

Oracle® E-Business Suite

Patching Procedures

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Oracle E-Business Suite Patching Procedures, Release 12.1

Part No. E12148-04

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Preface

Intended Audience

Welcome to Release 12.1 of the *Oracle E-Business Suite Patching Procedures*.

This guide assumes you have a working knowledge of the following:

- The principles and customary practices of your business area.
- Computer desktop application usage and terminology.

If you have never used Oracle E-Business Suite, we suggest you attend one or more of the Oracle E-Business Suite training classes available through Oracle University.

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

Deaf/Hard of Hearing Access to Oracle Support Services

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Structure

1 Patching Overview

Applying a patch can update your existing system in various ways, from adding a new feature or product to improving system performance. This chapter introduces the various types of patches, the utilities you use to apply them, and the ways to monitor their effect on your system.

2 Patch Application Utilities

Various utilities are available for applying patches to your Oracle E-Business Suite system. Their features and usage are described here.

3 Patch Tracking Utilities

It is important to keep track of the patching status of your system. This chapter describes how to identify patches that have not been applied to your system, and how to maintain any customized files.

4 Patch Reporting Utilities

As you apply patches and perform other maintenance tasks that modify your system, you may need to refer to the numerous reports that are automatically created as a record of these activities. This chapter explains how to do this, and lists the options available. For example, you can query the patch information files to see lists of patches applied and files affected, or you can generate a report about the version and translation level of your files. You can also generate reports that contain statistics about maintenance sessions, including the number of jobs in each session, the time taken to complete each job, and the time taken to complete the whole session.

5 Patching Procedures

How patches are applied to an Oracle E-Business Suite system depends in part on the various strategies or options that may be chosen. In some cases, existing features of the

system may determine how patches are applied.

Related Information Sources

This book is included on the Oracle E-Business Suite Documentation Library, which is supplied in the Release 12.1 Media Pack. You can download soft-copy documentation as PDF files from the Oracle Technology Network at <http://www.oracle.com/technology/documentation/>. The Oracle E-Business Suite Release 12.1 Documentation Library contains the latest information, including any documents that have changed significantly between releases. If substantial changes to this book are necessary, a revised version will be made available on the "virtual" documentation library on My Oracle Support (formerly Oracle*MetaLink*).

If this guide refers you to other Oracle E-Business Suite documentation, use only the latest Release 12.1 versions of those guides.

Online Documentation

All Oracle E-Business Suite documentation is available online (HTML or PDF).

- **Online Help** - Online help patches (HTML) are available on My Oracle Support.
- **PDF Documentation** - See the Oracle E-Business Suite Documentation Library for current PDF documentation for your product with each release. The Oracle E-Business Suite Documentation Library is also available on My Oracle Support and is updated frequently.
- **Release Notes** - For information about changes in this release, including new features, known issues, and other details, see the release notes for the relevant product, available on My Oracle Support.
- **Oracle Electronic Technical Reference Manual** - The Oracle Electronic Technical Reference Manual (eTRM) contains database diagrams and a detailed description of database tables, forms, reports, and programs for each Oracle E-Business Suite product. This information helps you convert data from your existing applications and integrate Oracle E-Business Suite data with non-Oracle applications, and write custom reports for Oracle E-Business Suite products. The Oracle eTRM is available on My Oracle Support.

Related Guides

You should have the following related books on hand. Depending on the requirements of your particular installation, you may also need additional manuals or guides.

Oracle E-Business Suite Concepts

This book is intended for all those planning to deploy Oracle E-Business Suite Release 12, or contemplating significant changes to a configuration. After describing the Oracle E-Business Suite architecture and technology stack, it focuses on strategic topics, giving a broad outline of the actions needed to achieve a particular goal, plus the installation

and configuration choices that may be available.

Oracle E-Business Suite Installation Guide: Using Rapid Install

This book is intended for use by anyone who is responsible for installing or upgrading Oracle E-Business Suite. It provides instructions for running Rapid Install either to carry out a fresh installation of Oracle E-Business Suite Release 12, or as part of an upgrade from Release 11i to Release 12. The book also describes the steps needed to install the technology stack components only, for the special situations where this is applicable.

Oracle E-Business Suite System Administrator's Guide Documentation Set

This documentation set provides planning and reference information for the Oracle E-Business Suite System Administrator. *Oracle E-Business Suite System Administrator's Guide - Configuration* contains information on system configuration steps, including defining concurrent programs and managers, enabling Oracle Applications Manager features, and setting up printers and online help. *Oracle E-Business Suite System Administrator's Guide - Maintenance* provides information for frequent tasks such as monitoring your system with Oracle Applications Manager, administering Oracle E-Business Suite Secure Enterprise Search, managing concurrent managers and reports, using diagnostic utilities including logging, managing profile options, and using alerts. *Oracle E-Business Suite System Administrator's Guide - Security* describes User Management, data security, function security, auditing, and security configurations.

Maintaining Oracle E-Business Suite Documentation Set

This documentation set provides maintenance and patching information for the Oracle E-Business Suite DBA. *Oracle E-Business Suite Maintenance Procedures* provides a description of the strategies, related tasks, and troubleshooting activities that will help ensure the continued smooth running of an Oracle E-Business Suite system. *Oracle E-Business Suite Maintenance Utilities* describes the Oracle E-Business Suite utilities that are supplied with Oracle E-Business Suite and used to maintain the application file system and database. It also provides a detailed description of the numerous options available to meet specific operational requirements. *Oracle E-Business Suite Patching Procedures* explains how to patch an Oracle E-Business Suite system, covering the key concepts and strategies. Also included are recommendations for optimizing typical patching operations and reducing downtime.

