for maintaining reporting currency journals.

Oracle Project Planning and Control

This section describes the changes for Oracle Project Planning and Control.

Web-based Budgeting and Forecasting

If you are using web-based budgeting and forecasting, note the following changes:

- In this release you can plan Resource Break Down structure with Resource classes or without Resource classes in the hierarchy by selecting the option Enable Resource Class.
- Period Profiles

All project-specific period profiles are obsolete. Each project's plan version now has one or two of new seeded period profiles. You can also choose to create new period profiles and associate them to plan versions. You do not have to refresh the periodic data as the project progresses.
- Budgets Time-Phased by Date Range

Time phasing by user-defined date ranges is no longer supported. All existing budgets time-phased by date range are converted to time-phased or non-time phased, depending on what has been implemented and how the budget data has been entered. You can now plan for buckets of grouped periods containing more than one period.
- Flexible Budgeting Options for Data Entry

The Top and Lowest Task planning level is no longer supported. Instead, you can choose the lowest planning level to be Lowest Task to plan at any level of the financial structure.
- Plan Amounts Calculation and Rate derivations

Oracle Projects automatically calculates the cost or revenue amounts based on the Effort (Quantity) entered for a labor resource. Prior to this release, all amounts were entered manually. In this release, data is modified accordingly to meet the rules of amount calculation to be based on Effort (Quantity) entered.
- Budgeting and Forecasting Integration with Microsoft Excel

In prior releases, Oracle Projects provided 24 spreadsheet layouts (accessible from Desktop Integrator > Projects > Financial Plan) as part of Budgeting and Forecasting Integration with Microsoft Excel. In this release, all the 24 spreadsheet layouts are obsolete. Oracle Projects has reduced the number of default spreadsheet layouts to four. Oracle Projects will associate one of the four default Microsoft Excel spreadsheet layouts with each plan type based on the plan class (Budget or Forecast) associated with the plan type.
- Changes to the Budget and Forecasting Pages are accessed

Project Performance Reporting now serves as the basis for viewing the budgets data by either the work breakdown hierarchy or the resource breakdown hierarchy.

- Planning Resource Lists

In this release you can plan Planning Resource Lists with Resource classes or without Resource classes in planning resources by selecting the option Enable Resource Class.

Web-based budget and forecasting are automatically upgraded to use planning resource lists based on the new Resource model.

Note: Users cannot view resources added to upgraded lists in web-based view if they add resources using forms based view nor any amounts associated to them.

Additional Information: See Projects, for more information.

Project Forecasting

The feature for forecasting based on staffing plans in Oracle Project Resource Management has been fully integrated with the enhanced Budgeting and Forecasting feature.

Work Management

Note these changes to workplan management:

- Enable Financial Structure

The financial structure in a new template or project is not enabled by default. After you enable the financial structure, it does not have the default task. This change puts the behavior of the financial structure in synch with workplan structure.

- Workplan Task Level Effort

The task-level workplan planned effort has been moved under a default task assignment of the PEOPLE resource class in order to make the existing workplan transaction model compliant with new Planning Transaction model.

- Program Management

The subproject association feature is now available in a self-service application as Program hierarchy. Note that a program hierarchy can be still be created in the Oracle Projects forms-based application using subproject association. There is no change from the forms side.

Property Manager

This section describes the changes to Oracle Property Manager.

Integration with E-Business Tax

Payment and Billing terms now contain the tax-related information through the Tax Classification Code instead of the Tax Code/Tax Group values as in previous releases. Tax information is consolidated using the E-Business Tax application.

The new rule-based tax engine is designed to fully replace and substantially enhance the existing tax code-based tax calculation. Tax calculation is accomplished using the Global Tax Engine and tax codes and the defaulting hierarchy approach are migrated and supported in E-Business Tax.

Integration with Subledger Accounting

This release introduces Oracle Subledger Accounting for managing accounting across subledger transactions. During the upgrade, accounting options and their settings, and the existing accounting entries in the Oracle Property Manager data model, are moved to the new accounting data model to ensure a continuous business operation between the two releases. All accounting lines related to the transactions are also migrated. Oracle Property Manager has been enhanced to fully support Oracle Subledger Accounting.

Legal Entity in Oracle Property Manager

In order to consolidate legal-entity data into a central repository, Oracle Property Manager has incorporated Legal Entity stamping on its Payment and Billing terms. The legal entity can now be associated with the ledger when it is set up.

In an accounting setup that contains only one legal entity, a ledger represents the legal entity. The operating unit does not have a direct relationship to the legal entity, but will have a direct relationship to a ledger. Because the operating unit cannot always determine a unique legal entity, both the legal entity and the business entity are now explicitly defined on the transactions.

Projects Foundation

This section describes the changes to Oracle Projects Foundation.

Project List and Alternate Project Search Page

In Release 11*i*, both the Project List and Alternate Project Search pages displayed financial amounts from Project Status Inquiry. In this release, these pages display financial amounts only from project performance reporting.

New Resource Model

In Release 11*i*, resource lists, which could be of one or two levels, were used for budgeting and reporting. In this release, there are separate structures for budgeting and reporting:

- Self-service budgeting uses planning resource lists
- Project performance reporting uses resource breakdown structures

A planning resource list consists of planning resources that are based on planning resource formats. *A resource breakdown structure* is a multi-level hierarchy of resources that is used for reporting the planned and actual amounts on a project.

The upgrade automatically converts all resource lists used in self-service budgets to planning resource lists and creates resource breakdown structures. The result is that self-service budgeting is now performed based on the planning resource list. The new resource breakdown structures have no impact on existing functionality. They are used

only by project performance reporting.

Note: Users cannot view resources added to upgraded lists in web-based view if they add resources using forms based view nor any amounts associated to them.

Additional Information: See *Oracle Projects Fundamentals* for more information. See also *Oracle Project Planning and Control User Guide*.

Supply Chain Management Upgrade Impact

This section describes how the upgrade affects your existing Supply Chain Management products, and highlights the impact of these functional changes on your day-to-day business. It is arranged alphabetically by products in the Supply Chain Management product family.

Action: Review the product-specific Release Content Documents (RCDs) and TOI on *My Oracle Support* for additional information.

About Business Impact and Functional Changes

An Applications upgrade alters both the technical and functional aspects of your Oracle E-Business Suite system. In addition to changes to the technology stack and file system, an upgrade also initiates specific changes that affect how your existing products work after the upgrade and the way they look and feel.

Note: This section describes some of the ways the upgrade changes your existing products. Oracle assumes that you have reviewed the new features and products delivered in this release, which is included in the product-specific Release Content Documents (RCDs) and TOI on *My Oracle Support*.

The discussions of the functional aspects of the upgrade in this chapter are arranged by products within the Supply Chain Management product family.

Supply Chain Management

Your Supply Chain Management applications specialists should be completely familiar with the information in this section and should have made appropriate plans to accommodate the associated changes before you begin your upgrade.

Advanced Supply Chain Planning

Changes for Oracle Advanced Supply Chain Planning are described in this section.

Distribution Planning

In previous release, you planned distribution centers using master production plans (MPPs), which used material requirements planning logic. In this release, you plan distribution centers using distribution requirements planning (DRP).

You can still use MPP plans after the upgrade. However, the DRP plan uses fair share balancing stock among distribution centers (when one has too much and one not enough of a particular item). You can also use DRP plans to view and adjust material among competing resources (allocation plan), to search for material unassigned to a carrier (opportunities) and add to consolidated shipments, and view a distribution-based horizontal plan.

If you are a distribution-intensive company, you can use distribution requirements planning to plan product movement across your supply chains.

Item Attribute Simulation Sets

In previous release, you could see the effect of changes to your static and dynamic planning data - without actually making the changes in your production environment - by running simulations. Beginning with this release, you can simulate changes to key item attributes in advanced supply chain plans and distribution plans.

You can assign different values to key item attributes for item-organizations and save the assignments in an item attribute simulation set. When you reference an item attribute simulation set at plan launch, the planning and distribution planning engines use the item attribute values from the item attribute simulation set rather than those from the collected item definition.

You can specify simulated values for these item attributes to use both in manufacturing plans and in distribution plans:

Critical Component, Preprocessing Lead Time, Processing Lead Time, Postprocessing Lead Time, Fixed Lead Time, Variable Lead Time, Fixed Order Quantity, Fixed Days Supply, Shrinkage Rate, Fixed Lot Multiple, Minimum Order Quantity, Maximum Order Quantity, Service Level, Carrying Cost, Demand Time Fence Days, Forecast Control, Planning Time Fence Days, Standard Cost, Net Selling Price, PIP Flag, Selling Price, Substitution Window, Safety Stock Days, Unit Weight, Unit Volume, Safety Stock Method, Safety Stock Percent, ABC Class, Planning Method, and Minimum Remaining Shelf Life Days.

You can specify simulated values for these item attributes to use only in distribution plans: DRP Planned, Max Inventory Days of Supply, Max Inventory Window, Target Inventory Days of Supply, and Target Inventory Window.

OPM Planning Convergence

In previous releases, you planned process manufacturing facilities using the Oracle Process Manufacturing MRP module. In this release, you plan manufacturing facilities using Oracle Advanced Supply Chain Planning (ASCP) unconstrained planning. If you have an ASCP license, you can launch multi-organization unconstrained plans. If you

do not have an ASCP license, you can launch single-organization unconstrained plans.

Process manufacturing facilities can use these Advanced Supply Chain Planning features: advanced user interface, multi-level pegging, online planning and simulation capabilities, and advanced co-product planning. They cannot, however, use these Process Manufacturing MRP module features: replenishment method-specific order modifiers, multiple transfer types, and resizing suggestions.

After upgrading to Release 12, the term work order replaces the term discrete job in the user interface, including windows such as the Navigator, Supply/Demand, Horizontal Plan, Preferences, and Exceptions Summary.

Sequence-dependent Setup

In previous releases, you created rules that controlled how to schedule the sequence of discrete job and flow schedules and used Oracle Manufacturing Scheduling to sequence the discrete jobs and flow schedules. In this release, the new scheduling feature is based on sequence-dependent resource setup times.

Oracle Advanced Supply Chain Planning determines a preferred task sequence that minimizes the time used for changeovers. It then tries to schedule activities in accordance with this sequence. You can specify plan option values that control how Oracle Advanced Supply Chain Planning trades off the benefits of minimizing setup time and maximizing resource throughput against the costs of satisfying demands early and building up inventory or satisfying demands late.

Sequence-dependent setup capability is available for both discrete and process manufacturing. Oracle Advanced Supply Chain Planning uses the same setup transition matrix inputs that Oracle Manufacturing Scheduling uses.

Previously, Advanced Supply Chain Planning scheduled only to the resource level. Now, when it schedules resources with specified sequence-dependent setups, it schedules to the instance level for the resource.

You can view the preferred sequence of tasks for a resource in the Resource Changeover window of the Planner Workbench. You can also view the calculated setup hours for a resource in the horizontal capacity plan for the resource.

The Sequence Dependent Setups plan option controls how Oracle Advanced Supply Chain Planning handles sequence dependent setups. If you set this option to No for all time buckets, Oracle Advanced Supply Chain Planning uses resource utilization percentages to increase activity durations and account for setup times. If you set the option to Yes, Oracle Advanced Supply Chain Planning does not use the utilization percentage. Instead, it calculates sequence dependent setup times using the changeover matrix defined in Oracle Discrete and Process manufacturing modules.

Gantt Chart Enhancements

In previous releases, you used the Advanced Supply Chain Planning Gantt chart to graphically view the manufacturing and distribution plan and reschedule orders as needed. In this release, new paradigms have been introduced, new features have been

added, and the usability of existing features has greatly improved.

Gantt chart enhancements make it easier for planners to manipulate schedule outputs and diagnose scheduling problems. With the enhanced Gantt chart, you can:

- View activities planned for a resource along the same horizontal line rather than in separate rows in the Resource view.
- Compare bucketed required hours to available hours for a resource in the Resource view.
- View the variation of used and available resource units over time in the Resource view.
- Open multiple views at the same time. For example, you can open both the Resource view and the Orders view at the same time.
- Transfer information context between two views. For example, you can display all resources in the Resource view for an order shown in the Orders view.
- Save a set of orders or resources as folders that you can view on command.
- See other Planner Workbench menu options when the Gantt chart is open.
- Peg up and down from a supply or a demand. Arrows in the right pane show pegging.
- Display instances for resources with sequence-dependent setups.
- Change activity schedules by editing dates in the left pane.

Reports

The following Advanced Supply Chain Management reports have changed.

Planning Detail Report

In previous releases, you ran the Advanced Supply Chain Planning Detail Report against manufacturing plans. In this release, you can run it against your manufacturing plans, distribution plans, and collected data. It shows material requirements planning information that you can use to understand the results of a plan, and can include a horizontal listing, a vertical listing, and detail sections showing gross requirements, scheduled receipts, planned orders, bill of material and engineering changes, expired lot, and by-product information.

This report replaces these Oracle Process Manufacturing (OPM) reports: MRP Bucketed Material Report, MRP Material Activity Report, MRP Action Messages Report, and MRP Error Messages Report.

Inventory Reorder Point Report

This report replaces the OPM Reorder Point Report used in previous releases.

OPM MRP Reports

The following OPM MRP reports have a new format: MPS Material Activity report (based on source transaction data) and MPS Bucketed Material report (based on source transaction data).

Additional Information: See *Oracle Advanced Supply Chain Planning Implementation and User's Guide* (Doc ID: 118086.1) for more information.

Asset Tracking

Changes for Oracle Asset Tracking are described in this section.

Notification from Fixed Assets

You can leverage a new concurrent program - Generate Notification - New Fixed Assets for Install Base Tracking to generate a workflow notification for new assets created in Oracle Assets. All users associated to the newly seeded Oracle Asset Tracking - Planner responsibility receive notification.

Interface to Fixed Assets

A new user interface facilitates the integration between item instances and fixed assets. You can associate an item instance to a fixed asset, either with a specified item instance or optionally with a selected fixed asset. You can associate multiple serialized item instances to the same fixed asset.

Fixed Asset Update

You can perform Fixed Asset updates for manual item instances, such as location or ownership. Fixed Asset updates are also supported for most Oracle Inventory transactions, except WIP transactions.

The Enable Auto Update flag has been added. When Enable Auto Update is set to Yes, an item instance and its associated asset are fully synchronized, subject to the validation rules existing prior to this release. If this flag is off, the association is not subject to fixed asset updates.

The Open Item interface contains Fixed Assets columns. You can create both the item instance and the associated fixed asset as part of your Oracle Installed Based item instance import process.

General Ledger Reversal Process

You can manually create reversing accounting distribution entries. These reversing entries offset entries generated by the Cost Manager, for selected inventory transactions of capitalized item instances. Prior to this release, these reversing entries were created automatically as part of the transaction costing process. In this release, you must run the Create Reversal GL Entries for Inventory FA Items concurrent program to generate

reversing entries.

Field Service Capabilities for Assets

You can create service requests and tasks for an internal asset in Oracle Field Service. Oracle Asset Tracking captures an asset's complete service history, including the debrief transactions, the manual logging of In/Out of Service, and the operation status of a recovered asset.

Contracts (Core)

The following functionality for Oracle Contracts Core 11i3 and later is being discontinued and will not be supported in this release.

- Stand-alone contract authoring and contract management using Oracle Contracts Core features, such as the Launchpad, Contract Navigator, and stand-alone Authoring form.
- Stand-alone sales contracts authoring using the Sales Contract category.
- The web based user interfaces (searching, creating, and updating contracts) in Contracts Online.

No data is migrated during the upgrade. If these discontinued features affect your system, you should consider implementing Release 11.5.10 (or higher) Oracle Sales Contracts, including the contract repository feature. Oracle will continue to support the previously released versions of the Contracts Core and Contracts for Sales products, although enhancements are no longer being offered.

Note: This does not apply to Oracle Sales Contracts or Oracle Procurement Contracts released as part of Release 11.5.10, nor does it apply to customers who are using only Oracle Service Contracts or Oracle Project Contracts.

Demand Planning

Changes for Oracle Demand Planning are described in this section.

Forecasting Enhancements

Statistical forecasting techniques in Oracle Demand Planning are enhanced in several areas:

- Forecast at Day Level

Forecasting at day-level now addresses situations when the demand patterns vary by the day of the week. For example, more newspapers are sold on Sundays than on other days of the week.

- Forecast Seasonal Data at Week Level
The Holt-Winters implementation now supports weekly (as opposed to just monthly) seasonal trends.
- Display Smoothed History and Seasonal Factors
To handle outliers and missing values, Demand Planning automatically performs pre-filtering to smooth demand history. Demand Planning also automatically calculates seasonal factors. You can now view the smoothed history and seasonal factors as outputs in Demand Planning.
- Demand Planning now supports Croston's method for intermittent demands.

Shared Objects

Demand planning managers and demand planners can now share their personal objects with other demand planning users. The sharable objects include documents (reports, graphs, and worksheets), document folders, saved selections, and custom aggregates.

Demand planning managers can create these objects centrally, and then share them with all the demand planners at any time in the demand planning cycle. This provides a consistent view of demand planning data to all the users and eliminates the need for demand planners to create the same reports and worksheets individually. Planners can save personal copies of shared documents to refine their selections and layout.

Selective Forecasting

Selective Forecasting now supports the Combination Forecast measure, which selectively forecasts discrete groups of products with product-specific forecasting rules. You can copy data for a group of products from an existing measure to the Combination Forecast measure being defined. You can also use product saved selections when creating combination forecasts.

Combination Forecast measures that you create using Selective Forecasting appear in the administrator's measure list and for managers and planners in the document tree under the Measure folder's Forecast subfolder. These measures are available in reports, worksheets, and graphs for distribution, submission, collection and upload.

Planner Productivity

In this release, Demand Planning has been enhanced to improve planner productivity:

- Input Negative Numbers in the Worksheet
In Release 11*i*, users captured decisions based on marketing intelligence, new product introductions, and so on by directly modifying the statistical baseline forecast in Demand Planning. You can now also manually input negative numbers on the worksheet. A benefit is that you can maintain adjustments to the statistical baseline forecast in a separate measure in Demand Planning. You can then create a formula measure to add the adjustments to the statistical baseline forecast allowing

you to view the original forecast, adjustments and adjusted forecast in a worksheet.

- **Start Date for Moving Totals**

Demand Planning now supports the cumulative sum or "moving total" type formula measure. There are two options for determining the Start Date for a Moving Total:

1. The calculations can begin using a specific Time period as the first period of the calculation; this is static over time.
2. Use Current period (default) to always use the current period as the first period of the calculation; this changes dynamically over time.

- **Formula-generated Stored Measures**

You can now use the same set of functions and operations supported for formula measures (addition, subtraction, multiplication, division, lead, lag, nested formulae, and so on) for the initial creation of a stored measure. Once created, you can update stored measures on the basis of the generating formula if you explicitly recalculate it. You can select the dimension levels at which the calculation occurs, and the result is stored. You can also select the allocation and aggregation methods and base measures, apply a price list and make the measure editable in the worksheet.

Performance

The following Demand Planning enhancements improve performance in a number of areas:

Re-aggregate Option

Administrators can now force the re-aggregation of all measures in the Shared database, whenever a change in a hierarchy is detected, without overwriting user modifications to existing measures. The download process automatically determines which hierarchy values were modified, and then re-aggregates those values for all measures for those values, including input parameters that were not downloaded if a quick download was run. This allows a measure's values to reflect mid-cycle hierarchy changes without running a Populate process, which overwrites all existing modifications to the measures.

Do not run Populate when the Reaggregate option is checked. Populate automatically recalculates the measures and overwrites existing edits. The Reaggregate option only applies to affected hierarchies - not the entire measure. These options are generally mutually exclusive.

You can enable the Reaggregate option in the Demand Plan Administration module by checking a checkbox on the Download screen. A full distribution for planners' is required in order to receive the hierarchy changes. The Reaggregate option is examined during distribution, and if enabled all personal measures are reaggregated.

Worksheet Performance Enhancements

Performance improvements have been made to the worksheet opening, editing, and recalculation operations.

Net Change Aggregation

When performing a Full or Quick download of one or more Demand Planning input parameters using the Update refresh mode, aggregation calculations are performed for only those measures that have changed.

Prevent Even Allocation

In Release 11i, entering values into an empty worksheet cell allocated that value to lower hierarchy levels using the Even allocation method. In certain situations this creates an explosion of values in the Demand Planning workspace that can be potentially detrimental to performance.

Values that are entered into empty worksheet cells are now allocated to lower hierarchy levels using the First Level Value allocation method. Only the first child of each descendant level is allocated the entered value, which prevents the database size from unnecessarily increasing.

Reduce Forced Recalculations

In Release 11i, you were not able to edit worksheet values of different hierarchy levels without recalculating the worksheet between edits. This enforced consistency of values across hierarchy levels, but created performance issues by forcing demand planners to wait for recalculations to complete between each edit.

Administrators now control when recalculations occur. Edits can be made at any level, and the worksheet is calculated at the user's discretion. Once the worksheet is recalculated or saved, edits are enforced from the top hierarchy levels down, so it is possible for an edit at a higher hierarchy level to override an edit at a lower hierarchy level.

View-only Access for Users

A new role (Demand Plan Viewer) is available. It allows you to view all data in the shared database, create documents, and share reports. However, data cannot be changed, shared or submitted.

Administration

The following enhancements help the Demand Planning administrator more effectively manage the progress of a demand planning cycle:

- Session Administration

The new Session Administration option enables the Demand Planning Administrator to view and if necessary terminate inactive or hanging user sessions for a demand plan. This allows demand plan sessions to be restarted as needed without technical database administrator assistance.

- Restart Distribute to Planner Stage

If the Distribute to Planner stage of the Demand Planning cycle terminates abnormally, then the Demand Plan Administrator can now restart the process from the beginning. Previously, restarting this process required the intervention of a technical database administrator.

Collections

The following collections enhancements help the Demand Planning Administrator more effectively manage the progress of a demand planning cycle:

- Collect Facts and Items from a Subset of Organizations

A new checkbox in the Organizations sub-form of the Application Instances form allows organizations to enable Demand Planning independently of Advanced Supply Chain Planning. This allows companies to collect Demand Planning fact data from a small subset of the ASCP-enabled organizations, which saves time on collections.

If you enable and maintain the same items in all organizations that you plan, then you can also save time on collections by invoking a new Collect Items Only From the Master Organization option.

- Collect Product Family-Level Manufacturing Forecasts

Demand Planning now supports the collection of manufacturing forecasts defined for product family items.

Enhanced Support for Forecast Priorities

In Demand Planning, you can very flexibly specify, down to the individual entry level, the priority associated with forecasts. You can then feed this information into Advanced Supply Chain Planning to drive planning decisions. This gives you the freedom to prioritize forecasts by demand class, customer, product, location, and time.

To set up forecast priorities, define a demand plan with at least two output scenarios: the normal forecast output scenario, and a forecast priority output scenario. For each forecast output scenario, use the Scenarios tab of the demand plan definition form to specify which other output scenario that you want to associate as the forecast priority. The output levels of the forecast output scenario and the forecast priority scenario must match. When using the forecast output scenario as a demand schedule in an ASCP plan, the associated priorities from the forecast priority scenario are passed into ASCP as the forecast priorities.

Demand History for Internal Sales Orders

In Release 11i10, Demand Planning ignored demand history based on internal sales orders. In this release, Demand Planning now recognizes demand history from internal sales orders to user-selected organizations. This supports demand planning processes for divisions within a larger enterprise running on a single global E-Business Suite instance. Divisions that run their own demand plans to fulfill demands from internal

organizations can now recognize demand history and create forecasts for those demands.

The new Select Internal Sales Orders For plan option field in the Demand Plan Definitions form allows you to specify which internal sales orders to consider. Demand Planning considers all internal sales orders containing one of the destination organizations that you list in the field.

Archiving Process for Demand Plans

Two new concurrent requests are available for archiving and restoring demand plans: Archive Demand Plan and Restore Demand Plan. These requests require only a demand plan name as a parameter. The archive process writes to a log named arch<plan_id>.log in ODPDIR. The Demand Planning system administrator runs a request to archive or restore a plan. Before starting the archive or restore processes, verify that there is sufficient space to write the log.

Depot Repair

In the Depot application, you can execute business flows for service, testing, calibration, exchange, upgrade, asset recovery, trade-in or recycling in addition to repair. However, many screen labels, menus, functions and title bars specifically say 'repair'. Some users dislike when the screen says 'repair' when no repair is being done.

In Release 12.2 the Depot application will replace the term "repair" with the more universal term "service". For example, 'repair order' becomes 'service order', 'repair type' becomes 'service type', 'repair organization' becomes 'service organization', and so on.

Automotive Industry Configuration

The automotive industry has a number of unique business flows, naming conventions, and data requirements that are unique to that industry. A new option is provided in the Depot application to automatically configure the system to provide automotive industry-specific setups for automotive manufacturers, dealers and service centers.

Enterprise Asset Management (eAM)

Changes for Oracle Enterprise Asset Management are described in this section.

Important: Prior to the upgrade to 12.1.1, you must set up the Install Base Parameters and Services Profile Option in accordance with Note 884201.1. See: Supply Chain Management Tasks, .

Asset Definition

Asset Definition in eAM migrates to the Installed Base data schema. This migration enables you to define and store both internal and customer assets in the same tables. The following functional changes results from this architectural change:

- By definition, you can track Asset Groups and Rebuildable Items. In the Item Master, the Tracked in Installed Base check box is always selected (On).
- Asset Number is now a globally unique number, identifying the asset during its lifecycle. You can change it any time, as long as it remains unique. Within Inventory, the Asset serial number is still used to identify an asset, but it does not have to be the same as the Asset Number.
- A Warranty Expiration date can be entered to indicate whether your asset is under warranty.

A new and simplified window enables you to define Asset Groups, using templates. This is an option in the Item Master window.

Asset Transactions

Unlike prior releases, you can now move an asset in and out of Inventory. You can define Assets as Transactable in the Item Master. You can receive an asset into Inventory, transfer it between organizations, and so on. When out of Inventory, you can specify the physical location of the asset.

Regardless of where an asset resides, its attributes, activity associations, meter association, and preventive maintenance schedules remain with the asset. They are not organization-specific.

Maintenance organization and Location Organization

In this release, as assets can be transactable, eAM introduces the concept of location organization. An eAM-enabled organization can see, not only assets in its own organization, but also assets residing in the organizations where it provides the maintenance services. The eAM Organization field in the Organization Parameters identifies the non-eAM organizations that an eAM-enabled organization services.

Asset Operations

With the Check In/Check Out feature, you can check an asset out to a user. A new self-service page enables you to check an asset out to a user, and check it back in.

As an asset is maintained, events are captured in the Operational Log; you can view this in a new self-service page. You can enter Asset events manually.

Work Management

In the Work Management area, extensive upgrades were added to this release.

Usability

Significant changes were made to the Work Order pages:

- New display the Approval history (new feature), Failure Information and Preventive Maintenance information, associated with a work order
- You can check on demand if there is any shortage of the required material

- Page containers display asset information and work order statistics
- A new page enables mass time entry

Workflow for Work Orders

A new Workflow process is seeded for a work order and its lifecycle. Integration with AME enables you to set up an approval process for your work orders, with preset approval hierarchy and flows.

A new window enables you to define your own work order statuses, which are associated to system statuses (for example, Draft, Released, Unreleased, and so on).

Assignment and Scheduling

You can now associate multiple time blocks for an employee assigned to your work order. Graphic representation of employee availability is provided when you perform assignment. When you make a change at a lower level, the Work Order Scheduling process adjusts the higher level dates and times, according to the "Bottom Up" hierarchy of Instance/Resource/Operation/Work Order.

Supervisor Workbench

A new workbench was added for the Supervisor role. From this workbench, a supervisor can manage the work of his departments or crews.

Mobile Solution

All the functionality needed to manage work orders is available on a connected mobile device. You can create and update work orders, request material, assign resource, enter material usage, charge time, complete operations and work orders from a mobile device.

CFR Part 11

The eAM work order process supports FDA compliance, with standardized electronic records and signatures that can be audited in accordance to CFR Part 11. At operation or work order completion, you can sign electronically. A signed record is created with a snapshot of the operation/work order information.

Meters

Meter Hierarchy is a new feature. If a Source meter is associated with a specific meter (Target), readings from the Source meter trickle down to the specified meter automatically. Readings from the Target meter are automatically created when readings from the Source meter are entered.

Mass data entry for meter readings is supported with a new self-service page.

Preventive Maintenance

Enterprise Asset Management supports organization-specific Preventive Maintenance sets. Global sets are visible to all maintenance organizations. If you define a set and specify it as Local, only your organization can see or update it.

There are two new Preventive Maintenance options:

- Multiple-Activity Preventive Maintenance schedule allows you to schedule multiple activities together in a cycle, specifying the intervals for each
- Base Date and Base Meter Preventive Maintenance schedule, where work orders are forecasted based on user-specified base date or base meter, regardless of the actual last service dates

Additional Upgrades

Other product upgrades that affect Enterprise Asset Management are described in this section.

Financial

From a new window, you can select work order costs and push them, using Mass Updates, to Oracle Assets for capitalization.

The new Maintenance Budgeting and Forecasting process enables you to generate asset maintenance cost forecasts, based on historical or planned works, and export them in Excel, HTML, or XML format.

iSupplier Portal

In the iSupplier Portal, search criteria enable you to query purchase orders specific to a work order or work order/operation. You can also drill down to view associated collection plans and enter collection results for a work order operation from the portal.

Quality Integration

To support the new asset architecture and the new eAM functionality, upgrades were made in Oracle Quality:

- The old element Asset Number is changed to Asset Serial Number. The prompts are also changed, including those in existing plans.
- A new hard-coded element, Asset Number, was added. Asset Activity and Followup Activity are in the context of this element.
- Lists of Values (LOVs) for Asset Group, Asset Serial Number, Asset Activity, and Followup Activity were modified to support the concept that a maintenance organization can service assets residing in other organizations.
- To support collection plan entry during check in and check out, two new transactions (including plan template and collection triggers) were added: Asset Check In and Asset Check Out transactions.

Flow Manufacturing

Changes for Oracle Flow Manufacturing are described in this section.

Flow Sequencing Profile Option

This release includes a new site-level Flow Manufacturing profile option (FLM: Enable

Flow Sequencing). It is not required for an upgrade from a previous release - you can continue to use both Oracle Manufacturing Scheduling and Oracle Flow Manufacturing Sequencing if both components were previously installed in your Release 11i system.

The default value is No for this profile option. You can legally set this option to Yes *only* if you have specifically licensed Oracle Flow Sequencing.

Install Base

Changes for Oracle Install Base are described in this section.

Discontinued Profile Options

Three profile options previously used to support Field Service Location are now obsolete: CSE_ISSUE_HZ_LOC, CSE_MISC_ISSUE-HZ_LOC, and CSE_MISC_RECEIPT_HZ_LOC.

Item Instance

A new user interface based on Oracle Applications (OA) Framework makes it easier to define and maintain an item instance. Important attributes of an item instance are grouped into tabs with the remaining information accessible through links.

- Organizes counters and notes information into tabs.
- Provides access to counter, order, and service information through Service Request and Repair Order links.
- Provides new links to access Oracle Enterprise Asset Management (eAM) Work Requests and Work Orders.
- Adds a new button to access Configurator for updates. This button is enabled only for configurations built in Configurator

Item Instance Mass Update

Item Instance Mass Update is converted from a form-based user interface to an OA Framework-based user interface. You can also update, delete, or transfer contracts as part of the mass update.

Counters

The definition of counters and Enterprise Asset Management meters is consolidated, and additional features have been added to enhance functionality.

- A counter group is optional when you define a counter.
- Multiple counters can be associated to an item instance.
- Meter readings can now be absolute or change readings.
- You can maintain a daily usage rate for your counter.

- Backdated reading adjustments are allowed with certain restrictions.
- A counter hierarchy can be set up so that readings for a source counter trickle down to target counter readings.

Asset Transfer to and from Field Location

The Inventory Transaction Type contains the Location Required flag, which supports Asset Transfer to/from Field Location. You can create new user-defined transaction types as follows:

- Transaction Source: Inventory or Move Order
- Transaction Action: Issue from Store or Receipt into Store
- Location Required flag: Selected

Support for Other Products

The upgrade affects the way item instance works with other products.

Oracle Contracts

A new Contract page displays contracts impacted by an item instance transaction such as quantity change or ownership change. Associated changes to contracts can be initiated from this page.

Oracle TeleService (Tangible Asset for the Contact Center)

A new sub-tab allows you to search and display item instances in the Contact Center user interface. Validations for item instance creation and update, configuration update (reconnect, disconnect) are enforced.

Oracle Process Manufacturing (OPM)

The convergence of Oracle Inventory and Oracle Process Manufacturing allows Oracle Install Base to support the tracking of OPM inventory transactions.

Inventory

Changes for Oracle Inventory are described in this section.

Oracle Process Manufacturing Convergence

Oracle Process Manufacturing (OPM) Inventory has been replaced with Oracle Inventory. Oracle Inventory now supports both process manufacturing and discrete manufacturing organizations.

Before this release, OPM maintained its own inventory module. This module interacted with standard Oracle Order Management, Oracle Procurement, and Oracle Advanced Planning and Scheduling, as well as the OPM-specific manufacturing module. Oracle Inventory interacted with all discrete and flow manufacturing modules.

In this and future releases, Oracle will support only Oracle Inventory for both discrete and process manufacturing environments. Oracle still retains the organization type

distinctions process and discrete because the manufacturing, costing, and quality modules are not converging for this release. Although Oracle Inventory integrates with both product suites, you must still determine the organization type in order to indicate the appropriate costing, production, and quality modules.

The Process Manufacturing convergence has the following benefits:

- **One item master:** Instead of maintaining separate item masters for discrete and process manufacturing, you can now maintain a single item record.
- **Central view of inventory:** You can view on hand balances across all discrete and process manufacturing organizations.
- **Integrated Supply Chain:** OPM customers can now use Oracle Mobile Supply Chain Applications and Oracle Warehouse Management.

In order to support process organizations, the following functionality is available in Oracle Inventory.

- Dual unit of measure (UOM) support
- Material status control
- Advanced lot control
- Support for indivisible lots
- Material aging workflow

Additional Information: See the *Oracle Inventory User's Guide* for more information.

Deferred Cost of Goods Sold (COGS) Recognition

Starting in this release, Oracle Inventory can defer the recognition of COGS until all contract contingencies are filled and Receivables has recognized the revenue. Oracle Inventory holds incurred costs in a deferred COGS account until Receivables recognizes it per the revenue recognition rules. This enables you to recognize both COGS and revenue in the same accounting period. The new accounting rules also support customer returns.

All sales order issue transactions are debited to the deferred COGS account except:

- **Internal sales orders:** For internal sales orders, the COGS account is debited directly when the new accounting rule is not enabled.
- **Intercompany transactions:** For all intercompany transactions (external drop shipments, internal drop shipments, and non-ship flows) COGS is debited directly if the new accounting rule is not enabled.

Oracle Cost Management moves incurred costs from the deferred COGS to the COGS account based on the revenue recognition events or order close events. The remaining accounting aspects remain unchanged. Set up the Deferred COGS account on the Other Accounts tab of the Organization Parameters window.

Dependencies and Interactions

This feature interacts with Oracle Cost Management to defer the cost of goods sold. Oracle Inventory stamps the account type on the material transaction, and Oracle Cost Management debits the correct account at the time of the material transaction. Oracle Cost Management also moves the costs incurred from the Deferred COGS account to the COGS account upon revenue recognition.

Additional Information: See *Defining Other Account Parameters* in the *Oracle Inventory User's Guide*.

Material Workbench

In Release 11.5.10, Oracle Inventory introduced the option to use the Material Workbench to view material that resides in receiving in addition to on-hand material. In this release, you can use the Material Workbench to view detailed information about material that resides in receiving, in-transit material, and on hand material. When you choose to view in-transit material, you can view the following document types:

- Purchase orders
- Advanced shipment notices (ASNs)
- Internal Orders

Oracle Inventory calculates availability information according to the material location of the relevant material. Instead of viewing on hand material, material in receiving, and in-transit material through separate queries, you can perform one query that displays an item across different material locations. You can also perform a query that displays item information across organizations. This provides you with access to a global picture of inventory for the item, and allows you to make quick decisions regarding item sourcing and procurement.

Query Changes

In this release, the following changes were made to the Material Workbench query window:

- Search based on cross-reference: You can now search for material based on purchasing or order management cross-references. This enables you to easily access on hand information for inventory if you do not know the internal item number.
- Search for inbound material: You can now search for inbound material from a particular supplier, against a source document, or expected within a certain period. You do not have to have an ASN to search for inbound material. The system uses

the purchase order promise date as the expected receipt date for purchase orders without an ASN. You can also search for internal organization transfers.

- **Save Queries:** You can save queries to use for a later date. This enables you to reuse complex queries. You can mark saved queries as public or private. If you mark a query as private, then only you can use the query.

After you execute a query, you can view the material across different material locations at the same time. You can expand the tree window to view on hand, receiving, and inbound material according to the search criteria you supply. In the results pane, when the organization node is highlighted, the summary view may include multiple organizations. The system displays material in each location simultaneously to provide a global picture for a particular item. The results pane also provides you with faster sorting, column manipulation, and exporting capabilities.

Changes to Support Process Manufacturing

The following changes were made to the Material Workbench to support Oracle Process Manufacturing convergence:

- **Dual UOM:** If an item is under dual UOM control, the secondary UOM information displays in the results pane, and the Availability window in the Material Workbench.
- **Grade update:** You can now select Grade Update on the Tools menu to update the grade of an item under lot control.
- **Status update:** You can now select Status Update on the Tools menu to update the material status of material in an inventory organization.

Additional Information: See *Material Workbench* in the *Oracle Inventory User's Guide*.

Picking Rule Enhancements

In this release, the picking rule window enables you to capture individual customer product quality and material characteristic preferences. For example, one customer may require premium grade material, while another more price-sensitive client may not have that restriction. To manage customer preferences, restrictions were added to the picking rules engine allocation logic in addition to the existing sort criteria for acceptable material. In this release, the Inventory Picking Rules window enables you to create picking rules without installing Oracle Warehouse Management.

These rules are a subset of Oracle Warehouse Management rules and have the following usage and restrictions:

- Allocate based on first in first out (FIFO) or first expired first out (FEFO)
- Ensure only one lot is allocated, or allow multiple lot allocation

- Restrict allocation by shelf life days
- Allow partial allocation, or ensure full allocation
- Specify matching based on item quality data
- Allocate lots in lot number sequence, or no sequence
- Allocate revisions by revision, effective date, or no sequence
- Allocate by sub-inventory, receipt date, or no sequence
- Allocate by locator, receipt date, or no sequence
- Allocate by preferred grade
- Ensure lots of indivisible items are fully consumed
- Allow over allocation

After you create the picking rules, you can use the Rules Workbench page to assign picking rules in the following combinations:

- Item
- Item category
- Customer
- Source type
- Transaction type

When you enable a rule the system builds a rules package. After the system builds a rules package, it creates an enabled strategy with the same name and description. If you disable the rule, then the system automatically disables the strategy. You can only disable rules that are not used in any disabled strategy assignments. You can also only modify disabled rules.

Note: The Rules Workbench available in an inventory-only organization does not have the full capabilities of the Oracle Warehouse Management Rules Workbench.

Additional Information: See *Defining Picking Rules* in the *Oracle Inventory User's Guide*.

Enhanced Reservations

You can create linkages between supply and demand to guarantee material availability. These linkages are known as reservations. A reservation guarantees the availability of reserved supply to a specific demand. In previous releases, reservations supported limited supply and demand types.

In this release, Oracle Inventory introduced the following new supply and demand types:

Supply types

- Purchase orders
- Internal requisitions
- Discrete jobs
- Process manufacturing batches
- Shop floor jobs

Demand types

- Components for Complex Maintenance Repair and Overhaul work orders
- Components for process manufacturing batches

Reservations supports document validation, availability checks, and change management for the new supply and demand types. In this release, reservations also supports crossdocking in the warehouse, and enables you to reserve the most appropriate inbound receipts for an outbound shipment. The crossdock attribute was added to the Item Reservations window to link supply to demand. The system creates crossdock reservations automatically. You cannot delete a crossdock reservation if the supply type is receiving.

In this release, you can reserve a specific serial number and Oracle Inventory ensures the system allocates the serial number at pick release. A new Serial Entry window was added to enable you to reserve multiple serial numbers for a reservation. If you reserve serial numbers, pick release allocates the serials irrespective of the picking rules. Pick release allocates the reserved serials first and honors the organization parameter Allocate Serial Numbers for the remaining demand. Oracle Inventory also allows you to substitute serial numbers during picking and shipping. If you choose to substitute a serial number, then the system deletes the reservation for the substituted serial number.

Note: The items Reservations window supports serial reservations only for on-hand delivery.

Additional Information: See *Item Reservations* in the *Oracle Inventory*

User's Guide. See also Warehouse Management Crossdocking in the Oracle Warehouse Management User's Guide.

Inventory Optimization

This section describes the changes to Oracle Inventory Optimization.

Demand Fulfillment Lead Time

Demand fulfillment lead time is the time between order placement and order fulfillment. You usually set it either to the time allowed by the customer or based on business practice. You can express a customer service level target in terms of a demand fulfillment lead time. For example, you can set a 95% service level with a three-day demand fulfillment lead time.

In previous releases, Oracle Inventory Optimization assumed that the lead time was zero. And, service levels were specified in different places - item-specific service levels as a flex field for the item, customer-specific service levels as a flex field for the customer, and demand class-specific service levels when associating a demand class with allocation rules.

In this release, service level and demand fulfillment lead time can be specified in one place as part of a service level set at the following levels: Item - Organization - Demand class, Item - Demand class, Item - Item category - Demand class, Item - Organization, Category, Demand class, Customer site, Customer, Organization - Demand class, and Organization.

You can enter lead time in days as a fractional number. For example, a 4-hour lead time as 0.167 (4 hours / 24 hours).

Lead Time Variability

In previous releases, Inventory Optimization did not consider the variability of lead times when it calculated safety stock levels. In this release, it calculates these variability measures from lead times when it calculates safety stock levels:

- **Manufacturing lead-time variability:** A standard deviation value that the planning engine applies to the item processing lead time. You enter item processing lead time in Collections Workbench form, Item Details window. Oracle Inventory Optimization assumes that the statistical distribution of the manufacturing lead time is normal.
- **In-transit lead-time variability:** A standard deviation value that the planning engine takes against the ship method transit time. You enter ship method transit time in the Transit Times form. Oracle Inventory Optimization assumes that the statistical distribution of the in-transit lead time is normal.
- **Purchasing lead-time variability:** A standard deviation value that the planning

engine takes against the supplier processing lead time. If entered, Oracle Inventory Optimization assumes that the statistical distribution of supplier variability is normal. As in previous releases, you can also enter this value by specifying a histogram of purchasing lead time-probability pairs. If you enter the value using a histogram, Oracle Inventory Optimization takes the probability distribution from the user inputs.

Additional Information: See *Oracle Inventory Optimization Implementation and User's Guide* (Doc ID: 118086.1) for details.

Product Hub

Changes for Oracle Product Hub (previously known as Oracle Product Information Management or PIM) are described in this section.

Structures

In prior releases, you could only update structure attributes for common structures (also known as common bills of material) in the source bill. You can now edit five structure attributes, and can have different values from the source bill. These five attribute fields include:

- Operation Seq.
- Include in Cost Rollup
- Supply Type
- Subinventory
- Locator

You can choose to change these attributes when you create a new common structure, change an existing common structure, or add or update a common structure when using the Bill Import open interface program.

The profile EGO: Enable Oracle Collaborative Development should not be enabled from Release 12 onwards.

You can now only update structure and component attribute values using the Product Workbench. See: *Editing Structure Information, Oracle Product Hub User's Guide*.

Advanced Search

The advanced search function has been enhanced so that searches using the operator "contains" are now case-insensitive.

Web ADI Integration

Columns created within a Microsoft Excel spreadsheet during the information export process now match the column formats of the display format selected.

Item Organization Assignments

In prior releases, when assigning items to organizations, some of the item primary attributes were defaulted from the master item during organization assignment and could not be changed. In this release, you can now edit the following attributes during organization assignment:

- Tracking
- Pricing
- Secondary Unit of Measure
- Defaulting
- Positive Deviation Factor
- Negative Deviation Factor

Simplified Item Creation Process

The item creation process in releases prior to 12.1.1 involved multiple steps and different user interfaces. You can now create one or more items using a one-step process for entering basic item information. You can then go to the item's **Overview** page to provide additional details.

Ad-hoc New Item Request

As of release 12.1.1, the new item request process enables users to create items and then submit a new item request for the item or group of items at a later date. The new item request is no longer created automatically at the end of the item creation process. This enables a user to work on an item or set of items as a draft, then request further definition and approval using workflow when appropriate.

Versioning of Item Catalog Categories and Value Sets

You can now create versions for item catalog categories and certain types of value sets. Versioning is possible only if the profile option *Enable PIM for Telco Features* is set to Yes. For versioning pre-upgrade item catalog categories, see the post-upgrade tasks section. For versioned item catalog categories, only transaction attributes and structures can be maintained within versions.

Global Data Synchronization Network (GDSN)

Both Demand-Side Product Data Synchronization for GDSN and Supply-Side Product

Data Synchronization for GDSN is obsolete. Functionality related to this is not visible.

Value Set Security

When you initially install or upgrade Oracle Product Hub to Release 12.2.4 or later, users cannot view, insert or update any value set values. You must explicitly set up access for specific users by enabling appropriate grants and roles for those users. For more information about setting up access, refer to *Flexfield Value Set Security, Oracle E-Business Suite Flexfields Guide*.

Related Topics

For additional information, refer to the *Oracle Product Hub Implementation Guide* and the *Oracle Product Hub User's Guide*.

Order Management

Changes for Oracle Order Management are described in this section.

Obsolete Profile Options

The following profile options are obsolete. All functionality previously provided by these profile options is now controlled by Oracle Payments.

- OM: Estimated Authorization Validity Period.
- OM: Number of Days to Backdate Bank Account Creation.
- OM: Payment Method for Credit Card Transactions. Control is now available at the Payment Type level in the Define Payment Types window.
- OM: Process Payment Immediately at Booking. Control is now available at the Payment Type level in the Define Payment Types window.
- OM: Risk Factor Threshold for Electronic Payments.

Changed Profile Options

These profile options have been converted to Oracle Order Management system parameters:

- Credit Memo Transaction Type
- Credit Salesperson for Freight on Sales
- Employee for Self-Service Orders
- GSA Discount Violation Action
- Invoice Source

- Invoice Transaction Type
- Non-Delivery Invoice Source
- Overshipment Invoice Basis
- Reservation Time Fence
- Schedule Line on Hold
- Show Discount Details on Invoice
- Inventory Item for Freight
- Invoice Freight as Revenue

The system parameters retain the same names as the profile options without the prefixes (OM: or Tax:). The profile OM: Employee for Self-Service Orders is replaced by the system parameter called Requestor for Drop Ship Orders created by external user.

These profile options were changed to system parameters to support Multiple Organization Access Control (MOAC), which allows you to access one or more operating units using a single responsibility. Some addition benefits include:

- Implementers need to set some application controls at an operating unit level so that the business flows they operate on can be consistent within that operating unit. At the same time, the application controls can be set differently for different operating units. Delivering those controls as system parameters (which are specific to operating units) instead of as profile options meets this need.
- After you set the values of certain key application controls during an implementation, you need to ensure that those values are not changed later in the implementation process. Using system parameters for these controls ensures that implementers are appropriately warned or disallowed from making such changes.

The upgrade migrates the values of the profile options to system parameter values.

Defaulting Rules

In previous releases of Order Management, seeded defaulting rules defaulted the Order Type and Salesrep from the Customer. These defaulting rules are deleted. You can still default the Order Type and Salesrep values from other sources, such as the Customer Ship-to and Customer Bill-to.

The sources Customer.Order type and Customer.Salesrep are also disabled, so all custom defaulting rules that used these source are deleted.

Pre-Payments

In previous releases, Order Management stored credit card information locally. In this

release, the integration with Oracle Payments provides a centralized data model within Oracle Payments for credit card and bank account information and services to process payments. Vital and sensitive data such as credit card numbers, credit card security codes (CVV2), and bank accounts are encrypted and stored within this centralized model.

Additional Information: See *Oracle Order Management Implementation Manual* for more information.

Process Manufacturing

Prior to this release, Oracle Process Manufacturing (OPM) had its own inventory control system, which maintained a central Item master, tracking inventory in two units of measure, provided grade control, status control, and lot and sub-lot numbers. With the upgrade, these features are migrated to Oracle Inventory. The OPM application now relies on this core inventory system. This model is common for both process and discrete organizations and provides for a single inventory view throughout the supply chain.

Additional Information: See Chapter 2, and Chapter 4, for pre- and post-upgrade steps.

Process Execution

OPM Process Execution leverages additional capabilities available with the core inventory system. Reservations, which are guarantees of available inventory, replace the "pending lot allocations" capabilities. However, unlike the current pending lot allocations, detailed reservations are "hard" reservations. That is, once you have reserved material to a batch, all other sources of demand are prevented from reserving or using this inventory. Move Orders can optionally be used to model, control, and document the movement of material to a staging location prior to consumption by a batch. Revision control of items is also supported in batches.

If you are using the Oracle Warehouse Management System (WMS) and Oracle Mobile Supply Chain Applications (MSCA) products, then there are two new mobile transactions are supported in OPM Process Execution. You can now create and update batch reservations via mobile devices. This reduces data entry errors and the need for reconciliations, and streamlines production-reporting processes.

The following table summarizes changes in concepts and terminology to OPM Process Execution for Release 12:

| Before the Upgrade | After the Upgrade |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Allocation of ingredients (pending transactions) | Reservation (multiple levels) - manual or rule-based |
| No support for movement of inventory material within the production | Support for move orders |
| No support for WMS | Integration to WMS transactions |
| No support for item revisions | Item revision support |
| Organization can be either a plant or laboratory | Same organization can be defined as either a plant or an organization or both |
| No support for subinventories | Inventory organization (plant) can have multiple subinventories |
| Consumption and yield warehouses | Supply subinventory and yield subinventory |
| Shop calendar | Workday calendar |
| Profile options | Profile options and organization parameters |
| Pick lots | Select Available Inventory |

Product Development

Least Cost Formulation is a new capability that enables a formulator to generate a formula based on a pre-determined product specification by optimizing on-hand ingredients usage with respect to their quality attributes and costs to generate the optimal formulation. The formulation (or batch) created from this process is typically used only one time, since it's using a snapshot of available inventory that may not exist again. However these formulas can also be saved for re-use during a certain time period.

A new field, S88 Recipe Type, is introduced as part of the recipe header that enables users to categorize each recipe as a General, Site, or Master Recipe. A new View By for Recipes is available from the Product Development Workbench with a General Recipe at the top of the list, followed by all of the Site Recipes, and each site displaying all of the Master Recipes. Also, General and Site recipe types will be defaulted when new recipes are created. Recipes created under a Master Inventory Organization will default to "General" recipe type, while recipes created under all other Inventory Organizations will default to 'Site' recipe type.

Item Substitution Lists will enable users to restrict the substitutions made, rather than allowing any item to be substituted for another. Effective dates for each substitute item will be possible, reducing the number of formulas and recipes by enabling one formula to store all the possible alternative items over a period of time. Item Substitution lists must be approved, and will therefore require an approval workflow, including status and version control.

There were also some minor changes to comply with the new organization structure and implementation of revision control of items.

The following table summarizes changes in concepts and terminology to OPM Product Development:

| Before the Upgrade | After the Upgrade |
|-------------------------------|-------------------------------------------------------|
| Lab as a type of organization | Lab as a separate inventory organization |
| No support for item revisions | Item revision support for formulas and validity rules |
| Experimental items | Engineering items |
| Profile options | Profile options and organization parameters |

Quality Management

OPM Quality Management has been enhanced to leverage some elements of the Oracle Quality applications. The first is a new process during receiving inspection to hold delivery inventory in a receiving location until sample acceptance. This functionality provides a two-step receiving process: 1) inspection by a warehouse operator and 2) quality testing and results entry within the laboratory.

Another addition is the capability to track a nonconformance (batch irregularities such as ingredient substitutions or changes in procedures) during the production process with Oracle Manufacturing Execution System for Process Manufacturing and Oracle Quality. These nonconformance issues can be reviewed by plant quality personnel prior to yielding acceptable product from the batch.

The following table summarizes changes in concepts and terminology to OPM Quality Management:

| Before the Upgrade | After the Upgrade |
|-------------------------------|-------------------------------------------------------------------------|
| No support for item revisions | Item revision support in specifications, samples, and stability studies |

| Before the Upgrade | After the Upgrade |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Sample against a lot updates its sublots | Sample against parent lot updates its lots |
| Miscellaneous inventory adjustment for sample quantity deduction | New inventory transaction type for sample quantity issue |
| Sample history only for a specific lot, warehouse, and location | Sample and results traceability through lot split, merge, and transfer |
| Quality laboratory and R&D llaboratory defined as same laboratory organization | Quality laboratory and R&D laboratory defined as same or separate inventory organizations |
| Lot expiry/retest workflows | Inventory Date Notifications |
| Grade and actions defined in OPM Quality Management | Grade and actions defined in Oracle Inventory |
| Profile options | Profile options and organization parameters |
| Hold reasons | Reason codes in Oracle Inventory |

Inventory Control

OPM Inventory Control has been replaced with a common inventory solution - Oracle Inventory (see Inventory, page 2-108 in this chapter for a description of changes made to support process industries). As a result, many all of the OPM Inventory Control windows are now in Query-only access without update. Current balances are available directly from Oracle Inventory views and reports. The OPM Inventory Close functionality is now available under the OPM Financials responsibility as Period Close for Process Inventory Organizations.

The following table summarizes changes in concepts and terminology in Common Inventory:

| Before the Upgrade | After the Upgrade |
|---------------------------|--------------------------------------|
| Items | Master items and organizations items |
| Item organizations | Obsolete |

| Before the Upgrade | After the Upgrade |
|---------------------------|-----------------------------------------------|
| Inventory calendar | Inventory calendar |
| Warehouse | Organization/subinventory |
| Warehouse locations | Stock locators |
| Item lot conversions | Item conversions and lot-specific conversions |
| Lot and subplot | Parent lot and child lot |
| Session parameters | Change organizations |
| Lot status | Material status |
| Allocation parameters | Picking rules |
| OPM category sets | Default category sets |
| Profile options | Organization parameters |
| Lot genealogy | Genealogy workbench |
| Public APIs | Public API signatures may have changed |

Process Planning

An unconstrained version of Oracle Advanced Supply Chain Planning (ASCP) application replaces the Oracle Process Manufacturing Material Requirements Planning (MRP) application. The Oracle ASCP unconstrained planning and scheduling engine determines material requirements and schedules supplies to satisfy dynamic demand. Additional capabilities include: advanced multilevel pegging, flexible replenishment hierarchy, and online planning.

Unconstrained planning and scheduling provides you with a platform to integrate to other Oracle Advanced Planning and Scheduling applications (APS) including Oracle Collaborative Planning (CP) to increase cooperation with suppliers and customers, Oracle Demand Planning (DP) to enhance forecast and sales and operations planning, Oracle Inventory Optimization (IO) for advanced inventory optimization, and Oracle Global Order Processing (GOP) for enhanced order promising.

The following features replace the Oracle ASCP product that existing OPM customers who are upgrading as well as new customers receive as a replacement for OPM MRP:

Licensed ASCP - New Customer

- Replacement for P/MRP
- Single-Org Unconstrained Plan ASCP
- Single instance - no separate Planning Server

Not Licensed ASCP - Upgrade Customer

- Replacement for P/MRP
- Multi-Org Unconstrained Plan ASCP
- Single instance - no separate Planning Server

Licensed ASCP - New Customer

- Not Licensed or Licensed CBO
- Multi-Org Unconstrained or Constrained Plan ASCP
- Option to have a separate Planning Server

Licensed ASCP - Upgrade Customer

- Not Licensed or Licensed CBO
- Multi-Org Unconstrained or Constrained Plan ASCP
- Option to have a separate Planning Server

The following table summarizes changes in concepts and terminology for Planning:

| Before the Upgrade | After the Upgrade |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Shop calendar | Workday calendar |
| OPM MRP reports replaced by the Oracle ASCP Supply Chain Planning Detail Report: Bucketed Material, Material Activity, Action Messages, Error Messages | The Oracle ASCP Supply Chain Planning Detail Report replaces the indicated OPM MRP reports |
| OPM Reorder Point Report | Oracle Inventory Reorder Point Report |
| Batches | Work orders |
| Batch status | Work order status |
| Firm jobs | Firm work orders |

| Before the Upgrade | After the Upgrade |
|----------------------------------------------------|---------------------------------------------|
| Move work order to PIP functionality not available | Move work orders to PIP |
| Profile options | Profile options and organization parameters |

System Administration

Changes made to the Oracle Inventory and OPM System Administration applications support process manufacturer users of Oracle Inventory. Therefore, the need for a separate OPM System Administration application is diminished. Many of the functions in the OPM System Administration are replaced by Oracle Inventory procedures and routines. For reference purposes, the OPM System Administrator windows are query-only and cannot be updated.

A new window has been added for users to set up and initiate the migration of data. The data can be validated in a new log report.

The following table summarizes changes in concepts and terminology to OPM System Administrator:

| Before the Upgrade | After the Upgrade |
|-----------------------------------------------------------|---------------------------------------------|
| Profile options | Profile options and organization parameters |
| Look Up window | Process Manufacturing System Lookup |
| Session Parameters for selection of Process Organizations | Change organization |
| Reason Codes | Transaction reasons in Inventory |
| User Organization access using User Organizations window | Achieved by creating the profile in HRMS |
| Document numbering done in OPM System Administration | Obsolete option |

Cost Management and Manufacturing Accounting Controller

Oracle Subledger Accounting replaces the Manufacturing Accounting Controller to generate journal entries in Oracle General Ledger. The Subledger Accounting product is designed to provide greater flexibility and to streamline setups. SLA is a single source

for both process and discrete manufacturing organizations. For additional information, refer to the Subledger Accounting section of this document.

OPM Cost Management continues to capture costs for all transactions in a process-enabled organization are provided by OPM Cost Management. There is complete support for material transfers between process and discrete organizations.

The following table summarizes changes in concepts and terminology to OPM Cost Management and Oracle Subledger Accounting:

| Before the Upgrade | After the Upgrade |
|-------------------------------------------------------|----------------------------------------------------------------------------------------|
| Company | Legal entity |
| Cost method | Cost types |
| Burdens | Fixed overheads |
| Percentage burdens | Percentage overheads |
| PM batch detail (actual cost transaction view) | Production batch |
| PCO account | COGS account |
| Inventory close (in OPM Inventory Control) | Period Close for Process Inventory Organizations |
| Subsidiary Ledger Update program | OPM Accounting Pre-Processor and Subledger Accounting programs |
| GL Export | The export to GL is available as an option while running the Create Accounting program |
| Acquisition costs | Freight and special charges |
| Inventory Valuation report (in OPM Inventory Control) | Inventory Valuation report for process inventory organizations (in OPM Financials) |

Logistics Applications

Differences in functionality resulting from separate inventory models for process and discrete applications are now removed from the Logistics product areas. Additional process logistics capabilities, formerly available only to discrete, such as vendor managed and consigned inventory, international drop shipments, shared services and global procurement are now available.

For those companies using WMS, Oracle Receiving will also have the capability to put material into LPNs, use putaway rules and create labels (if using Oracle Process MES Operations). Process industries can also use WMS functionality in MSCA since the product supports both secondary quantities and grade.

Lastly, Oracle Purchasing for OPM Receiving has a tighter integration to OPM Quality Management. A two stage inspection process provides the ability to view sample acceptability and visual inspection results directly from the receiving window. Oracle Quality is leveraged to define skip receipt parameters and sampling plan criteria based on ANSI/ASQC standards or user-defined rules.

Regulatory Management

Most of the changes in Oracle Process Manufacturing Regulatory Management enable multi-organization access to information. The Dispatch History window, Dispatch History Report, Regulatory Item Information window, and Workflow Notifications show the organization context information and now use the common inventory model. Organization context restricts record query and item validation. Inbound and outbound XML messages also incorporate organization as one of the elements.

UN Numbers and Hazard Classes are now maintained in the Oracle Purchasing product and CAS Numbers are maintained on the common item master.

The following table summarizes changes in concepts and terminology to OPM Regulatory Management:

| Before the Upgrade | After the Upgrade |
|---------------------|--------------------------------------------------------------------|
| Item Version | Item Revision |
| Actual Hazard | Actual Hazard % |
| Primary CAS Number | CAS Number |
| Stand-alone formula | OPM Product Development formula with regulatory validity rule type |
| Regulatory item | Items in Oracle Inventory with Regulatory flag |

Mobile Supply Chain Application

OPM MSCA now supports the following additional transactions:

- Create and update batch reservations in OPM Process Execution
- Oracle Manufacturing Execution System for Process Manufacturing:

- Update actual resource usage
- Ingredient issue
- Ingredient return
- Product completion
- Product return
- Incremental backflush
- Create pending product lot
- Update pending product lot

E-records

Technology changes enable all e-record and e-signature features available in the Forms technology stack to be supported for the Oracle Applications Framework Forms technology stack. Also a mobile e-signature framework enables e-signatures on mobile devices. Improvements to streamline the approval setup include one-step data setup validation, role based approvals and the ability to leverage XML from multiple sources for e-record generation.

Additional capabilities to streamline the approval process include the ability to do a before and after comparison through redlining, expediting the process through parallel or simultaneous signatures and "first responder wins" functionality. The number of window that a user needs to few has also been decreased to a single step.

Obsolete Features

Prior to this release, Oracle Process Manufacturing had its own inventory control system, which maintained a central Item Master, tracked inventory in two units of measure, provided grade control, status control, and lot and subplot numbers.

- Prior features are added to Oracle Inventory. The Oracle Process Manufacturing application now relies on a core inventory system—a single model of inventory for both process and discrete organizations. This provides for a single inventory view throughout the supply chain. One central Item Master becomes the source of item creation and maintenance. It is also a repository for all item attributes.
- Common inventory is the centralization of all inventory tracking. Oracle Inventory contains inventory balances, transactions, and reservations.
- Consigned and vendor-managed inventory are also tracked in this application. For process manufacturers, all of the Oracle Process Manufacturing applications now use Oracle Inventory for their inventory information, and no balances or

transactions are maintained in OPM Inventory Control.

- Historical information can be viewed in OPM Inventory Control, but current balances reside in Oracle Inventory and transactions are executed in Oracle Inventory.

The following OPM Inventory concurrent programs are disabled:

- Synchronize all OPM Items
- Synchronize all Process Inventory Organization
- Synchronize all Stock Locators for Process Organizations
- GMI Purge Empty Balance
- Move Order Line Auto Alloc and Confirm
- Purge Empty Balances
- Inventory Close is now available under the OPM Financials responsibility as Period Close for Process Inventory Organizations

The following OPM Logistics concurrent programs are disabled:

- Purge OPM Txns and Move Order Lines
- Reprocess Internal Order Receipts
- Auto Alloc and Confirm

Following are the OPM Inventory public APIs packages. Package bodies for the APIs are dropped and files stubbed. Signatures of APIs are retained. This ensures that any code which calls these APIs get successfully compiled but due to missing package body errors are raised during runtime:

- GMIPAPI
- GMI_TRANS_ENGINE_PUB
- GMIPDX
- Transfer API

Following are the obsolete features in OPM Regulatory Management:

- Several fields are desupported
- Stand-alone formulas are no longer supported

The OPM MRP application is obsolete and the following features are not supported by Oracle ASCP:

- Replenishment method specific order modifiers
- Multiple transfer types
- Resizing/Rescheduling suggestions
- Dynamic Bucketing
- Dual unit of measures

In addition, the following features are obsolete:

- The OPM Manufacturing Accounting Controller application is now obsolete. It is replaced with the OPM Subledger Accounting application
- The organization structure used earlier by OPM prior to this release is now replaced with the organization structure used across the E-Business Suite and is applicable for all process-enabled organizations. To ensure compliance with the organization structure, the costing entities that were at the OPM Company level such as Cost Rollup and Actual Cost Calculation are now mapped to the Legal Entity level.
- Sales Order Reservations menu option is obsolete.
- The OPM Logistics applications support the common Inventory application. In OPM Order Fulfillment, you can view historical data in query-mode.
- All Oracle E-Record features, which were available in the Forms Tech Stack, are now supported for the Oracle Applications Framework Forms Tech Stack.
- Hold Reasons are now obsolete.
- Profile options are now referred to as system parameter.

Quality

Oracle Quality provides an integrated, enterprise wide, flexible quality management application designed to support diverse quality needs of discrete, repetitive, assemble-to-order, and batch process manufacturers. Oracle Quality is integrated with the Oracle E-Business Suite to provide unified quality data definition, data collection, and data management throughout the enterprise and across supply and distribution networks. Oracle Quality's flexible architecture can support a wide variety of business models and also provides reporting on all aspects of quality management.

Changes for Oracle Quality are described in this section.

Device Integration Functionality

This is new functionality introduced in this release that enables the application to communicate with devices on the shop floor and collect the Quality data. A new User Interface (UI) page has been added to enable the device setup. To support this functionality, the collection plans setup window from Release 11*i* has been modified to specify the elements that are device enabled. A new button on the Quality Workbench enables the entry/update page to read the data from the devices. This functionality is available only for those customers who have purchased the MES product license.

Note: See *Oracle Quality User's Guide* for more information.

Changes in Quality Workbench

The usability of the Quality Workbench (QWB) is improved in this release to bring a parity between forms and OA pages in terms of the functionalities that include online actions processing and online validations, deletion capability, adding rows and row duplication features for standalone plans, exporting quality results, multi-row update for parent and child plans, and additional features that serve to bridge the gap that existed between the forms application and the workbench application in Release 11*i*.

Note: See *Oracle Quality User's Guide* for more information.

OA Framework Graphics

The Oracle Quality charts that were based on the legacy Oracle Graphics in Release 11*i* are replaced with OA Framework charts in this release.

Note: See *Oracle Quality User's Guide* for more information.

ERES Support in Service Family

The ERES functionality in Release 11*i* has been enhanced to support deferred E-Signatures for entering and updating quality results. Quality integration with service request transactions feature ERES functionality in this release.

Note: See *Oracle Quality User's Guide* for more information.

Obsolete Profiles

The following Quality profiles are obsolete in this release:

1. QA:Action Processing Mode
2. QA:Receive Web Supplier Notifications

3. QA:Self-Service Transaction Notification
4. QA:Statistics Engine

Service Contracts

Oracle Service Contracts provides a complete contract authoring and execution solution to manage warranties, extended warranties, usage and subscription based services. Service providers can leverage entitlement verification checks to accurately determine the level of service available to customers via call center support, depot repair or field service processes. Accurate pricing and flexible billing options ensure customers receive accurate invoices. An automated renewal process improves revenue by guiding customers and sales representatives through upcoming renewals, ensuring uninterrupted service for customers while minimizing service revenue leakage for service providers.

Changes for Oracle Service Contracts are described in this section.

Partial Period Definition

Businesses require flexibility for defining how pricing, billing and termination amounts are calculated for partial periods. Some businesses base partial period calculations on fixed 30-day months, 90-day quarters and 360-day years. Others prefer to calculate partial periods based on the actual number of days within a period.

To use this new feature, you need to define the way you wish the partial period to be calculated in the Global Contracts Defaults form. For example, you will need to define whether the application counts whole periods from the start date of the service, or based on the full calendar months that span the duration. Periods can be defined based on a fixed quantity, for example, 30 days per month, or based on the actual number a days in each period.

Additional Information: See *Oracle Service Contracts User Guide* for more information.

Service Cancellations

At time of contract renewal, customers sometimes elect to discontinue one or more services on a contract. The ability to track cancellation details for individual service lines or covered levels improves management's ability to evaluate renewal rates and cancellation rates, providing insight into the reasons behind changes in renewal rates.

To use this new feature you may need to set up additional statuses to track the reasons for cancellation. Use the Status and Operations form to define extra statuses as necessary under the Entered and Canceled status types.

Additional Information: See *Oracle Service Contracts User Guide* for more

information.

Contract Approval Rules

The standard contract approval workflow is integrated with Oracle Approvals Management to drive the approval process. Standard Approvals Management features, such as rules-based approval routing and definition of approval groups, are supported.

To use this new feature, you need to set up the Oracle Approvals Management engine defining the approval rules, approval groups and hierarchy as necessary to support your business.

Additional Information: See *Oracle Service Contracts Implementation Guide* for more information.

Multi-Org Access Control

Multi-Org Access Control (MOAC) enables companies that have implemented a Shared Services operating model to access, process, and report on data for an unlimited number of operating units within a single applications responsibility. Users are no longer required to switch applications responsibilities when processing transactions for multiple operating units. Data security is maintained using security profiles that determine the data access privileges associated to responsibilities granted to a user.

To use this new feature, you may need to define or change your setup for organization hierarchies. You must define security profiles and assign operating units, and assign a security profile to each responsibility and a default operating unit to your users.

Additional Information: See *Oracle Service Contracts Implementation Guide* for more information.

Coverage Definition and Instantiation

Some service providers standardize their service offerings across their customer base, while others tailor complex service programs to meet the needs of specific customers. In this release, service providers who standardize their offerings can define standard coverage that can be referenced by services sold in contracts.

Updates to the standard coverage are automatically applied to all contracts that include that service coverage, making changes in coverage immediately accessible to all downstream processes that need to check entitlements. Coverage can still be tailored to suit the specific needs of customers by pressing the Customize button when adding the service to a contract.

To use this new feature, you need to:

- Review your current set of coverage templates and ensure that they represent the

set of standard coverage offerings that your business offers.

- Exclude the customize coverage function, Create Customized Coverage, to the set of users that should not have the privilege of authoring contracts that deviate from standard or reapply standard coverage to a service line.
- By default, contracts will be migrated with customized or "private" coverage. If you wish your contracts to reference a standard definition, open the contract and reapply the standard for each service line. This reverts to the coverage template currently assigned to the service and removes the instantiated coverage. Or, you can start using standard coverage for new or renewed contracts only.

Additional Information: See *Oracle Service Contracts User Guide* for more information.

XML Publisher Communication Templates

Service Contracts is integrated with XML Publisher to support user-defined layout templates for customer communication documents. The Template Setup forms are enhanced in this release.

To use this new feature, review the seeded communication templates and modify them as necessary to support your business process.

Additional Information: See *Oracle Service Contracts User Guide* for more information.

Shipping Execution

Changes for Oracle Shipping Execution are described in this section.

Flexible Documents

Beginning with this release, printing of reports in Shipping Execution is not limited to text output. PDF format is now available on various Shipping Execution reports through the use of report templates created in Oracle XML Publisher.

Oracle XML Publisher enables you to define your reports using broadly accepted tools such as Microsoft Word. Within Word, you choose the information you want, where you want it on the report, and any fonts, colors, or logos you prefer for the report. You can start by copying the seeded.rtf (Rich Text Format) layout provided with Shipping Execution and modifying it, or you can start from scratch and define any desired report layout you prefer.

The following Shipping Execution reports are available for PDF output:

- Pick Slip

- Packing Slip
- Mailing Label
- Bill of Lading
- Master Bill of Lading
- Commercial Invoice
- Vehicle Load Sheet Summary

Many new attributes have been added to the XML output of the Pick Slip, Packing Slip, and Commercial Invoice reports, including:

- Secondary Quantity
- Secondary UOM
- Lot number
- Grade

FOB terms and Freight terms have been added to the Bill of Lading and the Master Bill of Lading reports to provide support for the VICS Bill of Lading.

Note: This new information does not appear on the report's seeded layouts. It is part of the XML data structure available to build the templates within Oracle XML publisher.

Workflow-enabled Shipping Transactions

The Shipping Transactions form and Quick Ship window now allow you to view Workflow-enabled shipping transactions. These transactions automate business processes by routing information according to user-defined business rules. You can use them to automate specific tasks and customize output based on attributes of business objects.

Additional Information: See *Oracle Shipping Execution User's Guide* for more information.

Parallel Pick Submission

Pick Release runs pick release processes in parallel. Distributing the workload across multiple processors reduces the overall time required for a single pick release run. You can also specify the number of threads spawned by Pick Release. (The actual number of pick release child processes spawned by Pick Release depends on each individual pick

release batch, and on the profile setting.)

The new seeded profile WSH: Number of Pick Release Child Processes is used to determine the default number of child processes. However, it does not have a default value so the Pick Selection program considers this as "1." Change this profile to the number of child processes that you want to run in parallel, depending on the hardware efficiency and other application constraints at your location.

Because Inventory locks the organization/item combination, multiple parallel pick release processes do not process the same item in the same organization at the same time.

Shop Floor Management

Changes for Oracle Shop Floor Management are described in this section.

Option 1 Disabled

Option 1 in Oracle Shop Floor Management (OSFM) refers to the behavior of jobs where copies are not created, and individual operation data is not copied from the Bills of Material definition to job as you move to that operation.

As a part of the upgrade, this functionality is discontinued and automatically replaced with Option 2 functionality.

Option 2 enables you to create individual copies for each job by copying Bills of Material and network routings when a new lot-based job is created. You can hold, modify, and view detailed information for each operation of the job.

Using Option 2, you can make the following job-level changes:

- Change the path of a job to any other valid intended path for future operations
- Change component requirements or specify component substitutes for future operations
- Employ alternate resources using the resource-centric workbench
- Use the new HTML User Interface for detailed planning recommendations on the components, resources, and the network path of a job. (You can also make similar changes to the job through open interface tables.)

Profile Option Changes for Option 2

The WSM: Create Job Level BOM and Routing Copies profile option is disabled and set to a value of Yes so that it uses the Option 2 functionality. In addition, The Shop Floor Parameters window contains the Create Job level BOM and Routing Copies field. It is display-only and always displays a value of Yes.

Additional Information: See the information about Defining Parameters

and Profile Options in the *Oracle Shop Floor Management User's Guide*.

Warehouse Management

Changes for Oracle Warehouse Management are described in this section.

Advanced Catch Weight

In release 11*i*, navigation to the Catch Weight mobile UI from the Direct Ship function was automatic if item pricing was based on Secondary quantity.

Automatic navigation to the Catch Weight UI from Direct Ship mobile function has now been disabled. Customers upgrading to Release 12.2.2 or higher releases must set the new Direct Ship form function parameter CATCH_WEIGHT to 'Y' to enable navigation to the Catch Weight UI.

Control Board Enhancements

The Warehouse Control Board, which enables you to monitor warehouse activity and improve warehouse efficiency, has been enhanced.

Manage Groups of Tasks

You can now manage tasks as a group instead of individually. And, you no longer have to view the details of individual tasks and approve changes manually. The Manage Tasks window replaces the Update Tasks window (use the Manage button from the Find Tasks window). It retains all the capabilities of the Update Tasks window, but also enables you to:

- Increment and decrement task priority
- Cancel inbound and crossdock tasks
- Change the status of Active and Dispatched tasks to Unreleased or Pending
- Save, query, and delete action plans
- View task count by task type
- Assign tasks based on user task type
- Execute tasks immediately, or execute tasks in the background

Note: Use this feature with caution. It is not easy to undo committed actions. Managing groups of tasks works best with saved criteria for queries and actions because they are more predictable.

Planned Task Management

The Control Board-Manage Tasks concurrent program is used to schedule planned task

actions. It requires you to save queries and action plans before you run the concurrent request. The system commits actions based on the action plan you select, without need for further input.

Additional Tasks Selection Criteria

The Find Tasks window contains new search criteria, that increases control over returned tasks, and supports the new crossdocking feature. The following task selection criteria is now available:

- **Crossdock:** You can now manage crossdock tasks on the Warehouse Control Board. When you select this source type, you cannot select any other source type.
- **Item Type:** You can now query for tasks based on the item type you assign in the Item Master.
- **Task Age:** You can now query for tasks based on days, hours, minutes, months, or weeks.
- **Order Type:** You can now query for tasks based on sales order type.
- **Time till Shipment:** You can query for tasks based on the time until the scheduled shipment in days, hours, or minutes.
- **Time till Appointment:** You can query for tasks based on the time until the scheduled dock door appointment in days, hours, or minutes.

Additional Information: See *Navigating the Warehouse Control Board in Oracle Warehouse Management User's Guide*.

User-extensible Label Fields

In previous releases, Oracle Warehouse Management restricted the list of fields you could include on the label format to a list of predefined seeded variables. In this release, you can create an SQL statement to add your own variables to label formats without customizing the application. Using the Define Custom Labels window, you can create custom label fields for Label Formats.

Additional Information: See the sections on Defining Label Field Variables and on Setting Up Label Formats in *Oracle Warehouse Management User's Guide* for more information.

Multi-delivery Consolidation

In this release, you can now group deliveries that travel part of the way together, but do not travel to the same final destinations. With this feature, you can:

- Consolidate outbound material across deliveries as well as within a delivery.

- Consolidate material in either a consolidation locator, or directly to a staging lane.
- Consolidate material into an LPN. In this release, the outermost consolidation LPN cannot contain any loose material, and none of the LPNs inside the outermost LPN, whether nested or not, can have material for more than one delivery.
- Consolidate material during pick drops, packing, staging moves, and crossdock.

Oracle Warehouse Management integrates with Oracle Shipping Execution to determine if you can consolidate deliveries. In order to be consolidated, deliveries must have a common ship-from address and a common de-consolidation point.

There are five new seeded outbound operation plans for consolidation:

- LPN-based consolidation in staging lane within delivery (available in previous releases as LPN based consolidation)
- Direct consolidation in staging lane across deliveries (new)
- Direct consolidation in staging lane within delivery (new)
- LPN-based consolidation in consolidation locator, across deliveries in staging lane (new)
- LPN-based consolidation in consolidation locator within delivery in staging lane (available in previous releases as locator and LPN based consolidation)
- LPN-based consolidation in staging lane across deliveries (new)
- Locator-based consolidation in consolidation locator, across deliveries in staging lane (new)
- Locator-based consolidation in consolidation locator within delivery in staging lane (available in previous releases as locator based consolidation)

You can also consolidate crossdocked material. When you create a crossdock operation plan, you enter the appropriate outbound operation plan at the end of the crossdock operation.

New Transaction

Mass Consolidate enables you to perform mass moves from consolidation locators to staging lanes. During this transaction, you can also specify a consolidation locator. You can only perform this transaction on a mobile device.

Changed Transactions

You can now consolidate material in the packing workbench. You enter an existing or new consolidation LPN, and Oracle Warehouse Management performs the necessary validations. The mobile ship confirm transactions, such as LPN Ship, Dock Door Ship, and Direct Ship, now capture all delivery information and confirm it individually if you consolidate material across deliveries. The Quick Ship transaction also validates and

restricts confirming a delivery if you consolidate material across deliveries.

Additional Information: See the information on Setup Operation Plans and on Explaining Consolidation in the *Oracle Warehouse Management User's Guide*.

Rules Engine Enhancements

In previous releases, you had to create a dummy strategy with no restrictions. In this release, you can now assign rules and values directly in the Rules Workbench, so you no longer need to create a strategy with a single rule. Other enhancements are:

- Assign rules and values along with strategies directly in the Rules Workbench.
- Rules Engine Simulator and Execution Trace Log display the strategy rule and value used.
- The custom strategy selection API also supports returning a strategy, rule, or value.
- Evaluates and processes the first assignment that satisfies the conditions.
- The Rules Where Used window available in previous releases was decommissioned because you can view rules directly in the Rules Workbench.
- You can now allocate material based on Oracle Process Manufacturing allocation criteria. Additional objects and parameters were added to the rules engine to support Oracle Process Manufacturing. For allocations of dual UOM-controlled material, allocations are made in both the primary and secondary quantities.
- Additional objects and parameters were seeded to enable quality specification matching. The system calls an API and returns a Yes if the lot meets the specifications, and a No if the lot does not meet the specifications.
- The Rules Engine now supports searching for material in non-locator controlled sub-inventories.
- The system can now create lot level detailed reservations for lot indivisible items. The system validates that the lot quantity equals the available to reserve quantity. If they do not fall within tolerances, it does not make a reservation. In previous releases reservations for lot indivisible items were created systematically during sales order scheduling. In this release, reservations for lot indivisible items are created manually after sales order booking.
- The Rules Engine will only over allocate an indivisible lot if you enable over picking for the organization. You can under pick an indivisible lot. Indivisible lot consumption is restricted to sales order and manufacturing issues.

Note: You can assign a value only if the rule type is Cost Group.

With the Rules Workbench, you can assign crossdock rules and criteria to objects. The rule assignments can include both demand initiated (opportunistic) and supply initiated (planned). You can assign criteria to business objects that include organization, customer, supplier, item project, and task.

The rules engine now honors serial-level detailed reservations before it applies rules. It verifies the availability and material status of serial numbers. If a serial number fails the availability check for any reason, Oracle Warehouse Management backorders the demand line. In previous releases, the system did not perform validations between reservations and material status. The rules engine also controls the allocation of serial numbers at a locator.

Additional Information: See the information on Rules Workbench and on Crossdock Criteria in the *Oracle Warehouse Management User's Guide*.

Crossdocking

In previous releases, Oracle Warehouse Management provided opportunistic (supply initiated) crossdocking that was limited to back ordered sales orders. In this release, Oracle Warehouse Management introduced planned (demand initiated) crossdocking. You can use a set of crossdock criteria to plan crossdocking in your warehouse. Oracle Warehouse Management can now compare expected receipts and outbound shipments to identify planned crossdocking opportunities in the warehouse. When the system identifies a planned crossdocking opportunity, it pegs the scheduled inbound receipt to the outbound shipment. The system then identifies a specific crossdocking goal based on whether you want to maximize crossdocking or minimize wait time.

Planned crossdocking enables you to pre-allocate incoming supply to a given demand source, while opportunistic crossdocking enables you to dynamically allocate incoming supply to a demand source on receipt. The planned crossdocking eligible supply sources are:

- Advanced Shipment Notice (ASN)
- Internal Requisition
- Intransit Shipments
- Material in Receiving
- Approved PO

Oracle Warehouse Management still supports opportunistic crossdocking. It enables you to assign material to a demand source until it arrives in the warehouse.

Note: If you are currently using opportunistic crossdocking, you must create a default opportunistic crossdock criterion and assign it in the Organization parameters in order for it to continue working after the upgrade.

The eligible demand sources for opportunistic crossdocking are:

- Scheduled Sales Orders (new)
- Backordered Sales Orders (available in previous releases)
- Scheduled Internal Orders (new)
- Backordered Internal Orders (new)
- Backordered WIP Component Demand (available in previous releases)

Warehouse Management introduced a new crossdock criteria window. The Crossdock Criteria window enables you to:

- Determine Crossdocking type (planned or opportunistic)
- Determine the eligible supply and demand sources for crossdocking
- Determine crossdocking goal
- Set the crossdocking window
- Prioritize documents

Additional Information: See the information on Warehouse Management Crossdocking and on Setup Operations Plans in the *Oracle Warehouse Management User's Guide*.

Material Handling

The following features were added to Material Handling:

Flexible Response Message Formats

You can now define automated device messages in the following formats: XML, message with delimiter, or message without delimiter. You use a message template to specify the message format, and then specify the message components and characteristics. The components you can use in the messages are seeded in the system. This list is extensive and covers the components the usual business flows require.

Use the new Message Templates page added to the Warehouse Control System to create message templates. Then specify the message components in the new Message Components page. You can assign the message template to use when you define a

device on the Define Devices window within Oracle Warehouse Management.

Workflow Support

When the Warehouse Control System receives an error, it initiates a workflow process linked to the reason. You can create a message based on the device response reason. You can create workflow processes based on transaction reasons you define in Oracle Inventory.

Process Manufacturing

Two business events were added to the Warehouse Control System to support Oracle Process Manufacturing: Process Dispensing and the Process Parameter. You assign these events in the Assign Devices to Business Events window in Oracle Warehouse Management.

The Warehouse Control System also added another device type called Manufacturing Equipment to support Process Manufacturing. You assign device types to equipment on the Define Devices window in Oracle Warehouse Management. Oracle Process Manufacturing uses the Warehouse Control System execution framework to invoke the necessary APIs to obtain device responses directly on an Oracle Applications framework page.

Additional Information: See information on Transaction Reasons in the *Oracle Inventory User's Guide*. See also Defining Devices and Assigning Devices to Business Events in the *Oracle Warehouse Management User's Guide*.

NLS Upgrade Considerations

This section discusses some important considerations for managing your translations, languages, and character sets during the upgrade.

Language Status

Additional space for each non-American English language will be required in the database to complete the upgrade. It is not possible to predict the amount of additional space your system will need, because the space depends on factors such as the database character set, the number of active languages other than American English, and in particular the volume of transaction data in the system.

Conditional Action: For the recommended minimum space required for each active language in the APPL_TOP, see the *Oracle E-Business Suite NLS Release Notes* for your release level.

You must retain your existing Applications Release status until the entire upgrade process (including the post-upgrade and finishing steps) is complete. The base language must also remain the same, and new languages cannot be activated.

After the upgrade process is complete, you can activate new languages or change the

base language. Oracle does not support disabling or removing installed or enabled languages.

Conditional Action: See Adding and Maintaining NLS Languages section in *Oracle E-Business Suite Maintenance Guide*.

Character Sets

You cannot set the APPL_TOP character set. It is automatically set to the same value you selected as the db character set.

Additional Information: Refer to *License Manager* in the *Oracle E-Business Suite Release 12.2 Maintenance Guide* and *Migrating to Unicode* in the *Globalization Guide for Oracle Applications Release 12* (Doc ID: 393861.1)

General Information and Required Tasks

Before you prepare your system and product data, you should gather information about the upgrade process, the tools required, the number and types of tasks involved, and the way your system and products will look in Release 12.2.

Reference Information

It is very important that you read the documentation associated with this release. Appendix E, "Product Documentation List", in this guide contains a list of basic required reading. In addition, you may also find it useful to review any presentation materials on upgrade technology and white papers on Multi-org, and links to various Consulting services as well as Oracle University training courses.

Application specialists and functional users should pay special attention to the Release Content Documents (RCDs), Electronic Technical Reference Manuals (eTRMs), and Transfer of Information (TOI) documentation for the products that are active in your system. This information describes new features and functionality in Release 12.2.

Planning and Performing Pre-Upgrade Tasks

This chapter covers the following topics:

- Planning Oracle E-Business Suite Release 12.2 Deployment Architecture
- Review AD Patch Level and Upgrade Tasks
- Preparing Products To Reduce Upgrade Downtime
- Protecting Data in Renamed Files
- Preparing Customizations
- Preparing External Integrations
- Preparing Third-Party Integrations
- EBS 12.2 Upgrade Readiness Checker - Database Tier (EURC-DT)

Planning Oracle E-Business Suite Release 12.2 Deployment Architecture

An upgrade to Oracle E-Business Suite Release 12.2 may require upgrades to your operating system and hardware. This section provides requirements to address hardware that will run Oracle E-Business Suite Release 12.2.

Installed Components and System Requirements

This section lists the certified components installed with Rapid Install, and the system requirements for an Oracle E-Business Suite Release 12.2 installation.

Technology Stack Components

Rapid Install automatically installs and configures the required technology stack components for both the database node and the application tier node.

The database tier technology stack for a new Oracle E-Business Suite Release 12.2

installation consists of an Oracle Database 12c Release 1 (12.1.0.2) Oracle home. We strongly recommend that you upgrade to Oracle AI Database 26ai or Oracle Database 19c following the installation. For more information on Upgrade Support and how to upgrade, see My Oracle Support Knowledge Document 3051860.1, *Alert: Oracle E-Business Suite Release 12.2 End of Error Correction Support for Oracle Database 12c Release 12.1.0.2 and 11g Release 11.2.0.4*.

Required Action: You must refer to My Oracle Support Knowledge Document 1349240.1, *Database Preparation Guidelines for an Oracle E-Business Suite Release 12.2 Upgrade*, for comprehensive instructions specific to your current Oracle E-Business Suite instance and the required Oracle Database version.

Important: For databases running on-premises or on Oracle Cloud Infrastructure, Oracle E-Business Suite requires Oracle Database Enterprise Edition. No other Oracle Database editions are certified for use with Oracle E-Business Suite environments on-premises or on Oracle Cloud Infrastructure.

The application tier node technology stack includes, among other components:

- Oracle Application Server 10g (10.1.2.3), which includes:
 - Oracle Forms
 - Oracle Reports
- Oracle Fusion Middleware 11g, which includes:
 - Oracle WebLogic Server

Note: In Release 12.2, the required Java Development Kit (JDK) is automatically installed by Rapid Install. You do not need to install the JDK separately.

Note: Oracle E-Business Suite requires Oracle homes to be writable, not read-only.

Product-specific documents on My Oracle Support [<https://support.oracle.com>] describe use of these components with Oracle E-Business Suite.

You can also check product certifications from My Oracle Support by clicking the *Certifications* tab (which may be under the *More* tab).

Note: If you are performing an Oracle E-Business Suite upgrade to Release 12.2 on Oracle Cloud Infrastructure, it is strongly recommended that you follow the standards listed in Sections 3 and 4 of My Oracle Support Knowledge Document 2656874.1, *Standards Used by the Oracle E-Business Suite Cloud Manager for Provisioning Oracle E-Business Suite on Oracle Cloud Infrastructure*.

Important: Do not deploy custom applications into the Oracle E-Business Suite technology stack. The Oracle E-Business Suite database Oracle home must be used exclusively for that database, and not shared either with other Oracle E-Business Suite databases or with other applications. Similarly, the Oracle E-Business Suite application tier Oracle homes should be used exclusively to run Oracle E-Business Suite services.

Sharing a database Oracle home between multiple Oracle E-Business Suite instances is not recommended because Oracle E-Business Suite tools are designed to work with a single database associated with a single Oracle E-Business Suite instance. Running these tools in an environment where multiple Oracle E-Business Suite instances are associated with the same database Oracle home can have unpredictable results.

Combining custom applications into the Oracle E-Business Suite technology stack is not recommended for the following reasons:

- Difficulty in isolating and debugging performance or stability issues
- Increased security risk if either a custom application or Oracle E-Business Suite is compromised
- Complexity in maintaining the technology stack if either a custom application or Oracle E-Business Suite has dependencies on older component versions
- Complexity in obtaining support for issues on nonstandard environments

Instead, it is recommended that you deploy a custom application and its required technology stack prerequisites on a separate server.

System Software, Patch Level, and Networking Requirements

This section describes system software requirements, patch level requirements in multinode installations, and essential networking requirements.

Operating System

Oracle E-Business Suite Release 12.2 requires a 64-bit operating system. If you have not already done so, then you must plan for and upgrade the operating system of your Oracle E-Business Suite application and database tiers to a 64-bit operating system.

Action: Follow the instructions in the Oracle E-Business Suite Installation and Upgrade document for your platform to ensure that you meet all operating system requirements:

- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for Linux x86-64* (My Oracle Support Knowledge Document 1330701.1)
- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for Oracle Solaris on SPARC (64-bit)* (My Oracle Support Knowledge Document 1330702.1)
- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for IBM AIX on Power Systems (64-bit)* (My Oracle Support Knowledge Document 1330703.1)
- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for HP-UX Itanium* (My Oracle Support Knowledge Document 1330704.1)
- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for Microsoft Windows x64 (64-bit)* (My Oracle Support Knowledge Document 1330706.1)

Oracle Applications are developed and tested on Oracle Linux, which is optimized for performance, stability, and security.

Tip: In addition to the platform-specific maintenance tools listed in the *Installation and Upgrade Notes*, the following utilities are required on all UNIX-based operating systems: `unzip`, `df`, `ps`, and `wall`.

Note: In this guide, the term "UNIX" refers to all variants of that operating system, including Linux.

Conditional Action: If you are installing on Exadata or Exalogic, follow the instructions in *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for Linux x86-64* (My Oracle Support Knowledge Document 1330701.1) above, taking note of the exceptions listed for

packages that are already contained in Exadata systems.

Operating System Requirements in a Multinode Installation

In a multinode installation, all application tier nodes are required to be on the same platform and operating system. This is a requirement for adding nodes by cloning in a multinode deployment.

Additional Information: Refer to My Oracle Support Knowledge Document 1383621.1, *Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone*.

For all the nodes of a particular tier, either application tier nodes or database RAC nodes, Oracle recommends that you use the same operating system kernel parameter settings when using identical machines, or adjust the settings based on the machines' load. Using the same operating system kernel parameter settings simplifies management and maintenance.

Note: When you run Rapid Install as part of an upgrade, the upgrade process is performed with only one application tier and one database tier. You must complete the upgrade to the latest Oracle E-Business Suite code before you can perform optional advanced configurations, such as scaling your environment by adding application tier nodes and database RAC nodes, as a post-upgrade step. However, if you plan to use a multinode deployment after the upgrade, it is recommended that you prepare the hardware infrastructure in advance as part of the preparation for the upgrade.

Networking

The key networking requirement is for the `hosts` file to include an entry for the installation machine, formatted as follows:

```
<IP address> <host name>.<domain name> <host name>
```

Note: If you are performing an Oracle E-Business Suite upgrade to Release 12.2 on Oracle Cloud Infrastructure, it is strongly recommended that you follow the standards listed in Section 2 of My Oracle Support Knowledge Document 2656874.1, *Standards Used by the Oracle E-Business Suite Cloud Manager for Provisioning Oracle E-Business Suite on Oracle Cloud Infrastructure*.

Shared Memory Permissions

On applicable UNIX platforms, ensure that the `/dev/shm` directory has neither the

'noexec' nor 'nosuid' permissions set. If it has, you may encounter the following Oracle JVM JIT runtime error:

```
ORA-29516: Aurora assertion failure: Assertion failure at joes.c:  
Bulk load of method java/lang/Object.<init> failed; insufficient shm-  
object space
```

CPU, Memory, and Disk Space Requirements

Because there are different product combinations, different user profiles, and different configurations, there is no one sizing answer for all hardware platforms. Some hardware vendors have sizing worksheets that model the CPU and memory requirements of Oracle E-Business Suite on their hardware.

The most reliable strategy to ensure that the hardware is sized appropriately is to install a test environment, and then conduct a benchmark test with a configuration, product mix, and user load that simulates your own current and expected workloads. These conditions can help verify performance before you install your production-ready environment. An alternative is to ask Oracle Consulting Services or your hardware vendor to find another Oracle E-Business Suite system running a product mix, throughput, and user profile similar to yours.

CPU Requirements

Note: Unless explicitly noted otherwise, Oracle E-Business Suite documentation uses the term "CPU" to mean an actual CPU core rather than a logical core.

CPU requirements for running Oracle E-Business Suite for the database and application tiers depend on the following factors, which are listed in no particular order:

- Required response times of the business
- Number of concurrent users and their usage profiles
- Number of concurrent manager processes and the types of jobs that they are running
- Load of activities other than Oracle E-Business Suite
- Size of the database
- The chosen deployment topology

The number of CPUs and cores needed to support Oracle E-Business Suite depends on the specific platform implementation, and whether or not hyperthreading is in use.

Two useful formulae are:

- $\text{Actual Cores Count} = \text{Processor Count} * \text{CoresCountPerProcessor}$

- Logical Processor Count = Actual CoresCount * ThreadCount

You should also consult your platform vendor as required.

Memory Requirements

Memory requirements for Oracle E-Business Suite depend on both the application and database tiers.

Minimum Memory for an Oracle E-Business Suite Installation

The minimum amount of memory needed to run Oracle E-Business Suite is about 6 GB for the database tier machine, and 10 GB for a single application tier machine. This configuration would typically support no more than ten users.

Tip: For additional guidance, see Database and Application Tier Sizing Guidelines, *Oracle E-Business Suite Installation Guide: Using Rapid Install*.

Single-User Single-Machine Non-Production System

For the special case of a system that will only be employed by a single user to develop or test patches, the minimum memory requirement is 8 GB.

Important: This figure represents the minimum amount of memory that can be employed, and may rise either to meet the needs of new releases or the deployment of components such as additional managed servers.

Application Machine Memory Requirements

The total RAM memory for the application tier is the sum of:

- Technology Stack Memory
- JVM Memory
- Forms Memory
- Concurrent Manager Memory
- Other Running Processes
- Resident Memory
- OS Kernel Memory

Aside from the stack, the two main contributors to the application tier memory are the JVM memory and Forms memory (the frmweb process). For every 150 to 180 self-service users, you should allow 2 GB of JVM heap and 2 CPUs. The Forms Processes memory is equal to the (Number of Forms users) * 40 MB.

Important: These figures represent average usage. Your instance may use more or less memory depending on the applications you use.

The memory required per machine also depends on the number of application machines in your deployment. For general usage, it is not recommended that you allocate very large heap sizes. Instead, add more managed instances in the cluster to scale up to the target concurrency levels.

Note: Some transactions, such as those for Oracle Configurator, may require more memory.

Database Machine Memory Requirements

To determine the total memory requirements on the machine where the Oracle E-Business Suite database is installed, you must take the following into account:

- Oracle Database overhead
- Size of System Global Area (SGA)
- Number of concurrent users
- Any non-Oracle software that has to run on the machine (this is not recommended)

When sizing the environment in which you will install Oracle E-Business Suite, you should aim to allow for any expected growth in usage over the planned lifetime of your system. It is, however, possible to scale up a system later to meet additional requirements subsequent to installation, either by adding nodes (machines) to the application tier or employing Oracle Real Application Clusters (Oracle RAC) on the database tier.

Action: To help determine your memory requirements for the various Oracle E-Business Suite database components, refer to My Oracle Support Knowledge Document 396009.1, *Database Initialization Parameters for Oracle E-Business Suite Release 12*.

Disk Space Requirements

Rapid Install installs the file system and database files for all products, regardless of their licensed status. The approximate file system disk space requirements for a standard installation are:

File System Space Requirements for Standard Installation

| Node | Space Required |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Database node file system (Fresh install) | 90 GB (includes database files and 12c Release 1 database Oracle home). |
| Database node file system (Vision Demo database) | 200 GB (includes database files and 12c Release 1 database Oracle home). |
| Application tier node file system (OracleAS 10.1.2 Oracle home, Oracle Fusion Middleware Oracle home, COMMON_TOP, APPL_TOP, and INST_TOP) | 64 GB (for dual file system). Also, see note for language (NLS) considerations. |

Tip: The minimum recommended space required for each active language is 16 GB in the file system for both APPL_TOPs, and 3 GB in the database.

Additional Information: For more information, refer to My Oracle Support Knowledge Document 1314621.1, *Oracle E-Business Suite NLS Release Notes, Release 12.2*.

Warning: At present, Rapid Install does not support installing Oracle E-Business Suite into a directory that has more than 2 TB of free space. This is because of address space restrictions.

Stage Area

For a production database installation, running Rapid Install from a stage area requires at least 48 GB to accommodate the file system and database files in the stage area. See *Setting Up the Stage Area*, page 4-7.

Oracle E-Business Suite Log and Output Files

Many Oracle E-Business Suite products generate log and output files during runtime. The disk space needed varies with the number of users and transactions, and depends on how frequently you purge these files.

Tip: Log and output files are not automatically purged. The size of these files can increase quickly, which can impact the performance of your system. Determine a strategy for archiving and purging these files after the installation, particularly for files in the trace directories, and

monitor the disk space they consume to determine how much space you may need in the future.

Temporary Disk Space Requirements

You should ensure that the \$TMPDIR environment variable points to /tmp, and that this directory has at least 5 GB of free space for use by Rapid Install. The equivalent variables on Windows are %TEMP% and %TMP%.

At runtime, Oracle E-Business Suite requires temporary disk space. For example, each concurrent manager writes temporary parameter files, Oracle Reports writes temporary format files, and Oracle Forms writes temporary buffer records. Rapid Install sets the temporary directory based on the value you supply on node-specific settings screens. The directory defined by the TMPDIR variable is also used for some temporary files, such as certain patches.

The amount of temporary space will depend on the number of forms and concurrent manager sessions writing on the temporary file system. It is recommended that you use separate disk partitions for operating system and user data (that is, separate partitions for /home, /tmp, /var/tmp, /oracle, and so on). This strategy can prevent a "file system full" issue from impacting operations. Establishing disk quotas can also prevent a user from accidentally or intentionally filling up a file system.

Updates and Patches

You will need adequate disk space for applying updates, patches, maintenance packs, family packs, and minipacks, as well as for any backup files that may be created.

Additional Information: For more information about the amount of disk space needed for the various types of patching operation, see *Patching Utilities, Oracle E-Business Suite Maintenance Guide* and *Patching Procedures, Oracle E-Business Suite Maintenance Guide*. Also see *Applications DBA System Maintenance Tasks and Tools, Oracle E-Business Suite Maintenance Guide*.

Other Files

The total disk space estimate must account for the requirements of files other than those directly related to Oracle E-Business Suite. For example:

- Operating system software
- Online backups
- Custom applications development files
- Files for any other software that you use

Input/Output (I/O) Subsystem

Performance during an upgrade depends heavily on the speed of the Oracle database system input/output (I/O) subsystem. Oracle recommends an average disk response

time (average service time) below 10-15 milliseconds for better performance.

Additional Information: Detailed information, including input/output operations per second (IOPs) calculations, is available in My Oracle Support Knowledge Document 1597531.1, *Oracle E-Business Suite Release 12.2: Upgrade Sizing and Best Practices* and My Oracle Support Knowledge Document 2115481.1, *Oracle E-Business Suite Release 12.2.5 Upgrade Sizing and Best Practices*.

To monitor the I/O performance, you should use OS tools like `iostat` or `sar` (Unix) during your test upgrade. Use similar tools for other operating systems, for example Performance Monitor for Windows. You can also monitor I/O performance on your production system during peak load to get an idea about your I/O subsystem performance before the upgrade. However, you should note that the I/O load and, therefore, the average service time on existing applications, is different from that of an upgrade.

While you are monitoring the I/O performance, you should focus on the *average service time* (the average of elapsed time in milliseconds that the disk drive takes to complete an I/O request) and the *average wait* (the average amount of time requests are left outstanding). Higher averages for these two indicators signal an I/O bottleneck. An average service time longer than 50 milliseconds is reason for concern if it lasts too long or it is continuously at a high level. Small intervals of high average service time should not be of concern.

Additional Information: See the *Oracle Database Performance Tuning Guide* for your Oracle Database version.

Database Size

Database sizing is dependent on the following main factors:

- Current user distribution along with transaction rates
- Project workload and user increase
- Retention policies for historical data

You should ensure that proper planning is in place for database footprint management, in conjunction with appropriate purge and archive policies defined as part of your instance management strategy.

To estimate the increase in required disk space for upgrading, consider the products, the number of languages being installed, and changes in the data model. For example, in a test upgrade of the largest Oracle production system (oraprod), the database increased 10-20 percent. In a test upgrade, the Vision database increased 5 percent.

Additional Information: For guidelines based on an upgrade of the

Oracle production system, see My Oracle Support Knowledge Document 1597531.1, *Oracle E-Business Suite Release 12.2: Upgrade Sizing and Best Practices* and My Oracle Support Knowledge Document 2115481.1, *Oracle E-Business Suite Release 12.2.5 Upgrade Sizing and Best Practices*.

Tablespace Sizing

Make sure you allocate sufficient tablespace.

Additional Information: For guidelines based on an upgrade of the Oracle production system, see My Oracle Support Knowledge Document 1597531.1, *Oracle E-Business Suite Release 12.2: Upgrade Sizing and Best Practices* and My Oracle Support Knowledge Document 2115481.1, *Oracle E-Business Suite Release 12.2.5 Upgrade Sizing and Best Practices*.

Block Size

This release requires a database block size of 8K. In addition to providing significant performance improvement, this setting accommodates the Oracle E-Business Suite indexes that require this block size.

Configure and Use `/dev/urandom` on the Application Tier (applicable for UNIX platforms)

In Oracle Database releases 11.2.x and later, JDBC connection establishment uses a new connection mechanism called o5logon that requires the use of random numbers. These numbers are typically generated by a special device, `/dev/random`. However, this random number generator relies on entropy in order to generate sufficiently random numbers. Unlike `/dev/random`, `/dev/urandom` is an unlimited, non-blocking random source.

Before you begin an Oracle E-Business Suite installation using Rapid Install, you must configure `/dev/urandom` and use it for the duration of the installation. If you do not set this configuration, you may encounter issues with Oracle WebLogic Server domain deployment and Oracle HTTP Server instance setup if the entropy on your system is low. To avoid these issues, prior to running Rapid Install on the application tier, you must configure `/dev/urandom` and use it for the duration of the installation. After Rapid Install has completed, you can revert to your previous configuration.

If `/dev/urandom` is configured on your machine, you can temporarily replace `/dev/random` with `/dev/urandom` by using a symbolic link. The following sample commands show an example of how to set up the symbolic link:

```
mv /dev/random /dev/random_orig
ln -sf /dev/urandom /dev/random
```

Note: This configuration must be in place while you are running Rapid Install to perform the following actions as part of an upgrade to Oracle

E-Business Suite Release 12.2.0:

- Create Upgrade File System
- Configure Upgraded Release 12.2.0 Instance

For information on keeping this setup for the remainder of the upgrade process when running Rapid Install as part of an upgrade, review the recommendations in My Oracle Support Knowledge Document 1581549.1, *Best Practices for Minimizing Oracle E-Business Suite Release 12.2.n Upgrade Downtime*.

If the `/dev/urandom` file is not available and configured, refer to My Oracle Support Knowledge Document 1065393.1, *Upgrade From 11.5.10.2 Is Very Slow as XDLOADER Task Hangs*, which is referenced from My Oracle Support Knowledge Document 1581549.1, *Best Practices for Minimizing Oracle E-Business Suite Release 12.2.n Upgrade Downtime*.

Note: You should check the use of `/dev/urandom` with the relevant security team in your organization, as the keys produced by `/dev/urandom` are pseudo-random. However, provided that the entropy pool has started using genuine randomness (from entropy), `/dev/urandom` is not predictable or less secure, even though it uses a reduced number of bits. Only the most sensitive uses of random numbers need the entropy guarantee that `/dev/random` provides.

General Sizing Guidelines for the Database and Application Tier

Below are some general sizing guidelines for Oracle E-Business Suite.

Be aware of the following important points:

- These guidelines were derived using Oracle's hardware and networking infrastructure, and should only be used as a starting guide.
- You should always size your systems based on tests using representative data and workloads for your own environments. The most reliable strategy to ensure that the hardware is sized appropriately is to install a test environment, and then conduct a benchmark test with a configuration, product mix, and user load that simulates your own current and expected workloads. These conditions can help verify performance before you install your production-ready environment.
- In addition to the memory needed based on the sizing guidelines given, you should allow an extra 2 GB of free memory for the database tier machine, and an extra 3 GB of free memory for the application tier machine (for Online Patching).

- The sizing of transactions depends on the transaction type (such as Oracle Application Framework, Forms, or batch programs), and the expected transaction workload (light, medium, or heavy). Some transactions may require more memory (such as those for Oracle Configurator). The transactional workload is a function of user concurrency levels, user transaction frequency, and user adeptness. For instance, less adept users may increase the load on the system by performing less exact searches that would cause a full table scan instead of performing an index lookup.

Oracle Application Framework Transactions

The following table shows the machine memory used for Oracle Application Framework-type transactions with light to medium workload characteristics:

Note: The figures in this table do not take into account any Online Patching requirements.

Machine Memory for Oracle Application Framework Transactions

| Number of Concurrent Users | Database Machine Memory | Number of Database Machine CPUs | Application Tier Machine Memory | Number of Application Tier Machine CPUs |
|----------------------------|-------------------------|---------------------------------|---------------------------------|-----------------------------------------|
| 0-10 | 4 GB | 2 | 6 GB | 2 |
| 100-200 | 8 GB | 2 | 8 GB | 2 |
| 200-400 | 12 GB | 4 | 10 GB | 4 |
| 400-800 | 20 GB | 8 | 14 GB | 8 |

You should plan your resources using these figures as guidelines.

Important: Figures of this kind represent a *minimum* amount of memory, and your specific requirements may need more.

Oracle Forms Transactions

On the application tier, each Oracle Forms process requires approximately 40 MB of memory. So the total memory required, using the average, is given by the formula:

(Number of concurrent Oracle Forms users) * 40 MB

The following table lists the additional machine memory needed for different numbers of users:

Machine Memory for Oracle Forms Users

| Number of Users | Required Machine Memory |
|------------------------|--------------------------------|
| 100 | 4 GB |
| 200 | 8 GB |
| 400 | 16 GB |
| 800 | 32 GB |

On the database tier, there is one Oracle Forms session per open form, and each of these sessions requires approximately 30 MB of PGA memory.

The following table lists the memory required for different numbers of sessions:

Machine Memory for Oracle Forms Sessions

| Number of Oracle Forms Sessions | Required Machine Memory |
|----------------------------------------|--------------------------------|
| 100 | 3 GB |
| 200 | 6 GB |
| 400 | 12 GB |
| 800 | 24 GB |

JVM Parameter Settings for Java on WLS Web Tier

If you are running Oracle E-Business Suite on 64-bit Java, bear in mind the following points:

- For both Oracle Application Framework and Oracle Forms applications, you can support 150-180 users per 2 GB of JVM heap. The initial heap size (Xms) and maximum allocated heap (Xmx) should both be set to at least 2GB per 150-180 users.
- Only the value of Xmx has an effect on response time. Changing the value of Xms does not have an effect.
- Usually, one JVM is allocated for every 2 CPUs.

- For best results, use multiple managed instances. For example, two managed instances with a 4 GB heap size for each will provide better response times than one JVM with a total heap size of 8 GB.

Note: These guidelines are provided here to aid in your resource planning prior to installation. By default, Xms and Xmx are both set to 1024 MB during installation. You can configure the JVM parameters to alter these settings as part of performance tuning after the installation.

Suggested Reading: For more information, see Customizing the number of instances of a particular service type, Technical Configuration, *Oracle E-Business Suite Setup Guide* and *Oracle E-Business Suite Performance Best Practices*, My Oracle Support Knowledge Document 2528000.1.

If you need to accommodate more users, we recommend doing so by adding managed instances to the cluster. The maximum heap size should be no more than 4 GB. The JVM heap size is dependent on the number of CPUs available for the JVM to support incremental and full garbage collection cycles, in addition to the actual concurrency workload. There are two benefits from scaling by using additional managed instances:

- Garbage collection (GC) activity is more easily balanced (automatically) with multiple managed instances.
- Each instance will be able to utilize a separate connection pool. In essence, you need to maintain a balance between the allocated JVM heap size per instance and the available connection pool for that instance.

Careful sizing is needed for the concurrent manager components, especially Java concurrent programs. If you will be processing relatively large volumes of data, you may need to increase the Xms/Xmx settings for the Java concurrent programs. This is normally done via the options field of the define concurrent program screen. Note that when you increase the number of workers, the memory requirements may increase significantly: this is because each Java concurrent worker will require at least an amount of memory specified by the value of Xms.

Advanced Configuration

Optional advanced configurations for Oracle E-Business Suite are deployed after you upgrade to Release 12.2. However, consideration of these options is a critical component of planning your upgrading to Oracle E-Business Suite Release 12.2.

Your requirements for advanced configurations of Oracle E-Business Suite may include the following:

- Scale up or scale out to address sizing and, or high availability requirements.

- Configure access from the Internet with a DMZ deployment.
- Create a disaster recovery site.
- Create a reporting environment.

Conditional Action: Review the following for the required steps to plan and set up your final Oracle E-Business Suite Release 12.2 deployment architecture:

- *Configuring Oracle E-Business Suite Release 12.x Using Logical Host Names*, My Oracle Support Document 1968231.1
- *Using Load-Balancers with Oracle E-Business Suite Release 12.2*, My Oracle Support Document 1375686.1
- *Sharing The Application Tier File System in Oracle E-Business Suite Release 12.2*, My Oracle Support Document 1375769.1
- *Business Continuity for Oracle E-Business Suite Release 12.2 using Virtual Hosts with Oracle 12c Physical Standby Database*, My Oracle Support Document 2088692.1
- *Business Continuity for Oracle E-Business Suite Release 12.2 with Oracle AI Database 26ai Using Physical Host Names*, My Oracle Support Document 2966987.1
- *Business Continuity for Oracle E-Business Suite Release 12.2 with Oracle AI Database 26ai Using Logical Host Names*, My Oracle Support Document 3015085.1
- *Business Continuity for Oracle E-Business Suite Release 12.2 on Oracle Database 19c Using Physical Host Names*, My Oracle Support Document 2617787.1
- *Business Continuity for Oracle E-Business Suite Release 12.2 on Oracle Database 19c Using Logical Host Names*, My Oracle Support Document 2617788.1
- *Business Continuity for Oracle E-Business Suite Release 12.2 Using Oracle 12c (12.1.0.2) Physical Standby Database*, My Oracle Support Document 1963472.1
- *Business Continuity for Oracle E-Business Suite Release 12.2 Using Logical Host Names with an Oracle 12c Physical Standby Database*, My Oracle Support Document 2246690.1

- *Business Continuity for Oracle E-Business Suite Release 12.2 Using Oracle 11g (11gR2) Physical Standby Database*, My Oracle Support Document 1491855.1
- *Oracle E-Business Suite Release 12.2 Configuration in a DMZ*, My Oracle Support Document 1375670.1
- *Using Active Data Guard Reporting with Oracle E-Business Suite Release 12.2 and an Oracle 11g or 12c Database*, My Oracle Support Document 1944539.1
- *Using Active Data Guard Reporting with Oracle E-Business Suite Release 12.2 and Oracle AI Database 26ai*, My Oracle Support Document 2966999.1
- *Using Active Data Guard Reporting with Oracle E-Business Suite Release 12.2 and Oracle Database 19c*, My Oracle Support Document 2608030.1

Review AD Patch Level and Upgrade Tasks

In this section you will perform steps that provide a general checklist of tasks that are required for the upgrade using *The Upgrade Manual Script* (TUMS).

TUMS examines your current configuration and creates a report that lists upgrade tasks that do not apply to your system. This report contains information that is unique to your system configuration. Therefore, its output is relevant to your individual upgrade. Omitting the steps listed in the TUMS report can significantly reduce upgrade downtime. Create the TUMS report by applying a Release 11i patch, which loads objects into your APPS schema that TUMS uses to examine your applications configuration. Your current Applications environment is not affected. The patch uses the TUMS step keys identified in this guide to uniquely identify each task. The generated report lists the step keys, in addition to the type of step (for example, pre-upgrade) and step number for each upgrade task.

It also contains a reminder that you must have applied the 11i.AD.I.7 Minipack before you can continue with the remaining upgrade preparation tasks.

Note: If you have not already reviewed the information in Business Impact and Functional Changes in Chapter 1, do so before you begin. It is especially important that both the DBA and the application specialists be familiar with the tasks in the appendices as this information can help reduce system downtime and verify data migration.

1. Apply 11i.AD.I.7 (conditional)

Supported in EURC-DT: Yes

Applies to 11i release level: All

TUMS step key: N/A

If you have not previously done so, apply the 11i.AD.I.7 minipack on all application tier nodes. It must be present in your system in order to upgrade to Release 12.2.

Note: See *About Oracle Applications DBA Minipack 11i.AD.I.7* (Doc ID: 233044.1).

2. Run TUMS utility (recommended)

Applies to 11i release level: All

TUMS step key: N/A

The TUMS report lists tasks that you can omit from the upgrade because they do not apply to your system (for example, a task required for a product that you do not use or for applying a patch that you have previously applied). TUMS is delivered in a patch, which supplies the scripts you need to examine your system and create the report. Oracle strongly recommends that you create and review the TUMS report before you begin the upgrade.

1. Download and apply AD TUMS patch.

Download patch 21900924 and apply it to the administration server node on your Release 11i APPL_TOP. It supplies you with the script (adtums.sql) you need to generate the TUMS report (tumsr12.html).