Integration Repository

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

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.

Patching Overview

Applying a patch can update your existing system in various ways, from adding a new feature or product to improving system performance. This chapter introduces the various types of patches, the utilities you use to apply them, and the ways to monitor their effect on your system.

This chapter covers the following topics:

- Release Maintenance: Patching Concepts
- Introduction to Patching Utilities

Release Maintenance: Patching Concepts

Throughout the course of an Oracle E-Business Suite life cycle, patches are applied to maintain your system. This maintenance process may be necessary for a number of reasons, including, but not limited to:

- Fixing an existing issue
- Adding a new feature or functionality
- Updating to a higher maintenance level
- Applying the latest product enhancements
- Providing interoperability to new technology stacks
- Determining the source of an issue
- Applying online help

Depending on its type, a patch may update the system files, the database, or both. In addition, you can apply patches to other tiers according to your system architecture.

Note: All Oracle E-Business Suite patches are available from My Oracle Support [<http://support.oracle.com>].

Patch File Structure

Patches generally consist of a top-level directory that may contain several files, and one or more subdirectories. The top-level directory is named `<patchnum>`, where `<patchnum>` is the number of the patch. The most important files in the top-level directory are: README.txt, README.html and the unified driver file (named `u<patchnum>.drv`).

Readme File

The README.txt or README.html file describes what the patch does. If the patch contains manual steps, then the readme file provides information on using Oracle Patch Application Assistant (PAA) to generate customized installation instructions. If the patch does not contain manual steps, the readme file provides instructions for running AutoPatch to apply the patch.

Unified Driver File

The unified driver, named `u<patchnum>.drv`, contains the commands necessary to change files and database objects, and to generate new objects. It contains a sequential list of copy, database, and generate instructions, which are arranged in sections. You typically run the unified driver on all APPL_TOPs. AutoPatch runs only the actions that are required for the current APPL_TOP. However, there may be scenarios where you run only the applicable portion of the driver. In these cases, the readme file directs you to run PAA to generate the specific instructions.

Patch Formats

Patch format describes the way the patch is packaged and applied. If a patch format is described as *cumulative*, that patch contains a consolidation of updates for a given codeline from the inception of a release, up to, and including, the latest release level. Oracle E-Business Suite patches are released in the following formats:

Oracle E-Business Suite Patch Formats

Patches	Description
Individual bug fix	A patch that fixes an existing issue.

Patches	Description
Product family release update pack (product family RUP)	An aggregation of patches on a given codeline created for all products in specific product family for a specific point release. For example, R12.FIN_PF.A.1.
Release update pack (RUP)	A cumulative aggregation of product family release update packs on a given codeline created across Oracle E-Business Suite after the initial release. For example, 12.1.1.
Pre-upgrade patch	All <i>upgrade-related</i> , high-priority patches consolidated from all the products within a product family. Pre-upgrade patches are released as needed.
Consolidated upgrade patch	All upgrade-related patches consolidated from all the products in a product family. These patches are released as needed and are only available for upgrading a Release 12 system from one point release to another.

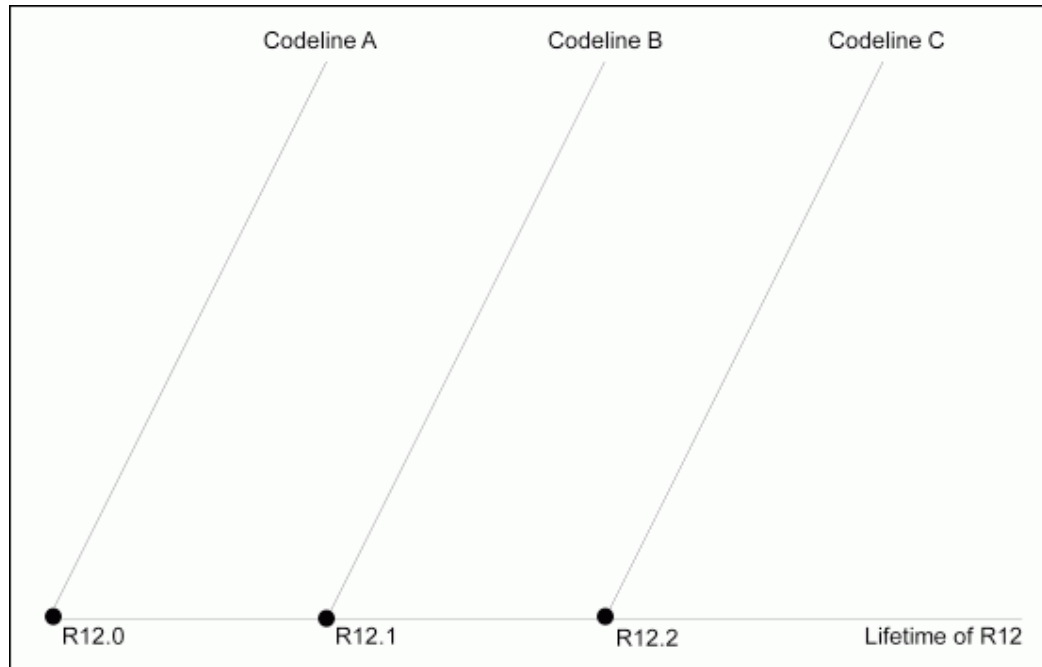
Patch formats can additionally be identified as high-priority. This means that the patch has an impact that is broad enough to merit application by all customers who have installed the affected product

Note: You can find the latest available patches by logging on to My Oracle Support. Click the Patches and Updates tab and choose the Quick Links to the Latest Patchsets, Mini Packs, and Maintenance Packs link.

Codelines

In Release 12, Oracle E-Business Suite patches are grouped into codelines. A *codeline* begins with a point release (for example, Release 12.0) consisting of a unique set of product features, and progresses to include all the patches created to maintain that point release. The initial Release 12.0 point release introduced codeline A. Additional point releases introduce new codelines, each identified by a unique letter. For example, Release 12.1 introduced codeline B, and Release 12.2 is expected to introduce codeline C.

Codelines



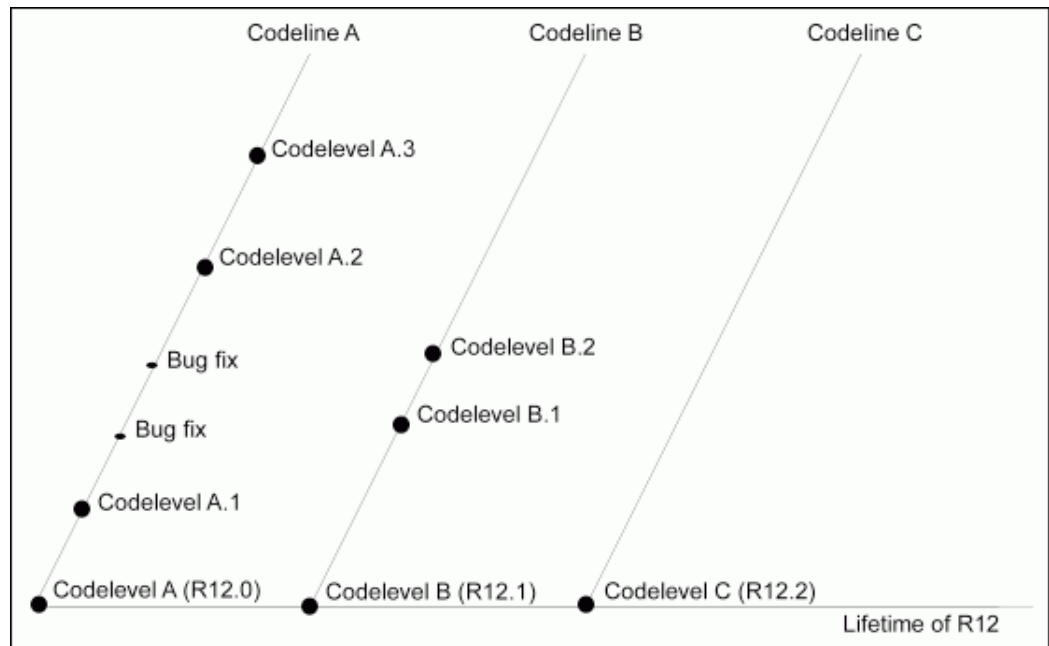
Codelines and their associated codelevels ease the tracking of patch prerequisites, dependencies, and compatibilities.

Important: This discussion of releases, codelines, and codelevels (including the diagrams used as examples), is intended solely to illustrate the concepts of codelines and codelevels. It does not represent any release commitment on the part of Oracle.

Codelevels

Patches associated with codelines not only implement a set of product features for that point release, but also provide fixes to that set of features. We describe this unique set of product features for a point release as a *codelevel* and assign it a unique number. The following diagram illustrates how codelines and codelevels might be associated with Oracle E-Business Suite Release 12.