2. Generate the TUMS report.

To generate the report:

Unix

```
$ cd $AD_TOP/patch/115/sql
$ sqlplus <APPS username> @adtums.sql <DIRECTORY>
```

Windows

```
C:\> cd %AD_TOP%\patch\115\sql
```

For the <DIRECTORY> value, enter the full path of the directory that you want the report to be written to. This directory must be defined as a database directory for PL/SQL file I/O before TUMS can write the report, and the directory must have the appropriate WRITE permissions.

Additional Information: See My Oracle Support Knowledge Document 2525754.1, Using UTL_FILE_DIR or Database

Directories for PL/SQL File I/O in Oracle E-Business Suite
Releases 12.1 and 12.2 for more information.

3. Review the report.

The tumsr12.htm report lists the steps (identified by the TUMS step key in this book) that do not apply to your installation. You may safely ignore any steps listed in this report.

Preparing Products To Reduce Upgrade Downtime

This section discusses tasks that you can perform in advance of the upgrade. By completing these optional tasks in advance of the actual upgrade, you may be able to substantially reduce the amount of time that your system is offline during the upgrade process.

Customer Relationship Management

The steps in this section are suggested *only* if you are using Customer Relationship Management products in your system.

Trading Community Architecture

Apply patch 9572834 (can be applied as a hotpatch) to your 11*i* environment prior to the Release 12.2 upgrade. This patch creates database objects required for party usage functionality in Release 12.2 . It also populates the table HZ_PARTY_USG_ASSIGNMENTS by running the arhmgtpu.sql script.

If the patch is not applied to the 11*i* environment, then these activities will be performed during the Release 12.2 upgrade and may increase the patching time, depending on the volume of data. If the patch is already applied to the 11*i* environment, then only party relationship and account records created or modified after the patch will need to be inserted in table HZ_PARTY_USG_ASSIGNMENTS during the upgrade, resulting in improved patching downtime.

Financials and Procurement Tasks

The steps in this section are appropriate *only* if you are using Financials and Procurement products in your system.

Assets

Completing these tasks could substantially reduce the downtime required for your upgrade.

Depreciation

If you have a large volume of depreciation data in the current open period in the books that are in use, and you are experiencing a long running time with `facpupg.sql`, consider running depreciation with or without closing the current period as permitted by business prior to the upgrade. Doing so can potentially reduce downtime by processing additions, back-dated transfers, and pending retirements and reinstatements in the current open periods in the books that are in use.

Post Mass Additions

If you have a large volume of pending mass addition lines from Payables and Projects that are for books in Assets with reporting books, and you are experiencing a long running time with `faumamcr.sql`, you can substantially reduce downtime by preparing and posting these pending Mass Addition lines before the upgrade.

General Ledger

Completing these tasks could substantially reduce the downtime required for your upgrade.

Posted Journal Entries Pre-upgrade Stand-alone Upgrade

TUMS Step Key: `GL_CREATE_JE_SEGVALS`

Review this section if you use General Ledger with a large number of posted journals and you are experiencing a substantial running time when running `glrsgup2.sql`.

The General Ledger Journal Entries Pre-Upgrade is an optional program that can reduce the duration of downtime while upgrading. It upgrades posted General Ledger journal entries before the planned downtime, leaving only unposted journals and newly posted journals to upgrade during downtime.

The GL Journals Entries Pre-Upgrade consists of the Program - Prepare Posted Journals Before Upgrade concurrent program, which you run from the Standard Request Submission form. Since this program is resource-intensive, it should be scheduled to run during non-peak times, such as evenings or weekends. It can, however, be terminated at any point, and, when restarted, it resumes from the point where it left off. Even after the program is complete, you can run it again at a later time. It processes only journal entries posted after the last time it was run.

In order to install the functionality necessary to run the Program - Prepare Posted Journals Before Upgrade concurrent program, apply patch 4685497.

Advanced Collections

This Step is necessary only if you are using Advanced Collections.

Large numbers of Score History rows in the `IEX_SCORE_HISTORIES` table can cause the collections upgrade scripts to run slow. You can avoid this by running the following concurrent program that truncates the `IEX_SCORE_HISTORIES` table.

From the Collections Administrator Responsibility, select Submit Request and select the concurrent program; IEX. Enter the following Purge Score History Table parameters:

- Truncate all data = Y
- Save last run = N
- Batch size = 100000

Leave the remaining parameter values 'null'. The concurrent program should complete in a few minutes.

Legal Entity

By setting the country code in your Release 11*i* environment before you upgrade to Release 12.1, you will prevent Form errors. This step is necessary to assure that your legal entities (which are defined in HR and used by EBS Subledgers) are upgraded from Release 11*i* to Release 12.1.

Navigate to the Locations window to query the location record and set the country code. Go to: Setup > Organization > Locations. Query the location record and set the country code.

iProcurement

Completing these tasks could substantially reduce the downtime required for your upgrade.

The Catalog Data Pre-upgrade Process

This pre-upgrade process is strongly recommended if you are upgrading iProcurement from 11.5.9 or 11.5.10 to Release 12. It pre-processes bulk-loaded content to reduce the actual time required for the upgrade and to ensure the upgrade process runs smoothly. You can run it multiple times. If exceptions are found, then make corrections and re-run the program until no exceptions are noted. Running this program does not require users to log off the system. Note: Exceptions noted and not fixed before the upgrade will not be available in the iProcurement Catalog. Specifically, this program shortens the time it takes to run these upgrade scripts:

- -icxiftug.sql: updates POR_TEMPLATE_INFO
- -icxr12in.sql: general setup upgrade script needed for iProcurement
- -poxujpoh.sql: updates PO_HEADERS_ALL (for example, create_language)
- -poxukpol.sql: updates PO_LINES_ALL (for example, ip_category_id)
- -poxukrt.sql: updates PO_REQEXPRESS_LINES_ALL (for example, ip_catetory_id)
- -icxr12ug.sql: migrates iProcurement data model to PO

- -icxr12rt.sql: populates the requisition templates in iProcurement intermedia index tables
- -icxr12pd.sql: populates the Purchasing documents in iProcurement intermedia index tables: blanket purchase agreements (BPAs), global blanket agreements (GBPAs), and quotes
- -icxr12mi.sql: populates the master items in iProcurement intermedia index tables
- -poxukfi.sql: purchasing script to approve the GBPAs created during iProcurement migration
- -poxukat.sql: purchasing script to update the attachments
- -icxr12fi.sql: final upgrade script, which upgrades favorite lists, purges the BPAs and GBPAs that are not approved, and creates the intermedia index

Run the Extractor

1. Run the extractor to ensure that the iProcurement extracted catalog data is updated.
For additional information, see *iProcurement Setup and Usage: Internal Catalog Extract Process* (Doc ID: 215530.1).
2. Apply patch 4914492.
This step applies patch 4914492 to all appropriate nodes. Review the log file for this step VERY CAREFULLY to ensure that the patch applied without problems.
If there are errors in the AutoPatch log file, then correct the issues and have your DBA manually re-apply this patch using the adpatch utility. Once done, mark the Execute step as manually completed, and continue on to the Validate step.
3. Apply patch 5452131. This step applies patch 5452131 to all appropriate nodes. Review the log file for this step VERY CAREFULLY to ensure that the patch applied without problems.

Exceptions to be Fixed and Reloaded

Whenever possible, an XML file is provided to help you fix the catalog data. You can download the XML file, fix data issues, and reload data back into the catalog using the loader feature in eContent Manager. Examples of these exceptions are:

- Bulk-loaded items without Supplier Site - prior to this release, you could load items in bulk without a supplier site. In order for the pre-upgrade/upgrade to move bulk-loaded items to GBPAs, you must provide a supplier site.
- Bulk-loaded items assigned to "all buyers" - prior to this release, you could load items in bulk without a supplier site. To re-load these items after the upgrade, you must provide the operating unit in the loader options user interface. You load the same file into multiple operating units, if necessary.

- Bulk-loaded items with invalid data such as category, category mapping, or unit of measure (UOM).

The following table lists exceptions for which you can download an XML file. It also indicates the file Type - price or item. The Delete? column indicates whether a delete file is provided to eliminate old data.

| Exception | Type | Delete ? | Instructions for Fixing Data |
|-----------------------------------------------------------------------------------------------------|-------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Currency code is invalid or disabled in the currency setup | Price | Y | Fix the Currency definition or download the file and re-load it, providing a valid currency. |
| Supplier site is invalid, disabled, on hold, or missing | Price | Y | Fix the Supplier Site definition or download the file and re-load it, providing Site in the file or in the load options user interface. |
| Supplier site is invalid due to expired Central Contractor Registration (CCR) supplier registration | Price | Y | Fix the Supplier Site definition in Purchasing or download the file and re-load, providing Site in the file or in the load options interface. |
| "All buyers" option is deprecated | Item | Y | Download the file and re-load, providing Operating Unit, Supplier, and Supplier Site in the file or in the load options user interface. |
| Supplier invalid or missing | Item | Y | Fix Supplier definition or download the file and re-load, providing Supplier and Supplier Site in the file or in the load options user interface. |
| Operating Unit invalid | Item | Y | Fix the Operating Unit definition or download the file and re-load it, providing Operating Unit, Supplier, and Supplier Site in the load options interface. |
| UOM code is invalid in the setup, or missing | Price | N | Fix the UOM definition or download the file and re-load it, providing a valid UOM. |

| Exception | Type | Delete ? | Instructions for Fixing Data |
|------------------------------------------------------------------------------|------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No Purchasing category that maps to the iProcurement category in the catalog | Item | N | Map the iProcurement category to a valid Purchasing category or download the file and re-load it, providing an iProcurement category mapped to a valid Purchasing category. |
| Purchasing category is invalid | Item | N | Fix the Purchasing category definition, or map the iProcurement category to a valid Purchasing category. Or, download the file and re-load it, providing an iProcurement category mapped to a valid Purchasing category. |

To fix exceptions using the XML files, perform the following steps:

1. Download the XML file.

The download link provides a compressed file called ItemException.zip for each supplier/supplier site/contract/language combination. This file contains two XML files: one for the SYNC and the other the DELETE action. There may be multiple SYNC files (for multiple languages), but there will always be only one DELETE file.

SYNC files are named ItemException_Language_SYNC.xml. They are in Release 11.5.9 or 11.5.10 format, which allows you to later re-load these items (after the SYNC action). The DELETE file is named ItemException_DELETE.xml. It is also in Release 11.5.9 or 11.5.10 format that deletes the old file from the system (DELETE action).

Note: In Release 11.5.9 and 11.5.10, there are two types of files: item and price. The language applies only to the item file.

2. Fix the data. Refer to the table to see the appropriate changes in the SYNC file.
3. Re-load the data. First, re-upload the items using the SYNC file.
4. Delete old data. Use the DELETE file, if provided.
5. Run data exceptions report. Re-run the data exceptions report to verify that the fix was successful. Repeat the process until no exceptions are noted.

Exceptions to be Fixed by Correcting System Defaults

In order to create GPBAs, you must fix other exceptions that are due to invalid default values. In these cases, you fix the system setup. The exceptions should not be listed

when you re-run the pre-upgrade or data exceptions report.

The following table lists these default value exceptions:

| Attribute | Exception | Error Message |
|----------------------|-------------------------------------------------------------|-------------------------------------------------------------------------|
| Rate | 1. Rate type is invalid or disabled in the rate type setup. | 1. Default rate type is invalid. |
| | 2. No rate for the date/type combination. | 2. There is no rate for the rate date and type default combination. |
| Buyer | 1. Buyer missing. | 1. The system cannot obtain the default value for the buyer. |
| | 2. Buyer invalid. | 2. Default buyer is invalid. |
| Ship to location | 1. Ship to location is missing. | 1. The system cannot obtain the default value for the ship location. |
| | 2. Ship to location is invalid. | 2. Default ship to location is inactive or invalid. |
| Bill to location | 1. Bill to location is missing. | 1. The system cannot obtain the default value for the bill to location. |
| | 2. Bill to location is invalid | 2. Default bill to location is inactive or invalid. |
| Terms and conditions | Terms and conditions invalid. | Default payment terms is inactive or invalid. |

| Attribute | Exception | Error Message |
|------------------|------------------------------|-------------------------------------------------------------------|
| Shipping options | 1. Freight carrier invalid. | 1. Default freight carrier is inactive or invalid. |
| | 2. FOB invalid. | 2. Default freight on board (FOB) carrier is inactive or invalid. |
| | 3. Freight terms invalid. | 3. Default freight terms is inactive or invalid. |
| | 4. Shipping control invalid. | 4. Default shipping control is inactive or invalid. |

The following rules govern the way the migration process defaults values to the new GBPA attributes listed in the preceding table.

Bulk-loaded items that refer to a contract purchase agreement (CPA)

The migration uses the CPA information as default for the new GBPA.

Bulk-loaded items that do not refer to a contract purchase agreement (CPA)

The migration relies on Oracle Purchasing to default values for Rate, Ship/Bill to Location, Terms and Conditions, and Shipping Options. For more details, see the *Oracle Purchasing Guide*.

For the buyer in the GBPA header, the migration tries to source a document to obtain a buyer. It looks for the most recently created document in any status in the following order. Matching is based on Supplier, Supplier Site, Currency, and Operating Unit.

- Matching BPA/GBPA
- Matching CPA
- Matching purchase order
- Matching Release
- If no document matches from the operating unit, obtains the last created active buyer for the business group

Agreement Summary

The agreement summary provides a list of all newly created agreements for bulk-loaded items. There is one table for agreements that refer to contract purchase agreements and another for agreements that do not refer to any CPA. In the first case,

the system uses CPA information to create the GBPA. In the second case, it uses Oracle Purchasing defaults to create the GBPA. You do not have access to the newly created GBPAs until the upgrade is complete.

Set the profile option POR:Autocreate Shopping Category and Mapping to Yes to map automatically. Otherwise, the categories will not be mapped automatically in the upgrade process and will require datafix scripts to map them.

Protecting Data in Renamed Files

Because files may be renamed for a variety of reasons, it is good practice to protect them from being accidentally overwritten during the upgrade. Therefore, if you have renamed files using the <filename>old, <filename>new, or any other generic designation, then rename them again to something meaningful before you begin the upgrade.

Preparing Customizations

Oracle E-Business Suite Release 12.2 introduces a new set of compliance, code, and patching standards that customizations must adhere to. This section describes the new standards and tools available for preparing your customizations for the Release 12.2 upgrade.

Creating a Customizations Inventory

All Oracle E-Business Suite customers should compile a comprehensive inventory of their existing customizations. Enhancements delivered with Release 12.2 may make some of these customizations unnecessary. Preparing customizations for the Release 12.2 Upgrade include:

- Creating a catalog of your customizations
- Analyzing and Implementing code remediation
- Deploying revised customizations

Ensure that the catalog identifies all of the following artifacts:

- Database
- Application Tier
- Technologies Used (OAF, Forms, Reports, Java, PLSQL, etc.)

Run the Online Patching Readiness Reports

Run the Online Patching Readiness Reports using the following process:

Apply the latest Oracle E-Business Suite Online Patching Readiness and GSCC Report Patch

Action: As part of planning and preparation, you must apply the Oracle E-Business Suite Online Patching Readiness and GSCC Report patch corresponding to your existing Oracle E-Business suite instance. You must use `adpatch` to apply this patch. For example, if you are at the Oracle E-Business Suite 11*i* level, then you must apply the patch marked for Release 11*i*.

Run the Online Patching Enablement - Readiness Reports

Refer to *Using the Online Patching Readiness Report in Oracle E-Business Suite Release 12.2* (Doc ID: 1531121.1) for instructions on how to download these utilities.

You must run the following utility from the application tier `APPL_TOP`. It reports EBR violations that include objects not complying with the EBR rule about Non-Editted Objects (data storage objects such as Tables and Materialized Views), and referencing edited objects (code objects such as: Packages, Triggers, Object Types, and so on). This report also lists several naming standard violations that must be fixed prior to applying the online patching enablement patch.

1. Source the environment file of current `APPL_TOP`

UNIX

```
$ . ./<APPL_TOP>/APPS<CONTEXT_NAME>.env
```

Windows

```
C:\> <APPL_TOP>\envshell<CONTEXT_NAME>.cmd
```

Note: The subsequent steps assume that you are running in the same session which was initialized with this environment file. If you need additional operating system level sessions, ensure that you initialize the environment with this same environment file.

2. Create the online patching log file location and set it as the current directory:

```
$ mkdir $LOG_HOME/appl/op  
$ cd $LOG_HOME/appl/op
```

3. Run the following Readiness reports:

- `ADZDPSUM.sql` - Provides a summary of the schemas that will be edited and also schemas with objects that depend on E-Business Suite code that is recommended to be edited. You can register these schemas with the application by running the commands that will be listed in the last section of this report. Oracle recommends that you run this report again after the custom

schemas are registered with the application. You should run ADZDPSUM.sql repeatedly to handle dependent schemas until no further EBR violations are reported.

Note: Enter the system password when prompted. You can ignore APPS_NE, and ODM schemas which may appear in section 2 of the report.

```
$ sqlplus system @$AD_TOP/sql/ADZDPSUM.sql
$ mv adzdpsum.txt adzdpsum_pre_dbprep.txt
```

- ADZDPMAN.sql - Lists objects with different categories of violations to EBR rules that must be fixed prior to running the enablement process to avoid errors during this process. Oracle recommends that you run this report after all custom schemas are registered with the application according to instructions in the above report ADZDPSUM.sql.

Note: Enter the system password when prompted.

```
$ sqlplus system @$AD_TOP/sql/ADZDPMAN.sql
$ mv adzdpman.txt adzdpman_pre_dbprep.txt
```

- ADZDPAUT.sql - This report lists all the objects with violations to the EBR rules that will be fixed automatically from the enablement process. This report is provided for information purposes and no action should be taken from this report.

Note: Enter the system password when prompted.

```
$ sqlplus system @$AD_TOP/sql/ADZDPAUT.sql
$ mv adzdpaut.txt adzdpaut_pre_dbprep.txt
```

Implementing Code Remediation

Fix Violations Listed in the Online Patching Readiness Report that Require Manual Intervention

The Online Patching Readiness Report contains sections with different violation types.

1. Review all sections listed from the ADZDPMAN.sql report. Follow instructions in each section to fix violations.

Note: Many violations in the Readiness report can be automatically fixed by registering your custom schemas. Review the last section of the Summary Readiness Report (ADZDPSUM.sql) for sample

commands on how to register your custom schemas.

The following schema should NOT be registered:

- SYS
- SYSTEM
- CTXSYS

Any dependency between these schemas and Edited Objects is a coding standards violation and must be fixed manually.

2. Oracle recommends that you perform the chosen fix by customizing template file \$AD_TOP/sql/ADZDPCUST.sql
3. Repeat the *Run the Online Patching Enablement - Readiness Report* step above until all violations have been addressed.

Database Object Development Standards for Oracle E-Business Suite System Schema Migration

The Oracle E-Business Suite Release 12.2 database architecture has been modernized by adoption of the Oracle E-Business Suite System Schema, EBS_SYSTEM. Prior to the introduction of the EBS_SYSTEM schema, Oracle E-Business Suite installed application objects in the Oracle Database SYS and SYSTEM schemas. Migration to the EBS System Schema obviates the need for any EBS-owned objects to reside in the SYS or SYSTEM schemas.

As part of your upgrade to Oracle E-Business Suite Release 12.2, you should prepare your customizations for mandatory compliance requirements introduced with the EBS System Schema Migration. EBS System Schema Migration development standards are either recommended guidelines or mandatory compliance requirements for custom-defined objects. Mandatory compliance requirements must be resolved so that your customizations will run without error after applying the completion patch. Failure to do so will result in invalid database objects for your custom code.

Additional Information: For additional information, refer to the following:

- *Oracle E-Business Suite Release 12.2 System Schema Migration* (Doc ID: 2755875.1)
- *Part 3: Database Object Development Standards for Oracle E-Business Suite System Schema Migration in Developing and Deploying Customizations in Oracle E-Business Suite Release 12.2* (Doc ID: 2755875.1)

Customizing Help Files

The help files in this release are in HTML format, making them easy to modify. You can reapply previously customized help files to your upgraded system if you convert them to HTML. If you don't convert customized help files to HTML and reapply, then it is important that you save the pre-upgrade customized help files as a reference.

Conditional Action: See *Customizing Oracle E-Business Suite Help* in the *Oracle E-Business Suite Setup Guide*.

Schemas Not Used by Oracle E-Business Suite Release 12.2

The following schemas are not used by Oracle E-Business Suite Release 12.2. If you have developed customizations that depend on these schemas, then you may recreate these customizations and delete the schemas after the upgrade is complete. Deleting schemas is a documented step in Chapter 5, *Performing Post Upgrade Tasks*.

| Schema Name | Schema ID |
|-------------------------------------------|---------------|
| Oracle Single Sign On | ORASSO |
| | ORASSO_DS |
| | ORASSO_PA |
| | ORASSO_PS |
| | ORASSO_PUBLIC |
| Oracle Internet Directory | ODS |
| OracleAS Certificate Authority | OCA |
| | ORAOCA_PUBLIC |
| Discoverer OLAP | D4OSYS |
| Discoverer Portlet Provider Metadata | DISCOVERER5 |
| Oracle Portal-to-Go and OracleAS Wireless | PTG |
| | WIRELESS |

| Schema Name | Schema ID |
|---------------------------------------------------------------------------------------|--------------------------------------------|
| Oracle Warehouse Builder | OWBRT_SYS OWBSYS_AUDIT |
| E-Business Suite product schemas DSR and MOC for Oracle Warehouse Builder integration | DDROWNER DDRUSER DSROWNER MTHUSER |
| Oracle Business Intelligence Applications | OBIA |
| MapView | MVDEMO |
| OracleAS UDDI Registry | UDDISYS |
| SOA Suite | ORABPEL |

Preparing External Integrations

Obsolete Technology Integrations

In preparation for the upgrade, you must migrate your external integrations to releases or products that are certified with Oracle E-Business Suite Release 12.2. The following table identifies a migration path to certified releases or products:

| Technology Integration | Description |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OSSO 10 | For single sign-on integration, you must migrate to Oracle Access Manager 11gR1 or 11gR2. Oracle recommends that you migrate to Oracle Access Manager 11gR2. |
| OID 10g | You must upgrade to Oracle Internet Directory (OID) 11g. If upgrading to Oracle E-Business Suite Release 12.2.5 or greater, then you can also upgrade to OID 11g or Oracle Unified Directory (OUD) 11g. |

| Technology Integration | Description |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OBIEE 10g | If you are using Oracle Business Intelligence Enterprise Edition (OBIEE) with products Oracle Incentive Compensation (OIC), Manufacturing Operations Center (MOC), Advanced Planning Command Center (APCC), or Demand Signal Repository (DSR), then you must migrate to OBIEE 11g. |
| ODI 10g | If you are using Oracle Data Integrator (ODI) with products Oracle Incentive Compensation (OIC), Product Information Management (PIM), Distributed Warehouse Management System (WMS), or Demand Signal Repository (DSR), then you must migrate to ODI 11g (11.1.1.5.0). |
| JPDK Portlet Producer | If you are using E-Business Suite Portlets based on the proprietary JPDK Portlet Producer implementation, then you must migrate these to use the WSRP standards compliant Portlet Producer implementation. |
| BPEL 10g | If you are using BPEL 10g, then you must migrate to SOA Suite 11g. |
| SES 10g | If you are using SES 10g, then you must upgrade to SES 11g. |
| Oracle Portal | You must migrate to Oracle WebCenter Portal 11gR2. |

Oracle E-Business Suite Integrated SOA Gateway

Oracle E-Business Suite Integrated SOA Gateway enables service generation, deployment, and invocation.

Conditional Action: If you want to use the product features, then perform the steps documented in *Installing Oracle E-Business Suite Integrated SOA Gateway, Release 12.2* (Doc ID: 1311068.1).

Note: Oracle E-Business Suite Integrated SOA Gateway has product

dependencies on Oracle SOA Suite and Oracle E-Business Suite Adapter for SOAP based web services. REST based web services do not have this dependency. You are not required to install Oracle SOA Suite if you plan to use only the REST based web services provided by Oracle E-Business Suite Integrated SOA Gateway.

Oracle XML Gateway1

In Release 12.2, Oracle XML Gateway Web services are enabled through the Oracle E-Business Suite Integrated SOA Gateway Service Provider and can be viewed from the Integration Repository. If an earlier release of the Oracle XML Gateway Web service feature or Oracle E-Business Suite Integrated SOA Gateway has been leveraged, then install Oracle SOA Suite first, before the upgrade to Release 12.2.

Conditional Action: The Oracle XML Gateway Web service feature depends on Oracle E-Business Suite Integrated SOA Gateway. Oracle E-Business Suite Integrated SOA Gateway Release 12.2 has product dependencies on Oracle SOA Suite and Oracle Adapter for Oracle Applications (informally known as Oracle E-Business Suite Adapter). See *Installing Oracle E-Business Suite Integrated SOA Gateway, Release 12.2* (Doc ID: 1311068.1).

Preparing Third-Party Integrations

Integrations with Oracle E-Business Suite may need to be modified to comply with new deployment and development standards to work correctly with Oracle E-Business Suite Release 12.2. Examples include:

- Custom and third-party integrations
- Integrations with other Oracle products, such as Oracle Application Express

Additional Resources: For information on integrating third-party products, refer to *Guidance for Integrating Custom and Third-Party Products With Oracle E-Business Suite Release 12.2* (Doc ID: 1916149.1).

EBS 12.2 Upgrade Readiness Checker - Database Tier (EURC-DT)

The EBS 12.2 Upgrade Readiness Checker - Database Tier (EURC-DT) performs checks based on key technical requirements as described in this guide.

Specific to: EURC-DT

- Verifies that critical system administration and other pre-upgrade technical steps have been performed.
- Can be used when upgrading to Oracle E-Business Suite Release 12.2 from any previous release.
- Compatible with Oracle database releases 19c, 12cR1, and 11gR2.
- Can be used for Oracle E-Business Suite on-premises, or Oracle Cloud Infrastructure (all database services) instances.

The system administration and other pre-upgrade technical steps in this guide have been tagged as *Supported in EURC-DT: Yes* if the check is part of the EURC-DT tool.

You can run EURC-DT as part of planning, test upgrades, and production upgrade.

For more information about EBS 12.2 Upgrade Readiness Checker - Database Tier, refer to My Oracle Support Knowledge Document 2749775.1, EBS 12.2 Upgrade Readiness Checker - Database Tier (EURC-DT).

Additional Information: For additional information, refer to *EBS 12.2 Upgrade Readiness Checker - Database Tier (EURC-DT)*, (DocID: 2749775.1) on My Oracle Support.

Performing the Upgrade

This chapter covers the following topics:

- Preparing the Database for the Upgrade
- Preparing the Oracle E-Business Suite Release 12.2 File System
- Performing Mandatory Preparatory Tasks
- Setting Up the Stage Area
- Creating the Upgrade File System
- Preparing the System for Upgrade
- Convert to Multiple Organizations Architecture (Required)
- Convert Oracle Alert E-Mail Processing to the Workflow Notification Mailer (Conditional)
- Customer Relationship Management Tasks
- Financials and Procurement Tasks
- Human Resource Management (HRMS)
- Lease and Finance Management
- Projects Tasks
- Public Sector Tasks
- Supply Chain Management Tasks
- Database and System Administration Tasks
- Performing the Upgrade to Release 12.2.0
- Finishing the Release 12.2.0 Upgrade
- Enabling Online Patching
- Database Initialization Parameters
- Upgrading to the Latest Code Level

Preparing the Database for the Upgrade

These tasks pertain to all systems. You must complete them prior to the product-specific tasks in this chapter.

Back Up the E-Business Suite Database and Customizations (recommended):

Make a cold backup of the Oracle E-Business Suite database. You can use it to restore the database should you encounter problems during the upgrade process.

Note: Shut down the database with the NORMAL option. You may not be able to restore it from the backup if you use the IMMEDIATE or ABORT option.

In addition to the database files, back up the APPL_TOP, product customizations, and customized help files (in HTML).

Note: The upgrade process does not save customizations. You should copy all your customized files and put them in a safe place so you can reapply the customizations after the upgrade.

Prepare Release 12.2 Tablespaces (Required):

Migrate Existing Objects to New Tablespace Model (recommended).

Oracle E-Business Suite Release 12 environments contain the latest Oracle Applications Tablespace Model (OATM). This model is based on database object type rather than product affiliation, making it simpler to manage and requiring far fewer tablespaces and operating system files.

If you previously upgraded your environment from Release 11*i* to Release 12, then the upgrade process created tablespaces for all new products, configured the database for the new tablespace model, and created new objects. However, it did not automatically migrate your existing objects. If you have not already done so, Oracle strongly recommends that you use the Tablespace Migration Utility to perform this migration now. Note that this utility is not supported for use after you enable Online Patching, so you cannot perform the migration after your environment is upgraded to Release 12.2. If you choose not to migrate to OATM now, then you must continue to manage your tablespaces separately.

Suggested Reading: For more information, refer to *Oracle E-Business Suite Setup Guide, Release 12.2*.

Run AD preparation scripts (Required).

Applies to 11i release level: All

TUMS step key: N/A

Note: Customers that previously migrated to OATM tablespaces model must follow this step and run the AD Preparation Scripts to verify that all required tablespaces for Release 12.2 exist in their database.

To prepare your system for the Oracle Applications Tablespace Model (OATM) functionality, you must run some preparation scripts. Download and unzip patch 13435302. Follow the instructions in the readme for running these scripts:

- adgncons.sql

The tablespace model for this release (OATM) is based on database object type rather than product affiliation. The adgncons.sql script prepares adcrtbody.sql, configures the database to hold the new products to be added during the upgrade, and switches your system to use the new tablespace model.

- adcrtbody.sql

Generated by adgncons.sql, this script creates the new tablespaces, allocates unlimited tablespace to all APPS users, updates fnd_product_installation table with correct data and index tablespace information, assigns default tablespace to all APPS users, and sets the new_ts_mode flag in fnd_product_groups to Y. Be sure to review the locations of the dbf files for each new tablespace listed in adcrtbody.sql, and change the locations in the script as necessary. Ensure that you have adequate disk space for all the changes and additions that adcrtbody.sql is going to make.

Note: All the tablespaces created by adcrtbody.sql are critical and required for Release 12.2 as they hold critical objects. Therefore, you should not drop any of these tablespaces at any point.

Note: Oracle has tested successfully an extent size of 128 K for small systems (for example, 100 GB database or the Vision database), and, for large multi-terabyte system, an extent size of 4-10 MB has been tested successfully.

- adgrants.sql (adgrants_nt.sql for Windows) Grants SYS privileges needed by Applications, and creates required views in SYS.

Upgrade Your Database and Apply Mandatory E-Business Suite Release 12.2 Database Patches (Required):

1. **Migrate or Upgrade your Database to Oracle 11g Release 2 (11.2.0.4) or 12.1.0.2 (for Database 12cR1)**

Supported in EURC-DT: Yes

Applies to: All 11i releases

Upgrading to Oracle E-Business Suite Release 12.2 requires your database to be at the minimum version 11.2.0.4. If you have not already upgraded your Oracle E-Business Suite database to 11.2.0.4 or 12.1.0.2, then you can upgrade your database prior to the upgrade downtime. You will not only benefit by receiving the latest updates for security, performance, and stability before you move to Release 12.2, but will have one less step to perform when you upgrade to Release 12.2.

Review the following considerations to determine whether to upgrade your database version.

Oracle Database 12c Release 1 (12.1.0.2) or Oracle Database 11g Release 2 (11.2.0.4): Oracle Database 12c Release 1 (12.1.0.2) and Oracle Database 11g Release 2 (11.2.0.4) are in Upgrade Support, the successor to Market Driven Support (MDS). Oracle strongly recommends that you upgrade to Oracle Database 26ai or Oracle Database 19c after you have completed the upgrade to Oracle E-Business Suite Release 12.2. For more information on Upgrade Support and how to upgrade, see *Alert: Oracle E-Business Suite On-Premises Customers and Upgrade Support for Oracle Database Releases 12.1.0.2 and 11.2.0.4*, My Oracle Support Knowledge Document 2997711.1.

Oracle Database 11g Release 2 (11.2.0.3) or earlier: Because Error Correction Support has ended for Oracle Database 11g Release 2 (11.2.0.3), if you are currently on that database version or earlier, then you should now upgrade to Oracle Database 11.2.0.4 or 12.1.0.2 before proceeding with next steps. Additionally, Oracle strongly recommends that you upgrade to Oracle Database 26ai or 19c after you have completed the upgrade to Oracle E-Business Suite Release 12.2. To upgrade your database, follow the process documented in *Interoperability Notes: Oracle E-Business Suite Release 12.2 with Oracle Database 26ai*, My Oracle Support Knowledge Document 2962871.1 or *Interoperability Notes: Oracle E-Business Suite Release 12.2 with Oracle Database 19c*, My Oracle Support Knowledge Document 2552181.1.

Conditional Action: If you are planning to enable TLS 1.2 only, then you must upgrade to database 12.1.0.2. Refer to the following for additional details: *Enabling TLS in Oracle E-Business Suite Release 12.2* (Doc ID: 1367293.1), Section 6.1.

Required Action: Follow the instructions in *Database Preparation Guidelines for an Oracle E-Business Suite Release 12.2 Upgrade* (Doc ID: 1349240.1).

Suggested Reading: Database de-support schedules have important operational and planning implications for Oracle E-Business Suite environments. Oracle recommends that you review

the following document that details the latest database support policies and de-support schedules: *Release Schedule of Current Database Releases* (Doc ID: 742060.1).

Conditional Action: If you are upgrading to Oracle Database Release 11gR2 (11.2.0.4) or Release 12cR1 from earlier Database releases (Release 10g or Release 9i) , then you must set the parameter `sec_case_sensitive_logon` to False (`sec_case_sensitive_logon = False`) in your `init.ora` to avoid login issues with `sqlplus`. For more information on this parameter and other database initialization parameters, refer to *Database Initialization Parameters for Oracle Applications Release 12* (Doc ID: 396009.1).

If you are upgrading to a Release 12c database, then ensure that your `sqlnet_ifile.ora` contains the line: `SQLNET.ALLOWED_LOGON_VERSION_SERVER = 8`

2. Ensure that the required database patches for Oracle E-Business Release 12.2 have been applied.

Supported in EURC-DT: Yes

Required Action: Follow the instructions in the *Oracle E-Business Suite Release 12.2: Consolidated List of Oracle Fusion Middleware Patches and Bug Fixes* (Doc ID: 2877607.1) to do the following:

- Check for missing database patches by executing the Oracle E-Business Suite Technology Codelevel Checker (ETCC) - `checkDBPatch.sh`.
- Apply the latest database patches identified in the report as missing.
- Confirm successful application or required database patches by re-executing the Oracle E-Business Suite Technology Codelevel Checker (ETCC) - `checkDBPatch.sh`.

Review Sizes of Old and New Tablespaces (Required):

Supported in EURC-DT: Yes

Ensure that all critical tablespaces contain sufficient space (below the threshold), including `APPS_TS_TX_DATA`. Resize the tablespace as necessary.

Required Action: For guidelines, see *Oracle E-Business Suite Release 12.2: Upgrade Sizing and Best Practices* (Doc ID: 1597531.1).

Preparing the Oracle E-Business Suite Release 12.2 File System

Oracle recommends using the latest startCD to install or upgrade to Oracle E-Business Suite Release 12.2.0.

Required Action: Follow the instructions in Section 1.2 "Current Version of startCD" in the *Oracle E-Business Suite Release Notes, Release 12.2*, My Oracle Support Knowledge Document 1320300.1, to obtain the latest startCD.

To prepare the E-Business Suite Release 12.2 file system, you must first prepare the system for installation using Rapid Install. You will then run Rapid Install to lay down the E-Business Suite Release 12.2 file system.

Performing Mandatory Preparatory Tasks

Before running Rapid Install, you must follow the applicable instructions in several critical documents. If you do not do so, your installation or upgrade may fail.

Action: Follow the instructions in My Oracle Support Knowledge Document 1320300.1, *Oracle E-Business Suite Release Notes, Release 12.2* to prepare your environment for running Rapid Install. As described in Document 1320300.1, you must meet all operating system and software requirements before you install or upgrade to Oracle E-Business Suite Release 12.2. Ensure that you follow the instructions in the relevant Oracle E-Business Suite platform-specific Installation and Upgrade document as listed in the operating system requirements, page 3-4 and in Document 1320300.1.

Conditional Action: Deploying a role-separated Oracle Grid Infrastructure on Oracle E-Business Suite requires additional patches. See My Oracle Support Knowledge Document 1320300.1, *Oracle E-Business Suite Release Notes, Release 12.2* and *Additional Bug Fixes Needed When Installing Oracle E-Business Suite Release 12.2 For Use With Oracle Grid*, My Oracle Support Knowledge Document 1594274.1, *Oracle E-Business Suite Release 12.2: Consolidated List of Patches and Technology Bug Fixes*.

Conditional Action: This note applies only if you are upgrading from Oracle E-Business Suite Release 12.0 or 12.1. If you are planning to use a logical hostname for the application tier, then you must refer to Section 5.4: Upgrading to Oracle E-Business Suite Release 12.2 Using Physical and Logical Host Names on the Application Tier, and perform the steps in Section 5.4.1: Verifying Logical Host Name Configurations Prior to Upgrade to Oracle E-Business Suite Release 12.2, My Oracle Support Knowledge Document 1968231.1, *Configuring Oracle E-Business Suite Release 12.x Using Logical Host Name*.

In addition to meeting the prerequisites described in this book and in the platform-specific notes, you should also ensure you understand the licensing agreement for your organization.

Additional Information: For general Oracle E-Business Suite installation troubleshooting hints and tips, see My Oracle Support Knowledge Document 1378579.1, *Troubleshooting Rapid Install for E-Business Suite Release 12.2*.

Setting Up the Stage Area

This section describes the tasks you need to perform to download the Release 12.2 installation software and create the *stage area* where the software will reside in readiness for installation.

Caution: Network-attached storage devices (such as NFS-mounted disk volumes) can be used for the stage area. However, you must use the correct mount options to avoid possible installation failure or performance issues. Refer to My Oracle Support Knowledge Document 359515.1, *Mount Options for Oracle Files When Used With NAS Devices*, and Document 1375769.1, *Sharing The Application Tier File System in Oracle E-Business Suite Release 12.2*.

Creating the Stage Area

Creating a new stage area is a multiple-step process. You must first create a directory, called `StageR122`, into which you will download the installation software mentioned above. Next you unzip the requisite files and run the build script. Then you patch the stage area with the latest consolidated fixes. After this, you are ready to run Rapid Install. This section describes the steps to follow.

Important: Do not attempt to reuse an existing stage area that was

created with startCD 12.2.0.50 or earlier, as it will contain Oracle Fusion Middleware 11g PS6 (11.1.1.7.0) or earlier, while startCD 12.2.0.51 (Patch 22066363, RAPID INSTALL STARTCD 12.2.0.51) requires Oracle Fusion Middleware 11g PS7 (11.1.1.9.0) as well as Oracle Database 12c Release 1 (12.1.0.2) and the latest Oracle E-Business Suite Release 12.2 software distribution.

Tip: Ensure that the directory has sufficient space for the downloaded installation files and for the content that will be extracted from those files. See Stage Area, page 3-9.

Creating the Stage Area Directory

Issue the appropriate command for your operating system in the desired location on the file system.

For UNIX Users

In the following example, the stage area directory is created under a mount point called /u01:

```
$ cd /u01
$ mkdir Stage122
```

For Windows Users

In the following example, the stage area directory is created on the F: Drive:

```
C:\>F:
F:\>mkdir Stage122
```

Downloading Software and Unzipping Start Here Files

After creating the stage area directory, you must download into that directory the components of the latest Oracle E-Business Suite Release 12.2 software distribution (also known as a media pack) that are used by Rapid Install. The Oracle E-Business Suite Release 12.2 software distribution includes Oracle E-Business Suite, Oracle Database, and Oracle Fusion Middleware. It is obtainable in zip format from the Oracle Software Delivery Cloud [<https://edelivery.oracle.com>].

Suggested Reading: Before you download the files, read the Release Notes for the specific release you are installing.

To download the required components of the Oracle E-Business Suite Release 12.2 software distribution:

1. Sign in to the Oracle Software Delivery Cloud with your My Oracle Support credentials.

2. Select `Download Package` as the search category, enter `Oracle E-Business Suite` as the search term, and choose **Search**.
3. In the search results, select the latest Oracle E-Business Suite package for Release 12.2, such as `Oracle E-Business Suite 12.2.15.0.0`.
4. Choose **Continue**.
5. Select only the following releases:
 - Oracle E-Business Suite 12.2.0 Current
 - Oracle WebLogic Server 10.3.6.0.0
 - Oracle Web Tier 11.1.1.9.0
 - Oracle Database 12.1.0.2.0

Ensure that all other releases in the list are deselected.

6. Select the platform for each of the selected releases, and choose **Continue**.
7. Read and accept the license agreement, and choose **Continue**.
8. By default, all available files are selected. Update the file list to select only the required files. You must download the following specific components of the Oracle E-Business Suite Release 12.2 software distribution:
 - Oracle E-Business Suite Release 12.2.0 Rapid Install Start Here (all parts)
 - Oracle E-Business Suite Release 12.2.0 for *<Platform>* Rapid Install (all disks and parts)
 - Oracle E-Business Suite Release 12.2.0 for *<Platform>* Rapid Install Technology one-off Patches
 - Oracle WebLogic Server 10.3.6 (11gR1) Generic with Coherence 3.7.1
 - Oracle Web Tier 11.1.1.9.0 Utilities (11g Patch Set 7) - Oracle Fusion Middleware for *<Platform>*
 - Oracle Database 12.1.0.2.0 for *<Platform>*

Important: If you have previously downloaded the "Oracle Database 12c Release 1 (12.1.0.2.0) EXAMPLES" component from the Oracle Software Delivery Cloud, then you must ensure that you download the latest components before proceeding further.

9. If you are performing an on-premises installation or upgrade, choose **Download** to start the download into your stage directory.
10. If you are performing an Oracle E-Business Suite upgrade from Release 12.1 to Release 12.2 on Oracle Cloud Infrastructure, you can download software to your Oracle Cloud Infrastructure Compute VM over an internet connection. For further instructions on downloading software or patches onto Oracle Cloud Infrastructure, see Section 6.4.6: Downloading Software and Patches, *Getting Started with Oracle E-Business Suite on Oracle Cloud Infrastructure*, My Oracle Support Document 2517025.1.

Note: Do not run Rapid Install to perform a fresh installation of Oracle E-Business Suite on Oracle Cloud Infrastructure. Follow the instructions in this step only for upgrading an existing Oracle E-Business Suite instance on Oracle Cloud Infrastructure.

11. Verify that you have downloaded all the required files, and only those files, into your stage directory. Each zip file is identified as "<Part Number>_NofM". For the complete set of files for a given Part Number, you need all the zip files from 1 to M. For example, Oracle Part Number "V100060-01 " has been divided into three parts, so you must download the three zip files V100060-01_1of3.zip, V100060-01_2of3.zip, and V100060-01_3of3.zip.

Warning: Do not download any other software components into the stage area, or the installation process may fail.

12. After you have downloaded the components listed above, unzip only the "Oracle E-Business Suite Release 12.2.0 Rapid Install StartHere" files, and proceed to run the buildStage script as described in the next section.

Important: Before you run the buildStage script, you must apply startCD 12.2.0.51 one-off Patch 36541996, following the instructions in the patch readme.

Running the buildStage Script

This script has several functions, which are selected from a series of menus. A key function is to unzip the rest of the installation software for subsequent use by Rapid Install. In the process, various subdirectories are created under the stage area.

Important: Running the buildStage script is a *mandatory* pre-installation step. The buildStage options you should choose depend on whether you have an existing stage area or not.

The buildStage script is run as follows on UNIX and Windows.

UNIX

```
$ cd /u01/StageR122/startCD/Disk1/rapidwiz/bin
$ buildStage.sh
```

Windows

```
C:\>F:
F:\>cd StageR122\startCD\Disk1\rapidwiz\bin
F:\>buildStage.cmd
```

The buildStage menus are shown below.

Main Menu

Build Stage Menu

- ```

1. Create new stage area
2. Copy patches to existing stage area
3. List files in TechPatches directory
4. Exit menu
```

Enter your choice [4]:

These options are used as follows.

### Main Menu - Option 1. Create new stage area

Use this option if you want to create a *new* stage area, for example if you are performing an installation from scratch. It will unzip the downloaded software and apply the one-off patches.

**Note:** When using startCD 12.2.0.51, you must choose option 1 to create a new stage area. This startCD version delivers a later patch set of the Oracle Fusion Middleware Web Tier Utilities than the patch set delivered by earlier startCD versions. Consequently, you must not use any existing stage area created with an earlier startCD version. Instead, create a new stage area to obtain the currently required Oracle Fusion Middleware Web Tier Utilities patch set.

On platforms other than Windows, choosing this option will display a submenu that shows the available platforms:

Rapid Install Platform Menu

---

1. Oracle Solaris SPARC (64-bit)
2. Linux x86 (64-bit)
3. IBM AIX on Power Systems (64-bit)
4. HP-UX Itanium
5. Exit Menu

Enter your choice [5]:

Specify the platform on which you want to install Oracle E-Business Suite.

**Note:** For a stage area on Oracle Cloud Infrastructure, the only platform you can choose is option 2, Linux x86-64.

You will then be prompted for the location of the installation software you downloaded:

Please enter the directory containing the zipped installation media:

On Windows, the platform submenu does not appear; instead, the script proceeds directly to this prompt.

Enter the full path to the directory. The stage area will then be built for you.

**Main Menu - Option 2. Copy new patches to current stage area**

This option updates the technology one-off patches for an *existing* stage area.

On platforms other than Windows, choosing option 2 will display the submenu that shows the available platforms:

Rapid Install Platform Menu

---

1. Oracle Solaris SPARC (64-bit)
2. Linux x86 (64-bit)
3. IBM AIX on Power Systems (64-bit)
4. HP-UX Itanium
5. Exit Menu

Enter your choice [5]:

Specify the applicable platform, and the buildStage script will stage the technology one-off patches packaged with the startCD into the stage/TechPatches directory.

**Note:** For a stage area on Oracle Cloud Infrastructure, the only platform you can choose is option 2, Linux x86-64.

On Windows, the platform submenu does not appear; instead, the script proceeds directly to staging the patches.

### Main Menu - Option 3. Display existing files in stage TechPatches

This option displays (in a tree format) the files in your stage/TechPatches directory:

```
Enter your choice [4]: 3
Directory /s0/oracle/XB45/startCD/Disk1/rapidwiz/bin/../../../../
/TechPatches
|--DB
|
|--11071989
| |--p11071989_112030_Linux-x86-64.zip
| |--11820674
| |--p11820674_R12_LINUX.zip
|--12949905
| |--p12949905_112030_Linux-x86-64.zip
|--12951696
| |--p12951696_112030_Generic.zip
|--12955701
| |--p12955701_112030_Linux-x86-64.zip
|--13040331
| |--p13040331_112030_Linux-x86-64.zip
|--13388104
```

### Patching the Stage Area

After running the buildStage script, you should patch the stage area with the latest consolidated fixes since the release of the current StartCD.

For StartCD 12.2.0.51, the consolidated fixes are delivered through the following patches:

- Patch 32947483 [RAPID INSTALL CONSOLIDATED BUNDLE PATCH ON TOP OF STARTCD 51 (OCTOBER 2021)]
- Patch 36332179 [RAPID INSTALL CONSOLIDATED BUNDLE PATCH 2 FOR STARTCD 51 (SEPTEMBER 2024)]

To patch the stage area, perform the following steps for each of these two Rapid Install Consolidated Bundle Patches in turn, including running patchRISStage.sh or patchRISStage.cmd as well as buildStage.sh or buildStage.cmd individually for each patch. That is, first perform all of steps 1 through 5 for Patch 32947483, and then repeat steps 1 through 5 again for Patch 36332179.

#### To patch the stage area with a Rapid Install Consolidated Bundle Patch:

1. Download the patch from My Oracle Support.
2. Unzip the patch using the following command:  
`unzip p<patch_number>_R12_GENERIC.zip`
3. Change to the <patch\_number> directory.
4. Patch the stage area using the following commands:

UNIX:

```
sh patchRISStage.sh
```

Windows:

```
patchRISStage.cmd
```

When prompted for the location of the Rapid Install stage, enter the path to the stage area you created for StartCD 12.2.0.51.

**Tip:** Run the script as the same user that you used to run the buildStage script when creating the stage area.

5. Re-run the buildStage.sh or buildStage.cmd script with the option Copy patches to existing stage area.

**Important:** Re-running the buildStage script with the option Copy patches to existing stage area is a mandatory pre-installation step.

UNIX:

```
$ cd /u01/StageR122/startCD/Disk1/rapidwiz/bin
$ buildStage.sh
```

Windows:

```
C:\>F:
F:\>cd StageR122\startCD\Disk1\rapidwiz\bin
F:\>buildStage.cmd
```

From the following buildStage menu, choose option 2, Copy patches to existing stage area.

```
Build Stage Menu

1. Create new stage area
2. Copy patches to existing stage area
3. List files in TechPatches directory
4. Exit menu

Enter your choice [4]: 2
```

On platforms other than Windows, choosing this option will display a submenu that shows the available platforms. Specify the platform on which you want to install Oracle E-Business Suite.

Rapid Install Platform Menu

- 
1. Oracle Solaris SPARC (64-bit)
  2. Linux x86 (64-bit)
  3. IBM AIX on Power Systems (64-bit)
  4. HP-UX Itanium
  5. Exit Menu

Enter your choice [5]:

Review the script output and press **Enter** to continue when prompted.

Directory /u01/StageR122/TechPatches

Stage Builder will now stage the one-off patches for <Platform>...

Press Enter to continue...

Copying latest one-off patches to stage area...

...

Press Enter to continue...

Finished copying additional patches.

...

Press Enter to continue...

Finally, from the main menu, choose option 4 to exit.

Build Stage Menu

- 
1. Create new stage area
  2. Copy patches to existing stage area
  3. List files in TechPatches directory
  4. Exit menu

Enter your choice [4]: 4

Stage Builder exiting...

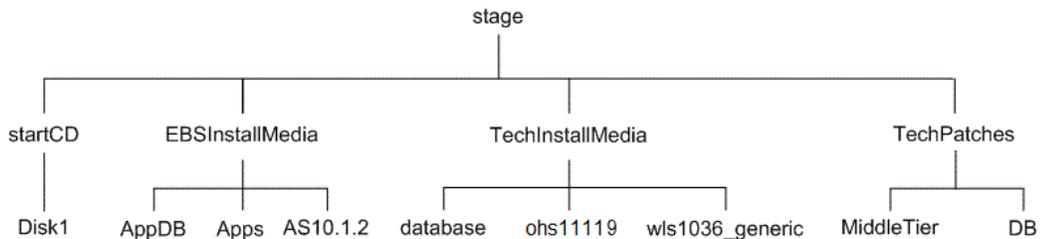
## Applying Additional StartCD 12.2.0.51 One-off Patches

**Required Action:** Refer to Section 1.2.2 "Additional StartCD 12.2.0.51 One-Off Patches" in the *Oracle E-Business Suite Release Notes, Release 12.2*, My Oracle Support Knowledge Document 1320300.1, to check for any additional critical one-off patches on top of startCD 12.2.0.51. For any patches listed in that section, you must follow the instructions in the patch's readme file to patch the Rapid Install stage area before you proceed with the next steps in your installation.

## Stage Area Structure

As shown in the following diagram, the stage area you have built consists of a top-level stage directory, with subdirectories *startCD*, *EBSInstallMedia*, *TechInstallMedia*, and *TechPatches*.

### Stage Area Directory Structure



The *startCD* directory contains Rapid Install itself (in a subdirectory called *Disk1*), plus supporting files and documentation.

The *EBSInstallMedia* directory contains the following subdirectories:

- *AppDB* (Oracle E-Business Suite database)
- *Apps* (Oracle E-Business Suite products)
- *AS10.1.2* (Oracle Application Server 10.1.2)

The *TechInstallMedia* directory contains the following subdirectories:

- *database* (Oracle 12c Release 1 Oracle home)
- *ohs11119* (Oracle HTTP Server)
- *wls1036\_generic* (Oracle WebLogic Server, part of Oracle Fusion Middleware)

The *TechPatches* directory contains the following subdirectories:

- *MiddleTier* (application tier patches)
- *DB* (database tier patches)

## Creating the Upgrade File System

The database can be running when you lay down an upgrade file system with an existing `ORACLE_HOME`.

Before running Rapid Install to create the upgrade file system, you should make a note of the database language and character set value from the existing Release 11i or

Release 12.1 database that will be upgraded. These values should be specified in the appropriate Rapid Install screen, as shown in Step 8 (Internationalization Settings) of this section.

### **Set Up the Configuration:**

As described in the previous section, Rapid Install performs two functions during an upgrade. This section describes the first of these functions, specifying the configuration values that Rapid Install needs to lay down a new file system and install the new technology stack.

**Additional Information:** See the *Oracle E-Business Suite File System* chapter in *Oracle E-Business Suite Concepts*.

**Important:** With Patch 32947483 [RAPID INSTALL CONSOLIDATED BUNDLE PATCH ON TOP OF STARTCD 51 (OCTOBER 2021)], Rapid Install creates the complete run file system (fs1) but only the context file and a few mandatory directories in the patch file system (fs2). This restricted patch file system setup is only a transitional setup to reduce the file system installation time. The complete patch file system will be created subsequently as part of an `fs_clone` action after the instance has been upgraded to a 12.2 Release Update Pack. Before running any lifecycle management actions, you must upgrade your instance to a 12.2 Release Update Pack and then run `fs_clone` to complete the file system setup.

Follow the instructions in the section *Before You Install, Oracle E-Business Suite Installation Guide: Using Rapid Install*. Then complete the following tasks.

**Note:** You are now ready to start Rapid Install as shown in the examples below. The exact path depends on the disk location you specified for your staging area.

The user who should run the Rapid Install wizard (`rapidwiz`) command depends on the configuration of the database tier and application tier.

- For instances with the database tier and application tier on the same system:
  - If the database tier and application tier are on the same system and owned by the same user, then you must run `rapidwiz` as that user.
  - In a multi-user installation, where the database tier and

application tier are on the same system but owned by different users, you must run `rapidwiz` as the root user.

- For instances using a split tier configuration, with the database tier and application tier on different systems:
  - If you plan to choose the 'Use Existing Oracle Home (No new Database Home install)' option, then you must run `rapidwiz` only from the application tier as the application tier operating system user.
  - Otherwise, you must first run `rapidwiz` from the database tier as the database tier operating system use, and then run `rapidwiz` again from the application tier as the application tier operating system user.

#### 1. Start the Rapid Install wizard

Start the wizard by entering the command `rapidwiz` at the command prompt.

##### UNIX

Example:

```
$ cd <Your stage directory path>/startCD/Disk1/rapidwiz
$./rapidwiz
```

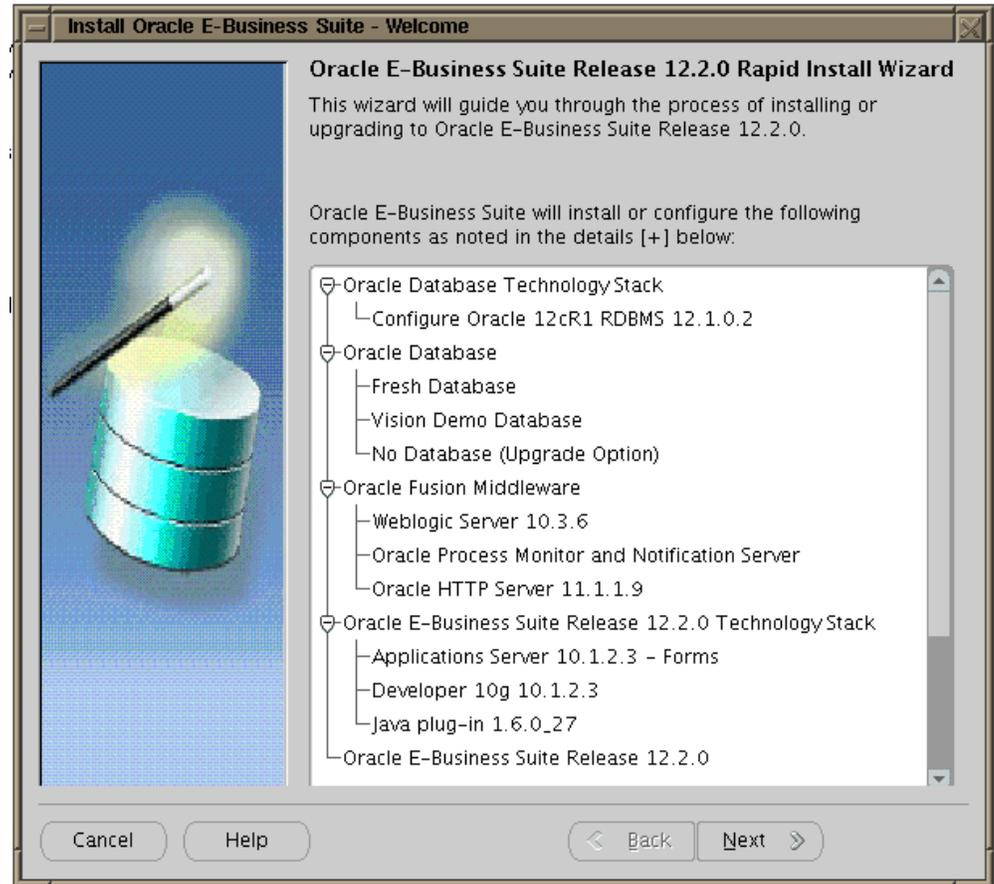
##### Windows

Example:

```
C:\>F:
F:\>cd <Your stage directory path>\startCD\Disk1\rapidwiz
F:\><Your stage directory path>\startCD\Disk1\rapidwiz>rapidwiz.cmd
```

The Welcome screen appears.

### Welcome screen



This screen lists the components that are included in, or supported by, this release of Oracle E-Business Suite. Use the scroll bar to bring all the components into view.