Codelevels

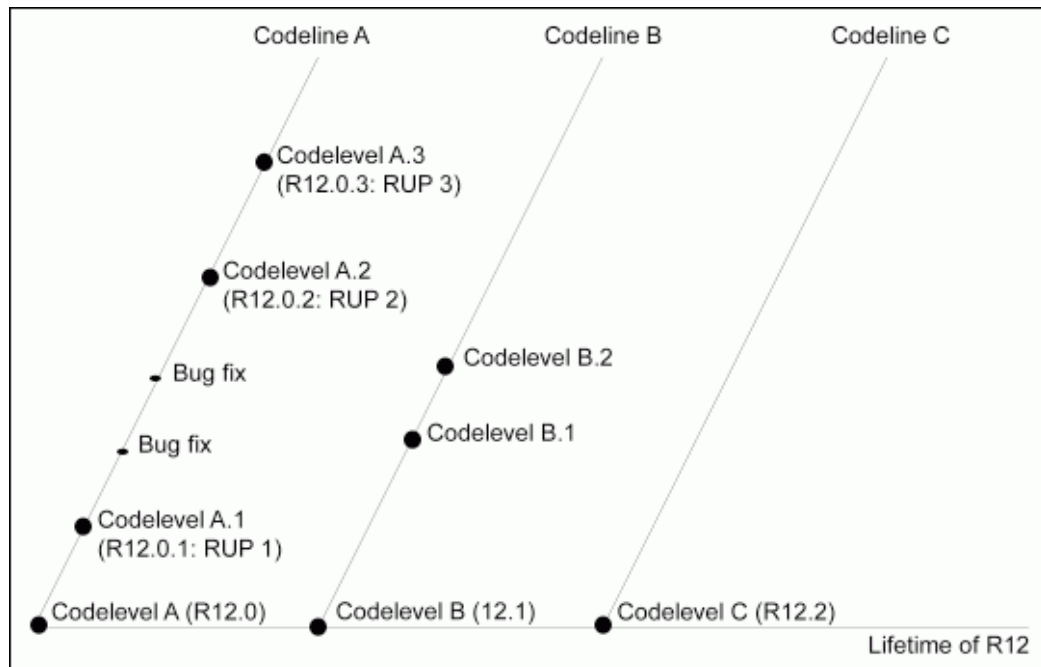


Further, codelevels identify patches for individual products. For example, if Oracle General Ledger (GL) is associated with your system, codelevel R12.GL.A.1 is the first set of fixes to codelevel R12.GL.A, R12.GL.A.2 is the second, and so on. Codelevels are cumulative - each one contains the initial set of features plus all the fixes created to date for that product or product family.

If individual bug fixes are created along the codeline, then subsequent codelevels will contain the bug fixes. For example, in the preceding diagram, the two bug fixes along codeline A will be included in codelevel A.2.

All codelevels created after the initial point release for a product or product family are aggregated into release update packs (RUPs). RUP1 is equivalent to R12.0.1, RUP2 is equivalent to R12.0.2, and so on. RUPs provide bug fixes. In addition, they may also provide feature enhancements, which provide new functionality that has a limited impact on your system.

Codelevels in RUPs



A new point release contains new features that will substantially impact your system and may change its operation. It starts a new codeline (for example, codeline B). At that point, you can choose to upgrade to the new codeline and adopt the new features, or stay on your existing codeline, where bug fixes and enhancements will continue to be provided for your existing features.

Note: For more information on determining the codeline and codelevel for each product installed in your system, see the Codelevels Summary page discussed in Codelevels Introduced by the Patch, page 3-18.

When applying individual bug fixes, make sure that you apply only the bug fixes for your existing codeline.

Introduction to Patching Utilities

Patches are applied and tracked as needed by using one of the utilities designed specifically for that purpose. Some of these utilities are run from the command line, and others are Web-based. This section describes these utilities briefly. You can find a complete description of the utilities in later chapters of this book.

Command Line Patching Utilities

The utilities in this section are all run from the command line.

AutoPatch (adpatch)

AutoPatch is the utility you use to apply patches to the Oracle E-Business Suite file system or database.

AD Merge Patch (admrgpch)

When you apply patches individually, you must perform associated patching tasks multiple times. For example, for every individual patch there may be duplicate link and generate processes. AD Merge Patch merges multiple patches into a single patch so that the required tasks and processes are performed only once.

Several new options have been introduced as part of recent enhancements to AD Merge Patch. These are described further in AD Merge Patch Enhancements, page 2-22.

Patch Application Assistant (admsi.pl)

Oracle Patch Application Assistant (PAA) helps you track and perform manual steps during patching, and provides consistency in the format of manual steps. For patches that have manual steps, the patch readme file contains generic instructions for *all* systems. The readme file instructs you to use PAA to generate instructions specific to your system. For merged patches, PAA automatically combines the contents of the individual patch readme files into a single readme file.

PAA generates a custom set of instructions, specific to your installation, that consolidates and displays the relevant manual steps for all the patches you want to apply. After successfully performing each manual step, you can record that step as 'completed' in the PAA interface. Then, when applying patches in the future, you can refer to this record to see which steps you have already completed. Unless specified otherwise, you do not have to repeat the manual steps you have previously completed.

Web-Based Patching Utilities

The Web-based utilities described in this section are all accessed via Oracle Applications Manager. (OAM)

Applied Patches

Applied Patches enables you to query the patch history database for a list of patches that have been applied to your system. From the Applied Patches interface, you can view patch information such as patch number and type, driver file name, platform and version, location of applied patch, patch content and language, files changed or copied, bug fixes in each driver file, whether patch application was successful, and timing information.

File History

With File History, you can view a history of the files that have been updated by a patch

such as: APPL_TOP where the file resides, directory in which the file resides, product family that owns the file, name of the file, version of the file, date on which the file was changed, patch details report, and action summary report for the updates to the file.

Patch Wizard

An important part of the patching process is to keep abreast of new patches that are recommended, and analyze their effects before you actually apply them. With Patch Wizard, you can determine patches that have not been applied to your system, but are recommended to keep the system current. Patch Wizard also gives you a preview about the effects on your system of applying an individual patch.

Timing Reports

Timing Reports help you monitor a job that is running or provide you with a view of the statistics from completed AutoPatch and AD Administration maintenance sessions. You can view information such as task name, time taken to complete the task, start time and end time.

Register Flagged Files

Register Flagged Files provides a central register for your customizations. Use it to import, export, add, delete and view records of customized files. This utility replaces the applcust.txt file used in previous releases of Oracle E-Business Suite.

Software Updates

Software Updates is a portal from which you can view all the patching-related activities of your system.

Manage Downtime Schedules

Refer to the *Oracle E-Business Suite System Administrator's Guide - Maintenance* for information and advice regarding managing downtime in restricted mode and downtime schedules.

Patch Application Utilities

Various utilities are available for applying patches to your Oracle E-Business Suite system. Their features and usage are described here.

This chapter covers the following topics:

- Oracle Patch Application Assistant
- AutoPatch
- AD Merge Patch

Oracle Patch Application Assistant

For patches that have manual steps, the patch readme file instructs you to use Oracle Patch Application Assistant (PAA) by running the `admsi.pl` script. For merged patches, PAA automatically merges the contents of the individual patch readme files.

The Oracle Patch Application Assistant Interface

The Patch Application Assistant is started from the command line, and collects your input in a graphical user interface.

Running Oracle Patch Application Assistant

The following is a summary of the steps you use to run Patch Application Assistant. For a complete description of all the steps, see *Creating Customized Instructions for Patching Using PAA*, page 5-1.

Step 1: Set the environment

You must set the environment to apply the configuration parameters that define your system. This task is common to many AD utilities.

Step 2: Unzip the patch

Create a patch top directory, if it does not already exist. Download the patch into the patch top directory and unzip it.

Step 3: Review the information in the readme file

In the directory where you unzipped the patch, you will find a README.txt file and a README.html file. Review either of these files for information about the patch and for instructions on using Oracle Patch Application Assistant to generate customized instructions for your system.

Step 4: Run Oracle Patch Application Assistant

Run PAA (admsi.pl) to generate customized instructions for your system. Follow the steps in the customized instructions to complete the patching process.

AutoPatch

You use AutoPatch to apply patches to the Oracle E-Business Suite file system or database. The utility gathers the required information about your system via a series of prompts. When you have responded to the prompts, AutoPatch performs the tasks required to apply the patch:

- Reads patch metadata to determine patch dependencies and requirements
- Uploads patch information from a prior patch session to the database (if applicable)
- Reads and validate the patch driver file and reads the product driver files
- Compares version numbers of object modules from the product libraries and version numbers of the existing files against the patch files
- Backs up all existing files that will be changed by the patch
- Copies files
- Archive files in libraries
- Relinks executables
- Generates forms, reports, messages, graphics, and Java archive (JAR) files.
- Compiles JSP files and invalid database objects
- Updates database objects

- Runs AutoConfig to update configuration files if any template files are introduced or updated by the patch
- Saves patch information to the database

AutoPatch takes no action if a patch contains no new updates to files or database objects in your system.

If AutoPatch detects a previously failed AutoPatch session, it will attempt to recover that session.

Preparing your System for Patching

Before you begin a patching session, there are some important tasks you need to complete.

Enable Maintenance Mode

Before you initiate an AutoPatch session, you must shut down the Workflow Business Events System and set up function security so that no Oracle E-Business Suite functions are available to users. This ensures optimal performance and reduces downtime when applying a patch. Maintenance mode provides a clear separation between normal runtime operation of Oracle E-Business Suite and system downtime for maintenance.

During a Maintenance mode downtime, user login is restricted. Users are redirected to a system downtime URL, which informs them that the maintenance session is in progress. The Oracle Applications Manager (OAM) Maintenance Mode page allows you to schedule system downtime and send alert messages to notify users of the downtime schedule.

To enable or disable Maintenance mode, use the Change Maintenance Mode menu in AD Administration. See: *Changing Maintenance Mode, Oracle E-Business Suite Maintenance Utilities*.

Caution: You can run AutoPatch by using *options=hotpatch* on the command line when Maintenance mode is disabled. However, applying a 'hot patch' may result in significant degradation of system performance. For more information, see AutoPatch Options, page 2-14.

Shut Down Services

If you are applying a patch that updates or relinks files, shut down the corresponding concurrent managers, Web services, or Forms services. See: *Applying a Patch Interactively*, page 5-7.

Log Files

In addition to the main log file (adpatch.log), AutoPatch also creates several other log

files for specific purposes, for example, to record all the actions associated with parallel workers. The log files are written to \$APPL_TOP/admin/<SID>/log (UNIX), where <SID> is the value of your ORACLE_SID or TWO_TASK variable, or in %APPL_TOP%\admin\<SID>\log (Windows), where <SID> is the value of ORACLE_SID or LOCAL. Review these files when the AutoPatch session is complete.

The log directory contains adpatch.log and adpatch.lgi, and may contain one or more additional files as described in the following table.

Log Files

Log File	Used For
adpatch.log	Main AutoPatch log file (default name)
adpatch.lgi	AutoPatch informational messages (default name)
adrelink.log	Relinking
adlibin.log	Moving C object files into the C library of a product
adlibout.log	Moving C object files out of the C library of a product
adworkxxx.log	Database operations run in parallel
<language>_<filename>_ldt.log	Seed data loader files

Note: You can also review log files using the View Log Files feature of OAM Timing Reports. See: View Log Files, page 4-28.

If AutoPatch does not perform an action, it does not generate the log file associated with that type of action.

Prompts

In addition to the standard prompts common to most AD utilities, AutoPatch also asks for information specific to the patching process. You must respond to all the prompts for each driver you run.

Important: Do not run multiple sessions of AutoPatch on the same

Oracle E-Business Suite system at the same time.

Main Log File Name

The main AutoPatch log file is named adpatch.log by default. We recommend you change the name to indicate the associated driver file, using a .log extension. For example, for the u1234567.drv driver, the log file should be u1234567.log.

SYSTEM and AOL User Passwords

AutoPatch prompts for the SYSTEM and AOL user passwords.

Note: You can change this behavior by using *options=validate* on the command line. See Command Line Arguments, page 2-12.

Patch Directory

AutoPatch asks you to specify the directory where the patch files have been unzipped. The default is the directory from which you started AutoPatch. If necessary, specify the full path name to the directory where you unzipped the patch files. The operating system user running AutoPatch must have write permissions to that directory.