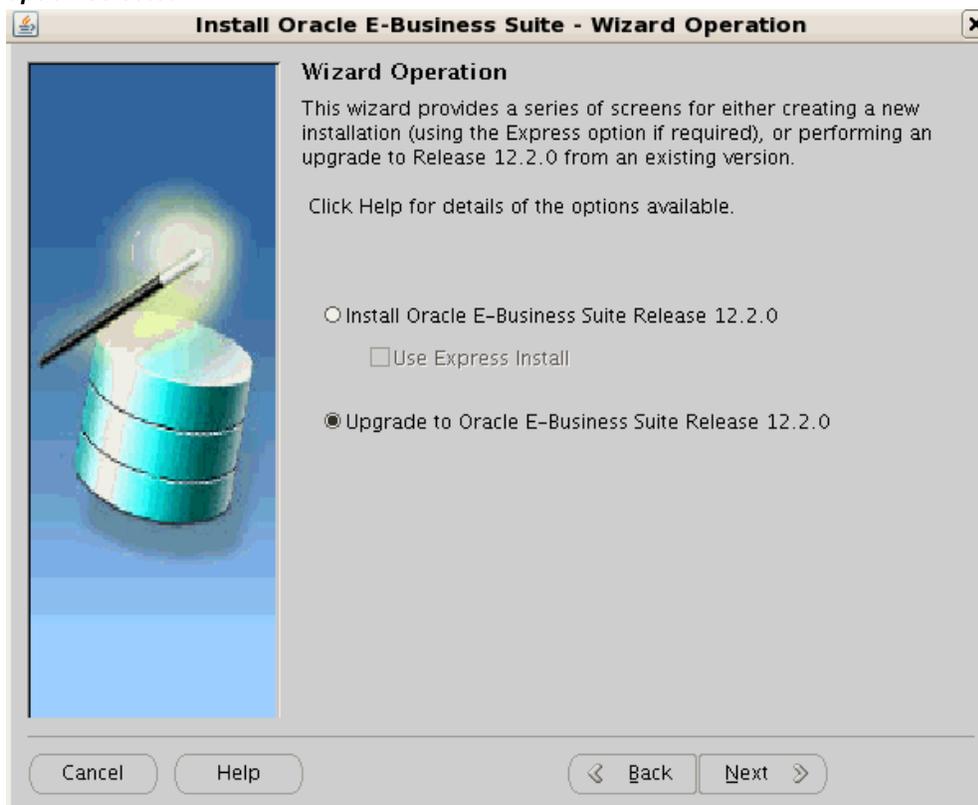
For an upgrade, Rapid Install creates an Oracle 12cR1 Database Oracle Home without a database. You can use this Oracle Home to upgrade or migrate your existing database to Oracle 12cR1. If you already have a suitable 11gR2 or 12cR1 Oracle Home, you can use it instead of using the one created by Rapid Install (which you may remove).

This screen is for information only. No action is required. Click *Next* to continue.

## 2. Select a wizard operation

Use the Select Wizard Operation screen to indicate the action you want Rapid Install to perform. You begin both new installations and upgrades from this screen. Based on the action you choose, the Rapid Install wizard continues with the appropriate screen flow.

**Wizard Operation screen with "Upgrade to Oracle E-Business Suite Release 12.2.0" option selected**



Choose the option *Upgrade to E-Business Suite Release 12.2.0* option to upgrade your Oracle E-Business Suite products to the current version of Oracle E-Business Suite. The Rapid Install screen flow presents two paths: one that lays down the file system and installs the new technology stack, and one that configures servers and starts services. In subsequent steps, you will enter information in the Rapid Install Wizard for upgrading a system.

**3. Supply Oracle Configuration Manager details**

*Oracle Configuration Manager* (OCM) is a component that is designed to facilitate support for your Oracle products. Use of Oracle Configuration Manager is optional, but recommended.

A lightweight agent that consumes minimal CPU resources, OCM supports automatic discovery of installed components and configuration information, and provides continuous tracking of key Oracle and system statistics of the machine it is running on.

Data collected is sent via HTTPS (secure HTTP) to Oracle Support, who can thereby maintain an up-to-date view of your Oracle installation, facilitating pro-active problem avoidance and helping to reduce the time needed for resolution of support

issues.

**Additional Information:** For further details of OCM, click the View details link on the OCM screen.

**Screen to enter email details for security updates**



Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details.](#)

Email:

Easier for you if you use your My Oracle Support email address/username

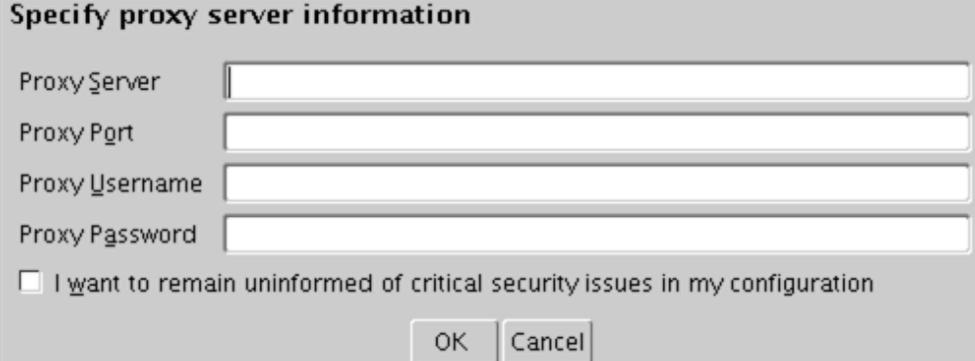
I wish to receive security updates via My Oracle Support

My Oracle Support Password:

Cancel Help < Back Next >

If submission of your details fails because no connection can be made, you are presented with a pop-up screen prompting for proxy server information:

**Specify Proxy Server Information screen**



Specify proxy server information

Proxy Server

Proxy Port

Proxy Username

Proxy Password

I want to remain uninformed of critical security issues in my configuration

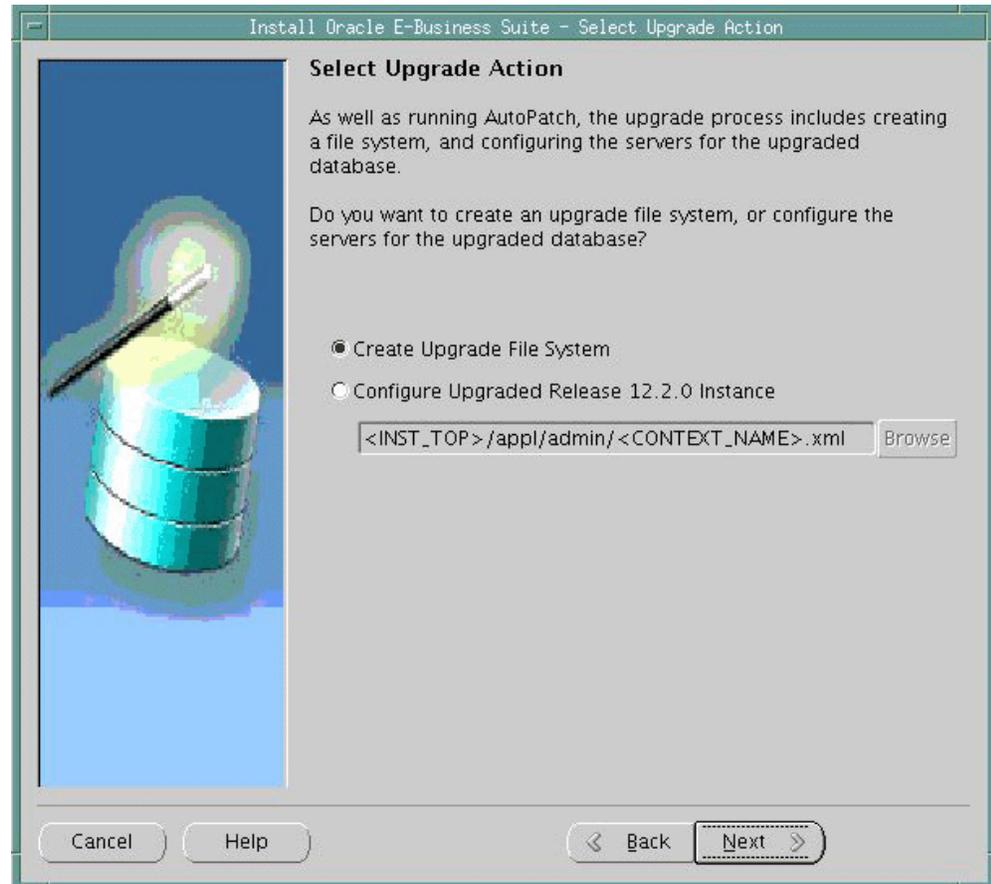
OK Cancel

If this screen appears, respond appropriately and then click *OK*.

#### 4. Choose upgrade option

On the Select Upgrade Action screen, you can choose to create an upgrade file system for your upgraded system, or configure the upgraded instance.

##### **Select Upgrade Action screen**



The actions associated with an upgrade are performed in separate Rapid Install sessions, as follows:

- **Create Upgrade File System**

Choose this option to run Rapid Install as a pre-upgrade step. In the screen flow associated with this option, the wizard collects configuration parameters for your system and stores them in the Oracle E-Business Suite database. When you run Rapid Install, AutoConfig uses these values to lay down the file system structure and technology stack components for your configuration. When it runs, it also creates a context file (<CONTEXT\_NAME>.xml) that contains all the parameters that describe your system. This context file is created and managed by AutoConfig.

- Configure Upgraded Release 12.2.0 Instance

Choose this option to run Rapid Install as a post-upgrade task. In the associated screen flow, you specify the name of the context file (<CONTEXT\_NAME>.xml) that AutoConfig created when you initially ran Rapid Install. This time, AutoConfig uses the values in the context file to configure the servers and start the services.

Choose *Create Upgrade File System* and click *Next*

#### 5. Specify Global System Settings

On the Global System Settings screen, you indicate required port usage for your system, selecting the port pool and (if required) individual port values.

### Global System Settings screen

**Global System Settings**

The Port Pool mechanism is used to specify a set of port values for an Applications system. Each pool uses a unique set of values, allowing multiple environments to co-exist on the same host. Individual port values can be changed using the Edit Ports button.

File System 1      File System 2

Port Pool:      0      1

Derived Port Settings:

|                                 |      |       |
|---------------------------------|------|-------|
| Node Manager Port               | 5556 | 5557  |
| WLS Admin Server Port           | 7001 | 7002  |
| WLS OACORE Application Port     | 7201 | 7202  |
| WLS FORMS Application Port      | 7401 | 7402  |
| WLS OAFM Application Port       | 7601 | 7602  |
| WLS FORMS-C4WS Application Port | 7801 | 7802  |
| WLS Portlet Application Port    | 8889 | 8890  |
| OHS Administration Proxy Port   | 9999 | 10000 |
| Database Port                   | 1521 | 1521  |

Edit Ports

Cancel      Help      < Back      Next >

After making your selections, click *Next* to continue.

#### 6. Specify Database Node Configuration

On the Database Node Configuration screen, describe your existing database.

### Database Node Configuration screen

**Database Node Configuration**

Database Host:

Database Port:

Database SID:

Operating System:

Domain Name:

Database OS User:

Database OS Group:

Base Directory:

RDBMS Oracle Home:

Use Existing Oracle Home (No new Database Home install)

Check if RAC ORACLE\_HOME

RAC Nodes:

SCAN Host:

SCAN Port:

Cancel Help Back Next

Enter the database host and database port.

**Important:** The host name for the database tier node cannot be longer than 30 characters. When entering the host name, ensure that you specify the host name in lower case. Using upper case or mixed case for the host name is not supported. Additionally, the host name must begin with an alphabetic character and cannot include an underscore (\_) character.

**Conditional Action:** This note applies only if you are upgrading from Oracle E-Business Suite Release 12.0 or 12.1. If the database server is using a logical host name, then specify the logical host name instead of the physical host name in the Database Host field in this screen.

In the Database SID field, enter the database name, or service name, that you want

Rapid Install to use to identify your existing database. The database name must be alphanumeric, must not exceed eight characters in length, must not start with a number, and must not include any spaces. Rapid Install records this name in the Net Services configuration and in the init<SID>.ora file.

**Conditional Action:** This note applies only if you are upgrading from Oracle E-Business Suite Release 12.1.3 with a multitenant architecture. For a multitenant architecture, set the Database SID field to your <EBS\_PDB\_Name>, that is, the pluggable database name for your Oracle E-Business Suite database.

**Important:** The database name specified in this field is used to determine the database SID. The database SID may vary depending on your environment.

- In an environment that does not use Oracle RAC, the database SID is the same as the database name.
- In an Oracle RAC environment, the instance number is appended to the database name to form the database SID for each Oracle RAC node.

If you want to use an existing ORACLE\_HOME for the upgrade, check the "Use Existing Oracle Home" check box.

**Important:** The existing database should be open.

**Conditional Action:** For Oracle Database 11g Release 2 (11.2.0.4) and Oracle Database 12c Release 1 (12.1.0.2) only, the database init.ora parameter `service_names` must have an entry called `ebs_patch`.

You must also enter a valid domain name on this screen. This value, when combined with a host (machine) name, must produce a fully qualified domain name (FQDN). For example, a hostname of `apps1` and domain name of `example.com` make up an FQDN of `apps1.example.com`

**Important:** The host name for the database tier node must be no longer than 30 characters.

The Rapid Install wizard displays a warning message if the fully qualified domain name (FQDN) exceeds 30 characters. If the host name for the database tier node is no longer than 30 characters,

then you can ignore the warning and proceed with the installation. Otherwise you must update the host name before you proceed.

You enter your Oracle RAC nodes as a comma-delimited list, in the form <node1>, <node2>.

After completing all required details, click *Next* to continue.

#### 7. Review Application User Information

The Review Application User Information screen lists usernames and the *default* passwords assigned by the wizard for the Application user.

**Important:** Record the actual passwords for your existing system before you continue.

### Review Application User Information screen

|                 |                                         |
|-----------------|-----------------------------------------|
| APPS Username   | <input type="text" value="APPS"/>       |
| APPS Password   | <input type="password" value="****"/>   |
| GWYUID Username | <input type="text" value="APPLSYSPUB"/> |
| GWYUID Password | <input type="text" value="PUB"/>        |
| Guest Username  | <input type="text" value="GUEST"/>      |
| Guest Password  | <input type="text" value="ORACLE"/>     |

As shown on the screenshot, the usernames and their respective default passwords are: APPS Username (APPS), APPS password (APPS), GWYUID username (APPLSYSPUB), GWYUID Password (PUB), Guest username (GUEST), and Guest password (ORACLE).

Complete the text fields to change all the passwords on this screen to match those in your existing system. The wizard stores this information in the configuration file.

**Warning:** Failing to record this information accurately could compromise the upgrade.

Click *Next* to continue.

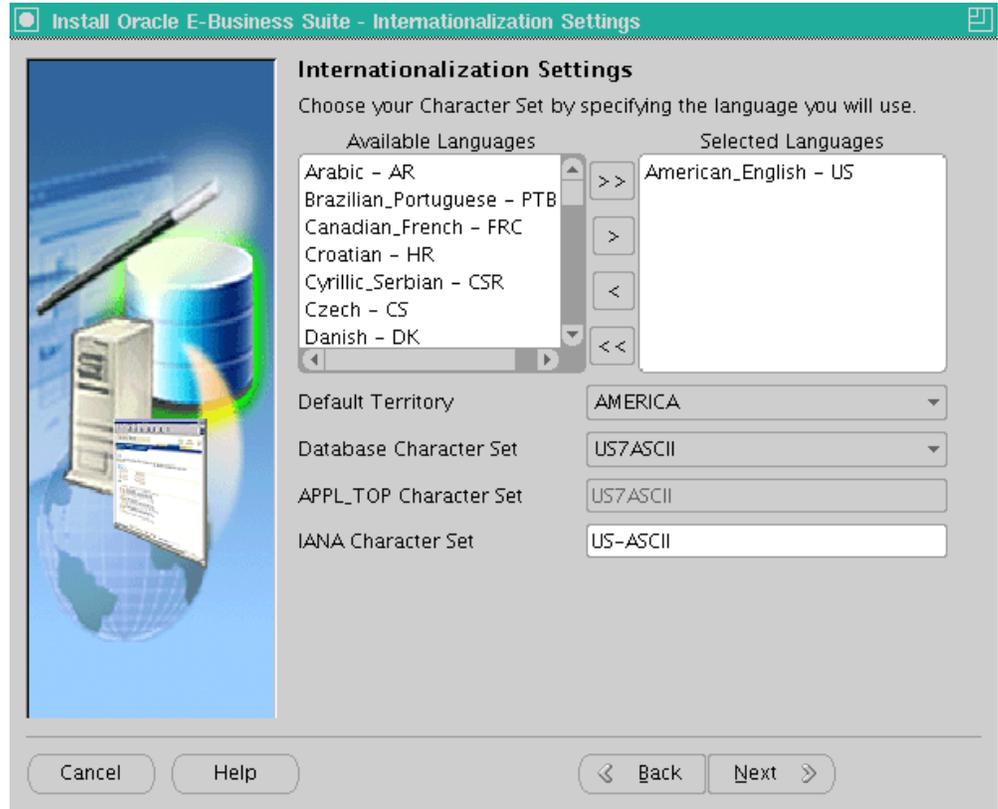
#### 8. Internationalization Settings (conditional)

The Internationalization Settings screen displays options for systems that require NLS functionality.

**Important:** As noted at the beginning of this section, the database

language and character set values you specify in this Rapid Install screen should match those of the database that is to be upgraded.

### Internationalization Settings screen



The languages you select determine the available options for the other NLS-related configuration parameters (such as base language, territory, and character set) that your system requires.

Double-click a language in the Available Languages box to move it into the Selected Languages box or highlight it and click the right arrow (>). Highlight a language in the Selected Languages box and click the left arrow (<) to remove it. To select or deselect all languages in a single action, use the double arrows, >> or <<.

**Note:** You cannot remove American English from the Selected Languages box.

You may need to perform additional tasks to finish the language installation. See *Oracle E-Business Suite NLS Release Notes* for details. You can register additional languages any time after the initial installation or upgrade. See *Registering Languages* in *Oracle E-Business Suite Setup Guide*.

This screen displays Rapid Install defaults, as described in the following paragraphs.

**Selected Languages:** If you have other active languages in your existing system, you can change the default, and add languages to reflect the existing database character set.

**Default Territory:** This field is set to AMERICA, and should remain so during the upgrade. Your system administrator can change this value after the upgrade, if necessary.

**Database character set and APPL\_TOP character set:** Defaults to a common character set that is compatible with the active languages indicated on the Select Additional Languages screen. If they are not the character sets in your existing system, select the correct ones from the drop-down list.

**Important:** If a database connection can be established, the current database character set is automatically used and the character set selection screen not displayed. If a connection cannot be established, you must specify the current database character set (and no other) in the selection screen that is then displayed.

**IANA character set:** The Internet Assigned Numbers Authority character set is the Internet-assigned standard used by the Web server. For more information, see <http://www.iana.org/assignments/character-sets>.

If necessary, change this value to indicate the one used in your existing system. Click *Next* to continue.

#### 9. Enter Primary Applications Node information

You have already specified the top-level directory and the mount points for the database. Now you must specify the top-level directory and subdirectories associated with the primary Applications node, on which Rapid Install will lay down the Oracle E-Business Suite Release 12.2 file system.

### Primary Applications Node Configuration screen

|                            |                                                                                    |
|----------------------------|------------------------------------------------------------------------------------|
| Primary Host Name          | <input type="text" value="appserv1"/>                                              |
| DNS Domain Name            | <input type="text" value="example.com"/>                                           |
| Operating System           | <input type="text" value="Linux x86-64 (64-bit)"/>                                 |
| Apps OS User               | <input type="text" value="oracle"/>                                                |
| Apps OS Group              | <input type="text" value="dba"/>                                                   |
| Apps Base Dir              | <input type="text" value="/d01/oracle/VIS"/> <input type="button" value="Browse"/> |
| Apps Instance Dir          | <input type="text" value="/d01/oracle/VIS"/> <input type="button" value="Browse"/> |
| File System 1 Base Dir     | <input type="text" value="/d01/oracle/VIS/fs1"/>                                   |
| File System 2 Base Dir     | <input type="text" value="/d01/oracle/VIS/fs2"/>                                   |
| File System 1 Instance Dir | <input type="text" value="/d01/oracle/VIS/fs1/inst"/>                              |
| File System 2 Instance Dir | <input type="text" value="/d01/oracle/VIS/fs2/inst"/>                              |
| Non-Editted File System    | <input type="text" value="/d01/oracle/VIS/fs_ne"/>                                 |
| APPLCSF Dir                | <input type="text" value="/d01/oracle/VIS/fs_ne/inst/VIS"/>                        |
| AppsLog Distribution       | <input type="text" value="Single"/>                                                |

**Important:** The node name returned by the operating system 'hostname' command for the application tier node must be no longer than 30 characters. If you configure your system to return only the host name for the node, without the domain name, then the host name must be no longer than 30 characters. If you configure your system to return the fully qualified domain name (FQDN), then the FQDN must be no longer than 30 characters, including the host name, domain name, and periods (.) used as separators.

The Rapid Install wizard displays a warning message if the FQDN exceeds 30 characters. If your system returns only the host name as the node name, and the host name is no longer than 30 characters, then you can ignore the warning and proceed with the installation. Otherwise you must update your configuration before you proceed.

The default directories use the syntax of the operating system on which you are running Rapid Install. You can either accept the defaults, or enter new values. When entering the host name, ensure that you specify the host name in lower case. Using upper case or mixed case for the host name is not supported. Additionally, the host name must begin with an alphabetic character and cannot include an underscore (\_) character.

Some of the fields are operating system dependent: for example, the UNIX Toolkit directory and Visual Studio directory are specific to Windows. If using a Windows platform, enter the location of the MKS (or Cygwin) tools in the UNIX Toolkit directory field, and the location of the Visual C/C++ executables and DLLs in the Visual Studio directory field. If using a UNIX system, complete the information for the Apps OS User (the account that owns the Applications node file system and technology stack) and Apps OS Group (the group to which the Apps OS User belongs).

The *Base directory* is the top-level directory that Rapid Install will use to derive the mount points for the Applications node. You can accept the default or enter a new value. Click Browse to navigate to a new path, and double-click the required directory to select it.

The *Instance directory* (new in Release 12) stores instance-specific files, including runtime generated files, log files, and configuration files. It can be a local directory (for better access speed). It does not have to be in a shared location.

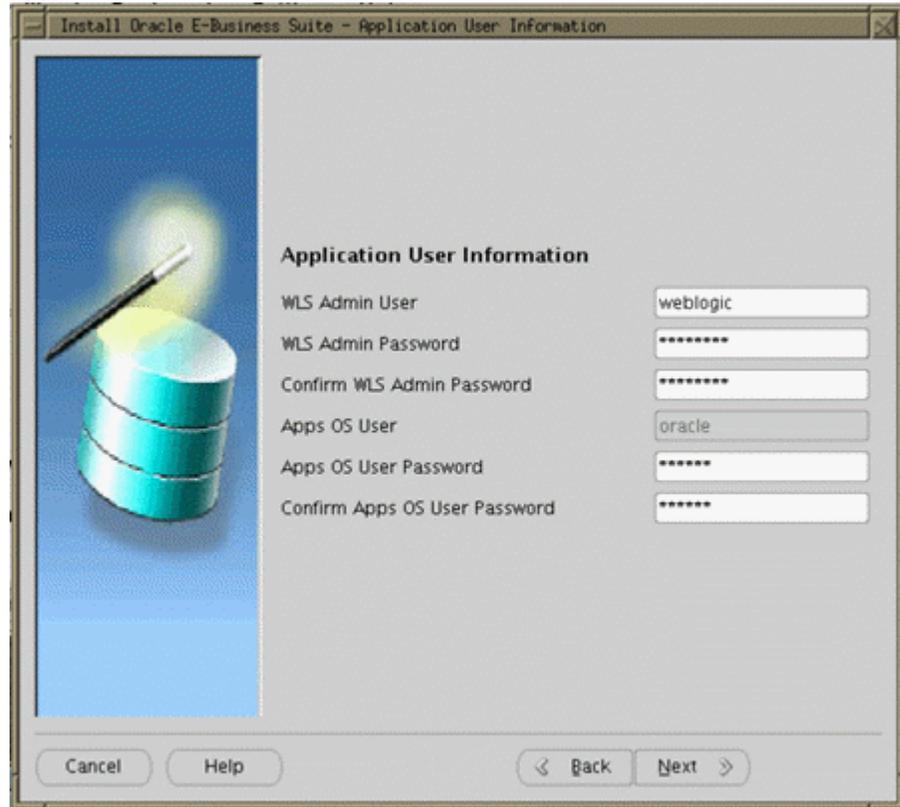
### **Creating Additional Applications Nodes**

Rapid Install is no longer used to create additional Applications nodes. Instead, you will use it to create a single Applications node, allow the Rapid Install session to complete, apply the latest AD and TXK patches to bring the node to the current codelevel, and then run the requisite cloning commands to create as many additional Applications nodes as required. This strategy avoids the need to apply the patches to multiple nodes, thus saving time and effort and reducing the risk of error.

**Note:** Scaling the environment is covered in Performing Post-Upgrade Tasks, page 5-1.

## **10. Supply Application User Information**

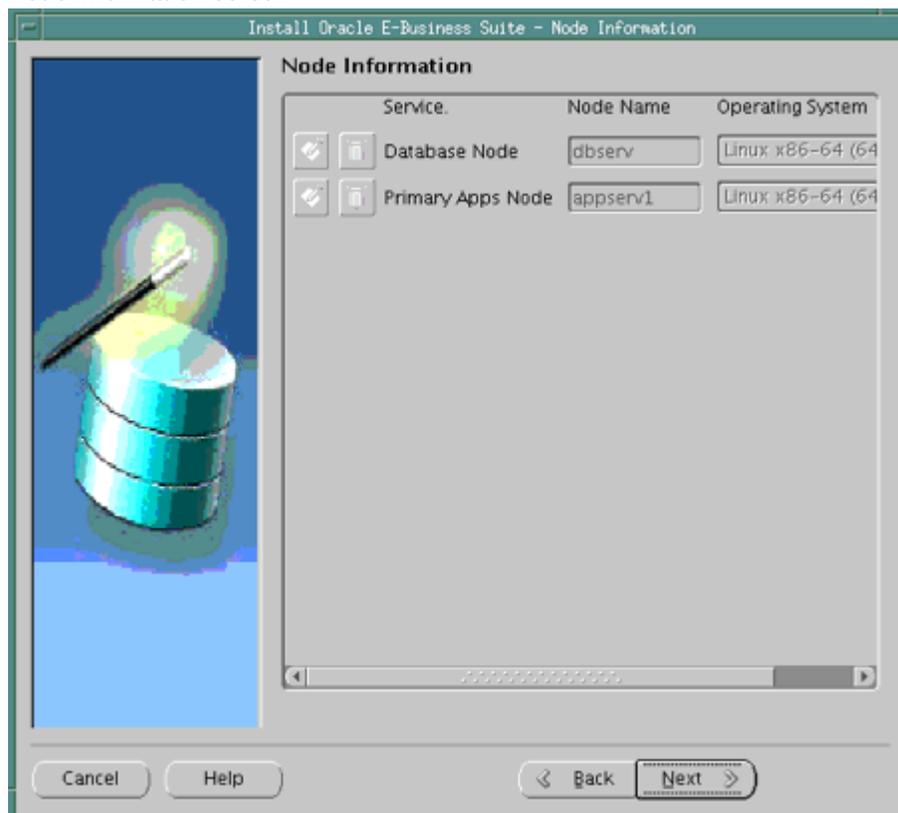
**Application User Information screen**



**11. Review Global Settings**

Rapid Install uses the values specified on the Global Settings screen to identify a qualified domain name and to derive port settings that your system will use to connect services and listeners.

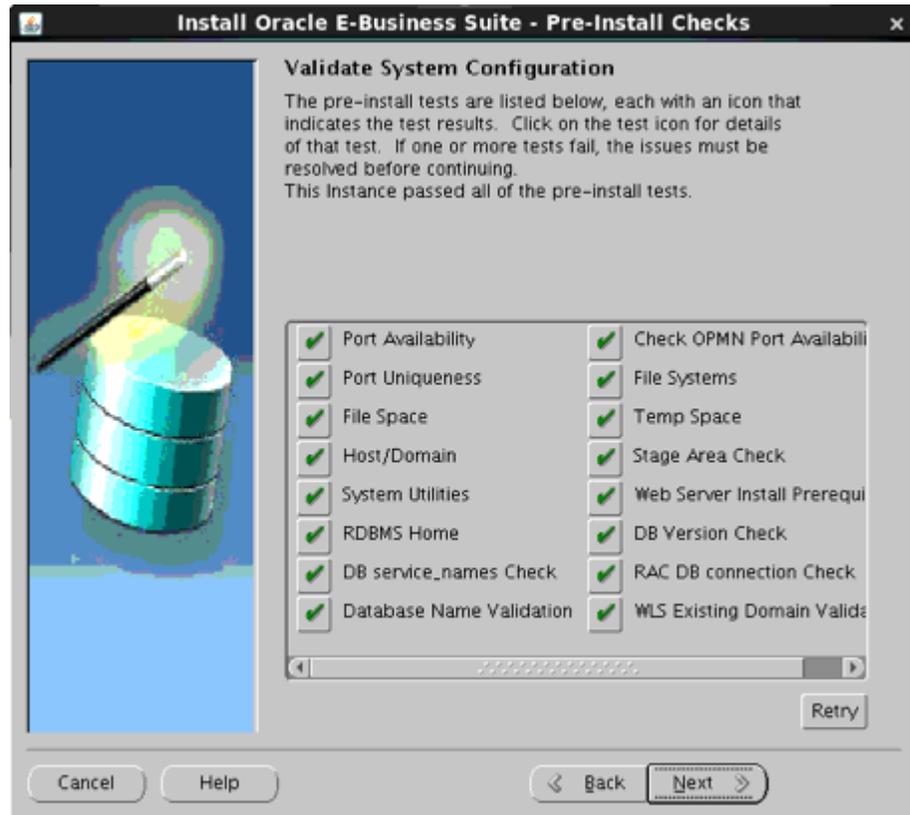
**Node Information screen**



**12. Review Pre-Install Checks**

Rapid Install begins to validate the configuration described by your configuration file. It lists the tests performed on the Pre-Install Checks screen and marks each one with an indication of whether it succeeded or failed.

### Pre-Install Checks screen



The results of each test are labeled using an icon. There are three types:

- Check mark

The test succeeded. Click the mark to obtain details of the test performed.

- Exclamation mark (!)

The configuration requires review. Click the ! to obtain information from the system test review. Rapid Install alerts you if you continue without resolving the issues.

- An x mark

All issues marked x must be resolved before you continue with the installation. Click the x to see the errors. If you can resolve an issue by fixing the values provided on the settings screen(s), click *Back* until you reach the appropriate screen, and re-enter the values. Some tests must be resolved in the operating system. In that case, you may have to restart the Rapid Install wizard after the problem has been fixed.

**Important:** The following pre-installation checks are expected to fail if the database is down during creation of the upgrade file system:

- Technology Codelevel
- Database Version
- Database Name Validation
- Database Service Name

You should therefore verify the results of all these tests manually.

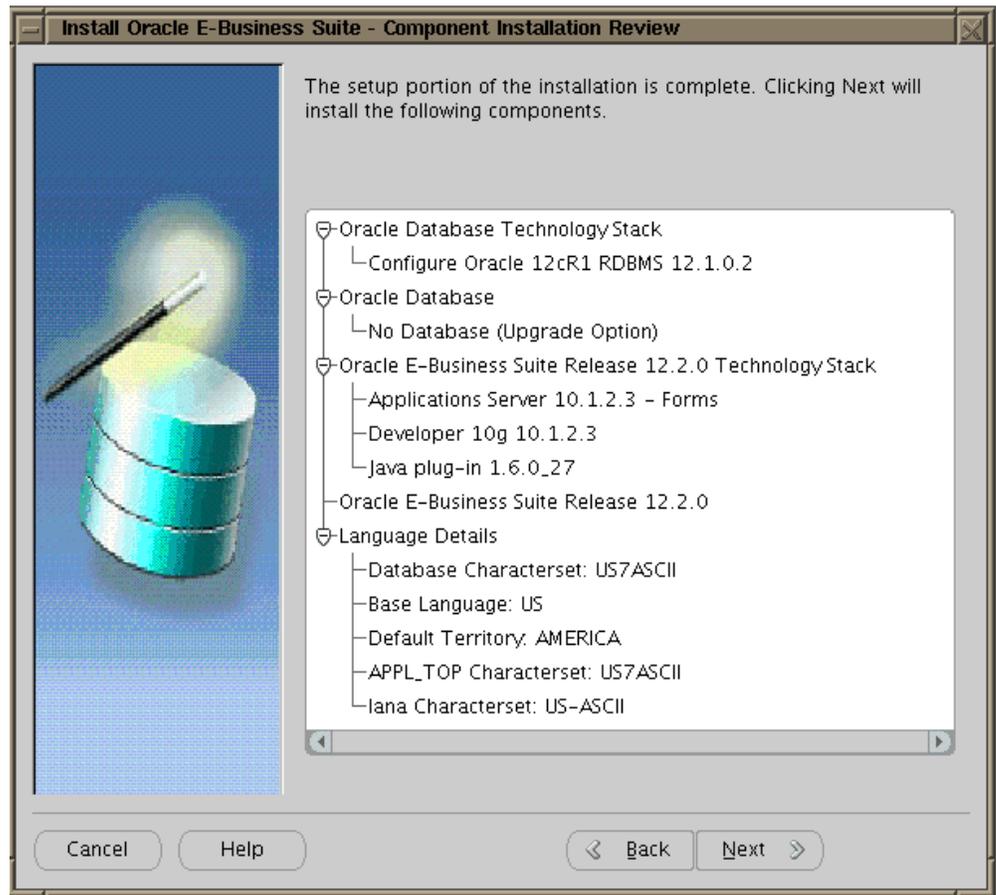
**Conditional Action:** This note applies only if you are upgrading from Oracle E-Business Suite Release 12.1.3 with a multitenant architecture. For a multitenant architecture, you can ignore the failure related to 'DB service\_names check'.

When there are no further issues to resolve, click *Next* to continue.

### 13. Run Rapid Install

Rapid Install lists the actions it will take during the installation process. The content of the list varies, depending on your installation choices.

### Component Installation Review screen



Click *Next* to continue. Rapid Install displays another alert screen asking you to verify that you are ready to begin the installation. Click *Yes* to continue.

Rapid Install creates new file systems for the application tier, and the 12cR1 Oracle Home for the database.

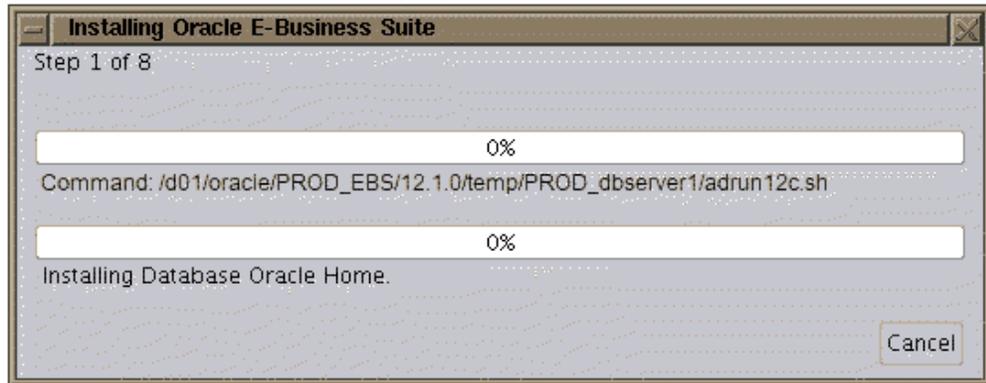
### Monitor Installation Progress:

1. Check progress bars

During an installation, Rapid Install displays a main progress bar and an individual progress bar. The main progress bar reports on the completion percentage of the installation as a whole. The individual progress bar reports on the progress of each individual step.

**Important:** The installation is not complete until all progress bars have disappeared from your screen.

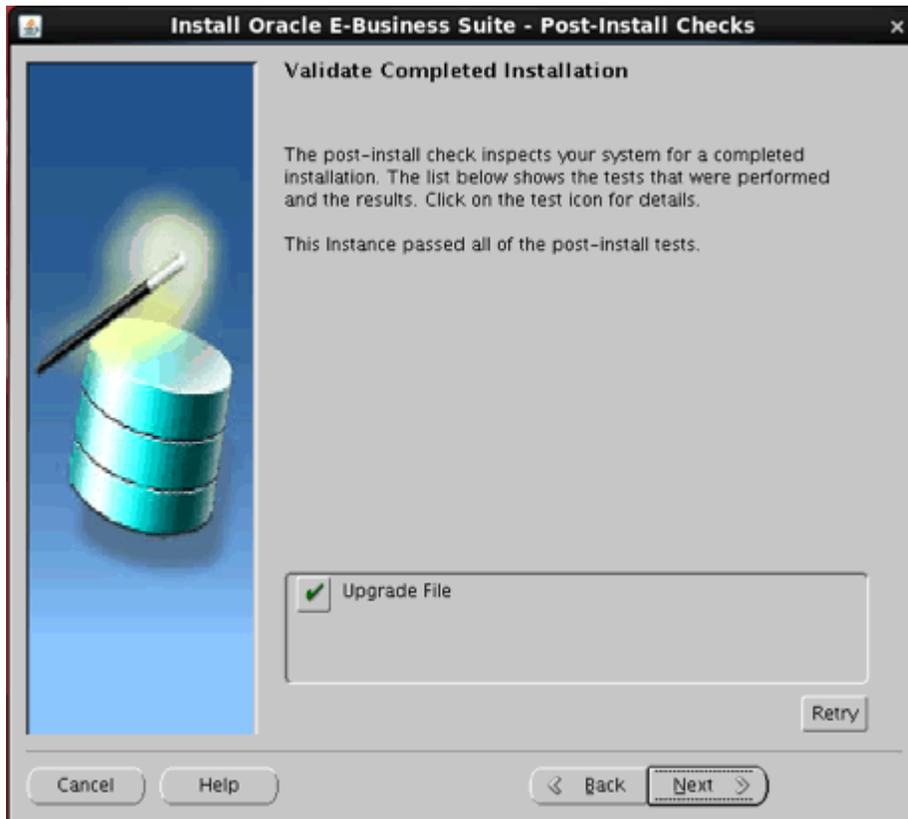
### Installing Oracle E-Business Suite progress screen



## 2. Review Post-Install Checks

When the processing is complete, Rapid Install displays the Post-install Checks screen.

### Post-Install Checks screen

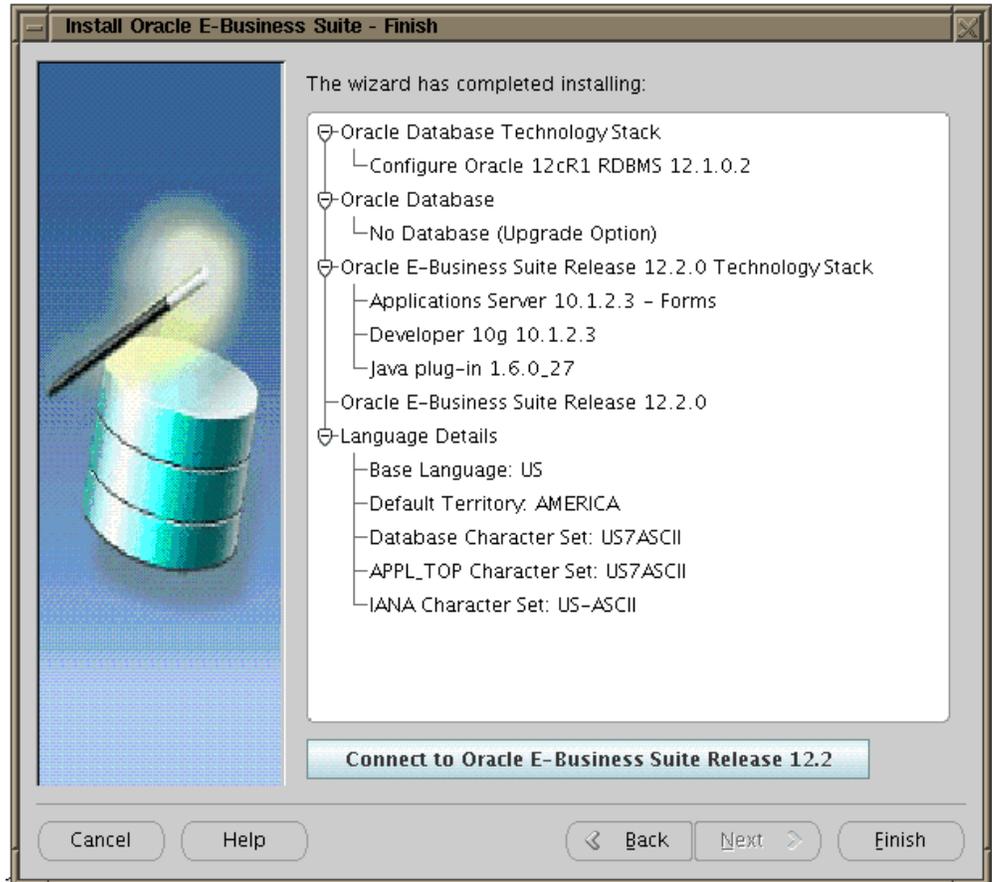


If the test does not succeed, review the errors listed on the screen. Click the *Back*

button to return to the appropriate screens and make corrections as needed. Then click the *Retry* button.

If there are no errors, click *Next*. Rapid Install displays a Finish screen that lists the components that it has installed, and describes any steps you need to perform to complete the upgrade. Review the information on this screen, and click *Finish* to exit Rapid Install.

### Finish screen



## Preparing the System for Upgrade

### Apply Required Application Tier Patches:

Ensure that the required middle tier patches for Oracle E-Business Release 12.2 have been applied.

**Required Action:** Follow the instructions in the *Oracle E-Business Suite*

*Release 12.2: Consolidated List of Oracle Fusion Middleware Patches and Bug Fixes* (Doc ID: 2877607.1) to do the following:

- Check for missing middle tier patches by executing the Oracle E-Business Suite Technology Codelevel Checker (ETCC) - checkMTpatch.sh.
- Apply the latest middle tier patches identified in the report as missing.
- Confirm successful application or required middle tier patches by re-executing the Oracle E-Business Suite Technology Codelevel Checker (ETCC) - checkMTpatch.sh.

### **EBS Tech Patch Automation Tool - Application Tier (ETPAT-AT):**

EBS Tech Patch Automation Tool - Application Tier (ETPAT-AT) can be used to apply missing technology one-offs to the Oracle E-Business Suite Release (EBS) Release 12.2.0 application tier.

ETPAT-AT automates patching of technology one-offs for the following components of the Oracle E-Business Suite Release (EBS) Release 12.2.0 application tier.

- FMW WebTier 11.1.1.9
- Oracle WebLogic Server 10.3.6 Smart Update Patch
- Oracle WebLogic Server 10.3.6.0
- FMW oracle\_common 11.1.1.9
- Forms and Reports 10.1.2.3

**Additional Information:** For additional information, refer to *Using the EBS Technology Patch Automation Tool for Application Tier (ETPAT-AT)* (Doc ID: 2749774.1) on My Oracle Support.

### **Drop Event Alert Triggers in Custom Schemas (conditional):**

To drop all event alert database triggers in custom schemas, run the aldrtrig.sql script, located in \$ALR\_TOP/patch/115/sql. Re-create the triggers after the upgrade is complete.

### **Validate GUEST Account:**

Supported in EURC-DT: Yes

Ensure that the GUEST account is valid and active and that the fnd\_user USER\_ID for the GUEST account is set to a value of '6'. For example, the following should return 'Y' if the GUEST account is valid and active:

```
SQL>
select fnd_web_sec.validate_login('GUEST','ORACLE') Valid from dual;

VALID

Y
```

If 'N' is returned, then query the error message for more info:

```
SQL> select fnd_message.get from dual;
```

## Convert to Multiple Organizations Architecture (Required)

Applies to 11*i* release level: All

TUMS step key: FND\_ENABLE\_MULTI\_ORG

Multiple Organizations architecture supports performance improvements across all Oracle Applications. It also supports Multiple Organizations Access Control, which enables an Applications responsibility to access multiple operating units if desired. This release requires that Multiple Organizations be enabled. If you have not done so already, you must convert to this architecture now.

Converting to Multiple Organizations does not require the use of multiple operating units or sets of books - it does enable you to use this functionality at any time in the future.

If you are converting from a Single Organization architecture to a Multiple Organization architecture, complete the following steps:

1. Create an operating unit.
2. Assign the operating unit you created to the profile option MO:Operating Unit.

**Note:** See the following documentation references: *Use of Multiple Organizations in Release 12* in *Use of Multiple Organizations (Multi-Org) in Release 11i* (Doc ID: 210193.1), and *MOAC in Oracle Purchasing* (Doc ID: 404800.1). HRMS users should also see *Setting Up Multiple Organizations for Oracle HRMS* (Doc ID: 259546.1).

## Convert Oracle Alert E-Mail Processing to the Workflow Notification Mailer (Conditional)

Applies to 11*i* release level: All

TUMS step key: FND\_WORKFLOW\_TASKS

Oracle Alert leverages the Workflow Notification Mailer to send alert e-mail messages and process responses, obsoleting the previous e-mail implementation. All incoming responses to alerts sent by the previous Oracle Alert E-mail implementation must be completed before the upgrade.

If you use response processing alerts and you have not already converted Oracle Alert to the Workflow Notification Mailer, convert now by applying Oracle Applications Technology 11i.ATG\_PF.H Rollup 6 (patch 5903765) to your Release 11i APPL\_TOP. This roll up patch causes Oracle Alert to use the Workflow Notification Mailer for new alerts, but allows you to continue to run the Alert Response Processor for incoming responses sent before the conversion. Continue to run the Response Processor until you have no more outstanding responses of this kind.

**Note:** See *About Oracle Applications Technology 11i.ATG\_PF.H Rollup 6* (Doc ID: 444524.1) for more information.

## Customer Relationship Management Tasks

Complete the tasks only if you are using Customer Relationship Management products.

**Note:** If you are upgrading your system from release 11.5.5 or any lower version to any higher release level, then you must create a directory object at the target system as follows:

Create or replace the directory AMS\_OA\_MEDIA\_PATH with '&media path' ;

Note that media\_path is the path described in the profile AMS:  
OA\_MEDIA Path

### Marketing, Sales, or Trade Management:

Perform these tasks if you have Oracle Marketing or Sales products or Oracle Trade Management products active in your system.

1. Create new product catalog (conditional)

Oracle Product Hub (PDH) is a market-leading solution, providing customers with tools to centralize all product information from heterogeneous systems, creating a single product repository that can be leveraged across all functional departments. There are several paths to creating the new product catalog, based on individual system configuration. For a description of all the options and the steps required to implement them, refer to *Oracle Applications Sales & Marketing Product Catalog Upgrade* (Doc ID: 396079.1).

**Additional Information:** See *Oracle Product Hub User's Guide* and

*Oracle Product Hub Implementation Guide* for more information.

### **Incentive Compensation:**

Perform these tasks if you are using Oracle Incentive Compensation.

1. Verify completion of Sales Compensation processes (conditional)

Applies to 11*i* release level: All

TUMS step key: CN\_PAYRN\_REP\_CHK

To verify that your Sales Compensation setup data is ready for the upgrade, download and apply patch 4963569 to your Release 11*i* APPL\_TOP. This patch contains cnupgchki.sql (located in the first database directory defined for PL/SQL file I/O.) Run this script manually. It creates a report that tells you what pre-upgrade steps are required. You can also view the results of the report in concatenated format in the AutoPatch log file (cnupgchki.log).

**Additional Information:** See My Oracle Support Knowledge Document 2525754.1, Using UTL\_FILE\_DIR or Database Directories for PL/SQL File I/O in Oracle E-Business Suite Releases 12.1 and 12.2 for more information.

The following remedies are suggested for errors listed in the report:

| <b>If this error exists...</b>                                           | <b>Take this action before running the upgrade...</b>    |
|--------------------------------------------------------------------------|----------------------------------------------------------|
| Calculation processes are not completed                                  | Complete all calculation processes before the upgrade.   |
| The following is a list of payruns that have not been paid               | Pay these payruns before the upgrade.                    |
| The following salesreps have calculated lines that are not posted        | Post all commission lines before the upgrade.            |
| There are non-zero posted transactions that are not loaded               | Load and pay all posted transactions before the upgrade. |
| The following salesreps have posted transactions that have not been paid | Pay all posted transactions before the upgrade.          |

| If this error exists...                                                                  | Take this action before running the upgrade...    |
|------------------------------------------------------------------------------------------|---------------------------------------------------|
| The following salesreps have inconsistent data between commission lines and posted lines | Resolve these inconsistencies before the upgrade. |

### Mobile Field Service:

Perform these tasks only if you are using Oracle Mobile Field Service.

1. Synchronize data for Mobile Field Service (conditional)

Applies to 11i release level: All

TUMS step key: CSM\_SYNC\_DATA

All Mobile Field Service users with changes pending in their mobile device should synchronize the mobile server. Do not make any additional changes using the Mobile Field Service application until the upgrade is complete, and all users have successfully re-synchronized.

### Sales and Telesales:

If you are currently on 11.5.10.2CU release level or have upgraded to 11.5.10.2CU as an upgrade task for the 12.2 release, then run the *Update as\_accesses\_all denorm flag* request set as follows:

From the Oracle Sales Administrator responsibility, navigate to Concurrent Requests > Run. Select and run the *Update as\_accesses\_all denorm flag* request set.

### TeleService:

Perform these tasks if you are using Oracle TeleService.

1. Set up profile option for TeleService (Required)

Applies to 11i release level: All

TUMS step key: N/A

Service upgrade scripts have been enhanced to allow you to choose the most appropriate upgrade path based on the value in the profile option Service: Upgraded Release (For Development User Only). The value in the profile option indicates the current Service version before the upgrade. Please make sure you have this profile value set to 11510 before performing the upgrade.

If you don't already have this profile option, then you can create it with an internal name CS\_SR\_UPDATE\_RELEASE and set the value to 11510 at the System level if it is not already present. This guide assumes that you are upgrading from MBL

version 11i.

## Financials and Procurement Tasks

Complete these tasks only for the Financials and Procurement products that are active in your system.

### The Catalog Data Pre-upgrade Process:

TUMS Step Key: ICX\_CATALOG\_MIG

This pre-upgrade process is mandatory if you are upgrading iProcurement from 11.5.10. This process runs the scripts that actually run during the upgrade process and prevents performance issues during upgrade. It pre-processes bulk-loaded content to reduce the actual time required for the upgrade and to ensure the upgrade process runs smoothly. You can run it multiple times. If exceptions are found, make corrections and re-run the program until no exceptions are noted. Running this program does not require your users to log off the system.

**Note:** Exceptions noted and not fixed before the upgrade will not be available in the iProcurement Catalog.

Specifically, this program shortens the time it takes to run these upgrade scripts:

- icxiftug.sql: updates POR\_TEMPLATE\_INFO
- icxr12in.sql: general setup upgrade script needed for iProcurement
- poxujpoh.sql: updates PO\_HEADERS\_ALL (for example, create\_language)
- poxukpol.sql: updates PO\_LINES\_ALL (for example, ip\_category\_id)
- poxukrt.sql: updates PO\_REQEXPRESS\_LINES\_ALL (for example, ip\_category\_id)
- icxr12ug.sql: migrates iProcurement data model to PO
- icxr12rt.sql: populates the requisition templates in iProcurement intermedia index tables
- icxr12pd.sql: populates the Purchasing documents in iProcurement intermedia index tables: blanket purchase agreements (BPAs), global blanket agreements (GBPAs), and quotes
- icxr12mi.sql: populates the master items in iProcurement intermedia index tables
- poxukfi.sql: purchasing script to approve the GBPAs created during iProcurement migration

- poxukat.sql: purchasing script to update the attachments
- icxr12fi.sql: final upgrade script, which upgrades favorite lists, purges the BPAs and GBPAs that are not approved, and creates the intermedia index

To run the pre-upgrade, perform the following steps:

1. Run the extractor to ensure that the iProcurement extracted catalog data is updated.
2. Apply the pre-upgrade patch (4914492). It inserts a new entry in the eContent Manager menu called Release 12 Data Migration, which you can use to run the data exceptions report and/or the pre-upgrade.
3. Run the exceptions report prior to the pre-upgrade. The report lists data that cannot be automatically upgraded and must be fixed before the upgrade. The pre-upgrade processes the catalog data to the new data model to reduce upgrade downtime. If there are still exceptions, it also updates the exceptions report.

The exceptions report divides exceptions into two categories: those to be fixed using an XML file and reloaded into the catalog, and those to be fixed by correcting system default values.

### **Advanced Collections:**

Perform this task only if you are using Oracle Advanced Collections.

1. Strategy Workflow checks.

Applies to 11i release level: All

TUMS step key: IEX\_STRATEGY\_CHECK

Apply the diagnostic scripts patch 11i 13027498. This patch contains scripts for Collection Strategy Workflow.

From the Collections Agent responsibility using the user name 'SYSADMIN', stop any scheduled Workflow Background Process concurrent program request for the following Item Types:

- IEXSTRY - IEX: Collection Strategy Work Flow
- IEXSTFFM - IEX: Strategy Fulfilment Mailer
- IEXSTRCM - IEX: Strategy Custom Work Flow

Run the script `$IEX_TOP/patch/115/sql/iexswowf.sql` to check and clean the strategies running without workflow.

Run the script `$IEX_TOP/patch/115/sql/iexstorg.sql` to update Org\_ID column in IEX\_STRATEGIES table to operate Strategy by Operating unit.

**Important:** This step requires that you apply IEX 11i.IEX.H Rup# 5 for the iexstorg.sql file to exist. Apply the prerequisite patch 6500218 before applying patch 13027498.

### **Loans Funding Advices:**

Perform this task if you are using Direct Loans in the Oracle Loans application.

#### **1. Loans Funding Advices.**

Applies to 11i release level: All

TUMS step key: LNS\_FUNDING\_CHECK

You must run the 'LNS: Update Funding Status' concurrent program for all loans in the application before upgrading to release 12. The concurrent program processes all 11i Accounts Payable (AP) payments related to Loans and Update Loan status.

In release 11i, loan funding advices paid in AP are recognized manually by running the concurrent program 'LNS: Update Funding Status', or by navigating to the Funding tab of the loan.

In release 12, the manual process is improved in the Payment application to call back loans upon payment.

### **Financials for India:**

Perform these tasks only if you are using Oracle Financials for India

#### **1. Set minimum patch levels (conditional)**

Applies to 11i release level: Patch level lower than IN60105D2

TUMS step key: JAI\_CHECK\_CUST

This step applies if you are not at the following patch levels. If you have already applied the patch set, or a later one, you can omit this step.

- Oracle Financials for India patch set IN60105D2 (included in Release 11i patch 4153130)
- Oracle Financials for India Service Tax Solution (Release 11i stand-alone patch 4239736)
- Oracle Financials for India Value Added Tax Solution (Release 11i stand-alone patch 4245089)
- Oracle Financials for India Tax Deduction at Source Solution (Release 11i stand-alone patch 4860026)

If you have not applied patch set IN60105D2 and the three stand-alone patches,

then apply the patch set (included in patch 4153130), and the consolidated patch 4923208 for the stand-alone patches before you upgrade.

### General Ledger:

Perform these tasks only if you are using Oracle General Ledger.

1. Run Accounting Setup Manager Diagnosis for MRC (optional)

Applies to 11*i* release level: All

TUMS step key: GL\_MRC\_REVIEW\_SETUP

The Accounting Setup Manager replaces many forms and user interfaces in this release. We recommend that you run the Accounting Setup Manager Pre-Update Diagnosis report to identify potential incompatibilities that would prevent you from using some new features. The report identifies Release 11*i* setup for Multiple Reporting Currencies, General Ledger, Global Accounting Engine, Assets, Payables, and Receivables. In order to run this report successfully, apply patch 5259121 to your Release 11*i* APPL\_TOP.

To access the report, run the Accounting Setup Manager Pre-Update Diagnosis report in the Standard Request Submission form from a General Ledger responsibility. Review the report and fix any setup it identifies as problematic. Note that modifying setup configurations is not easily done after the upgrade is complete.

**Note:** You can run the upgrade successfully without running this report or modifying the setup. All the features will function similarly to Release 11*i*. However, you may not be able to take advantage of some new functionality.

The report also details what changes, if any, the upgrade will have on certain objects. The following areas of the report show details in a tabular format. The table columns show necessary information, such as the reporting set of books name, currency, and description for unassigned reporting sets of books.

- Sets of Books: Review Sets of Books To Be Upgraded to Secondary Ledgers
- Multiple Reporting Currencies: Unassigned Reporting Sets of Books
- Multiple Reporting Currencies: One Reporting Set of Books Assigned to Multiple Primary Sets of Books
- Multiple Reporting Currencies: Reporting Sets of Books With Translated Currencies
- Multiple Reporting Currencies: General-Ledger-Only Reporting Sets of Books

- Multiple Reporting Currencies: Inconsistent General Ledger Conversion Rules
- Multiple Reporting Currencies: Inconsistent Setup
- Multiple Reporting Currencies: Incomplete Setup

### **iPayments:**

Perform these tasks only if you are using Oracle iPayments.

1. Prepare data for credit card encryption upgrade (conditional)

Applies to 11*i* release level: See text for conditions

TUMS step key: IBY\_SEC\_UPGRADE

Complete this step only if you are using credit card encryption in Release 11*i*.

Oracle Payments (renamed from iPayments in Release 11*i*) handles credit card encryption, along with encryption of other payment cards and third-party bank accounts. If you are using Credit Card Encryption in Release 11*i*, then you need to prepare your data for the upgrade to the new encryption model.