Patch Driver File

AutoPatch prompts for the name of the patch driver file. By default, it does not check the integrity of the patch - that is, whether the version of each file referenced in a driver file copy action matches the version in the patch - because Oracle E-Business Suite patches are always tested before release to ensure they contain the correct files.

The unified driver, named u<patchnum>.drv, contains the commands necessary to change files and database objects, and to generate new objects. It contains copy, database, and generate portions and performs the copy, database, and generate actions in the stated order. You typically run the unified driver on all APPL_TOPs and AutoPatch runs only the actions that are required for the current APPL_TOP. However, there may be cases where you run only the applicable portion of the driver.

Copy Portion of a Unified Driver

When the copy portion of a unified driver runs, AutoPatch performs the following actions:

- Extracts the appropriate files from the C library of each product.
- Compares the extracted object modules with their corresponding files in the patch directory. It also makes this type of comparison with files such as forms, reports, and SQL scripts.

- Backs up any product file with a more recent version in the patch directory to a subdirectory in the patch directory. For example, if *<patch_dir>* is the patch directory, *<system_name>* is the Applications System name, *<appl_top_name>* is the APPL_TOP name, and *<prod>* is the name of the product being patched, it backs up:

<PROD>_TOP/<subdir(s)>/<old_file_name>

to

<patch_dir>/backup/<system_name>/<appl_top_name>/<prod>/<subdir(s)>/<old_file_name>

Note: The Applications system name and the APPL_TOP name are determined during the Rapid Install process.

- Replaces the outdated files of each product with newer files from the patch directory.
- Loads the new object modules into the C libraries.
- Relinks the Oracle E-Business Suite products with the operating system, Oracle server, and other Oracle products libraries.
- Applies changed Java class files and regenerates JAR files as needed.
- Copies any specified HTML or media files to their respective destinations.
- Compiles out-of-date Java Server Page (JSP) files (if any JSP files are included in the patch).

Database Portion of a Unified Driver

When the database portion of a driver runs, AutoPatch performs these actions:

- Gets a list of current invalid objects in the APPS schema.
- Determines whether the action was performed in a previous patch.
- Runs SQL scripts and EXEC commands, which change Oracle E-Business Suite database objects. By default, AutoPatch runs scripts and commands in parallel.
- Compiles invalid objects in the database.
- Assembles a list of current invalid objects in the APPS schema.

Note: As of Release 12, a separate MRC schema is not required, so Invoker's Rights processing (included in previous releases) has been removed.

Generate Portion of a Unified Driver

Apply the generate portion of a unified driver on all APPL_TOP directories containing one or more files being generated by the patch. If in doubt, apply it to all APPL_TOP directories on all nodes. When the generate portion of a driver runs, AutoPatch performs these actions:

- Generates Oracle Forms PL/SQL library files
- Generates Oracle Forms menu files
- Generates Oracle Forms executable files
- Generates Oracle Reports PL/SQL library files
- Generates Oracle Reports files
- Generates message files
- Generates Oracle Workflow resource files

Note: You can change this behavior by using *options=integrity* on the command line. See Command Line Arguments, page 2-12.

Number of Parallel Workers

By default, AutoPatch runs database updates and file generation commands in parallel and prompts you for the number of workers. Tasks are assigned to workers, the workers run the tasks to completion, and AutoPatch assigns new tasks.

The default value for the number of workers is two times the number of CPUs on the node from which you run AutoPatch. Oracle recommends specifying the number of workers as between two and four times the number of CPUs.

After you specify the number of workers, AutoPatch displays messages similar to the following as it begins to update the Oracle E-Business Suite products:

```
Performing version checking for driver files...
Copying driver files into installation area...
Determining valid on-site files...
Screening out files not valid for this installation...
Extracting object modules from product libraries...
Performing version checking...
Determining what executables to link...
Determining what Oracle Forms files to generate...
Determining what Oracle Reports libraries to generate...
Determining what Oracle Reports files to generate...
```

AutoPatch runs all database actions based on *phase order*, a grouping of actions in the database portion of the patch that minimizes dependencies. This order is not necessarily the order in which the commands are listed in the database portion of the patch driver.

Note: For more information, see *Monitoring and Controlling Parallel Processing, Oracle E-Business Suite Maintenance Utilities*.

Customized Files

AutoPatch reviews the AD_FILES table to determine if any customized files (Register Flagged Files) will be replaced by the patch. If so, it displays a message listing the customized files it will replace.

Note: For more information, see *Customization Standards, Oracle E-Business Suite Developer's Guide*, and *Register Flagged Files*, page 1-8.

NLS

If the patch you are applying has an NLS-related version, and if you are an NLS customer, AutoPatch prompts you about the NLS-related version of the patch before allowing you to continue.

Preparing for Non-Interactive Patching

Non-interactive patching is a way to save time by avoiding some of the prompts and automating the patching process. To use non-interactive patching, create a defaults file by running AutoPatch interactively using a specific command line option. Then tell AutoPatch to run non-interactively by providing the name of the defaults file plus other associated command line options. After the AutoPatch actions are complete, you perform any post-AutoPatch steps listed in the patch readme file. See *Performing Non-Interactive Patching*, page 5-13.

Messages

AutoPatch generates several types of messages. Each message is recorded in a log file. See *Log Files*, page 2-3 for a list and descriptions.

Informational Messages

Informational messages are written to the informational message file (adpatch.lgi). This log file uses the same base file name as the main AutoPatch log file, but substitutes a .lgi extension for the .log extension. For example, if the AutoPatch log file is named u1234567.log, the AutoPatch informational log file is named u1234567.lgi.