**Recommended:** If you are using the Oracle Applications Credit Card Encryption feature that was introduced as a patch after Release 11.5.10, we recommend you complete all the historical credit card data migration programs provided with the patch. See the "Upgrade Steps for Credit Card Encryption" section in *Oracle Applications Credit Card Encryption* (Doc ID: 338756.1) for more information.

**Required:** If you are using the Oracle iPayment encryption feature, and have not yet moved to the enhanced Oracle Applications Credit Card Encryption feature, then you must apply patch 4607647 to your Release 11*i* APPL\_TOP and complete the steps described in the *Oracle Applications Credit Card Encryption* white paper.

### **Internet Expenses:**

Perform these tasks only if you are using Oracle Internet Expenses.

1. Import expense reports into Accounts Payable (conditional)

Applies to 11*i* release level: All

TUMS step key: OIE\_IMPORT\_INTERCOMPANY\_CHECK

Perform this step only if you have intercompany data in Internet Expenses (OIE) interface records that must be imported into Oracle Payables.

In this release, the Expense Report Import concurrent program is obsolete. Therefore, you must submit this program prior to the upgrade to ensure that all intercompany data in Internet Expenses interface records is imported into Oracle Payables. Fix any rejections and resubmit the program until all records are imported successfully.

## Payables:

Perform these tasks only if you are using Oracle Payables.

### 1. Import all invoices from Payables Open Interface (Required)

Applies to 11i release level: All

TUMS step key: AP\_IMPORT\_INVOICES\_CHECK

In this release, global descriptive flex fields (GDFs) are obsolete and are moved into tax and payment columns. Several validations are performed based on the country the invoice is imported from on these GDFs. They are not upgraded in the open interface tables.

Import all invoices that have not yet been imported by running the Open Interface Import program on the 11i APPL\_TOP. Resolve any rejections and resubmit the program until all invoices are imported.

### 2. Confirm or cancel all un-confirmed Payment Batches (Required)

Applies to 11i release level: All

TUMS step key: AP\_CNFM\_PAY\_BATCH\_CHECK

With the introduction of Oracle Payments, the new payment batch model is not compatible with 11i payment batches. To ensure that there are no in-process payment batches included in the upgrade processing, either confirm or cancel all payment batches before you begin.

### 3. Verify that accounting data has been transferred (Required)

Applies to 11i release level: All

Verify that all Accounts Payable accounting data has been transferred prior to the upgrade. If it is determined that there is untransferred data, then transfer it before continuing.

### 4. Run the Accounting Health Check (Required)

This step gathers information about specific known data corruptions in AP Accounting Tables as described in Payables Accounting Health Check (Doc ID: 416699.1). It runs the Accounts Payable Accounting Health Check (APAtgHealthCheck.sql) for you.

The script APAtgHealthCheck.sql takes 3 parameters:

- Start Date - Include data created/updated on or after this date
- Detail level - Detail or Summary
- Maximum Rows Returned

Three report files will be generated and displayed after execution, one following the

other:

- APAtgHealthCheck\_Summary\_MMDDHHMM.txt - Shows summary of all errors/problems
- APAtgHealthCheck\_MMDDHHMM.txt - Shows summary of all error/problems with error/warning details
- APAtgHealthCheck\_Details\_MMDDHHMM.txt - Shows detail of all errors/problems

Review the output very carefully, if the output indicates that there is data corruption, then you should log a SR (Service Request) for the Accounts Payable product and upload the output file with your SR.

**Note:** Only records which actually have errors will have data listed in that column. Ideally, you would like to see records in the output and no values in the Error column.

#### 5. Account Payables Trial Balance Reports (recommended)

Run the Accounts Payable Trial Balance, Posted Invoice Register, and Posted Payment Register reports. After the upgrade, run the same reports in your upgraded environment and compare the results. The R12 reports run for a ledger or a ledger set, not within the context of a single operating unit. The Release 11*i* reports run within a single operating unit. Depending on your system configuration, you may need to sum several of the 11*i* reports to tie to the new versions.

**Note:** Ensure that the Accounts Payable Trial Balance is reconciled to GL before the upgrade. If there is any incorrect data included in the report, then ensure it is corrected in the 'Clean Data' step before upgrading.

#### 6. Apply pre-upgrade Generic Data fixes (GDF) (recommended)

You should clean up any data issues in R11*i* before upgrading. If you have to fix R11*i* data after the upgrade, then it will be more complex due to more and different tables and code involved. In addition, bad R11*i* data can cause the upgrade to fail. As part of your effort to clean data in R11*i* before the upgrade, review the *Generic Data fix (GDF)* (Document ID: 874903.1). See: *What is a Generic Datafix Patch (GDF) and what GDFs are available for Payables?* and ensure that you apply any applicable GDF fixes from the 'Pre-upgrade' section of the note to your R11*i* instance before upgrading.

## Subledger Accounting:

Perform these tasks only if you are using Oracle Subledger Accounting and any of the associated products (see list included in Step 1).

### 1. Set range of periods (optional)

Applies to 11i release level: All

TUMS step key: N/A

During the upgrade, existing accounting data from the subledgers is upgraded into the new Oracle Subledger Accounting data model. By default, the upgrade updates the data for the current fiscal year, as well as the necessary periods of the previous fiscal, to ensure that there are at least six periods included in the upgrade (occurs when the upgrade is performed in the first half of the fiscal year).

You may need to run the SLA Pre-Upgrade program if you are using Oracle General Ledger and at least one of the following subledgers: Assets, Cost Management, E-Business Tax, Payables, Receivables, or Projects Accounting. This optional program allows you to change the default number of periods of historic data to be upgraded.

You can define a larger range of periods to be upgraded, and you can decide to perform the upgrade for all or most of the data during the downtime phase. This is an important decision because some of the Oracle Subledger Accounting functionality, such as accounting reversals and business flows, rely on the existence of previous accounting data.

If you do not perform a complete upgrade of the accounting data, Oracle Subledger Accounting allows you to perform an additional upgrade of the data by running the SLA post-upgrade process whenever the missing data is required (see Subledger Accounting, in Appendix G, ). This program is executed at the same time as daily operations. As a result, it may have an impact on overall system performance.

If you need to change the default number of periods of historic data to be upgraded, you must apply patch 5233248 to your Release 11i APPL\_TOP and submit the SLA Pre-Upgrade program. When submitting this program, you can enter the following parameters:

- **Migrate all sets of books:** Possible values are Yes (SLA Pre-Upgrade program updates the periods in all sets of books) or No (SLA Pre-Upgrade program updates the periods that belong to the selected set of books).
- **Set of books:** Set of books to be upgraded where you have selected to upgrade one set of books.
- **Start Date:** Date to be used to determine the first period to be upgraded. Does not have to be the starting date of a period - the initial period is determined as the first period in which this date falls.

## Human Resource Management (HRMS)

All custom database objects that are mapped to seeded APIs/Row Handlers must be changed from LONG/LONG RAW to CLOB.

The LONG and LONG RAW data type was obsoleted by the database group in release 8*i* and was replaced by the CLOB data type. LONG and LONG RAW remain a valid data type only for backward compatibility and have numerous restrictions. Many database features after release 8*i* do not support the LONG and LONG RAW data type, and interferes with upgrading to new technologies. Specifically, for Online Patching, LONG and LONG RAW columns cannot be referenced in a database trigger. This means that LONG and LONG RAW columns cannot be patched using Online Patching as the solution uses Cross Edition Triggers to upgrade data. Changes to seed data in the RUN edition cannot be propagated to the PATCH edition as Cross Edition Triggers are used to synchronize the changes. Due to this, all database objects/Oracle Forms/JAVA pages/PRO C/API programs have been changed to use CLOB data type that were previously using LONG and LONG RAW data types.

However, Oracle provides implicit conversion between LONG/LONG RAW data types and LOB data types, with one limitation in this conversion. The maximum size of a LOB is 128 terabytes depending on database block size, and the maximum size of a LONG is two gigabytes. If more than two gigabytes of data is assigned to LONG/LONG RAW data types from the CLOB data type, then a VALUE\_ERROR exception will be raised. All of the seed Database Objects/Oracle Forms/JAVA Pages/PRO C code/APIs have been modified to use the CLOB data type and provides more storage. If these new large values are passed to old custom programs that continue to use old LONG/LONG RAW data type and have less storage, then the exception error will be raised.

This enhancement will affect the functionality of User Hook pre-processors, Business Event pre-processors, and Data Pump pre-processors. Oracle suggests that you use the following script to identify procedure/UDF containing LONG parameters, and mapped with seeded APIs/Row Handlers:

```
SELECT
 package_name
 ,object_name
 ,argument_name
 ,data_type
FROM all_arguments
WHERE (package_name,object_name) IN
 (
 SELECT
 call_package
 ,call_procedure
 FROM hr_api_hook_calls
)
AND data_type = 'LONG';
```

**Action:** When all database objects have been identified, change the datatype to CLOB. Refer to *LONG to CLOB Conversion Procedures, Oracle E-Business Suite Developer's Guide*.

## Lease and Finance Management

Perform these pre-upgrade tasks only if you are using Oracle Lease and Finance Management.

TUMS Step Key: OKL\_LIC\_CHECK

Following are the mandatory pre-upgrade steps that must be completed before upgrading to Release 12.2.

If you are upgrading from 11*i* OKLG, then apply the OKLG Pre-Upgrade patch (patch 6027572) on 11*i* OKLG code line. If you are upgrading from 11*i* OKLH, then apply OKLH Pre-Upgrade patch (patch 6027561) on 11*i* OKLH code line.

**Note:** If you are currently on 11*i* OKLG, then the minimum requirement is that you upgrade to 11*i* OKLG Rup3 (patch 4487651). If you are currently on 11*i* OKLH, then the minimum requirement is that you upgrade to 11*i* OKLH Rup3 (patch 5350898). If you are currently on any other 11*i* codeline, then the minimum requirement is that you install 11*i* OKLH and upgrade to 11*i* OKLH Rup3 (patch 5350898).

### 1. Run OKL Billing Pre-Upgrade Report to check for pending transactions that have not been transferred to Oracle Receivables.

If there are any pending transactions, then you must run the following concurrent programs in the order given to clear the pending transactions:

1. Master Item - Process Billable Streams.
2. Master Program - Prepare Receivables.
3. Master Program - Receivables Bills Consolid.
4. Master Program - Receivables Invoice Trans.
5. Autoinvoice Master program.
6. Fetch AR Invoice Numbers.

Repeat these steps until all pending transactions are cleared.

### 2. Run OKL Disbursement Pre-Upgrade Report to check for pending transactions that have not been transferred to Oracle Payables.

If there are any pending transactions, then you must run the following concurrent programs in the order given to clear the pending transactions:

1. Pay Invoice Prepare for AP Transfer.

2. Pay Invoices Transfer to AP Invoice Interface.
3. Investor Payables Consolidation.
4. Payables Open Interface Import.

Repeat these steps until all pending transactions are cleared.

**3. Run the OKL Accounting Pre-Upgrade Report to check for pending transactions that have not been transferred to Oracle General Ledger.**

Also check for any accounting setup discrepancies. If there are pending transactions or setup discrepancies, then you must complete the following steps to clear the pending transactions and setup discrepancies:

1. Run the Accounting Entry Process.
  2. Correct accounting entries posted to the OKL sub ledger with an error using the Correct Accounting Entries window.
  3. Run General Ledger Transfer.
  4. If any accounting templates are found that have more than two template lines, then update the accounting templates that have more than two accounting template lines and remove the percentage allocation.
- 4. Run the OKL Multi-GAAP Pre-Upgrade Report to determine which operating units can be upgraded to Automated Accounting for Multi-GAAP.**

The report lists those operating units that can be upgraded to Automated Accounting for Multi-GAAP, and those that are not eligible. The report lists the reasons why a particular operating unit cannot be upgraded to Automated Accounting and the conditions that must be met before the operating unit can be upgraded to Automated Accounting. To make an operating unit eligible for upgrade to Automated Accounting, ensure that the following conditions in the pre-upgrade environment are met:

- The Reporting Product Asset Book profile option in 11*i* is defined.
- The set of books associated with the Reporting Product Asset Book must not be the same as the set of books associated with its corresponding Corporate Book.
- For all Multi-GAAP contracts, the local product and the reporting product must satisfy the following conditions:
  1. The revenue recognition method of the local and reporting product must be the same.

2. The interest calculation basis of the local and reporting product must be the same.
  3. If the book classification of the local product is Lease (Direct Finance lease, Operating lease or Sales Type lease), then the book classification of the reporting product must also be Lease (Direct Finance lease, Operating lease or Sales Type lease).
  4. If the book classification of the local product is Loan, then the book classification of the reporting product must also be Loan.
  5. If the book classification of the local product is Revolving Loan, then the book classification of reporting product must also be Revolving Loan.
  6. The pricing engine of the Stream Generation Templates associated with the corresponding Accounting Templates of the local and reporting products must be the same.
- All assets on all of the contracts in the Operating Unit must have the same corporate asset book.
  - For Multi-GAAP contracts, all assets on the Multi-GAAP contracts in the Operating Unit must have been created in the same tax asset book defined on the Reporting Product Asset Book profile option.

Re-running the OKL Multi-GAAP Pre-Upgrade Report upon making any changes in the pre-upgrade environment confirms if the particular operating unit is eligible for upgrade to Automated Accounting.

The following steps must be completed to select one or more operating units to be upgraded to Automated Accounting:

1. Navigate to Setup > Operational Options.
2. Click the Upgrade button to open the new Upgrade user interface.
3. Select the Automated Accounting value from the list of values for those operating units that need to be upgraded to Automated Accounting.
4. Click the Apply button to save the changes.
5. If a specific operating unit is not eligible to be upgraded to Automated Accounting, then the user interface displays the appropriate error message.
6. The secondary representation method can be defined as Automated Accounting only for those operating units that meet the above conditions.

Defining the secondary representation method value for operating units is an

optional pre-upgrade step. If the secondary representation method is not defined in the pre-upgrade 11*i* environment, then the operating units will be upgraded with the following default values for the secondary representation method:

- If the operating unit is not a Multi-GAAP operating unit in 11*i*, then the secondary representation method will be upgraded to Not Applicable in this release.
- If the operating unit is a Multi-GAAP operating unit in 11*i*, then the secondary representation method will be upgraded to Report in this release.

## Projects Tasks

Perform these tasks only if you are using Oracle Projects.

### 1. Complete distribution, transfer, and tieback of expense reports (conditional).

Applies to 11*i* release level: All

TUMS step key: PA\_COMPLETE\_DIST\_TIEBACK\_EXP

If you create expense reports using Pre-Approved Expenditure Entry or import unaccounted expense reports from external systems, then run the following concurrent programs for each operating unit that uses Oracle Projects as a source entry point for expense report creation, adjustment, or both:

- PRC: Distribute Expense Report Costs
- PRC: Interface Expense Reports to Payables
- Expense Report Import (must be run from the Payables responsibility)
- PRC: Tieback Expense Reports from Payables

Oracle recommends that your Projects application specialist ensure that all transactions are successfully processed and that no exceptions remain prior to the upgrade.

To assist you with this process, Oracle Projects has provided an SQL script that identifies expense reports created in Oracle Projects that have not been interfaced to Oracle Payables for all operating units. You can apply Patch 5760729 to your Release 11*i* APPL\_TOP. This patch copies the pa120u05.sql file to your Release 11*i* \$PA\_TOP/patch/115/sql directory. Your system administrator can run this script as often as necessary to verify that all transactions have been interfaced to Oracle Payables for all operating units. Additional information about the script can be found in the Patch 5760729 readme file as well as in the script file. If you are unable to complete this processing prior to the upgrade, then you can use the Invoice Workbench to manually enter the un-interfaced expense reports in Oracle Payables.

**2. Complete transfer and tieback of cost, cross charge, and revenue (conditional).**

Applies to 11i release level: All

TUMS step key: PA\_JRNL\_IMPORT\_TIEBACK\_REV

Run the following concurrent programs for each operating unit implemented in Oracle Projects and Oracle Grants Accounting. Ensure there are no exceptions.

- Journal Import: Complete Journal Import in General Ledger for all project journal sources
- PRC: Tieback Labor Costs from General Ledger
- PRC: Tieback Usage Costs from General Ledger
- PRC: Tieback Total Burdened Cost from GL
- PRC: Tieback Cross Charge Distributions From General Ledger (does not apply to Grants Accounting)
- PRC: Tieback Revenue from General Ledger

**3. Complete non-recoverable tax adjustment processing (conditional).**

Applies to 11i release level: All

TUMS step key: (To be determined at a later date)

If you adjusted expenditure items that represent supplier invoices or expense reports in Oracle Projects that have related non-recoverable tax, complete the following tasks for each operating unit:

- In Oracle Projects, run the PRC: Interface Supplier Invoice Adjustment Costs to Payables concurrent program
- In Oracle Payables, validate the adjusted invoices
- In Oracle Payables, account the adjusted invoices
- In Oracle Projects, run the PRC: Interface Supplier Costs concurrent program

Oracle recommends that your Projects application specialist ensure that all transactions are successfully processed and that no exceptions remain prior to the upgrade.

To assist you with this process, Oracle Projects has provided a script that identifies supplier invoice and expense report adjustments created in Oracle Projects that have not been interfaced to Oracle Payables for all operating units. You can apply Patch 5760729 to your Release 11i APPL\_TOP. This patch copies the pa120u05.sql file to your Release 11i \$PA\_TOP/patch/115/sql directory. Your system

administrator can run this script as often as necessary to verify that all transactions have been interfaced to Oracle Payables for all operating units. Additional information about the script can be found in the Patch 5760729 readme file as well as in the script file. You can also use either of the EXC: Transaction Exception Details concurrent reports to identify transactions in Oracle Payables that have not been interfaced to Oracle Projects. If you are unable to complete this processing prior to the upgrade, then you can use pre-approved batches in Oracle Projects to create negative miscellaneous transactions to balance the adjustments.

## Public Sector Tasks

Complete these tasks only for the Public Sector products that are active in your system.

### Contract Lifecycle Management for Federal Government (CLM)

If you are migrating to Contract Lifecycle Management for Federal Government (CLM), then review the structure changes in the new product.

## Supply Chain Management Tasks

The tasks in this section are required only if you are using Oracle Supply Chain Management products.

### Bills of Material (BOM):

Perform the following tasks if you are using Oracle Bills of Material (BOM).

1. Check for duplicate records

Applies to 11i release level: All

TUMS step key: BOM\_CHECK\_FOR\_BOM\_HEADER\_DUPLICATES

Run the following query and verify the output:

```
$ select count(*)
$ from BOM_BILL_OF_MATERIALS
$ where ASSEMBLY_ITEM_ID IN
$ (select distinct ASSEMBLY_ITEM_ID
$ from BOM_BILL_OF_MATERIALS
$ group by ASSEMBLY_ITEM_ID, ORGANIZATION_ID,
ALTERNATE_BOM_DESIGNATOR
$ having count(*) > 1);
```

If the above query returns greater than '0' as the output, then perform the following steps:

1. Take backup of bom\_bill\_of\_materials and bom\_structures\_b tables.
2. Refer to Note ID: 370841.1 and run the script provided in section 2: 'Query to Find list of duplicate BOMs' column within the 'Verification' section to identify

duplicate records.

If there are duplicate records, then run the scripts provided in the 'A. DATAFIX' column within the 'Solution' section to fix duplicate records by populating 'Alternate Designator'.

**Note:** You must eliminate duplicate records before upgrading to Release 12.2.

### **Product Hub:**

Perform the following tasks if you are using Oracle Product Hub.

1. Use the packing hierarchy structure type

Applies to 11*i* release level: All

TUMS step key: EGO\_PACK\_HIERARCHY\_MIGRATE

If you have used the structure type Packaging Hierarchy in releases prior to 12.1, then note that only the preferred packaging structure from this structure type is migrated over in the upgrade process. If you have defined multiple packaging structures and want to migrate all of them, then consider bringing them into the system by transferring them into other structure types, at which time they will be treated as regular structure types and not Packs.

2. Back up user-defined attributes data for items

Applies to 11*i* release level: All

TUMS step key: EGO\_UDA\_BACKUP

Considerable changes have been made to the data model that stores Item user defined attributes in Release 12. Upgrade scripts are available to automatically manage these changes. However, if these scripts fail during upgrade, there can be potential loss of data. It is recommended that you back up the following tables before you proceed with the upgrade.

- EGO\_MTL\_SY\_ITEMS\_EXT\_B
- EGO\_MTL\_SY\_ITEMS\_EXT\_TL

You can discard the backups when the upgrade is completed and the pre-upgrade UDA data for items have been functionally verified.

3. Check for duplicate records

Applies to 11*i* release level: All

TUMS step key: EGO\_CHECK\_FOR\_DUPLICATES

Run the following query and verify the output:

```
$ SELECT COUNT(1)
$ FROM SYS.ALL_IND_COLUMNS
$ WHERE INDEX_NAME = 'EGO_MTL_SY_ITEMS_EXT_B_U2'
$ AND COLUMN_NAME = 'UNIQUE_VALUE'
$ AND INDEX_OWNER = 'EGO';
```

If the above query returns '0' as the output, then perform the following steps:

1. Take backup of ego\_mtl\_sy\_items\_ext\_b table
2. Refer to Note ID: 953449.1 and run the script provided in the 'Identification Script' column within the 'Solution - Datafix' section to identify duplicate records.

If there are duplicate records, then run the scripts provided in the 'Fix' column within the 'Solution - Datafix' section for the appropriate base version to delete duplicate records.

**Note:** You must eliminate duplicate records before upgrading to Release 12.2. If you require help eliminating duplicate records, then contact Oracle Support.

4. Manage open new item requests (NIR)

Applies to 11*i* release level: All

TUMS step key: EGO\_MANAGE\_NIR

Before 12.1.1, one NIR was created for single item. From 12.1.1 forward, multiple items can be added to an NIR. During the upgrade, all existing NIRs are converted and a line is created with the details of the item.

Because there are significant changes to NIR between 11*i* and 12.2, all existing NIRs should be closed before upgrade. For example, either 'Implemented' or 'Rejected'.

### **Enterprise Asset Management:**

Perform these tasks if you are using Oracle Enterprise Asset Management (EAM).

1. Set up the Install Base parameters and Services profile option

Applies to 11*i* release level: All

TUMS step key: EAM\_CHECK\_SETUP

You must set up the Install Base Parameters and Services Profile Option in accordance with Note 884201.1. If this note is not checked and the IB Parameters are not verified and set up as described, then the eamsnupd.sql file will fail during patching, therefore creating data corruptions and the upgraded database will be compromised. Asset Numbers Upgrade will fail, and half of the Asset Numbers will be lost after the upgrade process.

## Process Manufacturing:

Perform these tasks only if you are using Oracle Process Manufacturing.

**Additional Information:** For additional Oracle Process Manufacturing upgrade details, refer to *Oracle Process Manufacturing (OPM) Migration from 11i to Release 12.1 and Higher* (Doc ID: 376683.1). Note that this reference is not a single document. It is a repository of OPM migration documentation.

### 1. Prepare to migrate OPM data (conditional)

Applies to 11i release level: All

TUMS step key: GMA\_PREP\_MIGRATE

To successfully migrate Oracle Process Manufacturing (OPM) Inventory data to Oracle Inventory, you must complete data cleanup and setup steps before the upgrade. Refer to the *OPM Migration Checklist* document which is linked from *Oracle Process Manufacturing (OPM) Migration from 11i to Release 12.1 and Higher* (Doc ID: 376683.1) and perform the steps in the order listed under the *Pre-Migration* section.

### 2. Finish migration preparations for OPM (conditional)

Applies to 11i release level: All

TUMS step key: GMA\_PREP\_MIGRATE\_FINISH

Ensure that you have completed all steps in the previous task before you begin this task. For this task as well, refer to the *OPM Migration Checklist* document which is linked from *Oracle Process Manufacturing (OPM) Migration from 11i to Release 12.1 and Higher* (Doc ID: 376683.1) and perform the steps in the order listed under the *Blackout Phase – Prior To Upgrade Patch Installation* section.

## Service Contracts:

Perform these tasks only if you are using Oracle Service Contracts.

### 1. Update Currency Code setup in Global Contracts defaults (conditional)

Applies to 11i release level: All

TUMS step key: OKS\_VALIDATE\_GCD

In Release 11i, the global contracts default (GCD) setup had three different currency codes for each of the three threshold amounts: Active, Credit Card, and Electronic Renewal. In this release, only one currency (Base Currency) code is used for all the three amounts.

If there are different types of currency codes specified for these amount fields in the

Global Contracts Defaults user interface, then the upgrade does not populate the base currency code. If the three currency codes are the same, then the currency code for Active threshold becomes the new Base currency.

If the codes are different, then populate the Global Contracts Defaults user interface with a single type of currency code before migration. Go to the Navigator and choose Setup > Service Contracts > Global Contracts Defaults to update contract defaults.

## Database and System Administration Tasks

### 1. Reset init.ora parameters (Required)

**Required Action:** Follow the instructions in *Database Initialization Parameters for Oracle E-Business Suite Release 12.2* (Doc ID: 396009.1) and reset the init.ora parameters as required.

### 2. Gather SYS, Fixed Object and Dictionary Statistics (Required)

Supported in EURC-DT: Yes

Execute all the steps as 'SYSDBA' user.

#### 1. Gather SYS schema statistics:

```
$ begin
 dbms_stats.gather_schema_stats(
 'SYS',
 options=>'GATHER STALE',
 estimate_percent =>
$ DBMS_STATS.AUTO_SAMPLE_SIZE,
 method_opt => 'FOR ALL COLUMNS SIZE AUTO',
 cascade => TRUE);
$ end;
/
```

#### 2. Fixed Object and Dictionary Statistics

These should have been previously gathered, correct and up-to-date on the pre-upgrade environment.

```
exec dbms_stats.gather_fixed_objects_stats;
```

```
exec dbms_stats.gather_dictionary_stats;
```

**Additional Information:** Refer to *Best Practices for Minimizing Oracle E-Business Suite Release 12.1.3 and 12.2.n Upgrade Downtime* (Doc ID: 1581549.1).

### 3. Gather schema statistics (Required)

Supported in EURC-DT: Yes

Applies to: Release 12.0 and 12.1

Schema statistics are gathered by the FND\_STATS process, which you can execute by running the Gather Schema Statistics concurrent program.

**Note:** During normal operation, you should gather schema statistics on a regular basis to ensure that the cost-based optimizer can generate optimal SQL execution plans. In preparation for an upgrade, gathering statistics should be one of the final tasks you perform before starting the upgrade downtime: this will ensure that the statistics are current.

From your Release 12 APPL\_TOP, perform the following steps:

1. Log in to Oracle E-Business Suite as the System Administrator.
2. Navigate to the Submit Request window (Requests > Run).
3. Submit the Gather Schema Statistics program.

Alternatively, run the following procedure manually:

```
$ FND_STATS.GATHER_SCHEMA_STATISTICS('ALL', 10, :parallel_degree,
'NOBACKUP', NULL, 'LASTRUN', 'GATHER AUTO', 10, 'N');
```

Where: parallel\_degree is set to the value of the database initialization (init.ora) parameter parallel\_max\_servers for your instance.

The parameters for FND\_STATS.GATHER\_SCHEMA\_STATISTICS are as follows:

```
$ FND_STATS.GATHER_SCHEMA_STATISTICS (<schema name>, <estimate
percent>, <degree of parallelism>, <backup flag>, <restart request
ID, if applicable>, <history mode>, <gather options>, <modifications
threshold>, <invalidate dependent cursors>);
```

**Additional Information:** Refer to the *Oracle E-Business Suite Maintenance Guide* for more information on the Gather Schema Statistics concurrent program and the FND\_STATS.GATHER\_SCHEMA\_STATISTICS procedure.

Set the schema name to ALL to gather statistics for all Oracle E-Business Suite schemas (those with an entry in the FND\_PRODUCT\_INSTALLATIONS table). In addition to gathering index and table-level statistics, the program gathers column-level histogram statistics for all columns listed in the FND\_HISTOGRAM\_COLS table.

**Note:** Oracle recommends that you use the 'GATHER AUTO' option, which gathers statistics for objects that have not been

previously had statistics collected, or whose rows have changed significantly since the last run. The default is 10%.

Depending on the size and number of changes to your database, gathering schema statistics may take a long time. Using the 'GATHER AUTO' option can reduce the overall time, as it uses an incremental approach.

Customers who gather schema statistics at 10% for all schemas and then again at a higher percentage for specific schemas or tables should initially continue this approach to avoid performance degradation. Review this process during the performance test phase.

Once the pre-upgrade steps have been completed, consider using the 'GATHER\_AUTO' option and the DBMS\_STATS.AUTO\_SAMPLE\_SIZE feature (available in Oracle Database 11gR1 and later). The AUTO sample size feature takes data skew into account, and may avoid the need to gather schema statistics at a higher percentage: in addition, it is likely to take the same time as using a manual approach with a percentage between 10-20 percent. When invoking the Gather Statistics concurrent program, Oracle recommends leaving the estimate\_percent parameter blank. The program automatically selects the default value for the estimate\_percent parameter. If you provide a value, then statistics will be gathered at the specified percentage. If the database version is 11g or higher, then the default value for this parameter is dbms\_stats.auto\_sample\_size. (For previous releases it was set to 10%.)

**Note:** See *Query Optimization in Oracle E-Business Suite Concepts* for more information.

#### 4. Install JRE on the database tier (conditional)

Supported in EURC-DT: Yes

If you are planning to run Rapid Install in Upgrade Mode by using the Use Existing ORACLE HOME option, then you must install JRE in the Database ORACLE\_HOME/appsutil as follows:

Download the latest JRE 7 Update. For optimum stability, performance, scalability, and OS vendor support, use the latest available update of JRE for the Oracle E-Business Suite database tier. The JRE download location is: <http://www.oracle.com/technetwork/java/javase/downloads/index.html>.

**Conditional Action:** Do not download the Java SE Development Kit (JDK). To download platform specific JRE and additional information on installation, refer to *Using JDK 7.0 Latest Update with Oracle E-Business Suite Release 12.2* (Doc ID: 1530033.1).

**5. Synchronize values of APPLPTMP with Database Directories for PL/SQL File I/O based Concurrent Requests (Required)**

Supported in EURC-DT: Yes

Concurrent processing (CP) may run PL/SQL (inside of the database) that creates output and log files using the utl\_file package. On all CP nodes, ensure that the \$APPLPTMP environment variable is set to the first database directory defined for PL/SQL file I/O. If you use a RAC database, then \$APPLPTMP should point to a directory on a shared file system visible to all the RAC nodes. This ensures that CP can locate the output and log files created from PL/SQL.

**Additional Information:** See My Oracle Support Knowledge Document 2525754.1, Using UTL\_FILE\_DIR or Database Directories for PL/SQL File I/O in Oracle E-Business Suite Releases 12.1 and 12.2 for more information.

**6. Perform a system backup**

Applies to: All 12.0 and 12.1 releases

Make a cold backup of the Oracle E-Business Suite database. Back up the Oracle E-Business Suite database. If you encounter problems during the upgrade process, you can use this backup to restore your system to the state before you began the upgrade.

## Performing the Upgrade to Release 12.2.0

This section describes the tasks required to initiate the upgrade process. All the tasks must be performed during the upgrade downtime. The following table provides a checklist of the tasks required in this chapter.

**Important:** After laying down the File System using Rapid Install, do not change the password for any products. Doing so may result in the following error: 'ORA-01017: invalid username/password; logon denied occurred while executing the SQL statement: CONNECT JTF/\*\*\*\*\*'

If the password for a product is changed, then FNDCPASS should be run to revert the password to the default value. Adpatch can be resumed after the password is restored to the original value.

---

| <b>These tasks...</b>                 | <b>are located here...</b> |
|---------------------------------------|----------------------------|
| Disable AOL Audit Trail (conditional) | , page 4-68                |

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| <b>These tasks...</b>                                                                 | <b>are located here...</b> |
|---------------------------------------------------------------------------------------|----------------------------|
| Shut down application tier listeners and concurrent managers (Required)               | , page 4-68                |
| Update init.ora with upgrade parameters (Required)                                    | , page 4-68                |
| Set FAILED_LOGIN_ATTEMPTS to UNLIMITED for Oracle E-Business Suite schema             | , page 4-69                |
| Disable custom triggers, constraints, indexes, business events, and VPD (conditional) | , page 4-69                |
| Check for data dictionary corruption and time stamp mismatch                          | , page 4-69                |
| Compile invalid objects                                                               | , page 4-70                |
| Rebuild unusable indices                                                              | , page 4-71                |
| Refresh materialized view (conditional)                                               | , page 4-71                |
| Back up the database (recommended)                                                    | , page 4-71                |
| Drop MRC schema (conditional)                                                         | , page 4-71                |
| Disable database auditing (recommended)                                               | , page 4-72                |
| Ensure that Maintenance Mode is enabled (Required)                                    | , page 4-72                |
| Apply AD Release 12.2 upgrade driver (Required)                                       | , page 4-72                |
| Apply Consolidated Upgrade Patch and Run the Release 12.2.0 Upgrade (Required)        | , page 4-73                |
| Disable Maintenance Mode (Required)                                                   | , page 4-74                |
| Back up Oracle Applications (recommended)                                             | , page 4-75                |

**Important:** You must turn off the Database Vault before upgrading to Release 12.2.0. After enabling EBR+upgrade to 12.2.x, re-enable the Database Vault.

**1. Disable AOL Audit Trail (conditional)**

Supported in EURC-DT: Yes

If you use the Oracle Applications Object Library Audit Trail feature, then you must disable it before the upgrade.

From the System Administrator responsibility under Oracle E-Business Suite Release 11i System, navigate to Security > Audit Trail > Groups. In the Audit Groups window, set the Group State field to Disable - Prepare for Archive for each audit group defined. Run the Audit Trail Update Tables report from the Submit Requests window (Requests > Run).

**Conditional Action:** If you plan to re-enable auditing after the upgrade, then archive and purge the shadow tables now. Data changes made after implementing this step are not audited. Refer to *Audit Trail* in the *Oracle E-Business Suite Security Guide* for instructions.

**Note:** See *Audit Trail* in *Oracle E-Business Suite Security Guide*.

**2. Shut down application tier listeners and concurrent managers (Required)**

Navigate to Concurrent > Requests. In the Find Requests window, select All my requests. Click Find, and click Hold Pending requests as necessary. Then, as System Administrator, choose Administer Concurrent Managers. Navigate to the Control field and select Deactivate.

Shut down all application tier services including Concurrent Managers using the adstpall script. Do this from your existing Release 11i E-Business Suite instance.

**Note:** If you want to isolate post-upgrade concurrent programs to a separate manager queue, then refer to *Managing Concurrent Processes*, page B-1 of this guide.

**3. Update init.ora with upgrade parameters (Required)**

Supported in EURC-DT: Yes

Initialization parameters required at each stage of an upgrade may vary depending on when you upgrade your database. Set the appropriate parameters now. If your processes and sessions values in the init.ora file is the default values provided by

the E-Business installation of 300 and 600, then you should consider doubling these during the upgrade process to avoid connection issues.

**Note:** See *Database Initialization Parameters for Oracle Applications Release 12.2* (Doc ID: 396009.1).

**4. Set FAILED\_LOGIN\_ATTEMPTS to UNLIMITED for Oracle E-Business Suite schema**

Supported in EURC-DT: Yes

The database provides parameters to enforce password management policies. However, some of the database password policy parameters may lock out the E-Business Suite schema. Therefore, ensure that FAILED\_LOGIN\_ATTEMPTS is set to 'UNLIMITED' for database profiles associated with Oracle E-Business Suite schema.

**Additional Information:** For details, refer to the *Secure Configuration* chapter in the *Oracle E-Business Suite Release 12.2 Security Guide*.

**5. Disable custom triggers, constraints, indexes, business events, and VPD (conditional)**

Supported in EURC-DT: Yes

Disable custom triggers or constraints on Oracle E-Business Suite tables. Re-enable these triggers after the upgrade. If you have custom indexes on Applications tables, then determine whether they can affect performance during the upgrade, and drop them if necessary. If you are not sure, then it is best to drop the indexes and add them after the upgrade, if the new release has not created a similar index.

**6. Check for data dictionary corruption and time stamp mismatch**

Supported in EURC-DT: Yes

If not already applied, then apply the latest Online Patching Readiness and GSCC Report Patch for the code level from which you are upgrading. Refer to *Using the Online Patching Readiness Report in Oracle E-Business Suite Release 12.2* (Doc ID: 1531121.1) on My Oracle Support.

**1. Check for Data Dictionary Corruption+**

Run the \$AD\_TOP/patch/115/sql/adzddtsfix.sql script, following the usage instructions provided.

Run the \$AD\_TOP/sql/ADZDDBCC.sql script to identify whether logical data dictionary corruption is present. If no corruption is found, then proceed with the upgrade. If corruption is present, then follow Step 2 as follows:

## 2. Fix Data Dictionary Corruption (conditional)

**Note:** Follow these steps only as a fix when logical data dictionary corruption (missing parent) is present.

Copy the script `$AD_TOP/patch/115/sql/adzddmpfix.sql` to the database tier.

On the database tier, connect to the database as SYSDBA.

**Note:** If you are on Oracle E-Business Suite Release 12.1.3 or Release 12.2 with a multitenant architecture, to connect to a multitenant architecture database as SYSDBA, run the following commands to set the database SID field to `<EBS_PDB_Name>`, the pluggable database name for your Oracle E-Business Suite database:

- `$ source <CDB_NAME>_<NODE_NAME>.env`
- `$ export ORACLE_PDB_SID=<EBS_PDB_Name>`
- `$ sqlplus "/ as sysdba"`

Run the `$AD_TOP/patch/115/sql/adzddmpfix.sql` script.

On the application tier, run the `$AD_TOP/sql/ADZDDBCC.sql` script again to identify whether data dictionary corruption is still present.

If no corruption is found, then proceed with the upgrade. If corruption is still present, then proceed to Step 3 as follows:

## 3. Additional Actions for Data Dictionary Corruption (conditional)

**Note:** Follow these steps only when data dictionary corruption is present after following the steps in step 2 above.

On the database tier, go to the `$ORACLE_HOME/rdbms/admin` directory.

Run the `utlirp.sql` script, following the usage instructions provided.

Run the `utlrp.sql` script, following the usage instructions provided.

On the application tier, run the `$AD_TOP/sql/ADZDDBCC.sql` script again to identify whether data dictionary corruption is still present. If no corruption is found, then proceed with the upgrade or patching cycle.

If corruption is still present, then contact Oracle Support and request a bug to be logged.

## 7. Compile invalid objects

Supported in EURC-DT: Yes

If any invalid objects exist, then you must connect to sqlplus using 'apps' to login and run the following:

```
$ exec sys.utl_recomp.recomp_parallel
```

## 8. Rebuild unusable indices

Supported in EURC-DT: Yes

1. An index must be usable. If an index, or indices are unusable, then you must rebuild the unusable indices:

Unusable indices block DML access to the table. Rebuild any unusable indices with the following command:

```
alter index index_owner.index_name rebuild
```

**Note:** You can ignore indices on unused tables.

2. Search for failed domain indices and fix them:

You can identify failed domain indices and fix them with the following command:

```
select index_name,index_type,owner,table_name,table_owner,
domidx_opstatus from dba_indexes where domidx_opstatus in
('UNUSABLE','FAILED','LOADING');
```

## 9. Refresh materialized view (conditional)

Supported in EURC-DT: Yes

To reduce the overall upgrade time, you can optionally run the ADZDMVREFRESHNEEDED.SQL script before starting with the Release 12.2.0 upgrade. To implement the most recent online patching readiness and GSCC report patch, refer to *Using the Online Patching Readiness Report in Oracle E-Business Suite Release 12.2* (Doc ID: 1531121.1) in My Oracle Support.

## 10. Back up the database (recommended)

Back up the Oracle E-Business Suite database. If you encounter problems during the upgrade process, then you can use this backup to restore your system to the same state before you began the upgrade.

## 11. Drop MRC schema (conditional)

Supported in EURC-DT: Yes

TUMS step key: N/A

All programs and reports now use the APPS schema. Because the MRC\_APPS schema is no longer needed, dropping it frees space and reduces processing

overhead during the upgrade. If you have not previously done so, drop the MRC schema now.

**UNIX:**

```
$ cd APPL_TOP/admin
$ sqlplus <SYSTEM username>/<SYSTEM password> @addrpmrc.sql
 <APPLSYS username> FORCE
```

**Windows:**

```
C:\> cd %APPL_TOP%\admin
C:\> sqlplus <SYSTEM username>/<SYSTEM password> @addrpmrc.sql
 <APPLSYS username> FORCE
```

**12. Disable database auditing (recommended)**

Supported in EURC-DT: Yes

If you have enabled Oracle database auditing, then it is recommended to disable database auditing for the duration of the Oracle E-Business Suite Release 12.2 upgrade. You can enable Oracle database auditing after the Oracle E-Business Suite Release 12.2 upgrade.

**Note:** Use the database initialization parameter AUDIT\_TRAIL to enable and disable Oracle database auditing.

**13. Ensure that Maintenance Mode is enabled (Required)**

Maintenance Mode restricts logins and the type of operations that the system can perform. Ensure that Maintenance Mode is enabled before you continue.

1. Source the applications run file system environment file as found in the fs1 file system appl\_top.
2. From the AD Administration Main Menu, choose the Change Maintenance Mode option.
3. The Change Maintenance Mode menu displays the current Maintenance Mode status at the top of the page. The status should be Disabled at this point.
4. Select Option 1, Enable Maintenance Mode.

**14. Apply AD 12.2 upgrade driver (Required)**

Download and unzip the AD Upgrade Patch for Release 12.2 (patch 10117518). Follow the instructions in the patch readme to use AutoPatch to run it from the Release 12.2 Run File System.

**Important:** AD Upgrade Patch for Release 12.2 (patch 10117518) patch readme contains information about the latest Consolidated

Upgrade Patch (CUP) for AD. You must follow the Patch readme and apply it by merging it with the latest Consolidated Upgrade Patch for AD, along with any other patches mentioned in the Readme, as instructed in the readme and by referring to the upgrade guides.

**Caution:** Ensure that the environment file from the Release 12.2 RUN File System is sourced prior to applying this patch.

#### 15. Apply Consolidated Upgrade Patch and Run the Release 12.2.0 Upgrade (Required)

The Consolidated Upgrade Patch (CUP) for Release 12.2.0 combines critical upgrade error corrections and upgrade performance improvements from Release 11i/12.0/12.1 into a consolidated suite-wide patch.

**Action:** Refer to *Oracle E-Business Suite Release Notes, Release 12.2* (Doc ID: 1320300.1) for the latest Consolidated Upgrade Patch and Pre-install patches.

**Note:** This patch is only intended for upgrade customers who are upgrading to Release 12.2.0. If you are already at Release 12.2.0 or beyond, do NOT apply this patch.

1. Apply the Consolidated Upgrade Patch (CUP) for Release 12.2.0 in pre-installation mode on the Run Edition File System.

**Note:** Before applying the patch for the latest CUP in pre-installation mode:

If you have applied any other patch previously in pre-installation mode and do not intend to merge it with the Release 12.2.0 upgrade driver u10124646.drv, clean up the directory <APPL\_TOP>/admin/<TWO\_TASK>/preinstall on run file system after taking the backup of the current directory.

```
$ adpatch preinstall=y
```

- Apply the pre-upgrade patches that were released after the Consolidated Upgrade Patch.

Refer to My Oracle Support Knowledge Document 1448102.2 for the Oracle E-Business Suite Release 12.2 Pre-install Patches Report. It provides a list of

essential patches that you must apply in pre-install mode before upgrading from Release 11i/12.0/12.1 to Release 12.2. Follow the recommendations within My Oracle Support Knowledge Document 1448102.2 and apply the additional pre-install patches.

Individual pre-install patches that are listed in the Oracle E-Business Suite Release 12.2 Pre-install Patches Report can be merged with the Consolidated Upgrade Patch and applied together.

2. Merge the patch drivers in \$APPL\_TOP/admin/\$TWO\_TASK/preinstall directory with the Release 12.2.0 upgrade driver \$AU\_TOP/patch/115/driver/u10124646.drv

**Note:** All of the patch driver files located under \$APPL\_TOP/admin/<TWO\_TASK>/preinstall are merged with the Release 12.2.0 upgrade driver <AU\_TOP>/patch/115/driver/u10124646.drv. Therefore, carefully evaluate the content of the directory <APPL\_TOP>/admin/<TWO\_TASK>/preinstall and retain only those patch drivers including the latest Oracle E-Business Suite CUP patch driver. It is intended to be merged with the Release 12.2.0 upgrade driver (u10124646.drv).

Merging patch drivers in run file system's <APPL\_TOP>/admin/<TWO\_TASK>/preinstall with <AU\_TOP>/patch/115/driver/u10124646.drv:

- Change directory to <AU\_TOP>/patch/115/driver

```
$ cd $AU_TOP/patch/115/driver
$ admrgpch -d . -preinstall -master u10124646.drv
```

**Note:** The default merged driver by name u\_merged.drv is then created in the destination directory that is specified.

3. Apply the newly merged Release 12.2.0 upgrade driver (For example, -<AU\_TOP>/patch/115/driver/u\_merged.drv) to the Run File System with the following command:

```
$ adpatch options=nocopyportion,nogenerateportion
```

**Important:** None of the application tier services should be started until you upgrade to the certified release update pack for Oracle E-Business Suite Release 12.2.

## 16. Disable Maintenance Mode (Required)

Maintenance mode controls the system downtime period by managing user logins. To disable maintenance mode, use the Change Maintenance Mode menu in AD Administration.

**Note:** Once the system is enabled for online patching, the Maintenance Mode option is not available.

1. From the AD Administration Main Menu, choose the Change Maintenance Mode option.
2. The Change Maintenance Mode menu displays the current Maintenance Mode status at the top of the screen. It should be Enabled.
3. Select Option 2, Disable Maintenance Mode.

**17. Back up Oracle E-Business Suite (recommended)**

Perform a full Oracle E-Business Suite backup of the application and database.

## Finishing the Release 12.2.0 Upgrade

You must complete all the tasks in this section to finish the upgrade. All the tasks must be completed during system downtime on the Release 12.2 E-Business Suite instance.

| These tasks...                                                        | are located here... |
|-----------------------------------------------------------------------|---------------------|
| Configure Release 12.2 E-Business Suite instance (Required)           | , page 4-75         |
| Upgrade considerations for Add-on Localization products (conditional) | , page 4-83         |
| Integrate custom objects and schemas (conditional)                    | , page 4-84         |

**1. Configure Release 12.2 E-Business Suite instance (Required)**

When you ran Rapid Install in the Prepare for the Upgrade section of Chapter 2, it created and stored an instance-specific context by replacing system variables you entered on the wizard screens with the specific values you saved in the configuration file (config.txt). At this point in the upgrade, point Rapid Install to the Application Tier context file. Rapid Install (using AutoConfig) updates your system configuration using the values it finds in the context file.

1. **Update the RDBMS ORACLE\_HOME file system with AutoConfig and Clone files (conditional)**

**Note:** If you have installed 12.1.0.2 Database ORACLE\_HOME using the latest StartCD, then skip this step.

On the application tier (as the APPLMGR user), log on to the APPL\_TOP environment (source the environment file) and run this perl script to create appsutil.zip in <INST\_TOP>/admin/out. Source the applications run file system environment file as found in the fs1 file system appl\_top.

```
$ perl <AD_TOP>/bin/admkappsutil.pl
```

On the database tier (as the ORACLE user), copy or FTP the appsutil.zip file to the <RDBMS ORACLE\_HOME> and unzip the file. Change directory to RDBMS Oracle Home as follows:

```
$ cd <RDBMS ORACLE_HOME>
```

Unzip the file with the following command:

```
$ unzip -o appsutil.zip
```

## 2. Install JRE on the database tier to ensure that the application tier and the database tier match (conditional)

If you have not installed JRE on Database Tier (see below) before running Rapid Install in Upgrade mode by using 'Use Existing ORACLE\_HOME' as described in *Preparing for the Upgrade*, then install JRE on the database tier. If you have used ORACLE HOME installed by Rapid Install, then skip this step.

Download the latest JRE 7 Update. For optimum stability, performance, scalability, and OS vendor support, use the latest available update of JRE for the Oracle E-Business Suite database tier.

**Conditional Action:** Do not download the Java SE Development Kit (JDK). To download platform specific JRE and additional information on installation, refer to *Using JDK 7.0 Latest Update with Oracle E-Business Suite Release 12.2* (Doc ID: 1530033.1).

## 3. Create the Context Name directory in the RDBMS oracle home

Copy listener.ora and tnsnames.ora from the \$ORACLE\_HOME/network/admin directory to the \$ORACLE\_HOME/network/admin/<CONTEXT\_NAME> directory.

**Note:** Verify that these files were correctly generated through autoconfig by checking the timestamp from the last autoconfig run, ensuring that they were properly instantiated. For example, for the listener.ora, check that there are correct SID

references that came from the %s\_db\_listener% value in the \$CONTEXT\_FILE.

#### 4. Set and export the following environment variables

- export ORACLE\_HOME=<RDBMS\_ORACLE\_HOME>
- export ORACLE\_SID = <instance name for current database node>
- export TNS\_ADMIN =  
\$ORACLE\_HOME/network/admin/<CONTEXT\_NAME>

##### UNIX:

- PATH = \$ORACLE\_HOME/bin: \$ORACLE\_HOME/perl/bin:/usr/bin:  
/usr/sbin:\$ORACLE\_HOME/appsutil/jre/bin:/bin:/usr/bin/X11:  
/usr/local/bin:\$PATH
- PERL5LIB=\$ORACLE\_HOME/perl/lib/[perl  
version]:\$ORACLE\_HOME/perl/lib/site\_perl/[perl  
version]:\$ORACLE\_HOME/appsutil/perl

##### Windows:

- PATH=%ORACLE\_HOME%/perl/bin;%ORACLE\_HOME%/bin;%PATH%  
(for Windows)
- PERL5LIB=%ORACLE\_HOME%\perl\lib;%ORACLE\_HOME%  
\perl\site\lib;%ORACLE\_HOME%\perl\lib\site\_perl\[perl version];%  
ORACLE\_HOME%\appsutil\perl
- SET LOCAL=<instance name for current database node>

#### 5. Generate a new database context file as follows:

**Note:** This step applies only to customers using their existing RDBMS home during the upgrade.

##### UNIX:

```
$ cd <RDBMS_ORACLE_HOME>/appsutil/bin
$ perl adblxml.pl
```

##### Windows:

```
cd <RDBMS_ORACLE_HOME>\appsutil\bin
C:\> cd <RDBMS_ORACLE_HOME>\appsutil\bin
C:\> perl adblxml.pl
```

6. **Clean up old node information prior to configuring the Oracle E-Business Suite Release 12.2 application tier**

Connect to sqlplus from the RDBMS\_ORACLE\_HOME environment as the APPS user, and then run the following statement:

```
$ exec fnd_conc_clone.setup_clean ;
```

**Note:** fnd\_conc\_clone.setup\_clean cleans all node information including primary and secondary nodes for all concurrent managers. If you are running a multi-node system with Concurrent Managers defined on multiple nodes, then you must process that setup as part of the post-upgrade steps after services are started.

7. **Synchronize values of APPLPTMP with Database Directories for PL/SQL File I/O based Concurrent Requests (Required)**

Concurrent processing (CP) may run PL/SQL (inside of the database) that creates output and log files using the utl\_file package. On all CP nodes, ensure that the \$APPLPTMP environment variable is set to the first database directory defined for PL/SQL file I/O. If you use a RAC database, then \$APPLPTMP should point to a directory on a shared file system visible to all the RAC nodes. This ensures that CP can locate the output and log files created from PL/SQL.

**Additional Information:** See My Oracle Support Knowledge Document 2525754.1, Using UTL\_FILE\_DIR or Database Directories for PL/SQL File I/O in Oracle E-Business Suite Releases 12.1 and 12.2 for more information.

8. **Run AutoConfig on the database tier nodes**

**For Database version Oracle 12c Release 1 (12.1.0.2):**

**UNIX:**

```
$ <RDBMS_ORACLE_HOME>/appsutil/bin/adconfig.sh
contextfile=<context file created in step 5>
```

**Windows:**

```
C:\> <RDBMS_ORACLE_HOME>\appsutil\bin\adconfig.cmd
contextfile=<context file created in step 5>
```

**For Database version Oracle 11g Release 2 (11.2.0.4):**

If your database version is 11.2.0.4, then execute adconfig.pl after setting PERL5LIB as described in step 4 above.

```
$ perl <RDBMS_ORACLE_HOME>/appsutil/bin/adconfig.pl
contextfile=<context file created in step 5>
```

## 9. Source the Run file system environment file

On the application tier, source the environment file for the run file system.

Run the following command to confirm that the environment is properly set:

```
$ echo $FILE_EDITION
```

Verify that the command returns 'run'.

## 10. Drop table ADX\_PRE\_AUTOCONFIG from APPS schema

- Prior to running Rapid Install to configure Release 12.2 E-Business Suite instance, check if table - ADX\_PRE\_AUTOCONFIG exists in APPS schema:

```
select object_name, object_type, owner, status from dba_objects where
upper(object_name)='ADX_PRE_AUTOCONFIG' and object_type='TABLE'
and upper(owner)='APPS';
```

**Execute the following commands to drop table  
ADX\_PRE\_AUTOCONFIG from APPS schema:**

**Note:** It will be recreated during autoconfig with APPLSYS schema.

```
$ cd <AD_TOP>/patch/115/sql
$ sqlplus APPS/<APPS Schema password>
@txkDropAdxPreAutoConfig.sql
```

## 11. Configuring the Oracle E-Business Suite Release 12.2 Application Tier

You will now run Rapid Install to configure the application tier services.

### Configure an Existing Instance

When you ran Rapid Install previously, it created and stored an instance-specific context by replacing system variables you entered on the wizard screens with the specific values you saved in the configuration file (config.txt). In this section, you point Rapid Install to the Applications context file, so that it can use the values there to complete the process of configuring your system.

Start by running the preamble actions:

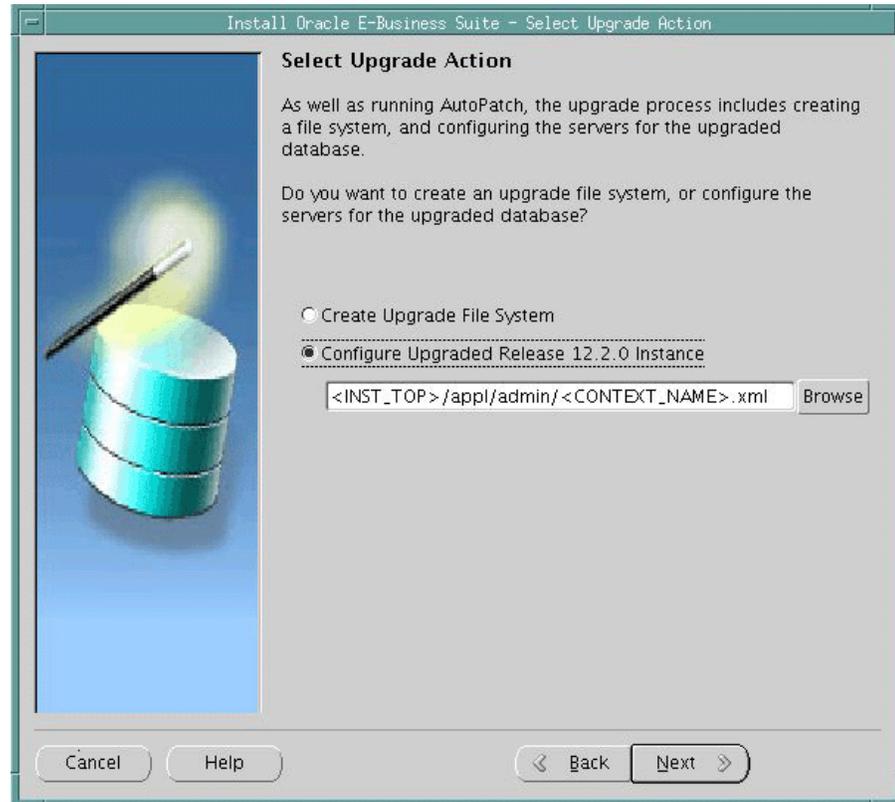
1. Ensure that the database and listeners have been started.
2. Start the Rapid Install Wizard by entering the command `rapidwiz`.
3. On the Welcome Screen, click *Next*.
4. Select the option *Upgrade to Oracle E-Business Suite Release 12.2.0*.
5. Specify Oracle Configuration Manager Details

You will now perform the relevant upgrade actions.

1. Configure upgraded instance

On the Select Wizard Operation screen, choose the *Upgrade to Oracle Applications 12.2.0* option to indicate you are performing an upgrade. This displays the Select Upgrade Action screen.

### Select Upgrade Action



On this screen, select *Configure Upgraded Release 12.2.0 Instance* to indicate that you want to configure the services for the upgraded database.

2. Indicate name and location of context file

When you ran Rapid Install previously, it configured your system by replacing system variables you entered on the wizard screens with the specific values you saved in the configuration file (config.txt). It stored this information as an Applications context file called <CONTEXT\_NAME>.xml.

**Additional Information:** See the Technical Configuration

chapter in *Oracle E-Business Suite Concepts*.

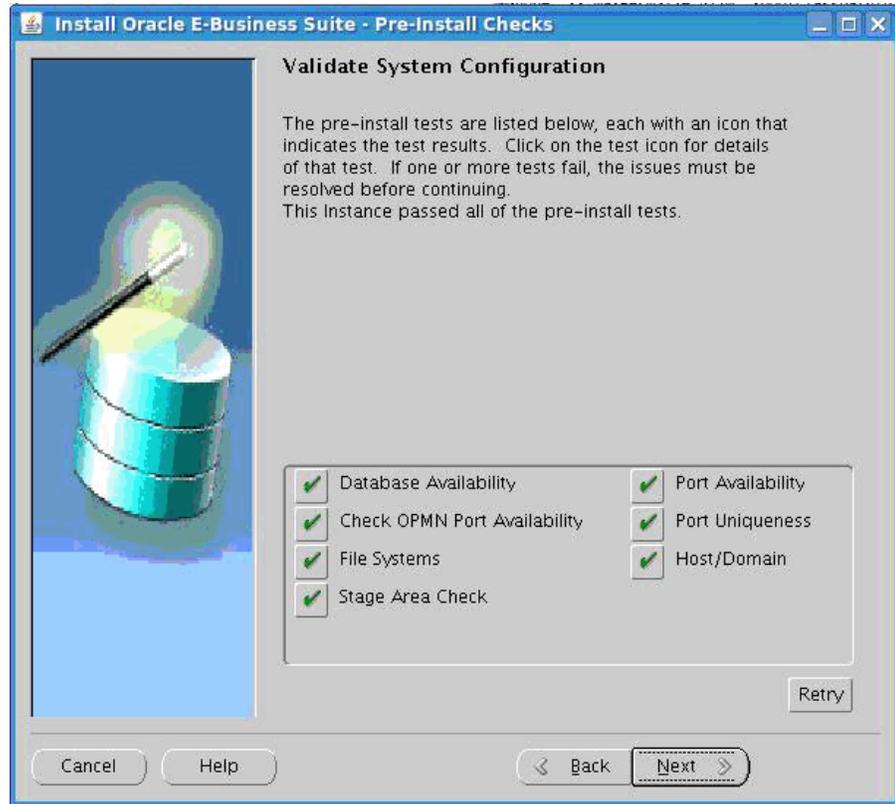
Complete the directory path to point Rapid Install to the File System 1 Applications context file, `$INST_TOP>/appl/admin/<CONTEXT_NAME>.xml`. For example, `/u01/R122_EBS/fs1/inst/apps/<CONTEXT_NAME>/appl/admin/<CONTEXT_NAME>.xml`. You may either enter the path directly in the box, or click *Browse* and select the path.

Click *Next* to continue.

### 3. Run pre-install checks

Rapid Install performs a series of system tests to validate the configuration specified. The System Check Status screen checks port availability.

The Validate System Configuration screen appears, to indicate whether various pre-install requirements for the installation have been met. The pre-install check screen then appears:

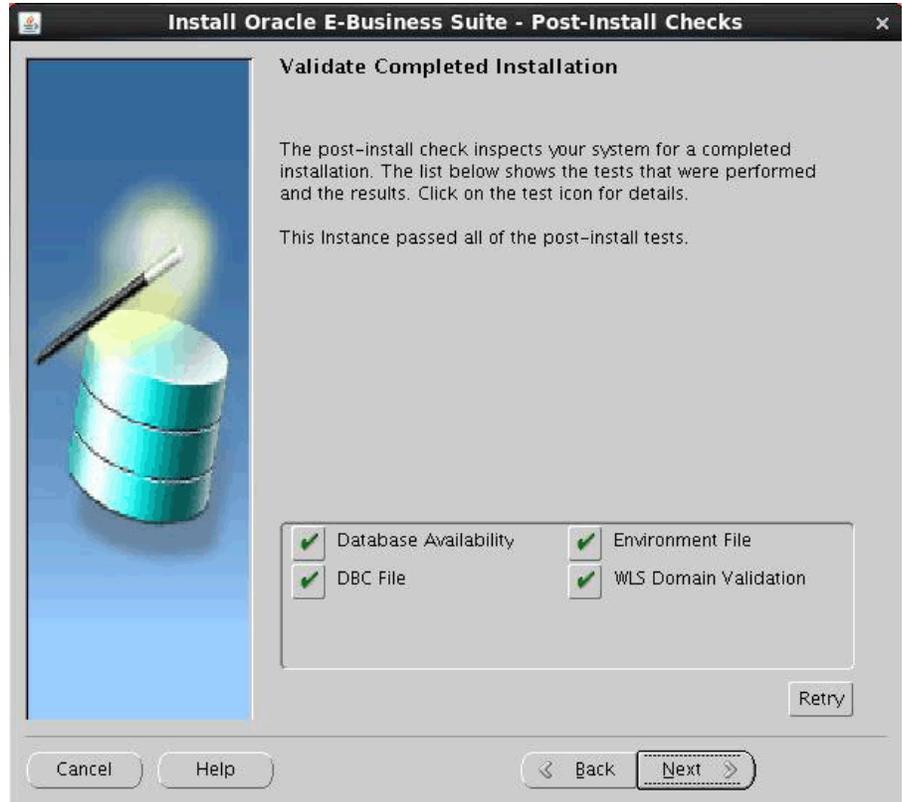


#### 4. Begin the configuration process

For security, the APPS password is not saved in the context file, so you will be prompted to re-enter it on the Review Application User Information screen. Enter the information as requested and click *Next*.

Rapid Install notifies you of the components and processes it will configure. Click *Next* to continue. At the prompt about beginning the installation now, click *Yes*.

When the process is complete, Rapid Install displays a screen that shows you the steps that were performed:



Click *Finish* to exit Rapid Install. This phase of the upgrade is now complete.

**Warning:** Do not start the application tier services at this point.

When directed to do so in this chapter, you will start the the Weblogic Admin Server (which in turn starts the Node Manager) as a requirement for applying the latest AD and TXK Release Update Packs (as documented in the AD and TXK patch ReadMe).

After the latest Oracle E-Business Suite Release Update Pack for Release 12.2 is applied, you will be directed to start the application tier services.

## 2. Upgrade considerations for Add-on Localization products (conditional)

Applies to 11i release level: All

TUMS step key: LOC\_INSTALL\_CHECK

**Action:** If you have been using Add-on Localizations products (CLE, CLL, CLA, or CLJ), then you must review the Add-on Localizations - Upgrade Consideration documents on *My Oracle Support* for upgrade steps and tasks to be completed before EBR enablement. Refer to *Add-on Localizations - Upgrade Consideration* (Doc ID: 1491965.1)

### 3. Integrate custom database objects and schemas (conditional)

**Action:** If you previously created custom objects or have custom schemas that must be tightly integrated with Oracle E-Business Suite, then follow the steps in the *Oracle E-Business Suite Developer's Guide* to reintegrate these customizations with the APPS schema.

This release uses Invoker Rights for most PL/SQL packages. Executing these packages from custom schemas may require additional grants from, and synonyms to, APPS schema objects. Oracle recommends that you explicitly declare Invoker Rights or Definer Rights for custom PL/SQL packages. See the *PL/SQL User's Guide and Reference* for more information.

**Additional Information:** For more information refer to the *PL/SQL User's Guide and Reference*.

Custom database objects must follow the naming standards for custom object names to avoid conflict with Oracle E-Business Suite.

**Caution:** When naming database objects, use XX as a part of the short name. For example, you might define the custom application to use the short name XXGL, and database objects to begin with an XXGL\_ prefix.

**Suggested Reading:** See *Defining your Custom Application* in the *Oracle E-Business Suite Developer's Guide*.

## Enabling Online Patching

Complete the following steps to enable online patching after the upgrade has finished:

### 1. Verify the database version

Oracle E-Business Suite Release 12.2 Online Patching requires the database to be upgraded to version 11.2.0.4 or higher. Ensure that the database upgrade was

completed properly and without errors.

## 2. Verify that the latest patches have been applied to the database and middle tier

The E-Business Suite Technology Codelevel Checker (ETCC) utility provides two scripts you can run to help ensure you have the necessary database and middle tier bugfixes installed on your Oracle E-Business Suite Release 12.2 system. Oracle strongly recommends the use of this utility to ensure that all required database and middle tier bugfixes have been installed.

You can download ETCC from *My Oracle Support* (patch 17537119). ETCC maps missing bugfixes to the default corresponding patches and displays them in a patch recommendation summary. If your Oracle E-Business Suite Release 12.2 installation has additional patches installed as well as the recommended patches, then you may need to install a merge patch from Oracle Support. As well as installation instructions and basic commands, the README for this patch includes a number of usage scenarios and examples so should be carefully reviewed before running ETCC.

## 3. Gather SYS schema statistics:

Run the following step as 'SYSDBA' user.

```
begin
 dbms_stats.gather_schema_stats(
 'SYS',
 options=>'GATHER STALE',
 estimate_percent =>
 DBMS_STATS.AUTO_SAMPLE_SIZE,
 method_opt => 'FOR ALL COLUMNS SIZE AUTO',
 cascade => TRUE);
end;
```

## 4. Apply the latest Oracle E-Business Suite Online Patching Readiness and GSCC Report Patch

You must apply the Oracle E-Business Suite Online Patching Readiness and GSCC Report Patch (Consolidate Standalone Readiness Report Patch) applicable for Release 12.2 and higher by referring to *Using the Online Patching Readiness Report in Oracle E-Business Suite Release 12.2* (Doc ID: 1531121.1), before you proceed with the following steps.

**Important:** The Consolidate Standalone Readiness Report Patch must be applied using `adpatch` on the Run Edition File System before proceeding with the following steps, including EBR enablement.

## 5. Run the Online Patching Enablement - Readiness Reports

**Action:** For instructions on downloading these utilities, refer to

*Using the Online Patching Readiness Report in Oracle E-Business Suite  
Release 12.2 (Doc ID: 1531121.1).*

You must run the following utility from the application tier APPL\_TOP. It reports EBR violations that include objects not complying with the EBR rule about Non-Editioned Objects (data storage objects such as Tables and Materialized Views), and referencing editioned objects (code objects such as: Packages, Triggers, Object Types, and so on). This report also lists several naming standard violations that must be fixed prior to applying the online patching enablement patch.

1. Initialize the Run File System environment:

```
$ source <RUN APPL_TOP>/<Instance SID>_<hostname>.env
```

**Note:** The subsequent steps assume that you are running in the same session which was initialized with this environment file. If you need additional operating system level sessions, remember to initialize the environment with this same environment file.

2. Create the online patching log file location and set it as the current directory:

```
$ mkdir $LOG_HOME/appl/op
$ cd $LOG_HOME/appl/op
```

**Note:** The \$LOG\_HOME directory will be under the instance top of the run file system.

3. Run the following Readiness reports:

- ADZDPSUM.sql - Provides a summary of the schemas that will be editioned and also schemas with objects that depend on E-Business Suite code that is recommended to be editioned. You can register these schemas with the application by running the commands that will be listed in the last section of this report. Oracle recommends that you run this report again after the custom schemas are registered with the application. You should run ADZDPSUM.sql repeatedly to handle dependent schemas until no further EBR violations are reported.

**Note:** Enter the system password when prompted. You can ignore APPS\_NE, and ODM schemas which may appear in section 2 of the report.

```
$ sqlplus system @$AD_TOP/sql/ADZDPSUM.sql
$ mv adzdpsum.txt adzdpsum_pre_dbprep.txt
```

- ADZDPMAN.sql - Lists objects with different categories of violations to EBR rules that must be fixed prior to running the enablement process to avoid errors during this process. Oracle recommends that you run this report after all custom schemas are registered with the application according to instructions in the above report ADZDPSUM.sql.

**Note:** Enter the system password when prompted.

```
$ sqlplus system @$AD_TOP/sql/ADZDPMAN.sql
$ mv adzdpman.txt adzdpman_pre_dbprep.txt
```

- ADZDPAUT.sql - This report lists all the objects with violations to the EBR rules that will be fixed automatically from the enablement process. This report is provided for information purposes and no action should be taken from this report.

**Note:** Enter the system password when prompted.

```
$ sqlplus system @$AD_TOP/sql/ADZDPAUT.sql
$ mv adzdpaut.txt adzdpaut_pre_dbprep.txt
```

## 6. Fix Violations Listed in the Online Patching Readiness Report that Require Manual Intervention

The Online Patching Readiness Report contains sections with different violation types.

1. Review all sections listed from the ADZDPMAN.sql report. Follow instructions in each section to fix violations.

**Note:** Many violations in the Readiness report can be automatically fixed by registering your custom schemas. Review the last section of the Summary Readiness Report (ADZDPSUM.sql) for sample commands on how to register your custom schemas as well as any schema installed as part of an Oracle technology such as APEX, XDB, and OWBSYS. You must register any custom or third-party schema that does not support Oracle E-Business Suite Online Patching.

The following schemas should NOT be registered:

- SYS
- SYSTEM

- CTXSYS

Any dependency between these schemas and Editioned Objects is a coding standards violation and must be fixed manually.

2. Oracle recommends that you perform the chosen fix by customizing template file \$AD\_TOP/sql/ADZDPCUST.sql. The reports provide more details on this step.
3. Repeat the *Run the Online Patching Enablement - Readiness Report* step above until all violations have been addressed.

## 7. Verify database tablespace free space

The Edition-Based Redefinition feature introduced in Oracle Database 11g Release 2 requires additional space for the dictionary tables that are used to manage editioned objects.

1. Initialize the Run File System environment:

```
$ source <RUN APPL_TOP>/<Instance ID>_<hostname>.env
```

2. Set the HOSTNAME environment variable before executing the online patching tool adop.

- Check to ensure the environment variable HOSTNAME is set by running the following:

```
$ echo $HOSTNAME
```

- If the HOSTNAME environment variable is not set, then run the following:

```
$ export HOSTNAME=<your-hostname-without-domain>
```

**Note:** Repeat the first step to ensure the environment variable is set to the correct hostname.

- If the hostname is set but has the domain, then reset it without the domain.

For example:

```
$ echo $HOSTNAME
$ apcappsx2.au.oracle.com
$ export HOSTNAME=apcappsx2
```

3. Run the following report to retrieve the current tablespace free space:

```
$ perl $AD_TOP/bin/adzdreport.pl apps
```

1. Select option 3 - 'Other Generic Reports'

2. Select the next option - 'Free Space in Important Tablespaces'

Enter the password when prompted.

4. Ensure the following:

- SYSTEM Tablespace: has a minimum of 25 GB of free space
- APPS\_TS\_SEED Tablespace: has a minimum of 5 GB of free space

APPS\_TS\_SEED is used to host all tables that have been registered as seed tables and that require seed data storage infrastructure.

- Add necessary space to the tablespaces if they do not contain the required free space. Refer to *Altering and Maintaining Tablespaces in Oracle Database Administrator's Guide* for details.

**Additional Information:** For details refer to *Altering and Maintaining Tablespaces in the Oracle Database Administrator's Guide*.

## 8. Run the Online Patching Enablement - Status Report

This report provides an overall status of the enabling online patching process. You can run it before, during, and after the enablement patch is applied. At this stage, you will receive report results before you enable online patching.

1. Set the current directory to \$LOG\_HOME/appl/op:

```
$ cd $LOG_HOME/appl/op
```

2. Run the report using the following command. Ensure that you verify any invalid objects at this stage. Take special note to ensure that all online patching objects (objects that match the pattern 'AD\_ZD%') are valid:

```
$ sqlplus <apps username> @$AD_TOP/sql/ADZDEXRPT.sql
```

**Note:** Enter the apps password when prompted.

3. Save the output as pre\_dbprep for future reference, such as:

```
$ mv adzdexrpt.txt adzdexrpt_pre_dbprep.txt
```

## 9. Ensure that all middle-tier E-Business Suite services are shut down

Verify that all middle-tier E-Business Suite services are shut down prior to applying the Online Patching Enablement patch.

**Caution:** None of the application tier services should be up until you upgrade to the latest Oracle E-Business Suite Release Update Pack for Release 12.2. Refer to *Post-Upgrade Tasks*, page 5-1 in this guide.

#### 10. Download and apply the Online Patching Enablement patch

Download and apply the Online Patching Enablement patch: 13543062:R12.AD.C. Use Autopatch in hotpatch mode to apply the patch (adpatch options=hotpatch, forceapply).

**Important:** While applying the Online Enablement patch, you may receive the following error: 'Attention: Adpatch should no longer be used to apply patches. Please use ADOP tool for applying patches.' If you receive this error, then you must use adop in hotpatch mode to apply the enablement patch.

#### Monitor the Online Patching Enablement patch application.

The enablement patch application may take several hours to finish. You can monitor its progress at any time by running the DDL Status Report (ADZDSHOWDDL.sql) as follows:

```
$ sqlplus <apps Username> @$AD_TOP/sql/ADZDSHOWDDL.sql
```

This report lists a count of the DDL statements that are required to EBR enable your environment. The report is organized by outcome of execution: 'Successfully Executed', 'Not Executed', and 'Failed Execution'. At the end of the patch application the report should have a zero count in the sections: 'Not Executed' and 'Failed Execution'. If the report contains 'Not Executed' and 'Failed Execution' items, then report these failures to Oracle Support. You will be asked to provide the output from the report, the patch log and all worker logs, and the online patching enablement status report output. If there is any worker failure during the Online Enablement patch, you should not ignore or skip the failed error. The issue should be addressed before restarting the worker. Ignoring or skipping the error can cause database corruption.

**Note:** In addition to the above outcomes, some DDL statements may complete with a 'Warning' status.

#### 11. Compile Invalid Objects (if any)

Connect to sqlplus as 'apps' and run the following:

```
$ exec sys.utl_recomp.recomp_parallel
```

#### 12. Re-run the Online Patching Enablement Status Report after the Online Patching

### Enablement patch has been applied

1. Set the current directory to \$LOG\_HOME/appl/op:  

```
$ cd $LOG_HOME/appl/op
```
2. Run the Status Report immediately after the enablement patch completes:  

```
$ sqlplus <Apps Username> @$AD_TOP/sql/ADZDEXRPT.sql
```

**Note:** You must provide the APPS schema password when prompted.

The purpose of running this report at this stage is to identify and fix any errors that occurred during the enablement process.

**Important:** You must fix errors listed by this report. Failure to comply may result in unexpected failures during future patching cycles.

### 13. Re-run the Online Patching Enablement Readiness Report after the Online Patching Enablement patch has been applied

1. Set the current directory to \$LOG\_HOME/appl/op:  

```
$ cd $LOG_HOME/appl/op
```
2. Run the Readiness Report after the enablement patch completes:  

```
$ sqlplus system @$AD_TOP/sql/ADZDPSUM.sql
```

**Note:** You must provide the SYSTEM schema password when prompted.

```
$ mv adzdpsum.txt adzdpsum_post_dbprep.txt
$ sqlplus system @$AD_TOP/sql/ADZDPMAN.sql
$ mv adzdpman.txt adzdpman_post_dbprep.txt
$ sqlplus system @$AD_TOP/sql/ADZDPAUT.sql
$ mv adzdpaut.txt adzdpaut_post_dbprep.txt
```

The purpose of running this report at this stage is to ensure that all EBR violations that could have appeared before enabling the online patching feature are fixed.

### 14. Run the Online Patching Database Compliance Checker report to check for coding standards violations

There are two levels of compliance that can be targeted:

- Minimal Compliance (Minimal) - These checks represent the minimum requirement for correct operation of E-Business Suite Release 12.2.

**Warning:** Do not attempt to operate the system if there are P1 minimal compliance violations. Custom code should pass the minimal compliance checks before being used in a Release 12.2 system.

- Full Compliance (Full) - These checks indicate whether an object can be patched using Online Patching. Objects which do not meet full compliance may have limitations in how they can be patched, or may need to be patched using downtime patching. Full compliance also requires that all minimal compliance checks are passed. Custom code that will only be patched using downtime patching does not need to meet the full compliance level.
1. Set the current directory to \$LOG\_HOME/appl/op:  

```
$ cd $LOG_HOME/appl/op
```
  2. Run the Online Patching Database Compliance Checker report to check for online patching database objects standards violations:  

```
$ sqlplus <Apps Username> @$AD_TOP/sql/ADZDDBCC.sql
```

This utility reports all violations to the Online Patching Development Standards. All Oracle E-Business Suite violations are fixed by the Release 12.2 upgrade. You must fix any object listed in this report that is part of your custom code. If you do not fix the violation, then you cannot leverage the online patching infrastructure to patch the objects listed in this report.

**Suggested Reading:** Refer to *Database Object Development Standards for Online Patching in Developing and Deploying Customizations in Oracle E-Business Suite Release 12.2* (Doc ID: 1577661.1).

## Database Initialization Parameters

Oracle E-Business Suite Release 12.2 introduces a new database service called `ebs_patch` that supports online patching. The 'service\_names' parameter specifies one or more names by which users can connect to an environment. The environment registers its service names with the listener. When a user requests a service, the listener determines which environments offer the requested service, and then routes the user to the most appropriate environment.

For example:

```
$ service_names=%s_dbSid%,ebs_patch
```

**Note:** Do not perform this step if your database version is Oracle

Database 19c.

**Important:** For Oracle Database Release 19c, the 'ebs\_patch' database service will not be present at this stage of the upgrade. This database service (<DB\_UNIQUE\_NAME>\_ebs\_patch) will be created after the application of the latest AD and TXK patchset.

The 'recyclebin' parameter must be turned off to allow the cleanup phase of the online patching cycle to be performed without having to connect as SYS. This feature may still be used at other times.

For example:

```
$ recyclebin=off
```

If the `_SYSTEM_TRIG_ENABLED` parameter is set to false, then system triggers are not processed. The post Online Patching Enablement parameter must be set to true.

```
_SYSTEM_TRIG_ENABLED=true
```

```
$ _SYSTEM_TRIG_ENABLED=true
```

**Required Action:** Follow the instructions in *Database Initialization Parameters for Oracle E-Business Suite Release 12.2* (Doc ID: 396009.1) and reset the `init.ora` parameters as required.

## Upgrading to the Latest Code Level

**Tip:** The Release 12.2.0 upgrade is now completed and Online Patching is enabled. All Oracle E-Business Suite patches from this point forward will be performed using AD Online Patching (adop).

**Additional Information:** For information on applying patches using ADOP, see the *Oracle E-Business Suite Maintenance Guide*. Also see *Requesting Translation Synchronization Patches* (Doc ID: 252422.1).

### Apply the Latest AD and TXK Release Update Packs for Release 12.2:

#### 1. Apply the latest AD and TXK patchsets (Required)

**Important:** None of the application tier services should be up until you upgrade to the latest Oracle E-Business Suite Release Update Pack for Release 12.2 as described in the following section. Only the

Weblogic AdminServer (which in turn brings up NodeManager) services can be brought up as part of applying the latest AD and TXK Release Update Packs (as mentioned in its Readme document).

**Required Action:** Follow the instructions in *Oracle E-Business Suite Release 12.2: Suite-Wide Release Update Pack and AD/TXK Delta Information* (Doc ID: 1583092.1) to apply the latest AD/TXK patchsets.

## 2. Mandatory Steps for Custom Schema Upgrade for 11i / 12.0 / 12.1

**Caution:** Do not run `adsplce` until you have successfully applied the latest AD/TXK patchset according to the previous step.

This step is applicable only if you have custom products. If you have add-on localization products installed (CLE, CLA, CLL, CLJ), then you must re-splice those add-on localization products.

**Important:** You must re-splice after enabling EBR with CLE. Applying the latest AD delta patches will overwrite the context file.

### 1. Running `adsplce`

For the custom products that already exist, you must run `adsplce` on the Run File system to lay down the file system.

**Action:** For running `adsplce`, refer to *Creating a Custom Application in Oracle E-Business Suite Release 12.2* (Doc ID: 1577707.1).

## Apply the Latest Oracle E-Business Suite Release Update Pack for Release 12.2:

The 12.2 Release Update Pack (RUP) is a thoroughly tested release pack that combines patches created across the Oracle E-Business Suite after the initial release of Oracle E-Business Suite Release 12.2.

**Action:** You must apply the latest Oracle E-Business Suite Release Update Pack. Follow the instructions in *E-Business Suite RUP, AD and TXK RUP Information, Release 12.2* (Doc ID: 1583092.1).

**Tip:** When applying the RUP, follow the steps in the associated readme of the Oracle E-Business Suite Release Update Pack for preparation, applying prerequisite patches, and applying the RUP. When you have completed those steps in the Readme document, return to this guide and continue with the following steps. Do not perform the Post-Upgrade steps for the RUP until instructed to do so in the *Post-Upgrade Steps of Oracle E-Business Suite Release Update Pack for Release 12.2*, page 5-40.



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## Performing Post-Upgrade Tasks

This chapter covers the following topics:

- Database and System Administration Tasks Database and System Administration Tasks
- Customer Relationship Management Tasks
- Financials and Procurement Tasks
- Cash Management
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- Projects Tasks
- Oracle Fusion Project Management and E-Business Suite Projects Coexistence
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- System Administration
- Backing Up Oracle E-Business Suite
- System Maintenance Tasks
- Oracle XML Publisher Tasks
- Post-Upgrade Steps of Oracle E-Business Suite Release Update Pack for Release 12.2
- Mandatory Steps Applicable for All Upgrade Customers
- Additional Tasks

### Database and System Administration Tasks

You must complete all of the tasks in this section to finish the upgrade. All tasks must be completed during system downtime on the Release 12.2 Oracle E-Business Suite instance.

1. **Verify completion of Compile Security concurrent program (Required)**

You must wait and verify that the 'Compile Security' concurrent program successfully completed before attempting to log into EBS. You can run the following pl/sql block to view the status of this concurrent request:

```
$ set serverout on
declare
 res boolean;
 request_id number := null;
 phase varchar2(80);
 status varchar2(80);
 dev_phase varchar2(80);
 dev_status varchar2(80);
 message varchar2(255);
begin
 res := fnd_concurrent.get_request_status(request_id,
 'FND',
 'FNDSCMPI',
 phase,
 status,
 dev_phase,
 dev_status,
 message);
 if (res) then
 dbms_output.put_line('Request Id : ' || request_id);
 dbms_output.put_line('Phase : ' || phase);
 dbms_output.put_line('Status : ' || status);
 dbms_output.put_line('Completion Message : ' || message);
 else
 dbms_output.put_line('Unable to retrieve the information');
 end if;
end;
/
.
```

Results should appear as follows:

- Phase: Completed
- Status: Normal
- Completion Message: Normal Completion

## 2. Verify completion of concurrent programs (Required)

The upgrade process creates numerous concurrent program requests. Once you bring up the application tier, these programs run automatically to complete tasks such as data cleanup and upgrades to historical data, among others.

**Note:** Before you continue, ensure that all concurrent programs generated by the upgrade have run successfully. Refer to Managing Concurrent Processes, page B-1 of this guide for a sample list of concurrent programs.

## 3. Drop Obsolete Product Schema (optional)

**Note:** This step should be executed only after completing the *Verify completion of concurrent programs* post-upgrade task.

1. Ensure no objects exist in the product schema to be obsoleted. If objects exist in the schema, then they should be removed before dropping the schema.
2. After determining the schema is empty and no customizations or dependencies exist, the schema can be dropped using `addropschema.sql`.

Usage: `sqlplus apps @<AD_TOP>/patch/115/sql/addropschema.sql`  
<EBS\_SYSTEM password if on AD-TXK Delta 13 or later or SYSTEM password if on an earlier AD-TXK RUP> <APPLSYS\_Schema>  
<Obsoleted\_Product\_Schema\_Name>

**Example:**

```
$ sqlplus apps/apps @<AD_TOP>/patch/115/sql/addropschema.sql
manager applsys bsc
```

**Note:** Enter the apps password when prompted.

3. Obsolete Product Schemas that can be considered for dropping include:
  - ABM, AHM, AMF, AMW, BIL, BIV, BIX, BSC, CSS, CUE, CUF, CUI, CUN, CUP, CUS, DDD, EAA, EVM, FEM, FII, FPT, FTP, GCS, HCC, IBA, IBP, IGF, IGS, IGW, IMT, IPD, ISC, ITA, JTS, ME, MST, OKB, OKI, OKO, OKR, OZP, OZS, PFT, POA, PSB, RCM, RHX, RLA, VEH, XNC, XNI, XNM, XNS, ZFA, ZPB, ZSA.
  - The following schemas must be retained to support technical dependencies from other products:  
HRI, BIM, OPI, PMI, ENI, PJI, FTE, EGO, BIC

**Note:** Some schemas may be active for other licensed products although these products are listed as obsolete in *Planning for an Upgrade*. In these cases, the functionality is removed.

4. **Drop dangling synonyms (optional)**

After dropping obsoleted product schema, you must run the following script to drop dangling synonyms:

```
$ sqlplus APPS/****@DB @<AD_TOP>/sql/adzd_drop_synonyms.sql
```

5. **Reset ORACLE schema passwords (recommended)**

During the upgrade, Rapid Install preserves the passwords that you previously set for existing products. However, as it creates a schema for each new product installed, if you did not enter a password in the Rapid Install wizard, then it sets up a default password derived from the product abbreviation (short name). To maintain product security, reset these default passwords now.

**Conditional Action:** Perform the steps to change the passwords as described in the *Oracle E-Business Suite Password Management* section in the *Oracle E-Business Suite Maintenance Guide*.

## 6. Change the WLS Admin Default Password (recommended)

For security purposes, you should now change the default password for the WLS Admin account as follows:

1. Run the following command to stop all application tier services except the Node Manager and the Admin Server:

```
$ EBSAPPS.env run
$ ADMIN_SCRIPTS_HOME/adstpall.sh ?skipNM -skipAdmin
```

2. Run the following command to change the WLS Admin password:

```
$ perl FND_TOP/patch/115/bin/txkUpdateEBSDomain.pl
-action=updateAdminPassword
```

**Note:** You will be prompted for the password information.

### For Windows Users:

Run the following commands on Windows platforms:

```
C:\> <ADMIN_SCRIPTS_HOME>\adadminsrvctl.cmd stop
C:\> <ADMIN_SCRIPTS_HOME>\adnodemgrctl.cmd stop
```

Start the Node Manager by running the following commands on Windows:

```
C:\> cd %INST_TOP%\admin\install
C:\> adsvNodeManager.cmd
```

Exit the command prompt after executing 'adsvNodeManager.cmd' and start services from a new command prompt.

3. Restart all services with the following command:

```
$ adstrtal.sh
```

**Additional Information:** For additional information refer to *Oracle E-Business Suite Setup Guide Release 12.2 (Part No. E22953)*.

## 7. Apply recommended patches (recommended)

Use Patch Wizard to generate a list of recommended patches for your environment and apply the list of recommended patches to your environment.

**Suggested Reading:** Additional information regarding the use of Patch Wizard is available in *Oracle E-Business Suite Releases 11i and 12.x: Required Updates for Patch Wizard* (Doc ID: 1267768.1)

## 8. Apply recommended security patches (recommended)

1. Oracle highly recommends that you apply the latest critical patch update to your Oracle E-Business Suite environment.

**Required Action:** Go to the *Critical Patch Updates, Security Alerts and Third Party Bulletin* web page located at: [www.oracle.com/technetwork/topics/security/alerts-086861.html](http://www.oracle.com/technetwork/topics/security/alerts-086861.html).

From this page, go to the latest Critical Patch Update page and select the link to Oracle E-Business Suite. From this page, select the link to the Oracle E-Business Suite MOS Note for the current CPU. Review and apply the CPU patches according to the referenced MOS note.

2. Oracle highly recommends that you enable TLS. You will enable TLS after you upgrade to Oracle E-Business Suite Release 12.2. You must apply the prerequisite patch requirements to enable TLS.

**Required Action:** Review the prerequisite patch requirements in *Enabling TLS in Oracle E-Business Suite Release 12.2* (Doc ID: 1367293.1), Section 5.1 for TLS 1.2 with Backward Compatibility, and Section 6.1 for TLS 1.2 Only. Apply all required patches and prerequisites to enable TLS.

## 9. Install online help (recommended)

To install the American English online help, run the database portion of the online help patch (u10201000.drv). It is located in \$AU\_TOP/patch/115/driver directory. You must apply the American English online help patch driver (\$AU\_TOP/patch/115/driver/u10201000.drv) using AD Online Patching (adop) with phase=apply hotpatch=yes and options=nocopyportion,nogenerateportion,forceapply.

```
$ adop phase=apply patchtop=$AU_TOP/patch/115 patches=driver:
u10201000.drv options=nocopyportion,nogenerateportion,forceapply
hotpatch=yes
```

## 10. Apply online help for Oracle E-Business Suite Release Update Pack

**(recommended)**

**Action:** Refer to the Oracle E-Business Suite Release Update Pack Readme (applied in the *Performing the Upgrade* chapter) and apply the corresponding Oracle E-Business Suite Release Online Help patch.

**11. Apply latest product patches (Required)**

Determine the latest product-specific patches. Then, download the American English patches. You must apply the patches using AD Online Patching (adop).

**Additional Information:** See Patch Wizard Main Page in *Oracle E-Business Suite Maintenance Procedures Guide*.

If you have languages other than American English registered in your system, then follow instructions in the following step.

**12. Grant flexfield value set access to specific users (Required)**

If you have not already granted flexfield value set access in a previous version of Release 12.2, then you must perform this step.

Release 12.2 includes a new security feature, flexfield value set security; it controls who can create or modify flexfield values in the Flexfield Values Setup window (FNDFMSV). Flexfield value set security requires some mandatory setup steps before any user can create or update values in the Values window.

**Note:** Follow the required steps in the *Flexfield Value Set Security* chapter in the *Oracle E-Business Suite Flexfields Guide, Release 12.2*.

**13. Installing NLS upgrade patch driver and NLS Online Help (conditional)**

For additional NLS languages active in the system, once the American English upgrade and recommended Release Update Pack level have been applied, you can then upgrade your NLS software for existing languages by performing either one of the following steps:

1. Using the Translation Synchronization Patch followed by applying the NLS Online Help patch if available.
2. Installing the R12.2.0 NLS software available in Oracle Software Delivery Cloud, followed by installing NLS versions of all US patches applied to your system including recommended Release Update Pack. You must then apply the NLS Online Help patch if available.

**Conditional Action:** All NLS patches, including the Translation Synchronization Patch must be called through AD Online Patching (adop). Follow instructions in the Post-Installation Tasks section of the *Oracle E-Business Suite NLS Release Notes, Release 12.2* (Doc ID: 1314621.1) for your release level. For additional information, refer to *Oracle E-Business Suite Translation Synchronization Patches* (Doc Id: 252422.1).

**14. Re-enable custom triggers, constraints, and indexes (conditional).**

During the upgrade, custom triggers or constraints may have been modified. If you disabled these triggers and constraints, then identify any data updates that must be made before you re-enable them.

If you dropped any custom indexes, then review the new data model to determine if the index is necessary before you redefine it.

**15. Manually add custom redirects and resources to configuration files (conditional)**

The Allowed Redirects and Allowed Resources features are enabled by default after your upgrade. Consequently, if you use custom redirects and resources, such as JSPs and servlets, in your environment, then you must manually add these to your configuration files for allowed redirects and allowed resources, respectively.

**Additional Information:** For additional information, see 'Allowed Redirects' and 'Allowed Resources' in the *Oracle E-Business Suite Security Guide*.

**16. Update and verify custom responsibilities (conditional)**

Verify that all custom responsibilities use the correct menu. From the System Administrator responsibility, navigate to Security > Responsibilities. Query each custom responsibility and update as necessary.

**17. Migrate custom development to new technologies (recommended)**

In this release, Oracle E-Business Suite is migrating to new technologies in certain areas. If you have built custom development on the out-dated technologies, you should migrate to the new technologies as part of the upgrade.

**Note:** See *Preparing Custom Development for Next Oracle Applications Release* (Doc ID: 374398.1) for more information.

**mod\_plsql:**

If you have custom development on mod\_plsql, migrate your web pages to Oracle Application Framework.

**Note:** See *Oracle Application Framework Developer's Guide* (Doc ID: 1315485.1) for more information.

### Oracle Reports Server Reports:

If you have custom development that uses reports that are run through Oracle Reports Server, the following migration alternatives are available.

---

| New Technology                          | Advantages and Considerations                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Convert to Oracle XML Publisher         | Prepares your application both for E-Business Suite Release 12 and for Oracle Fusion Applications. Allows you to take advantage of the benefits of XML Publisher. Some automated tools are available to help you migrate to XML Publisher. See <i>Oracle XML Publisher Administration and Developer's Guide</i> for more information.              |
| Convert to Oracle Application Framework | May be appropriate for some reporting needs. However, note that no automated migration tools are available. You must rewrite any charts using the Framework Charting tool (BI Chart Bean). See <i>Oracle Application Framework Developer's Guide</i> (Doc ID: 1315485.1).                                                                          |
| Run through the Concurrent Manager      | If you follow coding standards, you must modify your PL/SQL code to meet the concurrent manager standards. In particular, you must use some user exits. Rewrite any charts using the Oracle Reports Charting tool (BI Chart Bean). See <i>Oracle E-Business Suite Developer's Guide and Oracle Reports: Building Reports</i> for more information. |

---

### Oracle Graphics Integrations with Oracle Forms:

If you have custom development that uses Oracle Graphics (Charting) integrated with Oracle Forms, the following alternatives are available.

| New Technology                                                                      | Advantages and Considerations                                                     |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Convert both the form and the chart to a Framework-based application.               | Prepares your application both for Release 12 and for Oracle Fusion Applications. |
| Convert the chart to a Framework-based page that can be launched from Oracle Forms. | See <i>Oracle Application Framework Developer's Guide</i> (Doc ID: 1315485.1)     |

### AK Mode:

- Personalizations

Personalized Oracle E-Business Suite Framework-based pages in the AK repository, are automatically migrated from AK to MDS during the upgrade - if the AK and MDS repositories are in the same database instance.

The upgrade does not automatically migrate custom personalizations if the AK and MDS repositories are in separate instances. In this case, you must run the Personalization Migration tool manually to perform the migration.

**Note:** See *Migrating AK Personalizations* in *Oracle Application Framework Personalization Guide* for more information.

- AK/ICX Web Inquiries

If you have previously used AK/ICX Web Inquiries, then use the Oracle Application Framework Search feature to recreate search regions that can be personalized.

**Note:** See *Implementing Specific UI Features* in *Oracle Application Framework Developer's Guide* (Doc ID: 1315485.1)

### 18. Migrate the CUSTOM library (conditional)

Before you copy custom code in the CUSTOM library to the new directory structure, refer to the backup you previously created and verify that the customizations are valid for the new version of Oracle Applications.

For valid customizations, place a copy of the new CUSTOM library (CUSTOM.pll) in a safe place. It is located in the \$AU\_TOP/resource directory (UNIX), or the %AU\_TOP%\resource directory (Windows). Then, make a copy of the old Oracle Forms CUSTOM library and place it in the new directory. Upgrade to Oracle Forms Developer 10g by regenerating the library. Or, you can cut and paste the existing custom code into the new library, and then regenerate it.

**Note:** See *Using the CUSTOM Library* in the *Oracle E-Business Suite Developer's Guide*.

**19. Copy and re-customize modified scripts or reports (conditional)**

Copy custom shell scripts or reports to the custom application directories and re-customize the copy as necessary.

**Note:** See *Customization Standards* in *Oracle E-Business Suite Developer's Guide*.

**20. Copy existing custom start scripts (conditional)**

If you have customized the concurrent manager startup script (\$FND\_TOP/bin/startmgr.sh on UNIX), then you must copy the customized script from the old environment to the new environment. You should then verify that your customizations are valid for the new environment.

**Warning:** Oracle does not recommend customizing this script. If you perceive a need to change this script, then contact Oracle Support before making changes. For more information, see the *Oracle E-Business Suite Setup Guide*.

**Note:** The default location in UNIX for the startmgr script is \$FND\_TOP/bin. For more information, see the *Oracle E-Business Suite Setup Guide*.

**21. Review user responsibility assignments (recommended)**

Although user/responsibility assignments are preserved during the upgrade, the effective permissions granted by the seeded responsibilities, menus, functions, and report security groups may have changed. Use the information on the Forms or Security reports in the System Administrator responsibility to confirm that permissions granted by responsibilities continue to meet the requirements of the job roles (without granting more privileges than are necessary).

**Note:** See *Organizing Programs into Request Groups* in the *Oracle E-Business Suite Setup Guide* for more information.

**22. Configure applications client software for forms applet (Required).**

**Action:** The connection between the client and the applications

forms is provided through an applet in the client web browser. Instead of using the browser's own JVM, Oracle E-Business Suite uses the Sun Java (J2SE) native plug-in. You can find download instructions in *Deploying JRE (Native Plug-in) for Windows Clients in Oracle E-Business Suite Release 12* (Doc ID: 393931.1).

### **Alerts:**

These tasks apply to Oracle Alerts.

#### **1. Associate organization names with custom Alert definitions (conditional)**

Manually update custom alerts that you want to assign to a particular organization:

1. As the Alerts Manager, navigate to the Alerts form (Alert > Define) and query the definition.
2. Choose Alert Details, then display the Installations tabbed region in the Alert Details window.
3. Enter the ORACLE ID and organization name that you want to run this alert against.
4. Make sure you check Enabled before saving the changes.

### **Multiple Organizations:**

These tasks apply to Multiple Organizations for Oracle E-Business Suite.

#### **1. Set operating unit mode for customizations (conditional)**

With the introduction of multiple organizations In this release, an applications responsibility can access multiple operating units. Some concurrent programs have been enhanced to be able to process multiple operating units simultaneously, whereas for most others, the operating unit must be specified when you run the program.

To support this new functionality, concurrent programs are defined with an operating unit mode of S for single operating unit or M for multiple operating units. This mode is set automatically during the upgrade.

However, if you have modified the definition for any concurrent programs, then the upgrade will not set the operating unit mode in order to preserve the customization. Depending on how you run the customized program, you may need to set the operating unit mode manually. Run the following SQL command to set a concurrent program for a single operating unit:

```
$ UPDATE FIND_CONCURRENT PROGRAMS
$ SET MULTI_ORG_CATEGORY='S'
$ WHERE CONCURRENT_PROGRAM_NAME = '<your program name>'
```

Enter M instead of S for multiple operating units.

If you want to know which setting is appropriate for a given program, then you may review the setting in the appropriate .ldt file.

**Note:** If you have customized the concurrent program definition, this setting may not be appropriate given the way you use the program.

### **Oracle Web Applications Desktop Integrator:**

These steps apply to Oracle Web Applications Desktop Integrator and to products that use Oracle Web Applications Desktop Integrator to generate spreadsheets.

#### **1. Recreate existing spreadsheets (conditional)**

Applies to 11i release level: All

TUMS step key: N/A

Spreadsheets created in previous versions of Oracle Web Applications Desktop Integrator do not interact with Oracle E-Business Suite products after the upgrade. You must replace existing spreadsheets with ones that you create using the new technology stack. Follow the procedures in your product-specific documentation to create the new spreadsheets.

### **Workflow:**

These steps apply only to Oracle Workflow.

#### **1. Update Status Monitor URLs (Required)**

Applies to 11i release level: All

TUMS step key: N/A

Oracle Workflow provides URL access to the Status Monitor through the Application Framework Agent, rather than through the PL/SQL Web agent used in Release 11i. Run the Workflow Plsql Cartridge Dependency Removal From Data concurrent program to update the Status Monitor URLs that appear in existing workflow attribute values to the new Web agent structure. The program updates item attribute values for active workflow processes and message attribute values for open notifications.

**Note:** The update for message attribute values applies only to notifications accessed through the Worklist Web pages. Status

Monitor links in e-mail notifications that were sent or generated before the upgrade cannot be automatically updated. Log on to Oracle E-Business Suite separately to access the Status Monitor after the upgrade.

### **Oracle E-Business Suite Integrated SOA Gateway:**

**Conditional Action:** Oracle E-Business Suite Integrated SOA Gateway requires manual post-installation steps. If you want to use the Oracle E-Business Suite Integrated SOA Gateway feature for Web service generation, deployment, and invocation, then perform the steps documented in *Installing Oracle E-Business Suite Integrated SOA Gateway, Release 12.2* (Doc ID: 1311068.1).

**Note:** After the upgrade, the deployed WSDL URL for a generic XML Gateway service will be changed. You may have to replace it with the new WSDL URL and service location or address accordingly in Web service clients while invoking the generic XML Gateway service. For more information about XML Gateway Web services, see the *Oracle XML Gateway User's Guide*.

### **Oracle XML Gateway:**

**Conditional Action:** Complete the installation and setup tasks described in *Installing Oracle E-Business Suite Integrated SOA Gateway, Release 12.2* (Doc ID: 1311068.1) for enabling Oracle E-Business Suite Integrated SOA Gateway and generic XML Gateway services.

**Note:** After the upgrade, the deployed WSDL URL for a generic XML Gateway service will be changed. You may have to replace it with the new WSDL URL and service location or address accordingly in Web service clients while invoking the generic XML Gateway service. For more information about XML Gateway Web services, see the *Oracle XML Gateway User's Guide*.

## **Customer Relationship Management Tasks**

Complete the tasks in this section before you allow users to use Oracle Customer Relationship Management (CRM) products.

## **Email Center:**

These tasks apply only to Oracle Email Center.

### **1. Migrate Email Center data (recommended)**

Applies to 11i release level: All

TUMS step key: IEM\_PROD\_CHK

You can migrate Email Center data to the new architecture in two phases: live messages and historical messages. To accommodate the migration, a set of migration tools is delivered with Email Center in this release. They consist of a Download Processor, concurrent programs, and a Migration Console.

If you choose to perform the data migration, which includes both configuration and email data, then these tools are available to help with this process. Before you launch the migration process, you must:

- Stop the Email Server middle-tier process (IMAP, Postman, and so on)
- Stop or cancel pending Email Center concurrent requests
- Stop all Apache servers
- Log out of Email Center while the data migration is running
- Make sure there are no live messages in the pre-processing queue or pending outbound requests for the Outbox Processor. The migration tools check for these conditions and displays the data on the Migration Console.

**Note:** Refer to *Oracle Email Center Migration to Release 12* (Doc ID 549036.1) for more Email Center migration specific details.

## **Mobile Field Service:**

These tasks apply only to Oracle Mobile Field Service.

### **1. Migrate to the New Mobile Field Service Application (conditional)**

Applies to 11i release level: All

TUMS step key: CSM\_SYNC\_DATA\_POST

Oracle Mobile Field Service has been redesigned for this release. If you use this product, complete the steps described in *Oracle Mobile Field Service Post-upgrade Instructions for Oracle Applications Release 12* (Doc ID: 386682.1).

## **Sales and Telesales:**

These tasks apply only to Oracle Sales and Telesales. For upgrading from ASN.B to

Release 12, see: *Sales upgrade from ASN.B to Release 12*. ASN.B is Oracle Sales Mini-pack 11i.ASN.B. Refer to *About Oracle Sales Mini-pack 11i.ASN.B* (Doc ID: 292871.1).

### 1. Run concurrent programs (Required)

Applies to 11i release level: All

TUMS step key: AS\_DENORM\_CP\_CHK

Perform the following steps to update and refresh the AS\_ACCESSES\_ALL and AS\_SALES\_CREDITS\_DENORM tables:

- From the Oracle Sales Administrator responsibility, navigate to Concurrent Requests > Run.
- Run the "Update as\_accesses\_all denorm flag" request set.
- Run the "Refresh of as\_sales\_credits\_denorm" concurrent program.

**Note:** If you are at the 11.5.10.2CU release level, then you can reduce downtime by running the concurrent process request set "Update as\_accesses\_all denorm flag" as a pre-upgrade step.

### 2. Migrate Sales methodologies for opportunities (required – application specialist)

Applies to 11i release level: All

TUMS step key: N/A

This step must be performed by the Sales and Telesales application specialist before you allow users to log on.

This release requires you to set a sales methodology if a sales stage is specified in an opportunity. Once specified, you cannot change to any other sales methodology. To avoid errors and improper migration, your application specialist must follow the instructions in the *Migrate Sales Methodologies for Opportunities* section of Sales and Telesales in the Upgrade by Request appendix.

### 3. Migrate Sales credits (required – application specialist)

Applies to 11i release level: All

TUMS step key: N/A

This step must be performed by the Sales and Telesales application specialist before you allow users to log on.

In this release, only one sales person per opportunity line receives the entire revenue credits for that line. The Release 11i Sales feature that allowed multiple sales people to receive credits on a single opportunity line is obsolete. Before you can use the upgraded Sales and Telesales products, your application specialist must

follow the instructions in the *Migrate Sales Credits* section of Sales and Telesales in the *Upgrade by Request* appendix.

### **Sales Upgrade From 11i.ASN.B to Release 12.2:**

Customers upgrading from 11i.ASN.B to Release 12.2 must run two concurrent requests and are not required to run all the 11i.ASN.B enabling steps a second time:

- 1. Run ASN Migrate Duplicate Salesrep Main Program.**

This concurrent request removes duplicate sales team members. You should run this request at downtime as part of the upgrade process.

- 2. Run ASN Post Upgrade Log and Customer Update.**

This concurrent request updates the endday log flags for Sales Credit, Opportunity Lines, and synchronizes the Customer Id of opportunity sales team with opportunity header data. You can run this request after the upgrade process at up time.

## **Financials and Procurement Tasks**

Complete the tasks in this section before you allow users to log on to Oracle Financials and Procurement products.

### **Advanced Collections:**

This task applies for customers using Advanced Collections with Strategies.

### **Post Migration Verification Steps**

1. From the Collections Administrator responsibility, confirm the Collections Business Level in the Setup Checklist.
2. From the System Administrator responsibility, start the concurrent program Workflow Background Process for the following Item Types:
  - IEXSTRY - IEX: Collection Strategy Work Flow
  - IEXSTFFM - IEX: Strategy Fulfilment Mailer
  - IEXSTRCM - IEX: Strategy Custom Work Flow
3. Run the script `$IEX_TOP/patch/115/sql/iexumchk.sql` to set the profile option Unit of Measure (UOM) to 'time'.

### **Financials for India:**

These tasks apply only to Oracle Financials for India.

## 1. Apply custom logic for Projects functionality (conditional)

Applies to 11*i* release level: All

TUMS step key: JAI\_CHECK\_PA\_CUST

In this release, Oracle Financials for India (JAI) supports a Projects Costing/Billing solution, which includes a custom version of the Projects commitment view and creates a pre-processing extension registration in the transaction source definition for Purchase Receipts. Because this custom logic applies only to customers who want to use the Projects functionality provided by JAI, the customized files are released as a standalone patch (12699629).

Refer to the following table to determine whether to apply this patch to your system:

| Action                                             | Release 11 <i>i</i> uses JAI Projects? | Release 12.2 uses JAI Projects? | Apply Patch? |
|----------------------------------------------------|----------------------------------------|---------------------------------|--------------|
| Upgrading from Release 11 <i>i</i> to Release 12.2 | No                                     | Yes                             | Yes          |
| Upgrading from Release 11 <i>i</i> to Release 12.2 | Yes                                    | Yes                             | Yes          |
| Upgrading from Release 11 <i>i</i> to Release 12.2 | No                                     | No                              | No           |

**Note:** See *Oracle Financials for India Implementation Guide* for more information.

## Internet Expenses:

These tasks apply only to Oracle Internet Expenses.

### 1. Ensure that document categories have valid sequences (conditional)

Applies to 11*i* release level: All

TUMS step key: OIE\_DOC\_SEQUENCE\_CHECK

Internet Expenses creates employee invoices using the document category Expense Report Invoices (EXP REP INV). You should ensure that a valid sequence is assigned to this document category.

In addition, Internet Expenses no longer creates credit card provider invoices using the document category Mixed Invoices (MIX INV). Instead, it uses the Payment Request (PAY REQ INV) document category. You should ensure that a valid sequence is assigned to the Payment Request (PAY REQ INV) document category as well.

## **Payments:**

These tasks apply only to Oracle Payments (renamed from iPayments in Release 11i).

### **1. Enter encryption key for Payments (conditional)**

Applies to 11i release level: All

TUMS step key: IBY\_WALLET\_SETUP

If you used Oracle Applications Credit Card Encryption in Release 11i, then enter the same value you used for your system security key (also known as private key) in the Oracle Wallet Manager configuration. Then, complete the encryption setup on the System Security Options page. You must complete this setup before you begin any payment processing or transactions will fail.

**Note:** Refer to *How To Rotate/Migrate Oracle Payments System Key in R12* ( Doc ID: 1330774.1)

### **2. Complete payment profile options for Netherlands (conditional)**

Applies to 11i release level: All

TUMS step key: IBY\_PMT\_FILE\_FORMAT\_NL

If you used global descriptive flexfields to control payment file formatting in Release 11i, then edit the Oracle Payments EFT payment format template to pass required EFT values or create the values as a bank instruction on the Payment Process Profile in Oracle Payments.

You must complete this task before you begin any invoice or payment processing. If it is not complete, then you cannot track the required attributes for your transactions.

**Note:** See *Financials Upgrade Impact* for more information.

### **3. Complete Danish payment means and channels (conditional)**

Applies to 11i release level: All

TUMS step key: IBY\_PMT\_MEANS\_DK

If you used global descriptive flexfields to control payment means and channels in Release 11i, then edit the Oracle Payments Danish payment format template to pass

payment means and payment channel information before you begin any invoice or payment processing. Also, enter required payment validations for each payment method (migrated from payment categories) in Oracle Payments.

You must complete this task before you can track the required attributes for your transactions.

**Note:** See *Financials Upgrade Impact* for more information.

#### 4. Complete remittance advice controls for Italy (conditional)

Applies to 11i release level: All

TUMS step key: IBY\_REMIT\_ADV\_CONTROL\_IT

If you used global descriptive flexfields to control the remittance advice controls (Profile Option for Company Details) for Italy in Release 11i, then edit the Oracle Payments EFT payment format template to control whether the company details are printed.

If you do not complete this task before you begin any invoice or payment processing, you cannot track the required attributes for your transactions.

**Note:** See *Financials Upgrade Impact* for more information.

### Oracle Purchasing:

Complete the installation, configuration, and deployment steps to use Oracle BPEL Process Manager 11g with Oracle E-Business Suite Release 12.2.0. See *My Oracle Support* (Doc ID: 1362803.1).

**Note:** The prebuilt BPEL business processes in Oracle E-Business Suite Release 12.2 are certified with Oracle SOA Suite 12c, Oracle SOA Suite 11g. The BPEL 10g based prebuilt integrations are not supported in Oracle E-Business Suite Release 12.2. Customers upgrading to Oracle E-Business Suite Release 12.2 from 11i must migrate to Oracle SOA Suite 11g or Oracle SOA Suite 12c. Refer to *Integrating Oracle E-Business Suite Release 12.2 with Oracle BPEL in Oracle SOA Suite 11g R1* (Doc ID: 1584883.1) and *Integrating Oracle E-Business Suite 12.2 with BPEL in SOA Suite 12c* (Doc ID: 1951625.1). Follow the respective documentation to deploy these BPEL processes.

Oracle Purchasing (available as part of Oracle Order Procurement) is integrated with Oracle Transportation Management. If you have licensed both Oracle Transportation Management and Oracle Order Purchasing and will use Oracle Transportation Management with Oracle Purchasing, then perform the post-update steps outlined in *Oracle Transportation Management Integration with Oracle E-Business Suite Post-Update*

## Cash Management

The Bank Account Type values are now located in the Cash Management Lookups. The seeded values are SAVINGS, CHECKING and OTHER. Review your bank account type values used in 11i and add your custom values to the Bank\_account\_type lookup in the Oracle Cash Management Lookups window.

## Human Resource Management (HRMS)

Complete the tasks in this section before you allow users to log on to Human Resources Management products.

### Human Resources:

#### 1. Apply latest HRMS Legislative Updates (Required)

Applies to 11i release level: All

TUMS step key: PER\_HRGLOBAL

To maintain required legislative compliance, you must apply all legislative data updates. The updates are maintained regularly to be in line with government and country-specific legal requirements. See the latest HRMS (HR Global) Legislative Data Patch (Doc ID: 1469456.1) for information and instructions on how to ensure that your system is up to date.

**Note:** If you are using only Oracle HR Shared for use with another Oracle E-Business Suite product, then DO NOT apply this legislative data.

#### 2. Check downtime reduction report (recommended)

Applies to 11i release level: All

TUMS step key: PER\_R12\_DTR

Log on as System Administrator and submit the Data Update Process Status Report concurrent request. It identifies a number of data update tasks, which may run for an extended period of time if you have a large volume of data that requires manipulation.

**Note:** See *Guide to the Data Update Status Report* (Doc ID: 315932.1) for more information.

## Payroll:

These tasks apply only to Oracle Payroll.

### 1. Install or Update Vertex for Payroll (Required)

Applies to 11i release level: All

TUMS step key: PAY\_VERTEX

Oracle Payroll uses the Vertex Quantum Payroll Tax Series in the United States and Canada. The HRMS data in this release contains version 4.0 of this third-party product. If you run Oracle Payroll in the United States or Canada, see the information about advanced configuration steps allowed by Payroll, and the information about installing or updating the Vertex software, in *Installing Quantum for Oracle Payroll* (Doc ID: 224273.1).

**Note:** The Quantum setup (through concurrent programs "Quantum Program Update Installer" and "Quantum Data Update Installer") must be run before running the payroll.

### 2. Run the QuickPay Exclusions Data Upgrade process (recommended)

Applies to 11i release level: All

TUMS step key: PAY\_QUICK\_EXCL\_UPG

If you have not previously run the QuickPay Exclusions Data Upgrade process, you should do so now. From the System Administrator responsibility, run the Generic Upgrade Mechanism concurrent program from the Processes and Reports menu. It accepts a single parameter (the name of the data update process to be executed). Set the parameter to QuickPay Exclusions Table Upgrade.

### 3. Create translated Database Item names for Japanese Localizations (conditional)

Applies to 11i release level: All

TUMS step key: PAY\_QUICK\_EXCL\_UPG\_JP

If you currently use, or plan to use, Oracle Payroll in an NLS environment, apply the consolidated hrglobal translation patch to deliver translated names for Element Types, Element Input Values, Balance Types, Balance Dimensions, and Global Values. Then, run the Generate Payroll Dynamic Database Item Translations concurrent program and check the log file for errors.

**Note:** See *HRMS (HR Global) Legislative Data Patch* (Doc ID: 1469456.1) for details.

This program invalidates Customers' Formulas if they contain variables whose names clash with the new Database Item names. Any invalidated Formulas are

listed in the concurrent program log. You must correct and re-compile them before they can be used. If a seeded Formula contains a variable whose name clashes with a new Database Item name, that new name will not be applied in order to maintain seed data consistency.

When running the concurrent program, selecting Yes for the parameters Element Types, Element Input Values, and Balances causes translated Database Items to be created using the corresponding translations. Select Yes for the Localization parameter only if you run payrolls for countries that provide localized database item translation code (see New and Changed Components section of the About Doc for each country). If you select No for all parameters, the program logs any errors for Global Value translated Database Items.