For example, AutoPatch writes information pertaining to the files not updated because they are up-to-date in the informational log file.

File will not be copied to destination.

```
Version check:
/slot03/appmgr/prodappl/ad/12.0.2/xml/oam/patch/history/SearchFiles.uix
version is equal to or lower than
/slot03/appmgr/prodcomn/html/oam/patch/history/SearchFiles.uix.
File will not be copied to destination.
```

```
Version check:
/slot03/appmgr/prodappl/ad/12.0.2/xml/oam/patch/history/SearchFilesCriteriaAdvanced.uix
version is equal to or lower than

/slot03/appmgr/prodcomn/html/oam/patch/history/SearchFilesCriteriaAdvanced.uix
```

Error Messages

When AutoPatch is using parallel processing and an error occurs, the job fails. Review the main log file (adpatch.log) and the adworkxxx.log file to determine the source of the error, resolve the issues and continue. Restart AutoPatch using the adctrl command.

Note: See Monitoring and Controlling Parallel Processing, *Oracle E-Business Suite Maintenance Utilities*, for details on using the adctrl command.

If you cannot resolve the issue, you must:

- Verify that all steps in the readme file were completed.
- Check My Oracle Support for additional information regarding the patch you are applying.

If the message indicates that a worker has failed its job, you can fix the problem and restart the worker while the manager is running. Some failed jobs are deferred (not immediately reassigned) by the manager. These jobs do not cause the manager or other workers to stop.

See: Managing Worker Processes, *Oracle E-Business Suite Maintenance Procedures*.

Successful Completion Message

AutoPatch displays messages such as the following when processing is complete. If you do not see a completion message, you should investigate and identify the reason.

A job timing report has been generated for the current session.
You should check the file
 /slot03/appmgr/prodappl/admin/PROD/out/adt323790.lst
for details.

Purging timing information for prior sessions.

```
sqlplus -s APPS/*****  
@/slot03/appmgr/prodappl/ad/12.0.0/sql/adtpurge.sql 10 1000
```

Done purging timing information for prior sessions.

AutoPatch is complete.

AutoPatch may have written informational messages to the file
 /slot03/appmgr/prodappl/admin/PROD/log/adpatch.lgi

Errors and warnings are listed in the log file
 /slot03/appmgr/prodappl/admin/PROD/log/adpatch.log

and in other log files in the same directory.

Backup Directory

When AutoPatch runs, a backup directory is created in the directory where you unzip the patch. The old version of each file updated by the patch is copied into the backup directory. When applying large patches (such as release update packs, product family RUPs, and pre-upgrade patches), ensure there is enough disk space on the system where you unzip the patch, or the patching process may fail. We recommend having at least twice the amount of disk space as the unzipped patch file uses.

Tip: Periodically, you can delete the files in the backup directory to free the space.

AutoPatch Modes

AutoPatch can apply patches in two specialized modes: pre-install and test. The patch readme file instructs you when to use each of these modes.

Pre-Install Mode

Pre-install mode is generally used during the upgrade process to update AD utilities, apply pre-upgrade patches, or work around other patching issues. AutoPatch asks all startup questions except those relating to the database.

Note: Run AutoPatch in pre-install mode *only* if the patch readme instructs you to do so.

To run AutoPatch in pre-install mode, include *preinstall=y* on the AutoPatch command

line. It performs the following actions:

- Compares version numbers
- Copies files
- Relinks FND and AD executables
- Saves patch information to the file system

Because AutoPatch does not read driver files in pre-install mode, it copies all product files in the patch to the APPL_TOP directory. Additionally, even if a file in the patch should be both in the APPL_TOP and in another directory (such as in \$OA_HTML), AutoPatch copies the file only to the APPL_TOP.

Each patch run in pre-install mode will have its driver staged to a predetermined directory under the APPL_TOP. This allows AD Merge Patch to be run once for all pre-install updates, and merging with the upgrade driver only. See AD Merge Patch Enhancements, page 2-22 for further details.

In preinstall mode, AutoPatch validates codelevels against the files Preinstall_Codelevel_AD.txt and Preinstall_Codelevel_MP.txt. These files are located in the \$APPL_TOP/admin directory, and contain codelevel information about AD and other products registered in the database tables.

Since no database connection is available in pre-install mode, AutoPatch tries to validate whether the current patch should be applied based on the codelevel information in these two files, as follows:

- If Preinstall_Codelevel_AD.txt is missing from the APPL_TOP, AutoPatch will apply the patch in pre-install mode without validating the patch for codelevel compatibility.
- If Preinstall_Codelevel_MP.txt is missing from the APPL_TOP, AutoPatch will proceed with patch application without validating the patch for codelevel compatibility of the entities.
- If both files are missing, AutoPatch will not validate codelevels in pre-install mode.

Note the following restrictions when applying a patch in pre-install mode:

- NLS patches cannot be applied on the instance.
- Baseline or codelevel-introducing patches cannot be applied on the instance.
- AutoPatch will not check to see if the patch is already applied on the system.

Test Mode

In test mode, AutoPatch does not apply the patch. Instead, it lists each file it would

have copied, relinked, executed, or generated and shows exactly what actions it would have performed had it applied the patch. It also runs AutoConfig in test mode to determine any impending changes to the configuration files. This allows you to see the effects of the patch on your production system before you apply it.