#### 4. **Compile Japanese flexfields after generating messages (Required)**

Applies to 11i release level: All

TUMS step key: PAY\_COMPILE\_FLEX\_JP

A number of the Japanese Flexfields have value sets with translated prompts for some of the Quickpick columns. These values must be seeded in the NLS language for the flexfield to compile cleanly. The seeding occurs when the messages are compiled. You may see some Japanese flexfields that appear as invalid. Resolve this issue by using AD Administration first to generate messages, and then to re-generate flexfields that failed to cleanly compile.

#### 5. **Enable Subledger Accounting (SLA) (conditional)**

Applies to 11i release level: All

TUMS step key: PAY\_ENABLE\_SLA

If you intend to enable Subledger Accounting for Oracle HRMS in the first available version of Release 12, then you must perform a manual upgrade sequence to support your transfers to SLA. The manual sequence includes these steps:

1. Set up Journal Line Definitions
2. Set up the Application Accounting Definition
3. Set up the Method for each chart of accounts

**Note:** See *Performing a Manual Upgrade to Enable Subledger Accounting (SLA) for Oracle HRMS Release 12* (Doc ID: 399632.1) for details.

This manual upgrade sequence is required only for the current Release 12 software. However, an automated version is planned for a future release. When it is made available, the manual upgrade sequence will not be necessary.

See *Performing a Manual Upgrade to Enable Subledger Accounting (SLA) for Oracle HRMS Release 12* (Doc ID: 399632.1) for details about releases that require you to run the upgrade sequence manually.

**Note:** Optionally, if you want to migrate historical payroll data to SLA that has been posted to GL prior to availability of SLA functionality, then run the concurrent program Upgrade Historical Payroll Data to SLA for payroll system data synchronization.

## Projects Tasks

Complete the tasks in this section before users log on to Oracle Projects products.

### Project Costing:

Applies to 11i release level : All

Compile all Fast Formulas via FFXBCP (Doc ID: 167689.1)

This step applies to all customers upgrading to Release 12.2 and wanting to use the HR Rate by Criteria for labor rates, to be used in forecast or labor cost distribution in the Projects application.

### Property Manager:

These tasks apply only to Oracle Property Manager.

#### 1. Create accounts distribution for leases (conditional)

Applies to 11i release level: All

TUMS step key: PN\_CREATE\_ACCT\_DIST\_LEASE

If a lease with normalized payment terms does not contain a liability and accrued liability account or normalized billing terms, then create an accounts distribution.

Navigate to View > Requests > Submit a new request > Create Accounts Distribution. Supply the following information:

- Lease Class: Create accounts distributions for revenue leases, expense leases, or subleases
- Lease Number range: Range of leases for which you want to create the accounts distribution
- Location Code range: Location or a range of locations if you want to create accounts distributions for leases with tenancies for the specified location range
- Account information: Appropriate Receivable, Accrued Asset, Liability, and Accrued Liability accounts depending on whether you are creating an accounts

distribution for expense leases, or revenue leases and subleases

## Oracle Fusion Project Management and E-Business Suite Projects Coexistence

You can use Oracle Fusion Project Management to manage your projects and resources. After you are ready to start performing financial management activities such as collecting costs and billing, you can import the project into Oracle E-Business Suite (EBS) Projects, and generate the project budget.

Use Oracle Fusion Project Management for collaboration, scheduling, resource management, and progress tracking. As resources report actual hours in Oracle EBS Projects, export the resource to Oracle Fusion Project Resource Management and track the resource utilization.

You must complete the following post-install steps to enable the coexistence:

1. Get the SSL certificate.
2. Import the SSL certificate to the EBS instance.
3. Set the Username token authentication credentials for the service.
4. Add the service invocation subscription to invoke the service.
5. Add a subscription to the events.

### Applying Patches:

Download and apply patch 24610809:R12.PJT.C from *My Oracle Support*.

### Obtain the SSL certificate:

Complete the following steps to export the SSL certificate from your browser. The following steps describe the process using Mozilla Firefox:

1. Click the site identity button located in the address bar of your browser.
2. Click the More Information... button.
3. Select Security.
4. Click View Certificate.
5. Review the certificate details on the General tab. Verify that the imported SSL certificate is valid.
6. Select the Details tab.

7. Click Export...
8. Export the certificate to your directory.
9. Save the certificate using the host name of the web service provider. For example, if the host name is \*.example.com, then save the certificate as: \*.example.com.cer.

### **Importing the SSL Certificate to the EBS Instance:**

Perform the following steps to transfer the exported certificate to the EBS instance:

1. Use Secure File Transfer Protocol (SFTP) to export the server name to the EBS instance. For example, sftp <servername>.example.com.
2. Enter your username and password when prompted.
3. Use the put command to enter the certificate into the instance. For example, put \*.example.com.cer.
4. Log in to the EBS instance using telnet command.
5. Select a directory in which to save the certificate file.
6. Import the certificate to the EBS keystore. Ensure that you are in the same directory where you saved the certificate.
  - Use the keytool command to complete the task. For example, if your certificate name is \*.example.com.cer, then the command will be:

```
keytool -import -alias FusionCert -file *.example.com.cer -keystore $AF_JRE_TOP/lib/security/cacerts.
```
7. Enter the keystore password when the system requests it.
8. Restart the EBS server after importing the certificate.
9. To update the certificate to an updated release, delete the previously imported certificate. Use the following command:

```
keytool -delete -alias <mydomain> -keystore $AF_JRE_TOP/lib/security/cacerts.
```

### **Setting the Username Token Authentication Credentials for the Service:**

Use the following information to set the user name token credentials:

1. sqlplus apps/apps@db @\$FND\_TOP/sql/afvltput.sql <Module> <Key> <Value> to store your key, module, and password.

**Note:** The password is stored in the fndvault and remains secured from the end user when creating subscriptions. Users provide the module and the key and must remember it for later use.

2. Enter unique Key and Module pairs to identify passwords.
  - Module: PA
  - Key: PA\_MGMT\_SERVICES\_USA
  - Value: Welcome1

### **Adding the Service Invocation Subscription to Invoke the Service:**

Use the following Service Invocation Subscription details to invoke the service:

- Subscription type: Invoke web service
- WSDL URL: SSL enabled service URL
- Select the Service Port and Service Operation
- Subscription parameters:
  - WFBES\_SOAP\_USERNAME: username for the web service
  - WFBES\_SOAP\_PASSWOD\_MOD: Module name according to the above step (PA)
  - WFBES\_SOAP\_PASSWORD\_KEY: Module key according to the above step (PA\_MGMT\_SERVICE\_USA)
- The service constructs the SOAP header and username token based on the information provided.
- Payload information passed by the program at run time is appended to the header prepared above as the soap body.

### **Adding a Subscription to the Events:**

Perform the following steps after you have added the Fusion SSL certificate to the EBS instance:

1. Sign in to the Oracle E-Business Suite application using login credentials that provide access to the Workflow Administrator Web Applications responsibility.
2. Navigate to Workflow Administrator Web Applications > Administrator Workflow

> Business Events.

3. You must add four business events. They include:
  - oracle.apps.pa.coexist.project.invoke
  - oracle.apps.pa.coexist.projectplan.invoke
  - oracle.apps.pa.coexist.update.task.invoke
  - oracle.apps.pa.coexist.fileupload.invoke
4. Search for the predefined business event oracle.apps.pa.coexist.project.invoke.
5. Click GO.
6. Find your search result under the Results: Events section. Click Subscriptions.
7. Click Create Subscription.
8. In the Create Event Subscription page, enter the following subscription details:
  1. System: <EBS Instance>
  2. Source Type: Local
  3. Event Filter: This field is auto populated
  4. Execution Phase: Select a value between 1-99
  5. Status: Enabled
  6. Rule Data: Message
  7. Action Type: Invoke Web Service
  8. On Error: Stop and Rollback
9. Click Next.
10. In the Select a WSDL Source section, enter the WSDL URL.
  - The WSDL URL is the URL of the Oracle Fusion Cloud instance you are using to register this event.
  - Enter the URL in the following format: https://<host name>.<domain name>:port. For example, enter:  
https://101.us.vision.com:98335/pjtCommonProject/ProjectServiceV2?wsdl.

11. Click Next to select the service. The Service Name field is populated with ProjectServiceV2 in the Select Service section.
12. Click Next and select the service port.
13. Click Next and select the operation. In this example it is findProjectPlan.  

**Note:** All services used for integration with Oracle E-Business Suite are synchronous services.
14. Click Next to complete the subscription registry and link it with the predefined business event.
15. In the Create Event Subscription – Invoke Web Service section. The application provides the Subscription Parameters and User ID with access to the service and the parameters to retrieve the password from the vault. For customizations in Service Invocation, users can extend the default java class oracle.apps.fnd.wf.bes.WebServiceInvokerSubscription and provide the extended class in place of Java Rule Function.
16. Add the other three business events using the above steps 4 through 15. The corresponding operations and service names for each business event include:
  - Business Event: oracle.apps.pa.coexist.projectplan.invoke  
Operation: findProjectByProjectId  
Service Name: ProjectServiceV2
  - Business Event: oracle.apps.pa.coexist.update.task.invoke  
Operation: updateProjectPlan  
Service Name: ProjectServiceV2
  - Business Event: oracle.apps.pa.coexist.fileupload.invoke  
Operation: uploadFileToUcm  
Service Name: ERPIntegrationService

## Supply Chain Management Tasks

Complete the tasks in this section before users log on to Supply Chain Management products.

### Mobile Applications:

These tasks apply only to Oracle Mobile Applications.

## 1. Review MWA Server Administration Task Changes (Required)

Applies to 11i release level: All

TUMS step key: MWA\_SERV\_ADMIN

The Mobile Applications (MWA) Server administration configurations, command scripts, and security enhancements for the command scripts used to manage mobile server startup and shutdown Services are in a new location. Also, MWA Services can be managed using the Oracle Applications Manager (OAM) AutoConfig utility. See *Oracle Mobile Wireless Application: Release 12 Server Procedure Changes* (Doc ID: 394495.1) for more information.

## Oracle Process Manufacturing:

These tasks apply only to Oracle Process Manufacturing. For general information related to migration, refer to *Oracle Process Manufacturing (OPM) Release 12.1 Migration* (Doc ID: 376683.1). Disregard the Migration Checklist.

**Note:** Do not open the Oracle Process Manufacturing application until you complete all of the following tasks. Any patch referenced in this document must be applied using the Oracle ADOP utility.

## 1. Complete Inventory Convergence for OPM (conditional)

Applies to 11i release level: All

TUMS step key: GMA\_INV\_CONVERGENCE

If you do not have OPM enabled in your system, then you can omit this step. Refer to the *OPM Migration Checklist* document which is linked from *Oracle Process Manufacturing (OPM) Migration from 11i to Release 12.1 and Higher* (Doc ID: 376683.1) and perform the steps in the order listed under the *Post-Migration* section.

**Note:** See the *Oracle Process Manufacturing Migration Reference Guide* for details on data migration. In addition, refer to the *OPM System Administration User's Guide* and the *OPM Process Execution Forms Will Not Open In R12 After Migration/Upgrade* article (Doc ID: 1354718.1).

## Oracle Product Hub:

These tasks apply only to Oracle Product Hub.

## 1. Creating Versions of Item Catalog Categories (recommended)

Applies to 11i release level: All

TUMS step key: EGO\_VERSION\_ICC

In EBS release 12.1.2 and higher, you can choose to create a different version of an item catalog category (ICC) when you change a transaction attribute for structure component in the ICC if you set the profile option "Enable PIM for Telco Features" to Yes. When you enable the use of ICC versions, the system automatically creates a draft version for every new ICC created. You cannot choose to create versions for some ICCs, but not others. After upgrading from a release prior to 12.1.2 and after setting the profile option "Enable PIM for Telco Features" to Yes, you must create a released version for each existing ICC. Oracle provides an upgrade API that automatically performs this task. A database administrator can invoke the upgrade API from the back end after you set the profile option "Enable PIM for Telco Features" to Yes.

#### Upgrade API Sample Call

```

$ DECLARE
 uid NUMBER;
 rid NUMBER;
 rad NUMBER;
 sgid NUMBER;
$ BEGIN
$ SELECT
$ USER_ID,RESPONSIBILITY_ID,RESPONSIBILITY_APPLICATION_ID,
SECURITY_GROUP_ID
$ INTO
 uid, rid, rad, sgid
$ FROM
 FND_USER_RESP_GROUPS
$ WHERE
$ USER_ID = (SELECT USER_ID FROM FND_USER WHERE USER_NAME
='SYSADMIN')
$ AND RESPONSIBILITY_ID =
$ (SELECT RESPONSIBILITY_ID FROM FND_RESPONSIBILITY_VL WHERE
$ RESPONSIBILITY_KEY = 'SYSTEM_ADMINISTRATOR');
$ FND_GLOBAL.apps_initialize (uid, rid, rad, sgid);
$ ego_p4t_upgrade_pvt.upgrade_to_pim4telco(null);
$ END

```

### 2. Licensing Product Hub for Communications (conditional)

Applies to 11i release level: All

TUMS step key: EGO\_ENABLE\_LIB

If you license Product Hub for Communications, release 12.1.2 or later, Oracle Product Hub provides seeded libraries containing attribute groups, attributes, and value sets that are used primarily within the Telecommunications industry. These libraries are not automatically installed. The system administrator must run FND load commands to upload each library after installing the Oracle Product Hub for Communications patch. You can find these commands in the Seeded Item Metadata Libraries appendix, *Oracle Product Hub Implementation Guide*.

### 3. PIM publication web services require manual post installation steps (conditional)

Applies to 11i release level: All

TUMS step key: EGO\_WS\_POST\_INSTALL

If you are using the Publication feature in Oracle Product Hub for Communications, then perform the steps outlined in (Doc ID: 1336146.1).

#### 4. Update Existing Item Attributes (conditional)

Applies to: N/A

For the item attributes SHIPPABLE\_ITEM\_FLAG, INTERNAL\_ORDER\_ENABLED\_FLAG, INTERNAL\_ORDER\_FLAG in MTL\_SYSTEM\_ITEMS\_B table, the valid combination of values is either Y,Y,Y or N, N,N. Any other combination is considered as data discrepancy. Customers can chose a valid combination for these item attributes depending on their business requirements and execute an appropriate concurrent program to correct such discrepancy. Refer to *Data Fix: Items having invalid combination of SHIPPABLE\_ITEM\_FLAG, INTERNAL\_ORDER\_ENABLED\_FLAG, INTERNAL\_ORDER\_FLAG attributes* (Doc ID: 1676349.1) for instructions to identify and correct any items that have such data discrepancy.

#### 5. Setting Profile Option (Required)

Applies to 11i release level: All

TUMS step key: EGO\_ENABLE\_PROFILE

If you are using Product Lifecycle Management (EGO product) in Release 11i, then you must manually set the profile option EGO: Enable Product Lifecycle Management to 'Yes' after the upgrade.

#### 6. Gather Table Statistics (recommended)

Applies to 11i release level: All

TUMS step key: EGO\_GATHER\_STATS

Considerable changes have been made to the data model that stores Item user-defined attributes in Release 12.1 and above. Therefore, Oracle recommends gathering table statistics for the following EGO tables:

- EGO\_MTL\_SY\_ITEMS\_EXT\_B
- EGO\_MTL\_SY\_ITEMS\_EXT\_TL

#### 7. Use the Product Workbench (Required)

Applies to: Release 12.2

If you plan to use the Product Workbench, you must enable it by adding it to the allowlist of JavaServer Pages (JSPs).

**Additional Information:** Refer to *Allowed JSPs, Oracle E-Business*

### **Oracle Service Contracts:**

These tasks apply only to Oracle Service Contracts.

#### **1. Monitor Deferred Upgrade Tasks (conditional)**

Applies to 11i release level: All

TUMS step key: OKS\_VALIDATE\_CONCURRENT\_PROGS

Certain tasks were initiated by a series of concurrent programs that were launched during the upgrade. To reduce downtime, the completion of those tasks was deferred until the system came back online. They are executed when the concurrent manager starts after the upgrade.

The programs are as follows. You should monitor the completion of the tasks and re-submit any of the programs that may error out.

- Launch Process Workflow for existing Service Contracts
- Service Contracts Update Base Annualized Factor Manager
- Service Contracts Update History Annualized Factor Manager
- Service Contracts eBTax Migration
- Service Contracts ASO Queue Migration
- Service Contracts Update Base Tax Columns Manager
- Service Contracts Update History Tax Columns Manager
- Create Contract Header Text Index

### **Oracle Shipping Execution:**

Oracle Shipping Execution (available as part of Oracle Order Management) is integrated with Oracle Transportation Management. If you have licensed both Oracle Transportation Management and Oracle Order Management and will use Oracle Transportation Management with Oracle Shipping Execution, then perform the post-update steps outlined in *Oracle Transportation Management Integration with Oracle E-Business Suite Post-Update Steps, Release 12.2.0* (Doc ID: 1362803.1).

**Note:** The prebuilt BPEL business processes in Oracle E-Business Suite Release 12.2 are certified with Oracle SOA Suite 12c, Oracle SOA Suite

11g. The BPEL 10g based prebuilt integrations are not supported in Oracle E-Business Suite Release 12.2. Customers upgrading to Oracle E-Business Suite Release 12.2 from 11i must migrate to Oracle SOA Suite 11g or Oracle SOA Suite 12c. Refer to *Integrating Oracle E-Business Suite Release 12.2 with Oracle BPEL in Oracle SOA Suite 11g R1* (Doc ID: 1584883.1) and *Integrating Oracle E-Business Suite 12.2 with BPEL in SOA Suite 12c* (Doc ID: 1951625.1). Follow the respective documentation to deploy these BPEL processes.

### **Oracle Order Management:**

If you are using Available To Promise (ATP) functionality in the Order Management application and running ATP Data Collections, then you must refer to the *Oracle Value Chain Planning Installation Notes, Release 12.2 - FAQ And Latest Patch Information* document (Doc ID: 1361221.1) for Value Chain Planning (VCP) applications. Check for the latest cumulative patch to apply with VCP applications.

This is required because the ATP and ATP Data Collections functionality is controlled by Value Chain Planning applications code.

### **Oracle Value Chain Planning:**

Oracle Value Chain Planning includes Advanced Supply Chain Planning, Demand Planning, Inventory Optimization, Global Order Promising, Collaborative Planning, Production Scheduling, Strategic Network Optimization, Service Parts Planning, Advanced Planning Command Center, and Demand Signal Repository. If you have licensed any of these products, then perform the steps outlined in *Oracle Value Chain Planning Installation Notes Release 12.2* (Doc ID: 1361221.1) to enable these applications. If you are deploying Value Chain Planning Applications on a RAC RDBMS, then you must also refer to *RAC Configuration Setups For Running MRP Planning, APS Planning, and Data Collection Processes* (Doc ID: 279156.1) and *RAC for GOP - Setups for Global Order Promising (GOP) When Using a Real Application Clusters (RAC) Environment* (Doc ID: 266125.1) to understand restrictions and requirements for running application processes in a RAC environment.

### **Oracle Warehouse Management:**

Oracle Warehouse Management is integrated with Oracle Transportation Management. If you have licensed both Oracle Transportation Management and Oracle Warehouse Management, and you plan to use Oracle Transportation Management with Oracle Warehouse Management, then perform the post-update steps outlined in *Oracle Transportation Management Integration with Oracle E-Business Suite Post-Update Steps, Release 12.2.0* (Doc ID: 1362803.1).

**Note:** The prebuilt BPEL business processes in Oracle E-Business Suite Release 12.2 are certified with Oracle SOA Suite 12c, Oracle SOA Suite

11g. The BPEL 10g based prebuilt integrations are not supported in Oracle E-Business Suite Release 12.2. Customers upgrading to Oracle E-Business Suite Release 12.2 from 11i must migrate to Oracle SOA Suite 11g or Oracle SOA Suite 12c. Refer to *Integrating Oracle E-Business Suite Release 12.2 with Oracle BPEL in Oracle SOA Suite 11g R1* (Doc ID: 1584883.1) and *Integrating Oracle E-Business Suite 12.2 with BPEL in SOA Suite 12c* (Doc ID: 1951625.1). Follow the respective documentation to deploy these BPEL processes.

## System Administration

This section applies to all users, regardless of which products are registered as active.

### Configure SSL for Web Services:

#### 1. Configure SSL for Web Services (conditional)

Applies to 11i release level: All

TUMS step key: N/A

If you have implemented Secure Sockets Layer (SSL) and plan to use Web Services, then you must generate certificates using the Oracle Wallet Manager from your Oracle E-Business Suite Server home (\$IAS\_ORACLE\_HOME). Set up a password to protect your certificates.

**Additional Information:** See *Enabling SSL in Release 12.2* for more information.

Use the Oracle Wallet Manager to generate the Wallet file. Then, follow these steps to complete the configuration:

1. Set the `s_websrv_wallet_file` parameter in the Applications context file to the location of the Web Services Wallet file. Note that the value is a file location, not a URL.

#### UNIX:

```
$ /etc/ORACLE/Wallets/system1/exported_wallet
```

#### Windows:

```
D:\> oracle\system1\exported_wallet
```

2. Place the exported file in this location.
3. Provide the password for the exported Wallet file by running the following script:

```
$ FND_TOP/patch/115/sql/txkSetWalletPass.sql
```

## Secure Configuration:

### 1. Perform the following if you have upgraded to Release Update 12.2.6 or higher:

**Tip:** After you apply Patch 24744399:R12.FND.C (a mandatory post requisite for R12.ATG\_PF.C.Delta.6) or upgrade to Oracle E-Business Suite Release 12.2.7 Release Update Pack (which includes patch 24744399:R12.FND.C), your system will be 'locked down' until a local system administrator resolves or acknowledges the recommended security configurations in the Secure Configuration Console.

- **Login to the Oracle E-Business Suite**

Upon initial login as a local system administrator that has the Functional Administrator responsibility, you are automatically directed to the Secure Configuration Console.

- **Resolve or acknowledge security configurations**

You must now either resolve or acknowledge the recommended security configurations in the Secure Configuration Console.

**Suggested Reading:** *Oracle E-Business Suite Release 12.2 Security Guide, Part 2: Secure Configurations* in the *Secure Configuration Console* chapter.

### 2. Review and Deploy Security Guidelines (Recommended for all Oracle E-Business Suite releases)

- **Follow the Secure Configuration Guidelines**

**Tip:** You must follow all recommended secure configuration guidelines as documented in the Security Guide. At a minimum, Oracle recommends that you configure the following:

1. Allowed JSPs feature
2. TLS for inbound, outbound, and loopback connections

**Action:** Review and deploy the recommended security

guidelines documented in *Oracle E-Business Suite Release 12.2 Security Guide, Part 2: Secure Configurations*.

**Action:** Follow the instructions in *Enabling TLS in Oracle E-Business Suite Release 12.2* (Doc ID: 1367293.1) to encrypt inbound, outbound, and loopback connections.

**Tip:** If you have any computers requiring direct access to the database that are not registered nodes in AutoConfig (such as OAM clients), then you must explicitly grant access.

- **Execute the Security Check Scripts**

**Action:** Regularly run the Security Check Scripts on your production instance to ensure that it is, and continues to be in compliance with the recommendations in this document. For information on how to run the Security Check Scripts, run the scripts according to *Security Configuration and Auditing Scripts for Oracle E-Business Suite* (Doc ID: 2069190.1).

**Tip:** If you upgraded to Oracle E-Business Suite Release 12.2.6 or higher, then you can use the Secure Configuration Console on an ongoing basis to perform necessary checks on your environment.

## Backing Up Oracle E-Business Suite

Oracle strongly recommends that you perform a full system backup of your Oracle E-Business Suite Release 12.2 including the Run and Patch file systems (fs1 and fs2), the Non-Edition file system (fs\_ne), all technology stack component Oracle homes, and the database.

## System Maintenance Tasks

After you have verified that the system and the product upgrades are complete, perform the "clean-up" tasks described in this section.

## System Maintenance:

### 1. Delete obsolete product files (recommended)

Delete the product files for the previous release (if you have not done so already). You may want to retain report output files or customized programs. Output files are stored in the old log and output subdirectories under each product's top directory, under the log and output directories you created, or under a common directory.

To remove obsolete files for an old release, change to the top directory of that release and enter the following command:

#### UNIX:

```
$ rm -rf <old APPL_TOP>
```

#### Here is an example:

```
$ rm -rf /d01/appl/r10
```

#### Windows:

```
C:\> rd /s /q <old APPL_TOP>
```

#### Here is an example:

```
C:\> rd /s /q \APPL110
```

### 2. Register new products (conditional)

New products added since Release 12 are not automatically registered in the database. If you intend to use new products, then register them using License Manager. See *Oracle E-Business Suite Maintenance Guide* for instructions.

**Additional Information:** See the *Oracle E-Business Suite Maintenance Guide* for instructions to license new products.

By default, the Java Color Scheme profile option should be set to 'Standard' for all sessions and optimal system response time. The upgrade process sets this default value for all instances. However, setting this profile option to a different value may work better for some systems.

**Additional Information:** See the *Oracle E-Business Suite Setup Guide* and the *Oracle E-Business Suite User's Guide* for more information.

### 3. Update Java Color Scheme profile option for selected users (conditional)

By default, the Java Color Scheme profile option should be set to "standard" for all sessions for optimal system response time. The upgrade process sets this default value for all instances. However, setting this profile option to a different value may work better for some systems. See *Oracle E-Business Suite Setup Guide* and *Oracle E-*

*Business Suite User's Guide* for more information.

#### 4. Complete Workflow Notification Mailer configuration (Required)

Applies to 11i release level: All

TUMS step key: MP\_WORKFLOW\_TASKS

Before you send Oracle Workflow e-mail notifications, you must complete the Workflow Notification Mailer configuration, using the Notification Mailer Configuration wizard in Oracle Applications Manager.

1. Log on to Oracle Applications Manager.
2. From the Applications Dashboard, select the Workflow Manager from the "Navigate to" pull-down menu. Click Go.
3. In the Workflow System region, click the Notification Mailers status icon to navigate to the Service Components page. The Notification Mailers status icon should show a status of Down.
4. On the Service Components page, select the Workflow Notification Mailer service component and click the Edit button to navigate to the notification mailer configuration wizard.
5. In the Outbound Email Account (SMTP) region, enter the name of the outbound SMTP mail server.
6. If you want to enable inbound e-mail processing, select the Inbound Processing parameter in the Inbound Email Account (IMAP) region, and enter the name of the inbound IMAP mail server, user name and password of the mail account that the notification mailer uses to receive e-mail messages, and the reply-to address of the e-mail account that receives incoming messages, to which notification responses should be sent.
7. Click Apply.
8. Return to the Service Components page, and verify that the status of the Workflow Notification Mailer service component status is Running.

**Additional Information:** See *Oracle Workflow Administrator's Guide* for more information.

If you have previously implemented the C-based Notification Mailer concurrent program or the Generic Service Management Notification Mailer, the tag definitions and configuration parameter settings for those parameters that are still applicable are automatically transferred to the Java-based Workflow Notification Mailer configuration parameters.

## 5. Complete Transport Agent setup (conditional)

If you are using a proxy server to handle your outbound Oracle Transport Agent requests, then set following OXTA parameters in the container configuration:

- OXTAOutUseProxy=True
- OXTAOutProxyHost=<Your proxy server name>
- OXTAOutProxyPort=<Your proxy server port>

To set the parameters, go to the Oracle Applications Manager Site Map and choose AutoConfig > Applications Node > Edit Parameters. Then, use the Search field to find OXTA. After you set the parameters, run AutoConfig to regenerate the wls.properties file (FMW\_Home/Oracle\_EBS-app1/applications/oafm/APP-INF/wls.properties).

**Note:** See *Oracle XML Gateway User's Guide* for more information.

## 6. Complete Setup for Oracle XML Gateway (Required)

The Oracle XML Gateway engine uses style sheets from an operating system directory you define as a database directory for PL/SQL file I/O in your Oracle E-Business Suite instance. You must also specify the same directory in the ECX: XSLT File Path profile option. The profile option value must be an absolute path and cannot contain a symbolic link or other operating system-specific parameters.

**Additional Information:** See My Oracle Support Knowledge Document 2525754.1, Using UTL\_FILE\_DIR or Database Directories for PL/SQL File I/O in Oracle E-Business Suite Releases 12.1 and 12.2 for more information.

Also, ensure that the following profile options are set at site level for Oracle XML Gateway. If you have previously set these profile options, then no action is necessary, as the upgrade preserves these values.

| Profile Option      | Description                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ECX: XSLT File Path | Path to the directory specified as the location for style sheets to be used for XSLT transformations. This value must be a database directory defined for PL/SQL file I/O. Ensure that there is no slash at the end of the directory name. |

| Profile Option                          | Description                                                             |
|-----------------------------------------|-------------------------------------------------------------------------|
| ECX: System Administrator Email Address | Address to which Oracle XML Gateway error notifications should be sent. |
| ECX: Server Time Zone                   | Time zone the database server is running in.                            |

**Note:** See *Oracle XML Gateway User's Guide* for more information.

## Oracle XML Publisher Tasks

These tasks apply to all users, regardless of which products are registered as active.

### 1. Enable PDF printing (Required)

The PDF Publisher print style and PASTA\_PDF printer driver provide the capability to print PDF files using a third-party utility. You can use this style and driver to print a generated PDF. The Pasta Universal Printer type has been associated with the style and driver for ease of use.

**Action:** Refer to the *Oracle XML Publisher Administration and Developer's Guide*, Release 12, for configuration steps. For access to the *Oracle XML Publisher Administration and Developer's Guide* and the latest updates, refer to *Notes for Using Oracle Business Intelligence Publisher 10g in Oracle E-Business Suite Release 12.2* (Doc ID: 1640073.1).

### 2. Specify a temporary directory for XML Publisher (Required)

Use the Oracle XML Publisher's Administration interface to assign a temporary directory for the site level. The temporary directory improves performance and allows unlimited XML file size.

**Additional Information:** See *Oracle XML Publisher Administration and Developer's Guide* for more information about this directory.

## Post-Upgrade Steps of Oracle E-Business Suite Release Update Pack for Release 12.2

You must complete the Post-Upgrade steps described in the Oracle E-Business Suite

Release Update Pack Readme specific to the Oracle E-Business Suite Release Update Pack (RUP) that you have upgraded to that is described in the *Apply the Latest E-Business Suite Update Pack for Release 12.2*, page 4-94 section of this chapter.

**Required Action:** For example, if you upgrade to Oracle E-Business Suite Release 12.2.7, then you must complete all Post-Upgrade steps described in *Oracle E-Business Suite Release 12.2.7 Readme* (Doc ID: 2230783.1).

## Mandatory Steps Applicable for All Upgrade Customers

**Required Action:** Refer to *Oracle E-Business Suite Release Notes, Release 12.2* (Doc ID: 1320300.1) and perform all applicable post upgrade steps in Section 1: *Instructions for All Customers*, and Section 3: *Instructions for Upgrade Customers* such as 'Create Snapshot'.

## Additional Tasks

This section points to additional tasks that may be necessary, and suggests documentation that describes those tasks.

## Reapplying Application Tier Customizations

If your system includes customized forms, reports, programs, libraries, or other application files, then reapply all changes that you need for this release.

**Required Action:** Re-deploy your customizations following the instructions in *Developing and Deploying Customizations in Oracle E-Business Suite Release 12.2* (Doc ID: 1577661.1), Section 1.5, *Deploying Custom Application Tier Objects*.

## Migrating Portlets Preferences Store

If you are using Oracle E-Business Suite portlets, then copy the Portlets Preference Store directory from your Oracle E-Business Suite Release 12 10\_1\_3\_Oracle\_Home/portal/portletdata directory to following non editioned directory on your new new Oracle E-Business Suite Release 12.2 file system:

```
$ <s_ne_base>/inst/<s_contextname>/oracle_common/portal/portletdata
```

**Note:** Autoconfig context variable `s_portlet_preference_store_directory` by default points to the same directory.

**Additional Information:** Refer to section 15.4.2.4.2 *Migrating Customizations from the Default Production Location in the Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter Portal, and ADF 11g Release 1 (11.1.1.7.0)*.

**Note:** This applies to all customers using Oracle E-Business Suite portlets with EBS 12.1.3, regardless of whether they integrate with Oracle Portal or Oracle WebCenter consumer.

### For Portal 10g

Oracle E-Business Suite customers upgrading from Release 12.0 or 12.1 to Release 12.2 and already having Oracle Portal 10g configured:

1. **Conditional Action:** Upgrade Oracle Portal 10g to Oracle Portal 11g as described in section 10 of the *Integrating Oracle Portal 11.1.1 with Oracle E-Business Suite Release 12* document on *My Oracle Support* (Document ID: 1074334.1).
2. Migrate Portlets Preferences Store.

### For Portal 11g

Oracle E-Business Suite customers upgrading from Release 12.0 or 12.1 to Release 12.2 and already having Oracle Portal 11g configured:

1. Migrate Portlets Preferences Store.

## Regenerating Business Views (conditional)

If you are using Business Views, then regenerate your business views by running the *Generate Business Views by Application* concurrent program using the *Business View Setup* responsibility:

- Logon to Oracle E-Business Suite as SYSADMIN.
- Select the *Business Views Setup* responsibility.
- Navigate to Reports > Run > Pick Single Request > Generate ALL Business Views.

If you don't have the *Business Views Setup* responsibility assigned to the SYSADMIN user, then complete the following:

- Logon to Oracle E-Business Suite as SYSADMIN.
- Select the *System Administrator* responsibility.

- Navigate to Security > User > Define and add responsibility *Business Views Setup* to the SYSADMIN user.

## Understanding Oracle E-Business Suite System Administration Tasks

**Suggested Reading:** Ensure you are completely familiar with information in the *Oracle E-Business Suite Setup Guide* and the *Oracle E-Business Suite Security Guide*. In addition, you should understand the information in the *Oracle E-Business Suite Maintenance Guide, Release 12.2*. This document contains important details about AD utilities as well as instructions on how to patch your system and perform manual maintenance tasks.

## Implementing New Product and Country-specific Functionality

**Suggested Reading:** Refer to the implementation or setup guides (or implementation or setup section of the user's guides) associated with the Oracle E-Business Suite products in your system for instructions on implementing or setting up new products and features.

## Resizing the Database

The size of the production database depends on the products that you have licensed and the additional features (such as multiple languages or multiple organizations) that you have configured in your system. Refer to the product-specific documentation.

## Optional Advanced Configurations

You may have identified the need to scale your environment due to sizing requirements or for high availability. You may now scale the environment.

### Scale the Environment

Upgrading to Oracle E-Business Suite Release 12.2 is performed with a single application tier node and a single database node even if you are using RAC. Scaling the environment is a post-upgrade task. Now that the upgrade is complete, you may scale your environment according to production level requirements by adding application tier nodes and database RAC nodes.

### Adding Application Tier Nodes

**Conditional Action:** If you need to add additional application tier

nodes, then configure load balancing as described in *Using Load-Balancers with Oracle E-Business Suite Release 12.2* (Doc ID: 1375686.1).

When deploying multiple application tier nodes for an Oracle E-Business Suite environment, you can use a Shared Application Tier Filesystem or replicate the filesystem on every node in the environment.

**Tip:** Oracle highly recommends that you use a Shared Application Tier Filesystem.

When directed in *Using Load-Balancers with Oracle E-Business Suite Release 12.2* (Doc ID: 1375686.1), follow the steps in one of the following notes to create a new application tier node:

- To create the Shared Application Tier file system and add new application tier nodes, follow the steps in *Sharing The Application Tier File System in Oracle E-Business Suite Release 12.2* (Doc ID: 1375769.1).
- If you are using a distributed filesystem, then follow the steps in *Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone* (Doc ID: 1375769.1) to add new application tier nodes.

## Adding Database Tier Nodes to RAC

**Conditional Action:** If you are adding additional database tier nodes to Oracle Real Application Clusters (RAC) to meet scalability or high availability requirements, then follow the steps in the appropriate document:

- *Adding or Deleting Oracle RAC Nodes for Oracle E-Business Suite Release 12.2 with Oracle AI Database 26ai*, My Oracle Support Document 2966998.1
- *Oracle E-Business Suite Release 12.2: Adding or Deleting 19c Oracle RAC Nodes*, My Oracle Support Document 2608028.1
- *Oracle E-Business Suite Release 12.2: Adding or Deleting 11gR2 or 12c1 Oracle RAC Nodes*, My Oracle Support Document 1570554.1

## Performing DMZ Configuration

**Conditional Action:** If you need to configure Oracle E-Business Suite Release 12.2 for access from the Internet, then review and follow the

steps documented in *Oracle E-Business Suite Release 12.2 Configuration in a DMZ* (Doc ID: 1375670.1).

## Validating Custom and Third-Party Products

Oracle E-Business Suite Release 12.2 includes significant database and file system architecture changes designed to support Online Patching. Therefore, integrations with Oracle E-Business Suite may need to be modified to comply with new deployment and development standards in order to work correctly with Oracle E-Business Suite Release 12.2. Examples include custom and third-party integrations, as well as integrations with other Oracle products such as Oracle Application Express.

**Additional Information:** Refer to *Guidance for Integrating Custom and Third-Party Products With Oracle E-Business Suite Release 12.2* (Doc ID: 1916149.1).

If you identified external integrations that require updates to meet certification requirements with Oracle E-Business Suite Release 12.2 or require additional steps to deploy, then perform those actions now. Validate all external integrations once the necessary steps have been performed.

**Additional Information:** For more information, refer to *Preparing External Integrations*.

## Backing Up Oracle E-Business Suite

Oracle strongly recommends that you perform a full system backup of your Oracle E-Business Suite Release 12.2 including the Run and Patch file systems (fs1 and fs2), the Non-Edition file system (fs\_ne), all technology stack component Oracle homes, and the database.

## Logging On to Oracle E-Business Suite

To start Oracle E-Business Suite and access all Oracle E-Business Suite products, go to the Oracle E-Business Suite Login page, located at the following URL:

`http://<host name>.<domain name>:<HTTP port>/OA_HTML/AppsLogin`

**For example:**

`http://oraapps1.example.com:8000/OA_HTML/AppsLogin`

The system administrator should log on the first time using the sysadmin logon account that is pre-configured in the Applications installation. Use the System Administrator responsibility to launch an Oracle E-Business Suite session where you can complete the

required implementation steps.

**Note:** See the *Oracle E-Business Suite Setup Guide*. See also the *Oracle E-Business Suite User's Guide*.

## Functional Verification Tasks

The *Functional Verification Tasks* appendix in this guide contains optional tasks to verify that your transaction data was upgraded as expected.

**Action:** Refer to the Functional Verification Tasks, page C-1 appendix for details.

---

## Upgrade By Request

This appendix describes Upgrade by Request options - ways to upgrade historical data omitted from the initial upgrade process (critical downtime window). For example, instead of upgrading all your financial accounting data during downtime, you might include only the last fiscal year. If you want to upgrade other fiscal years - months or even years after - you can do so, at any time after the upgrade.

This appendix covers the following topics:

- Customer Relationship Management
- Financials and Procurement Tasks
- Projects
- Supply Chain Management

### Customer Relationship Management

This appendix contains information about upgrade by request tasks for Oracle Customer Relationship products.

### Sales

#### Migrate Sales Online Custom Responsibilities

At any time after the upgrade, you should, or can migrate custom responsibilities from Oracle Sales Online to Oracle Sales. You can accomplish this migration manually when appropriate for your business requirements. However, we have created a script that you can use to migrate a custom Sales Online responsibility to an equivalent Sales responsibility.

The script (asnmres.sql) takes old and new responsibility keys and responsibility application code as inputs. It does not create new responsibilities, but exits with an error if either the old or new responsibilities are not present. For each user having an old Sales Online responsibility, it assigns a new Sales responsibility, if it is not already

assigned to that user, and end-dates the old responsibility.

To run the script, do the following:

1. Go to the `$(SN_TOP)/patch/115/sql` directory.
2. Run `asnmres.sql`, using old and new responsibility keys and application code as input.
3. Repeat these steps for each Sales Online custom responsibility.

You can run the script multiple times for the same Sales Online responsibility to migrate it to multiple Sales custom responsibilities. You can also run it to migrate a Sales Online SuperUser responsibility to a custom responsibility without removing the end-date, even if it has been previously migrated.

Tips for creating custom responsibilities include:

---

| Custom Responsibility  | Manual Instructions                                                                                                                                                                                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sales Online User      | Create a similar responsibility in Oracle Sales and provide both the old and new responsibilities to the script. You may need to specify a new menu for the Sales responsibility, similar to <code>ASN_MAIN_MENU</code> used by the Oracle Sales seeded responsibility for the Sales User. |
| Sales Online Manager   | The new custom responsibility for migration should be created for the Sales Intelligence application. It should be similar to the Sales Intelligence Sales Manager responsibility and may refer to the Sales DBI menu.                                                                     |
| Sales Online SuperUser | Create a new responsibility in Sales that is similar to the Sales Administrator responsibility. It may point to the <code>ASN_ADMIN_MAIN_MENU</code> structure.                                                                                                                            |

---

## Sales and Telesales

**Note:** Your application specialist must complete the instructions in this section before users can log on to Sales and Telesales after the upgrade.

### Migrate Sales Credits

With Oracle Sales and Oracle Telesales, you can have only one sales person per opportunity line who receives the entire revenue credits for a line. The Release 11*i* Sales feature that allowed multiple sales people to receive credits on a single opportunity line is obsolete. Opportunities with multiple sales people, each receiving revenue credits for

the same opportunity line, are migrated so that only one sales person is designated to receive credits for each opportunity line.

To migrate sales credits and sales teams, you run a series of report scripts and concurrent programs, as follows:

1. Go to the \$ASN\_TOP/patch/115/sql directory.
2. Run the SQL Report scripts. The system prompts you to enter a value for `csv_report_file`. Type the report file name and click Enter to generate the report.
  - `asnmrsc1.sql` - generates the Multiple Salesreps Per Opportunity Line Report, which lists opportunities that have opportunity lines with more than one salesrep or partner getting revenue (or quota) sales credits.
  - `asnmrsc4.sql` - generates Non-Owner Single Partner Opportunity Report, which lists opportunities that have single partner who is getting revenue sales credits, but is not the opportunity owner. This report includes only information about partners, not sales representatives.
  - `asnmrsc5.sql` - generates Non-100% Non-Revenue Credit Receivers Report, which lists the non-revenue receivers whose credit percentage is not 100%. All non-revenue credit receivers are updated to 100% during the migration.
3. Generate Bad Data Sales Credits Report.

Run `asnmrsc6.sql` to generate the Bad Data Sales Credits Report. It lists the revenue sales credit records that were not migrated. Opportunities with the following characteristics are included as bad data:

  - Sum of quota credit percentage per line  $\leq$  100
  - Sum of quota credit amounts not equal to the line amount

You must correct the bad data before you continue with the next step. Re-run and make corrections until no bad data is reported.
4. Log in with the Oracle Sales Administrator responsibility.
5. Navigate to Concurrent Requests > Run.
6. Run the ASN Migrate Opportunity Multiple Salesrep and Owner concurrent request set. It contains the following concurrent programs:
  - ASN Migrate Duplicate Salesrep Opportunity Main Program
  - ASN Migrate Duplicate Salesrep Customer Main Program
  - ASN Migrate Duplicate Salesrep Lead Main Program

- ASN Migrate Multiple Salesrep Opportunity Main Program

7. Click on the Parameters field for each program to see the list of required parameters.

| Parameter Name    | Value                                                                                                                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Workers | Number of concurrent manager processes that you have running                                                                                                                      |
| Commit Flag       | Yes = commit changes. No = do not save changes.                                                                                                                                   |
| Debug Flag        | Yes = log messages in Application Common Logging Repository. No = do not log messages.<br><br>Note: To log debug messages, you must set profile values for FND Logging Framework. |

8. Repeat Step 2 to verify the migration results.

**Migration Example:**

An opportunity (Business World – Sell New Product) has an opportunity line for Brand-new Product, with two sales people (John and Mary), each receiving revenue credits. The opportunity line is for \$200, with John and Mary receiving revenue credits of 75% (\$150) and 25% (\$50), respectively.

The upgrade creates a new opportunity line for the product and assigns one of the sales people (let's say Mary) to the line. The new line has a line amount of \$50, revenue credit of 100%, and revenue credit amount of \$50. It updates the existing opportunity line to be \$150, with revenue credit of 100%, and revenue credit amount of \$150. John is the only sales person who receives revenue credits on the existing opportunity line.

The total opportunity header amount remains the same, but the opportunity now has two opportunity lines for the same product. Each line has only one sales person who receives revenue credits.

**Features of ASN Migrate Multiple Salesrep Opportunity Main Program:**

The key features and actions of this concurrent program include:

---

| <b>For this type of credit...</b> | <b>the program takes this action...</b> |
|-----------------------------------|-----------------------------------------|
|-----------------------------------|-----------------------------------------|

---

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Revenue Sales Credits     | <ul style="list-style-type: none"><li>• Ensures that no opportunities have more than one salesrep who receives quota credits per opportunity line. For opportunities with lines that have multiple salesreps receiving quotas, the program creates a new line within the same opportunity for every salesrep in the original opportunity line (who receives quota credits). The program merges credit records for any salesrep who gets quota credits multiple times.</li><li>• Deletes all quota sales credit lines with 0% quota allocation.</li><li>• Transfers revenue sales credits to opportunity owner (who is also an employee and an internal salesrep), if a partner is getting revenue sales credits.</li><li>• Assigns all salesreps receiving quota and non-revenue sales credits to a sales team.</li><li>• Defaults Best, Worst, and Forecast values only if the opportunity line amount is updated or if it is newly created, and is based on the value of profile ASN: Forecast Defaulting Type.</li><li>• Grants full access to the opportunity to all sales credit receivers.</li></ul> |
| Non-revenue Sales Credits | <ul style="list-style-type: none"><li>• Assigns all partner non-quota credits to the owner of the opportunity.</li><li>• Sets all non-quota credits to 100% regardless of the current number.</li><li>• Checks uniqueness of non-revenue sales credit receivers. Deletes duplicate non-revenue credits (based on sales force, sales group, and credit type).</li><li>• Defaults Best, Worst, and Forecast values only if the opportunity line amount is updated or if it is newly created, and is based on the value of profile ASN: Forecast Defaulting Type.</li><li>• Grants full access to the opportunity to all sales credit receivers.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

---

### Features of Customer/Lead/Opportunity Duplicate Sales Team Migration:

- Deletes duplicate salesrep records from the AS\_ACCESSSES\_ALL table for each individual customer (organization or person) in the HZ\_PARTIES table.
- Deletes duplicate salesrep records from the AS\_ACCESSSES\_ALL table for each individual lead in the AS\_SALES\_LEADS table.
- Deletes duplicate salesrep records from the AS\_ACCESSSES\_ALL table for each individual opportunity in the AS\_LEADS\_ALL table.

### Migrate Sales Methodologies for Opportunities

In Oracle Sales and Oracle Telesales, sales methodology is required if a sales stage is specified in an opportunity. Once specified, you cannot change to any other sales methodology for that opportunity. The sales methodology script (asnmomth.sql) migrates only the opportunities that have the sales stage without a sales methodology. The script randomly selects an active sales methodology that is mapped to a given sales stage. It reports errors if there are no active methodologies mapped to the sales stage. Whether a sales methodology is active depends on the start and end date of the methodology.

To avoid errors and improper migration, prepare for the migration by running the asnmromt.sql script to ensure that there is only one active sales methodology per sales stage.

**Note:** The system prompts you to enter a value for csv\_report\_file. Type the report file name and click Enter to generate the report.

Review the generated report, and correct the setup before you migrate the data. To run the script, do the following:

1. Go to the \$ASN\_TOP/patch/115/sql directory.
2. Run asnmromt.sql.
3. If no Sales Stage is reported, go directly to Step 5.
4. If a Sales Stage is reported, then correct the Sales Methodology and Sales Stage setup based on the information in the report. Run the report and make corrections until no Sales Stage is reported.
5. Run asnmomth.sql to migrate the Sales Methodologies in Opportunities.

The script reports sales stages that must be migrated in opportunities and have zero or more than one active sales methodology mapped to. Changing a sales methodology or a sales stage can impact other methodologies or stages. It's good practice to generate the latest report after you make any modifications.

## Financials and Procurement Tasks

This section contains information about upgrade by request tasks for the Oracle Financials and Procurement product family. Except where noted, it describes how to upgrade the historical transactions and journal entries for E-Business Tax and/or Subledger Accounting for each of the products listed. A description of the overall process of upgrading historical subledger journal entries is provided in the Subledger Accounting, section of this appendix.

### Assets

Review this section to:

#### Upgrade Historical Assets Transactions for Subledger Accounting

If you require additional accounting entries to be migrated into Subledger Accounting from Assets, you can run the SLA post-upgrade process. It calls a package that upgrades all Assets transactions for the specified ledger and period.

### Oracle E-Business Suite Tax

Refer to the Subledger Accounting, page A-9 section of this appendix to learn about the Upgrade Historical Subledger Transactions program, which updates accounting and tax data.

### Financials for the Americas

Review this section to:

#### Upgrade Historical Brazilian Receivables Transactions for Subledger Accounting

By default, only the current fiscal year's Brazilian Receivables collection document occurrences that are already posted to General Ledger and all un-posted occurrences are migrated as part of the upgrade. You can optionally change this period from current fiscal year to a longer period for a ledger. In addition to the occurrences falling into the upgrade period, all remittance occurrences of the collection documents that have one or more occurrences that fall into the upgrade period are also upgraded, so that the backward references to the Subledger journal entries of these remittance occurrences are addressed.

If you require additional journal entries for previous fiscal years occurrences to be migrated into Subledger Accounting, then you can run the SLA post-upgrade process. It calls a package in Receivables that upgrades the Brazilian Receivables Transactions for the specified ledger and period, in addition to the other Receivables transactions.

## General Ledger

This step applies if you have reconciled journals in General Ledger:

### Journal Reconciliation

TUMS Step Key: GL\_CREATE\_RECON\_LINES

This new feature replaces the General Ledger Entry Reconciliation functionality from within Oracle Financials Common Country Features. It enables you to reconcile journal lines that should net to zero. It is often used to reconcile suspense accounts, or in countries like Norway, Germany, or France, to audit or reconcile payroll and tax-payable accounts or to verify open balances of specific accounts at the end of a period.

If you want to reconcile journal lines entered prior to the upgrade or to view and reverse reconciliations performed prior to the upgrade, then run the Upgrade Journal Lines for Reconciliation concurrent program.

## Payables

Review this section to:

### Upgrade Historical Payables Transactions for Subledger Accounting and E-Business Tax

The Subledger Accounting upgrade processes accounting and tax data. During the upgrade, you specify periods for which you want to perform the upgrade. If at any point after the upgrade, you find a need to adjust a payment or prepayment that did not fall in this upgrade period, you can run the SLA post-upgrade process. It calls a package in Payables that upgrades all transactions in Payables for the specified ledger and period.

## Purchasing

Review this section to:

### Upgrade Historical Purchasing Transactions for Subledger Accounting and E-Business Tax

The Subledger Accounting upgrade processes accounting and tax data. If you need to migrate additional tax data to the E-Business Tax repository from Purchasing, you can run the SLA post-upgrade process. It calls a package in E-Business Tax that upgrades all appropriate tax transactions in Purchasing for the specified ledger and period.

## Receivables

Review this section to:

## Upgrade Historical Receivables Transactions for Subledger Accounting and E-Business Tax

The Subledger Accounting upgrade processes accounting and tax data. If you need to migrate additional accounting entries to Subledger Accounting from Receivables, run the SLA post-upgrade process. It calls a package in Receivables that upgrades all Receivables transactions for the specified ledger and period.

## Subledger Accounting

This section applies if you have any of the following products:

- Oracle Assets (for Subledger Accounting)
- Oracle Financials for the Americas (for Subledger Accounting)
- Oracle Payables (for both E-Business Tax and Subledger Accounting)
- Oracle Projects (for Subledger Accounting)
- Oracle Purchasing (for E-Business Tax)
- Oracle Receivables (for both E-Business Tax and Subledger Accounting)

## SLA Post-Upgrade Process

To avoid a long downtime period, you could choose to upgrade only a subset of the accounting and tax data, for example, if old data does not need to be permanently available for daily operations. This decision has a direct impact on hardware resources since less data requires less storage space. However, during normal business operations, some situations may require old data to be available. For example, if you need to reverse an old invoice, Oracle Subledger Accounting requires the original accounting data for the invoice to generate the correct accounting reversal.

**Note:** The SLA post-upgrade process should not be considered a replacement for a downtime upgrade. Its goal is to upgrade only individual periods of a given ledger - during downtime, multiple ledgers are upgraded at the same time.

It is important to consider the impact on resources when determining the upgrade strategy.

- The SLA post-upgrade process runs at the same time as the daily operations. You should carefully consider the impact of upgrading a large volume of data on your system performance.
- A downtime upgrade can process a large volume of data more efficiently. However, the length of the downtime period increases with the volume of data.

Before running the SLA post-upgrade process, enter the initial date to be used to determine the initial period to be upgraded in the SLA: Initial Date for Historical Upgrade profile option. This profile option must be populated in order to run the process.

Then, run the process as follows:

1. Run adop with *phase = apply, options = nocopyportion*
2. patchtop = \$XLA\_TOP/patch/115  
patches = driver:sla5584908.drv *hotpatch = yes*

## Projects

This section contains information about upgrade by request tasks for Oracle Projects, which is related to Subledger Accounting. A description of the overall process of upgrading historical subledger journal entries is provided in the Subledger Accounting, page A-9 section of this appendix.

## Projects

### Upgrade Historical Projects Transactions for Subledger Accounting

If you need to migrate additional accounting entries to Subledger Accounting from Projects, you can run the SLA post-upgrade process. It calls a package in Projects that upgrades all appropriate accounting entries for the specified ledger and period.

### Upgrade Historical Supplier Cost Transactions in Oracle Projects

If you need to upgrade additional supplier cost transactions in Oracle Projects, you can run the UPG: Upgrade Transaction Attributes concurrent program. This concurrent program updates all appropriate supplier cost attributes on transactions in Oracle Projects for the specified parameters. See the *Oracle Projects Fundamentals* guide for additional details.

## Supply Chain Management

This section contains information about upgrade by request tasks for Oracle Cost Management in the Oracle Supply Chain Management product family. A description of the overall process of upgrading historical subledger journal entries is provided in the Subledger Accounting, page A-9 section of this appendix.

## Cost Management

Review this section to:

### **Upgrade Historical Cost Management Transactions for Subledger Accounting**

If you require additional accounting entries to be migrated into Subledger Accounting from Costing, then you can run the SLA post-upgrade process. It calls a package in Costing that upgrades historical Inventory, Work in Process, and Receiving Transactions for the specified ledger and period.



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## Managing Concurrent Processes

This appendix covers the following topics:

- Isolate Post Upgrade Concurrent Programs to a Separate Manager Queue
- Sample Concurrent Programs

### Isolate Post Upgrade Concurrent Programs to a Separate Manager Queue

#### Overview

The downtime portion of the upgrade includes the automatic submission of several concurrent programs. For a list of sample concurrent programs, refer to the *Sample Concurrent Programs*, section in this appendix.

In many cases, concurrent programs run in multiple threads, therefore, the total number of concurrent requests that make up portions of the post-upgrade step can be high. These upgrade programs are run by the concurrent manager once the system is up, and processing will be mixed with ongoing concurrent jobs in the system.

You can define a separate concurrent manager queue to process only the post-upgrade concurrent programs, therefore improving manageability of this situation. You can use inclusion and exclusion rules to prevent other manager queues (such as the standard manager) from picking up requests, and force this new manager queue to process specific upgrade requests. This method lets you control the number of target processes allocated to these post-upgrade concurrent programs, including dynamic processes with the use of work shifts. For additional details on configuring new manager queues, target processes, inclusion and exclusion rules, and work shifts, refer to the *Oracle E-Business Suite Setup Guide*.

If you plan to isolate post-upgrade concurrent programs to a separate manager queue, then you must create a new concurrent manager for these upgrade concurrent programs before you shut down all services as part of the *Perform the Upgrade*, page 4-66 tasks described in this guide. This procedure is needed to prevent existing Request Processing Managers from picking up and executing requests when services are started

at the end of the upgrade.

## Create a New Concurrent Manager for Upgrading Concurrent Programs

**To create a new program type and include a program in that program type:**

1. Log in to Oracle E-Business Suite as SYSADMIN, and navigate to:  
System Administrator > Concurrent: Program > Type
2. Select or enter the following attributes:  
**Name:** R12PUPT  
**Application:** System Administration  
**Description:** Program Type for Post Upgrade Request
3. Include programs from the above list into this new program type.
4. Navigate to:  
System Administrator > Concurrent: Program > Define
5. Search for the program 'Refresh Materialized Views' and enter or select: R12PUPT
6. Repeat for other programs in the list.

**To exclude a program type from the Standard Manager:**

1. Log in to Oracle E-Business Suite as SYSADMIN and navigate to:  
System Administrator > Concurrent: Manager > Define
2. Search for Standard Manager.
3. Click on Specialization Rules.
4. Navigate to the bottom of the list to add a new record.
5. Select or enter the following attributes:  
**Include/Exclude:** Exclude  
**Type:** Request Type  
**Application:** System Administration  
**Name:** R12PUPT
6. Repeat for all other Request Processing Managers.

**To create a new concurrent manager and include a program type:**

1. Log in to Oracle E-Business Suite as SYSADMIN and navigate to:  
System Administrator > Concurrent: Manager > Define
2. Select the Enabled checkbox.
3. Select or enter the following attributes to create the new concurrent manager:
  - Manager:** R12\_Post\_Upgrade
  - Short Name:** R12PU
  - Application:** Application Object Library
  - Description:** New manager queue for R12 post upgrade requests
  - Type:** Concurrent Manager
  - Cache Size:** 1
  - Program Library Name:** FNDLIBR
  - Specialization Rules:
  - Include/Exclude:** Include
  - Type:** Request Type
  - Application:** System Administration
  - Name:** R12PUPT
  - Work Shifts:
  - Work Shift:** Standard
  - Processes:** Enter a Value, for example '4'
  - Sleep Second:** 30

#### **Activate the New Concurrent Manager**

After completing the above steps, activate the new concurrent manager R12\_Post\_Upgrade immediately after it is created.

1. Log in to Oracle E-Business Suite as SYSADMIN and navigate to:  
System Administrator > Concurrent: Manager > Administer
2. Select the new Concurrent Manager 'R12\_Post\_Upgrade'.
3. Click the Activate button.

#### **Disable the New Concurrent Manager**

After all post-upgrade requests run during the Verify completion of concurrent programs, page 5-2 step described in the *Post Upgrade Tasks* chapter, you must revert the

exclusion and inclusion of managers and programs to the original state by removing the new program type and new manager. This is necessary because some programs in the list may need to run in the future as part of the regular system batch processing requirements rather than part of the upgrade process.

## Sample Concurrent Programs

The following table contains a sample list of Concurrent Programs. This data is for reference only. The actual list in your instance may vary based on, but not limited to various factors including:

- Release level of Oracle E-Business Suite.
- Additional product patches or patchsets applied to the instance.
- Unaddressed upgrade failures.

| Application Name                    | Concurrent Program Name                | User Concurrent Program Name                                 | Total Number of Requests |
|-------------------------------------|----------------------------------------|--------------------------------------------------------------|--------------------------|
| Advanced Product Catalog(EGO)       | EGOCPAGV                               | User-Defined Attribute Group Views (AGV) Compilation Program | 2                        |
| Advanced Supply Chain Planning(MSC) | MSCREFMV                               | Refresh Materialized Views                                   | 2                        |
| Application Implementation(AZ)      | AZR12UPGRADE                           | iSetup R12 Upgrade Selection Sets Column                     | 4                        |
| Application Object Library(FND)     | FNDIRLPP                               | iRep Loading Post Processor                                  | 20                       |
| Application Object Library(FND)     | FNDWFBES_CONTR<br>OL_QUEUE_CLEAN<br>UP | Workflow Control Queue Cleanup                               | 4                        |
| Application Object Library(FND)     | FNDSCMPI                               | Compile Security                                             | 2                        |
| Application Object Library(FND)     | FNDLOAD                                | Generic Loader                                               | 10                       |

| <b>Application Name</b>         | <b>Concurrent Program Name</b> | <b>User Concurrent Program Name</b>                   | <b>Total Number of Requests</b> |
|---------------------------------|--------------------------------|-------------------------------------------------------|---------------------------------|
| Application Object Library(FND) | FNDWFNTFCU                     | Workflow Update Notification Action Comments          | 4                               |
| Application Object Library(FND) | FNDFIXRN                       | Fix FND role names                                    | 2                               |
| Application Object Library(FND) | FNDWFMLRSTATC<br>C             | Workflow Mailer Statistics Concurrent Program         | 4                               |
| Application Object Library(FND) | FNDIRLOAD                      | FNDIRLOAD                                             | 20                              |
| Application Object Library(FND) | DIAGPATCHINGCP                 | Diagnostics patching CP                               | 4                               |
| Application Object Library(FND) | FNDRSSUB                       | Report Set                                            | 6                               |
| Application Object Library(FND) | FNDRSSTG                       | Request Set Stage                                     | 6                               |
| Application Object Library(FND) | FDFVGN                         | Flexfield View Generator                              | 1656                            |
| Application Object Library(FND) | FNDWFAASTATCC                  | Workflow Agent Activity Statistics Concurrent Program | 4                               |
| Application Object Library(FND) | VERIFY                         | Verify                                                | 2                               |
| Application Object Library(FND) | FNDWFWITSTATCC                 | Workflow Work Items Statistics Concurrent Program     | 4                               |
| Application Object Library(FND) | FNDWFDSRHP                     | Workflow Role Hierarchy Propagation                   | 82                              |
| Application Object Library(FND) | AFLOBBLD                       | Rebuild Help Search Index                             | 4                               |

| <b>Application Name</b>         | <b>Concurrent Program Name</b> | <b>User Concurrent Program Name</b>                  | <b>Total Number of Requests</b> |
|---------------------------------|--------------------------------|------------------------------------------------------|---------------------------------|
| Application Object Library(FND) | ABORT                          | Abort                                                | 4                               |
| Application Object Library(FND) | FDFCMPN                        | Compile Non-Compiled Flexfields                      | 6                               |
| Application Object Library(FND) | FDFCMPK                        | Compile Key Flexfields                               | 108                             |
| Applications DBA (AD)           | ADDRPOBS                       | Drop obsolete products schema                        | 408                             |
| Applications DBA (AD)           | ADZDPATCH                      | Online Patching In Progress                          | 4                               |
| Asia/Pacific Localizations(JA)  | JAINDFOBS                      | India - Remove India Localization contexts from DFFs | 4                               |
| Collections(IEX)                | IEX_COLLECTORS_TO_RESOURCE     | IEX: AR Collectors To Resource Collectors            | 2                               |
| Contracts Core(OKC)             | OKCCHRCRCTX                    | Create Contract Header Text Index                    | 4                               |
| Contracts Core(OKC)             | OKCARTCRTCTX                   | Create Clause Text Index                             | 4                               |
| Human Resources (PER)           | PERNMFT_INT                    | Update Person Names (Internal)                       | 2                               |
| Human Resources (PER)           | PER_FND_SESSIONS_CLEANUP       | Remove obsolete sessions from fnd_sessions           | 12                              |
| Human Resources (PER)           | PERNMFT                        | Update Person Names                                  | 2                               |
| Human Resources (PER)           | IRC_CREATE_NOTIFICATION        | iRecruitment Create Notification Preferences         | 16                              |

| <b>Application Name</b>    | <b>Concurrent Program Name</b> | <b>User Concurrent Program Name</b>                                         | <b>Total Number of Requests</b> |
|----------------------------|--------------------------------|-----------------------------------------------------------------------------|---------------------------------|
| Incentive Compensation(CN) | CNUPGPMTCOMM TRXMGR            | Upgrade commissions and transactions for AutoUpgrade or AutoPatch - Manager | 4                               |
| Incentive Compensation(CN) | CN_R1212_CNCMH UPD             | CN_R1212_CNCMHUPD                                                           | 32                              |
| Incentive Compensation(CN) | CNUPGPMTCLWRKER                | Upgrade payment commission lines - Worker                                   | 40                              |
| Incentive Compensation(CN) | CN_FORMULA_GENERATION          | Generate Formula Packages                                                   | 4                               |
| Incentive Compensation(CN) | CN_R1212_CNSRPTXN              | CN_R1212_CNSRPTXN                                                           | 32                              |
| Incentive Compensation(CN) | CNUPGPMTRXMGR                  | Upgrade transactions for AutoUpgrade or AutoPatch                           | 4                               |
| Incentive Compensation(CN) | CNUPGPMTRXWRKER                | Upgrade payment transactions - Worker                                       | 40                              |
| Incentive Compensation(CN) | CN_R1212_CNCMA UPD             | CN_R1212_CNCMAUPD                                                           | 32                              |
| Inventory(INV)             | INVIDSEP                       | Items Data Scripts Execution                                                | 4                               |
| Labor Distribution (PSP)   | PSPERUPB                       | PSP: Migrate to OAFramework Effort Reporting                                | 2                               |
| Oracle iProcurement (ICX)  | ICXCUCDER                      | Catalog Child Data Exceptions Report                                        | 2                               |
| Purchasing(PO)             | POXUPMGR                       | Purchasing Post-Upgrade Process                                             | 2                               |
| Purchasing(PO)             | POXUPWKR                       | Purchasing Post-Upgrade Sub Process                                         | 6                               |
| Receivables(AR)            | ARHSUFXS                       | Data Fix for Party Site Use                                                 | 4                               |

| <b>Application Name</b>    | <b>Concurrent Program Name</b> | <b>User Concurrent Program Name</b>                     | <b>Total Number of Requests</b> |
|----------------------------|--------------------------------|---------------------------------------------------------|---------------------------------|
| Receivables(AR)            | ARHDQCMAL                      | DQM Compile All Rules                                   | 2                               |
| Receivables(AR)            | ARHGNRW                        | Geography Name Referencing Worker                       | 40                              |
| Receivables(AR)            | ARHDQMPD                       | DQM Parallel Sync Index Child Program                   | 16                              |
| Receivables(AR)            | ARHDQM                         | DQM Staging Program                                     | 2                               |
| Receivables(AR)            | ARHDCH                         | DQM Sync Import Child Program                           | 8                               |
| Receivables(AR)            | ARHDQMPP                       | DQM Parallel Sync Index Parent Program                  | 4                               |
| Receivables(AR)            | ARHDQSYN                       | DQM Synchronization Program                             | 2                               |
| Receivables(AR)            | HZ_GNR_DYNMK_P<br>KG_GEN       | GNR Dynamic packages Generation                         | 4                               |
| Regional Localizations(JG) | JGZZVATTRXUPG                  | EMEA VAT: Transaction Upgrade                           | 4                               |
| Service Contracts (OKS)    | OKSTAXBMgr                     | Service Contracts Update Base Tax Columns Manager       | 4                               |
| Service Contracts (OKS)    | OKSLAUNCHKWF                   | Launch Process Workflow for existing Service Contracts  | 4                               |
| Service Contracts (OKS)    | OKSTAXHWKR                     | Service Contracts Update History Tax Columns Worker     | 16                              |
| Service Contracts (OKS)    | OKSUBAFMGR                     | Service Contracts Update Base Annualized Factor Manager | 4                               |
| Service Contracts (OKS)    | OKSAQUMG                       | Service Contracts ASO Queue Migration                   | 4                               |

| <b>Application Name</b> | <b>Concurrent Program Name</b> | <b>User Concurrent Program Name</b>                        | <b>Total Number of Requests</b> |
|-------------------------|--------------------------------|------------------------------------------------------------|---------------------------------|
| Service Contracts (OKS) | OKSUBAFWKR                     | Service Contracts Update Base Annualized Factor Worker     | 16                              |
| Service Contracts (OKS) | OKS_TAX_MIGRATION              | Service Contracts eBTax Migration                          | 4                               |
| Service Contracts (OKS) | OKSUHAFMGR                     | Service Contracts Update History Annualized Factor Manager | 4                               |
| Service Contracts (OKS) | OKSTAXHMGR                     | Service Contracts Update History Tax Columns Manager       | 4                               |
| Service Contracts (OKS) | REPROCESS_SYNC_RULE_DATA       | Service Contracts Reprocess/Synchronize Rule Data          | 2                               |
| Service Contracts (OKS) | OKSTAXBWKR                     | Service Contracts Update Base Tax Columns Worker           | 16                              |
| Service Contracts (OKS) | OKSUHAFWKR                     | Service Contracts Update History Annualized Factor Worker  | 16                              |
| Service Contracts (OKS) | OKS_REPROCESS_SUBREQUEST       | Service Contracts Subrequest for Reprocessing Rule Data    | 2                               |
| Service(CS)             | CSSRAMGEN                      | Service: General Upgrade for Audit Records - Manager       | 4                               |
| Service(CS)             | CS_KB_SYNC_SOLUTIONS_INDEX     | Knowledge Management Solution Index Synchronization        | 2                               |
| Service(CS)             | CS_KB_SYNC_CATEGORIES_INDEX    | Knowledge Management Category Index Synchronization        | 2                               |
| Service(CS)             | CS_SR_SYNC_TEXT_INDEX          | Service Request: Synchronize Text Index Program            | 2                               |
| Service(CS)             | CS_KB_SYNC_STATEMENTS_INDEX    | Knowledge Management Statement Index Synchronization       | 2                               |

| <b>Application Name</b>   | <b>Concurrent Program Name</b> | <b>User Concurrent Program Name</b>                  | <b>Total Number of Requests</b> |
|---------------------------|--------------------------------|------------------------------------------------------|---------------------------------|
| Service(CS)               | CSSRAUDCWKR                    | Service: Upgrade for Audit Creation Record - Worker  | 12                              |
| Service(CS)               | CSCHGLINENOMGR                 | Charges: Upgrade for Line Number - Manager           | 4                               |
| Service(CS)               | CSCHGLINENOWKR                 | Charges: Upgrade for Line Number - Worker            | 12                              |
| Service(CS)               | CSSRAUDCMAN                    | Service: Upgrade for Audit Creation Record - Manager | 4                               |
| Service(CS)               | CSSRAWGEN                      | Service: General Upgrade for Audit Records - Worker  | 12                              |
| Trade Management (OZF)    | OZFMIGUTLREC                   | Migrate Accruals for Multi Currency Changes          | 4                               |
| Trade Management (OZF)    | OZFERNMV                       | Refresh Materialized View                            | 2                               |
| Warehouse Management(WMS) | WMSGRULE                       | Generate All Rules                                   | 2                               |
| XML Publisher(XDO)        | XDOTMGEN                       | XML Publisher Template Re-Generator                  | 4                               |

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## Functional Verification Tasks

### Description

This appendix covers the following topics:

- Customer Relationship Management
- Financials and Procurement Tasks
- Projects
- Supply Chain Management
- Diagnostics

### Customer Relationship Management

This appendix contains upgrade verification tasks for the Oracle Customer Relationship Management (CRM) product family.

### Email Center

These tasks apply only to Oracle Email Center.

#### Verify Email Accounts

After the upgrade, all email accounts except INTENT should be available. You can verify these accounts from the Email Center Administrator console screens in the upgraded environment. Administrators should plan to update the account properties and activate accounts as needed.

In addition, administrators should log in as a supervisor and verify that email messages from the live queues and Inbox can be viewed and replied to.

#### Monitor Historical Message Migration

You can use the Email Center migration screens to monitor the status of the message

migration process. In case of error, the screen displays descriptive error messages. You should act on each message as required. In case of environment issues during the migration, you can re-run messages selectively.

## **Incentive Compensation**

These tasks apply only to Oracle Incentive Compensation.

### **Validate Existing Objects**

Verify that the concurrent requests to generate collection and formula packages have been completed. Verify that the classification packages, collection packages, and formula packages are successfully generated and valid. If needed, regenerate these packages before using the product.

### **Verify Integration Points for External Modules**

If your system uses external modules, ensure that the following integration points are still valid:

- Order Management
- Accounts Receivable
- Accounts Payable
- Oracle Payroll
- Territory Manager

## **Marketing**

These tasks apply only to Oracle Marketing.

### **Verify Migrated Campaign and Activity Data**

From the Campaign workbench, verify that the header information and the mid-tabs were migrated as expected. From the Activity workbench, verify that the header information and activities with different channels (like Email, Fax, Advertising, and Telemarketing) were migrated as expected.

In addition, on the Additional Information mid-tab, turn on the deep links using OA Personalization, and verify that the associations are correct

## **TeleService**

These tasks apply only to Oracle TeleService.

## Verify Upgraded Data

Perform the following basic functions to ensure that the application is working as expected:

- Create a service request. If eAM is implemented, create an eAM service request as well.
- Update a service request, including one that was created before the upgrade.
- If you are using Charges, ensure that you can create charges lines and submit them to Order Management.
- View a service request report.

## Territory Manager

These tasks apply only to Oracle Territory Manager.

## Verify Responsibilities and Roles for RBAC

To ensure that the upgrade to Role-based Access Control (RBAC) is complete, verify the following for your users:

- All have Territory Management responsibility
- All have access to the correct Territory functions
- All have access to the correct usage(s)

## Verify Availability of Territory Types

The named account type should exist by default. If the system contained geographical territories in 11*i*, there should be a geography type available with the enabled geographical matching attributes from 11.5.10. For non-geographical and non-named account territories that existed in 11.5.10, there should be a general <usage> type that contains all the enabled matching attributes.

## Verify Mapping of the Territory Hierarchy View

Territories mapped from 11*i* should show the appropriate territory type and should have an end date defaulted to +10 years from the start date if the territory did not previously have an end date. In addition:

- All resources should have a transaction access level set to Full.
- Self-service geographic territories are visible in the administrator territory hierarchy view, but administrators cannot modify them. All modifications must be made

through the self-service UIs.

- Resources on escalation territories should be on the territory that the escalation territory was created for, with the resource access set to Escalation.

## Financials and Procurement Tasks

### Advanced Global Intercompany System

These tasks apply only to Oracle Advanced Global Intercompany System.

You should review the Advanced Global Intercompany System organizations to ensure that each organization is assigned to a legal entity. In some cases, the automatic upgrade may not identify a single legal entity to associated to any intercompany organization. In that case, the organization is inactivated and you must update it with the correct legal entity before using it in transactions.

### Assets

These tasks apply only to Oracle Assets.

### Subledger Accounting Upgrade

You should run selected reports and run some online inquiries both before and after the upgrade to verify that your data has no discrepancies.

### Verification Reports

Run the following reports prior to the upgrade in the Release 11*i* environment, and then again after the upgrade in the new environment. Compare the results to see if there are any discrepancies. You can run the reports for past periods or for a range of past periods or for the current period as applicable. However, it is important to note that when choosing the periods, you should choose only those that are within the range of periods that you ran the upgrade for.

- Cost Summary Report
- CIP Summary Report
- Reserve Summary Report
- Revaluation Reserve Summary Report
- Asset Additions Report
- Asset Retirements Report

- Asset Transfer Report
- Asset Transfer Reconciliation Report
- Asset Reclassification Report
- Asset Reclassification Reconciliation Report

You should also run the Account Drill Down Report in a Release 11*i* environment and the Account Analysis Report on the same set of data and compare the results.

### **Online Query**

In your Release 11*i* environment, go to Inquiry > Financial Information and query a few assets. Click Books > Transactions, then go to Tools > view Accounting. Make sure you are looking at the accounting for transactions that happened in the current fiscal years.

In the new environment, use the same menu path and perform an online accounting inquiry for the same assets and transactions and compare the results. Note that in this release, the menu path takes you to the Oracle Applications Framework page.

### **E-Business Tax**

These tasks apply only to Oracle E-Business Tax.

#### **Tax Transaction Audit and Reconciliation Reports**

To ensure that transaction tax information has been correctly upgraded, run the Payables Tax Audit Trail report and the Receivables Tax Reconciliation report for the current tax period before the upgrade to set a benchmark of transaction information.

Then immediately after the upgrade, run the same reports in the new environment for the same period and compare the results to ensure that the tax values are still the same.

#### **Payables and Receivables Transaction Query**

For a sample of Payables and Receivables transactions, record the details of the associated tax for these transactions before migration, and then query them again after the upgrade to ensure that the tax has been correctly upgraded.

Duplicate the same transactions and re-trigger to ensure that the new E-Business Tax-based calculation is consistent with the previous calculation.

### **Financials for the Americas**

These tasks apply only to Oracle Financials for the Americas.

## **Brazilian Receivables Bank Transfer Accounting Entries**

For occurrences that were already posted to the General Ledger prior to the upgrade, verify that the journal entries created in Subledger Accounting are synchronized with those created in General Ledger.

For occurrences that were not yet posted to General Ledger prior to the upgrade, run the Create Accounting program in draft mode (for the Receivables application and the Brazilian Bank Collection Occurrence Documents and Standard Receipts process category codes) to verify that the Subledger Accounting journal entries are created in the same way as they would have been in Release 11*i*.

## **Financials for India**

These tasks apply only to Oracle Financials for India.

### **Verify Sample Reports**

Verify the following sampling of reports (standard and customized), both before and after the upgrade and migration of data. Compare the data in the reports for accuracy.

The list of standard reports includes:

- PLA Register Report
- RG 23 Reports
- RG 23D Reports
- Cenvat Monthly Reports
- RG-I Report
- TDS Reports (Certificates and Returns)
- Service Tax Reports
- VAT Reports

In addition, run the Income Tax Act Fixed Assets Schedule and Depreciation Detailed Report.

## **General Ledger**

These tasks apply only to Oracle General Ledger.

### **Accounting Setup Manager Post-update Diagnosis Report**

Run the Accounting Setup Manager Pre-update Diagnosis report prior to the upgrade

and the Post-update Diagnosis report after the upgrade in the Standard Request Submission form in a General Ledger responsibility.

The diagnosis includes the following areas:

- Sets of Books: Review Sets of Books to be Upgraded to Secondary Ledgers
- Multiple Reporting Currencies: Unassigned Reporting Sets of Books
- Multiple Reporting Currencies: One Reporting Set of Books Assigned to Multiple Primary Sets of Books
- Multiple Reporting Currencies: Reporting Sets of Books With Translated Currencies
- Multiple Reporting Currencies: General-Ledger-Only Journal Conversion Rules
- Multiple Reporting Currencies: Inconsistent General Ledger Journal Conversion Rules
- Multiple Reporting Currencies: Inconsistent Setup
- Multiple Reporting Currencies: Incomplete Setup

Review the report and verify that the changes suggested by the Pre-upgrade report were actually performed during the upgrade process.

### **Upgrade Verification with Reports**

As a good practice, you should compare financial data and balances before and after the upgrade. Oracle recommends that you submit common reports, such as the Account Analysis, Journals reports, Trial Balance report, and Financial Statements to compare balances and journals before and after the upgrade to ensure that the data was properly upgraded.

### **Global Accounting Engine**

The following tasks apply only to Global Accounting Engine.

#### **Run Accounting Reports**

You should run the Global Accounting Engine accounting reports before the upgrade and the corresponding Subledger accounting reports after the upgrade to ensure that you have a proper audit trail of the upgraded accounting data. The reports are as follows:

| Global Accounting Engine                   | Subledger Accounting                   |
|--------------------------------------------|----------------------------------------|
| Daily Journal Book                         | Daily Journal Report                   |
| Account Ledger by Account                  | Account Analysis Report                |
| Supplier and Customer Subledger by Account | Third Party Balances Summary           |
| Supplier and Customer Balance by Account   | Third Party Detail and Balances Report |

## iProcurement

These tasks apply only to Oracle iProcurement.

### Catalog Data Upgrade

In the iProcurement post-upgrade interface, you can see the data exceptions report and the list of newly created global blanket agreements by choosing the Configuration tab from the iProcurement Catalog Administration responsibility. Under Configuration, the Release 12 Upgrade Summary continues two tabs: Exceptions and New Agreements.

#### Exceptions Report:

Any data listed in the data exceptions report under the Exceptions tab is not available in iProcurement. To fix data issues, follow these steps:

1. Download the XML file, if available in the exceptions report.

For the upgrade process, the XML file can be downloaded for any error condition in the data exceptions report. There is one compressed file for each supplier/supplier site/contract/language combination. Within the compressed file, there may be multiple files for the action SYNC per each language in which data is available. The file name is ItemException\_language.xml.

2. Fix any data that appears in the downloaded file.
3. Create or find a global blanket agreement (GBPA).

You must load the content of the file into a GBPA. See the Upload feature in *Oracle iProcurement Implementation and Administration Guide* for more information on uploading content to a GBPA.

**Note:** The upgrade data exceptions report is permanent. That is, even if you load the data into GBPAs with the XML file provided, you will continue to see the exception listed in the report.

### Agreements Summary:

The upgrade automatically validates and approves all newly created GBPAs. Buyers have access to these agreements through Oracle Purchasing and requesters can search for the content of these agreements in Oracle iProcurement.

The New Agreements tab lists GBPAs based on contract purchase agreements (CPAs). You can see the CPA number used as source data in the GBPA header and the resulting GBPA numbers in the CPA attachment section. See Oracle Purchasing User's Guide for more details on these documents.

### Content Security Upgrade

For the content zones created as a result of the 11.5.9 and 11.5.10 migration, the upgrade uses the catalog name as the content zone name. To maintain responsibility and operating unit level access restrictions, multiple instances of content zones with the same catalog name may be created.

#### Catalog and Stores - Before the Upgrade

- The Stationery Supplies store contains a Local Catalog consisting of items from Supplier A.
- A responsibility-level category realm exists such that users of the US Requesters responsibility can only access items of the Office Supplies category.

#### Content Zones - After the Upgrade

- The Stationery Supplies store continues to exist and contains two content zones, both of which are named Local.  
  
One of the two Local content zones is configured to contain only items of the category Office Supplies, and is made accessible to the iProcurement responsibility.
- The other Local Content Zone is configured to contain all catalog items, and is made accessible to all responsibilities in iProcurement, Purchasing, iSupplier Portal, and Enterprise Asset Management, except the US Requesters responsibility.

After running the upgrade script, check the Manage Content Zones screen in the e-Content Manager. It is possible that some catalogs have not been upgraded completely. In those cases, a warning icon is displayed next to the content zone name.

**Note:** Any content zone displayed with a warning icon requires further manual configuration before it will function properly.

In this release, content security restricts the number of suppliers, supplier sites, and categories that can be used in defining a content zone. A 2000 byte limit exists for performance concerns. In Releases 11.5.9 and 11.5.10, you could configure local catalogs to include up to 300 specific suppliers. During the upgrade process, iProcurement

determines if the number of catalog restrictions for a given catalog can be translated into a string of less than 2000 bytes. When this is possible, iProcurement migrates the catalog into the new content zone(s) completely and automatically. No further user action is necessary.

When a string of 2000 bytes cannot fully encompass the scope of catalog restrictions for a given catalog, iProcurement is not able to migrate the entire catalog completely into the content zones. When this happens, a warning icon is displayed next to the content zone(s) on the Manage Content Zone screen.

**Example:**

In the following example, you must manually divide the list of suppliers and categories restrictions into two or more content zones.

Suppose a "Stationery Supplies" store contains a single local catalog named "Local." The catalog contains a selection of several suppliers. During the upgrade process, iProcurement cannot translate all specific suppliers into a single content zone because of its 2000 byte limit, so a warning icon is displayed next to the "Local" content zone in the Manage Content Zones screen.

In order to retain the shopping behavior requesters experienced in iProcurement, a Catalog Administrator must manually remove some of the 300 suppliers referenced in the "Local" content zone and create a second content zone to include those suppliers. Both of these content zones can be included in the "Stationery Supplies" store.

## **Legal Entity Configurator**

These tasks apply only to Oracle Legal Entity Configurator.

### **Legal Entities and Establishments**

You should perform a review of all legal entities and establishments in your system after the upgrade is complete to ensure that the correct legal structure is in place. You can access this information by using the Search Page in the Legal Entity Configurator.

You can find detailed information about the assumptions made during the migration and the data migrated from country-specific fields in the *Oracle Financials and Oracle Procurement Functional Upgrade Guide: Release 11i to Release 12*.

If you need to create or upgrade legal entities and establishments, then see the *Oracle Financials Implementation Guide* for instructions.

## **Payables**

These tasks apply only to Oracle Payables.

### **Trial Balance Reconciliation**

In your Release 11i environment, run the Accounts Payable Trial Balance, Posted

Invoice Register, and Posted Payment Register reports. After the upgrade, run the Open Account Balances Listing Report, Posted Invoice Register, and Posted Payment Register in your upgraded environment and compare the results.

**Note:** The reports run for a ledger or a ledger set, not within the context of a single operating unit. The Release 11*i* Trial Balance and Posted Invoice and Payment Registers run within a single operating unit. Depending on your system configuration, you may need to sum several of the 11*i* reports to tie to the new versions.

## Invoice and Payment Processing

To verify the integration with Oracle Payments and the upgrade of existing invoices, submit a payment batch with limited selection criteria in order to pay a few invoices.

Recommended Payables testing includes, but is not limited to the following:

- Test Business Scenarios
- Pay an upgraded unpaid invoice
- Void an upgraded payment
- Cancel an upgraded invoice
- Apply an upgraded prepayment to a NEW invoice
- Unapply an upgraded prepayment from an upgraded invoice
- Cancel an upgraded prepayment invoice
- Create a new Invoice
- Pay a new Invoice
- Pay a group of new invoices in a Payment Process Request
- Payables Performance
- Review Payables Reports

**Note:** Review *EBS R12: Financial Reports impacted by the R12 (12.0 and 12.1) Upgrade* (Doc ID: 1110684.1).

Run the Create Accounting process for various volumes of data and verify it completes in appropriate amount of time based on environment ran on and volume of data.

Run the Account Analysis Report for different account and date ranges to bring back

different amounts of data and verify it completes in the appropriate amount of time based on environment ran on and volume of data.

**Additional Information:** See *Oracle Payables User's Guide Release 12.2*.

## **Tax Setup and Processing**

See E-Business Tax, page C-5 in this appendix.

## **Accounting Setup and Processing**

Query an invoice that was not validated prior to the upgrade, then submit accounting for that invoice. Query an invoice that was accounted before the upgrade, cancel it, pay it, and then account for the payment. See Global Accounting Engine, page C-7 in this appendix.

Recommended Subledger testing for Payables includes, but is not limited to the following:

- Test Subledger Business Scenarios for Payables
- Create Online accounting for an upgraded invoice
- Create Online accounting for an upgraded payment
- Run the Create Accounting process to create accounting for an upgraded invoice
- Run the Create Accounting process to create accounting for an upgraded payment
- Run the Create Accounting process to create accounting for an invoice cancelled after the upgrade
- Run the Create Accounting process to create accounting for a payment voided after the upgrade
- Run the Create Accounting process to create accounting for an upgraded prepayment applied to a new invoice
- Run the Create Accounting process to create accounting for an upgraded prepayment applied that was un-applied after the upgrade
- Run the Create Accounting process to create accounting for a new invoice
- Run the Create Accounting process to create accounting for a new payment
- Create and account NEW Intra/Inter company invoices (if applicable)
- View accounting for an upgraded invoice

- View accounting for an upgraded payment
- View accounting for a NEW invoice
- View accounting for a NEW payment
- Drill down from GL to upgraded Payables invoices/payments
- Drill down from GL to NEW Payables invoices/payments
- Run the Transfer Journal Entries to GL process to transfer any un-transferred accounting created after the upgrade
- Test closing the period after the upgrade

## Payments

These tasks apply only to Oracle Payments. In general, your planning for upgrade verification should involve testing in the two payment process areas:

- Funds Disbursement - If you used Oracle Payables for issuing payments in Release 11*i*, you should plan to test the funds disbursement processes equivalent to the former payment batch flow to ensure that your upgraded data correctly reflects your business process.
- Funds Capture - If you used Oracle Receivables for electronic payment processing such as direct debits or bills receivable remittances, you should plan on testing these areas to ensure that your upgraded data correctly reflects your business process. If you used Oracle iPayment for capture of funds from credit cards or bank account debits, you should plan on testing these processes to ensure that the upgraded data results in the process you expect.

## System Security Options

Oracle Payments provides this new page where system-level settings for encryption, masking, and credit card security can be controlled. When your upgrade is complete, you should plan on reviewing the seeded settings in this page to ensure they meet your business needs. For example, in Release 11*i* masking of credit card values is controlled in different ways throughout the applications. In this release, the central setting in this page controls all masking. You will want to review the setting in this page and modify it if needed.

## Oracle Payables Impact

You may want to run reports for use in your upgrade verification testing. For example, you may want to use the Suppliers Report in Oracle Payables to verify the data upgrade for payment details and bank accounts on the payees created in Oracle Payments. You

can use any reports that you ran before the upgrade to help verify upgraded data. In addition, there are some key setup entities that should be reviewed and used in testing payment processing.

- **Payment Process Profiles** - You should plan on reviewing the settings for the seeded profiles created by the upgrade. These settings come from a variety of sources, and since the profile drives the entire funds disbursement flow it is important to verify that the setup supports your business process. You should pay special attention to the usage rules set on the seeded profiles as these can be changed if the upgraded values do not align with your needs. It is recommended that you run a test payment process with each profile that you plan to use in production.
- **Payment Methods** - A new setup page is provided where payment methods can be created or updated. You should plan on reviewing the payment methods seeded by Oracle Payments to ensure that they meet your business needs.
- **Payment Systems and Accounts** - You should plan to verify these entities after the upgrade, and in particular the required settings, values, and their links to the payment process profiles. This setup controls important parts of the funds disbursement process such as payment file transmission, so you should test this area to be sure that the process is working as you expect.

### **Disbursement System Options**

This setup page allows you to review and set system options used in the funds disbursement payment process. You should plan on reviewing the upgraded and seeded settings in this page to ensure they meet your business needs. For example, the option to allow override of the payee's bank account on a proposed payment is upgraded from the equivalent setting in AP Payables Options. You will want to verify that the upgrade correctly set this option for each of your operating units.

### **Oracle Receivables Impact**

You may want to run reports for use in your upgrade verification testing. For example, you may want to run the Oracle Receivables Customer Detail Listing report to help verify the data upgrade for payment details and bank accounts on the payers created in Oracle Payments. You can use any reports that you ran before the upgrade to help verify upgraded data. In addition, there are some key setup entities that should be reviewed and used in testing payment processing.

- **Funds Capture Process Profiles:** You should plan on reviewing the settings for the seeded profiles created by the upgrade. These settings come from a variety of sources, and since the profile drives the entire payment flow it is important to verify that the setup supports your business process. It is recommended that you run a test payment process with each profile that you plan to use in production.
- **Payment Methods:** A new setup page is provided where payment methods can be

created or updated. You should plan on reviewing the payment methods seeded by Oracle Payments to ensure that they meet your business needs.

- **Payment Systems and Accounts:** You should plan to verify these entities after the upgrade, and in particular the required settings, values, and their links to the funds capture process profiles. This setup controls important parts of the funds capture process such as payment file transmission, so you should test this area to be sure that the process is working as you expect.
- **Payee and Routing Rules:** You should review the system payee entity created by the upgrade and in particular verify that the routing rules are correct and will result in what you expect for your payment processing.

### **Upgrade Verification Planning for Release 11*i* iPayment Users**

It is important that you plan to review the overall setup for the funds capture process flow. In particular, you should plan time to verify that the settings upgraded to the new process profiles, transmission configurations, and payment system accounts are correct. The upgrade program automatically migrates settings found in iPayment. However, due to the complex nature of areas like network configurations and required values for communication with your payment processors, the upgrade may not create all the new data as you expect.

You should also plan on reviewing the Payee configurations after you upgrade. You should review all the settings, but specifically check that the operating unit assignments are set the way you expect. These are set based on transactions in Oracle Receivables and the upgraded settings should be checked to ensure that you will process new funds capture transactions in the way you expect.

Once you have reviewed and made any corrections to the upgraded configurations, you should run a test payment process with each configuration that you plan to use in production.

### **Payment Processing Extensions and Customizations**

With the introduction of Oracle Payments, the data model used for payment processing this release is considerably different than that in Release 11*i*. Please note in particular that the formatting of payment files has changed completely with the new framework and Oracle XML Publisher integration. It is important that you review any custom payment formats, extensions or other customizations that you have created in this business area, and plan for obsoleting them by using new functionality or rebuilding them to work on the new model. You should plan on testing any custom payment formats, extensions, or other customizations that you have created, and verify that they work with the new payments architecture.

## **Receivables**

These tasks apply only to Oracle Receivables.

### **Integration with Oracle E-Business Tax**

- Manually create an invoice and select a Tax Classification (Tax Code in Release 11*i*). Complete the invoice and verify that tax is calculated as it was in Release 11*i*.
- Run a test tax calculation for each unique tax situation you plan to use in production.
- Verify your tax setup in E-Business Tax and in the new Receivables Customer user interface.

See the E-Business Tax, page C-5 section of this appendix.

### **Integration with Oracle Subledger Accounting**

- Query posted transactions (for example, Invoice, Debit Memo, Credit Memo, Chargeback, Deposit, Guarantee, Receipts, Adjustments) which have accounting dates in the current fiscal year. Use the Tools menu item and select 'View Accounting'. The journal lines should be represented correctly.
- Query a transaction in the non upgraded fiscal year. Use the Tools menu item and select 'View Accounting'. You should get the message that you need to run the Subledger Accounting post-upgrade program.
- Run the accounting reports in Receivables before and after the upgrade; verify your data.

### **Integration with Oracle Payments for Funds Capture**

- Run AutoReceipts for invoices flagged for credit card payments and verify that the receipt is created successfully and that the receipt is authorized.
- Run AutoRemittance for receipts flagged for electronic bank-to-bank payment and verify that the file is formatted properly in Oracle Payments.
- Verify your tax setup in E-Business Tax and in the new Receivables Customer user interface.

See the Payments, page C-13 section of this appendix.

### **Balance Forward Billing**

- Verify that Consolidated Billing setups upgraded to site level Balance Forward Billing setups.
- Run Balance Forward Billing program in draft mode and verify data on generated Balance Forward Bill.

- Confirm Balance Forward Billing (recommended)

In this step you must submit the Confirm Balance Forward Bill program to accept or reject draft bills. From the appropriate Receivables responsibilities, navigate to Control > Request > Run and select 'Confirm Balance Forward Bill' from the list.

For additional information, refer to the *Oracle Receivables User's Guide Release 12.2*.

- Print Balance Forward Billing (recommended)

This step is used to reprint draft or final balance forward bills. You must manually run the (BPA) Balance Forward Print program to reprint the bills.

For additional information, refer to the *Oracle Receivables User's Guide Release 12.2*.

### **Late Charges Enhancements**

- Verify that Finance Charge and Global Interest Invoice Flexfield setups have been migrated properly in the new Customer user interface.
- Run the Late Charges generation program and verify that late charges are generated as expected.

### **Customer User Interface Redesign**

Query upgraded customer records and verify that setup attributes at the account, account site, and business purpose levels are the same as in Release 11i.

### **Sourcing**

The following tasks apply only to Oracle Sourcing.

#### **Header Requirements Verification**

After the upgrade, log in as a sourcing buyer. Create a draft negotiation and verify that there is a Requirements section on the Create Negotiation: Header page. Also, confirm that the Header Attribute section is not available. Verify that Section Name has replaced Group Name.

#### **Template Migration**

After the upgrade, log in as a sourcing buyer. Retrieve an existing auction or Request for Quote (RFQ) template and verify that at the header level, there is a new field for Operating Unit. Verify that there is also a check box for Global Template.

### **Subledger**

Verify that the Subledger Accounting (SLA) upgrade completed successfully.

During the R12 upgrade, all periods to be upgraded are first marked as `gl_period_statuses.migration_status_code=P`, respective records are updated from the subledger (i.e., AP, AR, FA etc.) accounting tables to SLA's accounting tables, and finally the periods are marked as upgraded `gl_period_statuses.migration_status_code=U`. If some periods remain as not upgraded (i.e., `gl_period_statuses.migration_status_code=P`), then you may experience problems later while running the SLA upgrade or post upgrade patch. Run the following script to verify that the SLA upgrade completed successfully:

```
select * from gl_period_statuses where migration_status_code='P';
```

This SQL should NOT return any rows. If it does, then you must contact the appropriate Oracle Support team to log a bug on your behalf. See the `Application_ID` list in *R12 SLA Upgrade: Check that the SLA Pre-Upgrade Completed Successfully* (Doc ID: 747216.1) to determine which product is affected and to review further details on this issue.

## Trading Community Architecture

The following tasks apply only to Oracle Trading Community Architecture.

### Address Validation

To ensure the address validation setting has been correctly upgraded please check the following:

- Ensure that the E-Business Tax migration of current setup data is completed.
- Verify that Flexible Address Formatting (FAF) setup is correct after upgrade.

Customer setup should ensure that their Geography usage covers all data entry requirements for other usages, as this will be the point at which the user can correct the data. For example, if tax usage requires City, then this should be included in the Geography usage such that entry of City is required at data entry time. To avoid errors during address validation, the mapping for the Geography usage should match the FAF style for that country. In other words, the address should be validated based on the same data that is entered in the user interface.

- Run the E-Business Tax Missing Location Values report to identify locations with null parents and update them if necessary. See the E-Business Tax section of this guide for more information.

## Treasury

The following tasks apply only to Oracle Treasury.

### Bank Account Migration

In this release, internal bank accounts are migrated from Treasury to Cash

Management. Prior to the upgrade, take a snapshot of ALL (company, subsidiary, and counterparty) bank accounts and all their attributes. Also, take note of all counterparties used as banks.

After the upgrade, perform the following steps to verify that the bank accounts are properly migrated:

- In the new bank account user interface, search for company bank accounts. Make sure all company bank accounts are displayed and all the bank account attributes are present.
- In the new bank account user interface, search for subsidiary and counterparty bank accounts. Make sure all subsidiary and counterparty bank accounts are not displayed.
- In the new bank and bank branch user interface, search for counterparties used as banks prior to upgrade. Make sure all counterparties that were used as banks for company and subsidiary bank accounts are now shown as banks and bank branches (one counterparty = one bank and one bank branch). Also make sure that in the Counterparty Profiles window such counterparties are marked as bank branches and linked to a bank branch.
- In the new bank and bank branch user interface, search for counterparties used as banks prior to upgrade. Make sure that counterparties that were only used as banks for counterparty (external) accounts are not shown as banks or bank branches.

**Additional Information:** See the *Oracle Cash Management User Guide* for details.

## Bank Account Balance Migration

In this release, bank account balances are migrated from Treasury to Cash Management. Prior to upgrade, identify a sample set of company, subsidiary, and notional cash pool bank accounts and take a snapshot of the bank account balance details of these accounts. Also, take a snapshot of all interest rates that are set up as default rates for bank account balances. These rates are not going to be upgraded and you will need to recreate them after upgrade as interest rate schedules.

After the upgrade, perform the following steps to verify that the company and subsidiary bank accounts are properly migrated:

- In the new bank account balance user interface, search for the company and subsidiary bank accounts from the sample set. Make sure all pre-upgrade bank account balances are displayed correctly.
- Create interest rate schedules in line with the pre-upgrade interest rate data and assign the bank accounts to these schedules, if not already assigned.

- In the Bank Account Interest Settlement window, verify that the balances and interest amounts are correct.

After the upgrade, perform the following steps to verify that the notional cash pool balances are properly migrated:

- In the new bank account balance user interface, search for the notional cash pools from the sample set. Make sure all pre-upgrade balances are displayed correctly.
- In the Bank Account Interest Settlement window, verify that the balances and interest amounts are correct.

**Additional Information:** See the *Oracle Cash Management User's Guide* for details.

## U.S. Federal Financials

The following tasks apply only to Oracle U.S. Federal Financials.

### Treasury Confirmation and Reconciliation

Submit a payment process request from Oracle Payables with limited selection criteria in order to pay a few invoices. Have Treasury confirm the payment instruction in the the Treasury Confirmation and Reconciliation window and verify the subledger accounting was created as expected. This verifies not only the integration with Payments and the upgrade of existing Payables invoices, but also the treasury confirmation process and accounting in U.S. Federal Financials.

### Budget Execution

Enter budget execution transactions at various budget levels to verify the accounting is created as expected.

## Projects

### Property Manager

The following tasks apply only to Oracle Property Manager.

### Verify Upgraded Data

Perform these steps to verify that E-Business Tax, Subledger Accounting, and Legal Entity data was successfully upgraded:

**E-Business Tax:**

- Navigate to Property Manager > Leases and Documents.
- Query for a lease that has been upgraded from 11i (one that had a term with Tax Code and Tax Group).
- Navigate to Payment > Open and verify that Tax Classification Code is populated in the Payment Term.
- Navigate to Term Templates and verify that Tax Classification Code is populated in the template.

**Subledger Accounting:**

- Navigate to Property Manager > Leases and Documents > Subledger Accounting > Accounting Events.
- Specify the start and end date along with ledger for which the SLA upgrade was done. The system displays a list of Finally Accounted accounting events.
- Navigate to View Journal Entries and verify the entries.
- Drill down for more information.

**Legal Entity:**

- Submit the Receivables Auto Invoice Import program for importing the invoices with the Batch Name of Property Manager Batch Source.
- Navigate to Export to Receivables/Payables > Transactions > Transaction Workbench.
- If Legal Entity is associated correctly with the transaction, it signifies that the Legal Entity Upgrade for the Exported Line has been complete correctly.

**Projects**

The following tasks apply only to Oracle Projects.

**Verify Subledger Accounting Integration**

In your Release 11i environment, run the AUD: Revenue Audit report for an accounting period in the current fiscal year that has been closed. After the upgrade, run the same report in your upgraded environment and compare the results.

## Verify E-Business Tax Upgrade

Use the Event Types, Expenditure Types, and Invoice Review screens to check for invoices, event types, and expenditure types to make sure that they were upgraded successfully.

## Verify Resource List Migration

All upgraded Planning resource lists have the Enable Resource Class option set to 'Yes'.

All upgraded Resource Break Down structures have the Enable Resource Class option set to 'Yes'.

You can view existing resource lists that were successfully migrated to resource planning lists on the Planning Resource Lists page. You can also verify that the planning resources are the same as the resource list members.

Also the Resource Breakdown Structures page displays a resource breakdown structure with the same name as the resource list. Verify that the nodes of the resource breakdown structure are the same as the resource list members, and have the same two-level hierarchy if the resource list was grouped.

## Verify Labor Costing Rules

The existing labor costing rules should contain the following additional attributes with default values:

1. Costing Method: Standard
2. Enable Accrual: No
3. Enable Planning: Yes
4. Rate Source: Projects
5. Total Time Costing: No

## Supply Chain Management

This section contains upgrade verification tasks for the Oracle Supply Chain Management product family.

## Oracle Cost Management

These tasks apply only to Oracle Cost Management.

## Verify Subledger Accounting Integration

To verify that the integration with Subledger Accounting was successful and that the

data contains no discrepancies, complete these steps:

1. Verify that the accounting events for transactions prior to upgrade are available in the Subledger Accounting (SLA) events page. Verify and match the corresponding Journal Entries (headers and lines) for these accounting events.
2. Use the following reports to show balances and values derived from the accounting entries prior to the upgrade:

| Report Name                                          | Use                                                                                 |
|------------------------------------------------------|-------------------------------------------------------------------------------------|
| Material Account Distributions (Details and Summary) | View the accounts charged for inventory transactions                                |
| WIP Account Distributions (Details and Summary)      | View account information for work-in-process transactions                           |
| Discrete Job Value (Average and Standard)            | Analyze a summary of the transactions behind the charges and variances for each job |
| Receiving Account Distributions                      | View accounting distributions for receiving transactions                            |

3. Use the Journal Entries Report - Cost Management to summarize the upgraded accounting entries in SLA by organization and accounting class. Compare the summarized account balance at the organization level between the reports listed in the reports in Step 2, and the SLA Journal Entry report.

## Oracle Order Management

The following tasks apply only to Oracle Order Management.

### Verify and Review Upgrade Error Report

The upgrade process automatically produces a report (ontexc16.lst) that lists recommendations about, or errors that occurred during, the upgrade of Pre-Payment Order, Profiles moved to System Parameters, and Order Management Defaulting Rules. The report is located at \$APPL\_TOP/admin/<SID>SID/out (UNIX) or %APPL\_TOP%\admin\<SID>SID\out (Windows), where <SID> is the value of the ORACLE\_SID or TWO\_TASK.

After the upgrade is complete, and before you use Oracle Order Management, you should review the report and fix any issues you find there.

## Oracle Product Hub

The following tasks apply to Oracle Product Hub.

1. The Item or Item Revision business entity should be enabled for existing user defined attribute groups.
2. Seeded operational attribute groups should be enabled only at the Item Organization business entity.
3. Existing seeded pages for operational attributes should be available at Item Organization Level.
4. Existing New Item Requests will be converted and a line will be created with the details of item. The NIR line status will be same as NIR status.

## Diagnostics

Use diagnostic tools to install Oracle Diagnostics Support Pack.

### Assign Application Diagnostics Responsibility (recommended)

Oracle E-Business Suite Diagnostics are launched exclusively from within the Oracle E-Business Suite using the *Application Diagnostics* responsibility.

For instructions on assigning the *Application Diagnostics* responsibility to your users, see the *Responsibility Configuration* section of *eBusiness Suite Diagnostics Execution Instructions*.

### Confirm R12 Support Diagnostics is Working (recommended)

The 12.2 E-Business Suite includes the updated Diagnostic Support Pack. Follow the following Execution Instructions to confirm that the R12 Support Diagnostics are working properly:

1. Access the *Application Diagnostics* responsibility and select 'Diagnose'.
2. Within Oracle Diagnostics, choose the 'Select Application' button and query the desired application.
3. Select the desired Diagnostic Test and choose 'Execute'.
4. Enter test inputs and select 'Submit'.

## Obtain current versions of diagnostic tests (recommended)

Diagnostic patches may be available to get new diagnostic tests, bug fixes, and enhancements for existing diagnostic tests that were not released as part of your R12 base install. Reference the corresponding diagnostic catalog to find all available patches. If patches are available and required to get the current version of a diagnostic, then it will be noted in the *Additional Comment* section of the catalog for the specific test. You will also find the patch information in the *Description* and *Important* sections of the individual diagnostic test notes.

For additional information, see *E-Business Suite Diagnostics References for R12*.



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## Pre-Upgrade Patch List

This appendix lists the patches that are required as pre-upgrade steps for Release 12.2.

This appendix covers the following topics:

- Patch List

### Patch List

The following table lists the patches that are referenced as pre-upgrade requirements. The list includes a link to the task that requires the patch, and, where appropriate, the product associated with the patch. If a product is not registered in your Release 11*i* system, and you do not plan to implement it in this release, you do not have to download the patch.

| Patch #  | Task Reference                                                                           | Product/Conditions                                              |
|----------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 21900924 | Run TUMS utility                                                                         | All/None                                                        |
| 5903765  | Convert Oracle Alert E-mail Processing to the Workflow Notification Mailer (conditional) | Alert/11i.ATG_PF.H Rollup 6 - if you have not already converted |
| 4963569  | Verify completion of Sales Compensation processes (conditional)                          | Incentive Compensation/None                                     |
| 4153130  | Set minimum patch levels (conditional)                                                   | Fin for India/Patch Set - if not at IN60105D2                   |
| 4923208  | Set minimum patch levels (conditional)                                                   | Fin for India/Consolidated Patch - if not at IN60105D2          |

| <b>Patch #</b> | <b>Task Reference</b>                                         | <b>Product/Conditions</b>                                                                                                                           |
|----------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 5259121        | Run Accounting Setup Manager Diagnosis for MRC (optional)     | GL/Optional task                                                                                                                                    |
| 4607647        | Prepare data for credit card encryption upgrade (conditional) | Payments/If not already using enhanced product                                                                                                      |
| 5233248        | Set range of periods (optional)                               | Assets, Cost Management, E-Business Tax, Financials for the Americas, Payables, Projects, Purchasing, Receivables/releases earlier than 11.5.10.3CU |
| 4563075        | Prepare to migrate OPM data (conditional)                     | OPM/None                                                                                                                                            |
| 4699061        | Prepare to migrate OPM data (conditional)                     | OPM/None                                                                                                                                            |
| 4582937        | Prepare to migrate OPM data (conditional)                     | OPM/None                                                                                                                                            |
| 4458024        | Finish migration preparations for OPM (conditional)           | OPM/If there are open batches                                                                                                                       |
| 4350832        | Finish migration preparations for OPM (conditional)           | OPM/11.5.10 or Family Pack K or later                                                                                                               |
| 7197489        | Run AD preparation scripts (Required)                         | AD/Prep scripts for OATM.                                                                                                                           |
| 6694260        | Prepare to migrate OPM data (conditional)                     | OPM/None                                                                                                                                            |
| 6696828        | Prepare to migrate OPM data (conditional)                     | OPM/None                                                                                                                                            |

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## Product Documentation List

### Description

This appendix covers the following topics:

- Applications Technology
- Customer Relationship Management
- Environment and Database
- Financials and Procurement
- Human Resources
- Projects
- Supply Chain Management

### Applications Technology

*Secure Configuration for Oracle E-Business Suite Release 12.1 (Doc ID: 403537.1)*

*Oracle E-Business Suite Concepts*

*Oracle E-Business Suite Developer's Guide*

*Oracle Application Framework Developer's Guide (Doc ID: 1315485.1)*

*Oracle Application Framework Personalization Guide*

*Oracle E-Business Suite Installation Guide: Using Rapid Install*

*Oracle Applications Multiple Organizations Implementation Guide*

*Oracle E-Business Suite Setup Guide*

*Oracle E-Business Suite Maintenance Guide*

*Oracle E-Business Suite Security Guide*

*Oracle E-Business Suite User Interface Standards for Forms-based Products*

*Oracle E-Business Suite Integrated SOA Gateway Implementation Guide*

*Oracle XML Gateway User's Guide*

*Oracle XML Publisher Administration and Developer's Guide* (available within the Oracle E-Business Suite online help)

*Preparing Custom Development for the Next Oracle E-Business Suite Release* (Doc ID: 374398.1)

*Use of Multiple Organizations (Multi-Org) in Release 11i* (Doc ID: 210193.1)

*User Preferred Time Zone Support in the Oracle Applications Release 12* (Doc ID: 402650.1)

*Using AutoConfig to Manage System Configurations in Oracle E-Business Suite Release 12* (Doc ID: 387859.1)

## **Customer Relationship Management**

*Leads Management 11.5.10 Data Migration*

*Oracle Advanced Inbound Implementation Guide*

*Oracle Email Center Migration to Release 12* (Doc ID: 549036.1)

*Oracle Incentive Compensation Implementation Guide*

*Oracle Incentive Compensation User's Guide*

*Oracle TeleService Implementation and User Guide, Release 12.2* (Part Number: E48987-02)

*Oracle Territory Manager User Guide, Release 12.2* (Part Number: E48991-01)

## **Environment and Database**

*R11i: About Oracle Applications DBA Minipack 11i.AD.I* (Doc ID: 233044.1)

*Database Initialization Parameters for Oracle Applications Release 12* (Doc ID: 396009.1)

*Applications Release 12 Upgrade Sizing and Best Practices* (Doc ID: 399362.1)

*Interoperability Notes: Oracle Applications Release 11i with Oracle Database 10g Release 12 (10.2.0)* (Doc ID: 362203.1)

*Interoperability Notes: Oracle E-Business Suite Release 11i with Oracle Database 11g Release 2 (11.2.0)* (Doc ID: 881505.1)

*Oracle Applications Release 11.5.10.2 Maintenance Pack Installation Instructions* (Doc ID: 316365.1)

*Maintenance Wizard Overview* (Doc ID: 215527.1)

*Migrating an Applications Installation to a New Character Set* (Doc ID: 124721.1)

*Database Preparation Guidelines for an Oracle E-Business Suite Release 12.2 Upgrade* (Doc ID: 1349240.1)

*Oracle Applications DBA Minipack R12.AD.A (Doc ID: 401424.1)*  
*Oracle E-Business Suite NLS Release Notes, Release 12.2 (Doc ID: 1314621.1)*  
*Oracle Applications Tablespace Model Release 11i - Tablespace Migration Utility (Doc ID: 248857.1)*  
*Oracle Database Performance Tuning Guide 10g Release 2 (10.2)*  
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*R11i / R12 : Requesting Translation Synchronization Patches (Doc ID: 252422.1)*

## **Financials and Procurement**

*Migrating to Oracle Advanced Collections: An Overview for Oracle Receivables Users (Doc ID: 389443.1)*  
*Oracle Advanced Collections Implementation Guide*  
*Oracle Advanced Collections User's Guide*  
*Oracle Advanced Global Intercompany System User's Guide*  
*Oracle Cash Management User's Guide*  
*Oracle CLM for Public Sector Implementation Guide*  
*Oracle CLM for Public Sector iProcurement User Guide*  
*Oracle CLM for Public Sector iSupplier Portal*  
*Oracle CLM for Public Sector Sourcing User Guide*  
*Oracle CLM for Purchasing User's Guide*  
*Oracle E-Business Tax Implementation Guide*  
*Oracle E-Business Tax User's Guide*  
*Oracle Financials and Oracle Procurement Functional Upgrade Guide: Release 11i to Release 12*  
*Oracle Financials Concepts*  
*Oracle Financials for India Implementation Guide*  
*Oracle Financials Implementation Guide*  
*Oracle iProcurement Implementation and Administration Guide*  
*Oracle iSupplier Portal Implementation Guide*  
*Oracle iSupplier Portal User's Guide*  
*Oracle Payables User's Guide*  
*Oracle Procurement Buyer's Guide to Punchout and Transparent Punchout*  
*Oracle Procurement Supplier's Guide to Punchout and Transparent Punchout*  
*Oracle Purchasing User's Guide*

*Oracle Receivables User's Guide*  
*Oracle Sourcing Implementation and Administration Guide*  
*Oracle Subledger Accounting Implementation Guide*  
*Oracle Supplier Hub Implementation and Administration Guide*  
*Oracle Supplier Management Implementation and Administration*  
*Oracle Supplier Management User's Guide*

## **Human Resources**

*Guide to the OTA Classic Upgrade Report (Doc ID: 269571.1)*  
*Guide to the OLM Time Zone Update (Doc ID: 371179.1)*  
*Oracle Human Resources (HRMS) Payroll - Installing Vertex Quantum for US and Canada Legislations (Doc ID: 224273.1)*  
*PSP Post Upgrade Bad Data Report (Doc ID: 270447.1)*  
*OTA-iLearning Integration Migration to Oracle Learning Management (OLM) (Doc ID: 271719.1)*

## **Projects**

*Oracle Grants Accounting User Guide*  
*Oracle Project Billing User Guide*  
*Oracle Project Costing User Guide*  
*Oracle Project Planning and Control User Guide*  
*Oracle Projects Fundamentals*  
*Oracle Projects Implementation Guide*

## **Supply Chain Management**

*Oracle Process Manufacturing (OPM) Migration from 11i to Release 12.1 and Higher (Doc ID: 376683.1)*  
*OPM System Administration User's Guide*  
*Oracle Advanced Supply Chain Planning Implementation and User's Guide*  
*Oracle Bills of Material User's Guide*  
*Oracle Cost Management User's Guide*  
*Oracle Inventory Optimization Implementation and User's Guide*  
*Oracle Inventory User's Guide*

*MFS Post-Install Instructions for Oracle Applications R12 (Doc ID: 386682.1)*

*Oracle Order Management Implementation Manual*

*Oracle Product Hub Implementation Guide*

*Oracle Product Hub User's Guide*

*Oracle Service Contracts Implementation Guide*

*Oracle Service Contracts User Guide*

*Oracle Shipping Execution User's Guide*

*Oracle Shop Floor Management User's Guide*

*Oracle Warehouse Management User's Guide*



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