To run AutoPatch in test mode, include *apply=no* on the AutoPatch command line. This runs as if AutoPatch is applying the patch, except it does not. It performs the following actions:

- Copies any files from the patch directory to the Oracle E-Business Suite file system
- Archives any object modules into the product libraries
- Relinks any executables
- Generates any forms, reports, PL/SQL libraries, or menu files
- Runs any SQL or EXEC commands (commands that change the database)
- Instantiates new configuration files
- Updates the patch information files
- Updates patch information and release version in the database

See: Testing a Patch Before Applying It, page 5-11.

Command Line Arguments

You can direct the way the AutoPatch operates by adding modifiers to the AutoPatch start command. These modifiers may be in the form of arguments or options. They refine the actions performed by AutoPatch.

Command line arguments and options are in the "token=value" format, where *token* is the name of the modifier. We recommend you enter both the argument and the value in lower case: AutoPatch automatically converts the "token" portion to lowercase, but it cannot convert the "value".

In this example:

```
$ adpatch LOGFILE=TEST.LOG
```

The token ("LOGFILE") will be converted to lowercase, but the value (TEST.LOG) will not be recognized by the utility. The correct way to enter this command is:

```
$ adpatch logfile=test.log
```

You can enter more than one token=value argument on a single command line by separating them with a single space, as in the following example.

```
$ adpatch printdebug=y flags=hidepw
```

In some cases, you can include more than one value for a token. When doing so, you

separate the values with commas and no spaces. For example:

```
$ adpatch flags=nohidepw,trace
```

is a valid command, but

```
$ adpatch flags=nohidepw, trace
```

is not valid.

The following *arguments* are specific to AutoPatch, and can be used to modify and refine its behavior. The default value is used if you do not specify a value.

AutoPatch Arguments

Argument	Description
apply	Purpose: Tells AutoPatch whether to run in test mode. Values: y, meaning that AutoPatch does not run in test mode; n, meaning that AutoPatch does run in test mode. Default: y Example: adpatch apply=n
driver	Purpose: Tells AutoPatch the name of the patch driver file. This is usually used during non-interactive processing. It is only valid when the patchtop option is also used. Values: A driver file name, or comma-separated list of patch driver file names. Default: None, meaning that AutoPatch prompts for the patch driver file name. Example: adpatch patchtop=/d01/prodappl/patches/1234567 driver=u1234567.drv

Argument	Description
patchtop	Purpose: Tells AutoPatch the top-level directory for the current patch. This is normally used during non-interactive processing. Values: A fully qualified directory name. Default: None, meaning that AutoPatch prompts for the patch directory. Example: adpatch patchtop=/d01/prodappl/patches/1234567
preinstall	Purpose: Tells AutoPatch whether to run in pre-install mode. Pre-install mode is used to update AD utilities before an upgrade and to apply pre-upgrade patches. Values: y, meaning that AutoPatch does run in pre-install mode; n, meaning that AutoPatch does not run in pre-install mode. Default: n Example: adpatch preinstall=y
uploadph	Purpose: Tells AutoPatch to upload patch history information from the patch information files (in \$APPL_TOP/admin/\$TWO_TASK) to the database. AutoPatch exits after uploading the patch history information. Values: y, meaning that AutoPatch uploads patch history information; n, meaning that AutoPatch does not upload patch history information. Default: none Example: adpatch uploadph=y

AutoPatch Options

The *options=* argument is used to pass generic *options* to AutoPatch. It takes the form of a comma-separated list. Enter one option or a comma-separated list of options. For example, *options=nocopyportion,nogenerateportion*. As with AutoPatch arguments, there must be no space after the comma.

AutoPatch Options

Option	Description
autoconfig	Purpose: Tells AutoPatch to run AutoConfig automatically. Default: autoconfig Use <i>options=noautoconfig</i> if you are applying a number of patches in sequence and want to run AutoConfig once, after applying the last patch of the sequence. Comments: The more common method is to merge the patches first with AD Merge Patch.
checkfile	Purpose: Tells AutoPatch to either skip running EXEC, SQL, and EXECTIER commands if they are recorded as already run, or to record them as having run after running them. Default: checkfile Use <i>options=nocheckfile</i> to turn off the checkfile feature. Comments: checkfile provides significant performance benefits.
compiledb	Purpose: Tells AutoPatch to automatically compile invalid objects in the database after running actions normally found in the database portion of the driver. Default: compiledb for standard patches. nocompiledb for standard patch translations, documentation patches, and documentation patch translations. Use <i>options=nocompiledb</i> to save time when multiple non-merged patches are applied in a maintenance window. Comments: Merging multiple patches and applying a single merged patch is usually a better strategy.

Option	Description
compilejsp	Purpose: Tells AutoPatch whether to automatically compile out-of-date JSP files. JSP files are only compiled if the patch contains copy actions for at least one JSP file. Default: compilejsp for standard patches. nocompilejsp for standard patch translations, documentation patches, and documentation patch translations. Use <i>options=nocompilejsp</i> to save time when multiple non-merged patches are applied in a maintenance window. Comments: Merging multiple patches and applying a single merged patch is usually a better strategy.
copyportion	Purpose: Tells AutoPatch whether to run commands normally found in the copy portion of the driver. Default: copyportion Use <i>options=nocopyportion</i> to tell AutoPatch not to perform copy actions of the driver.
databaseportion	Purpose: Tells AutoPatch whether to run commands normally found in the database portion of the driver. Default: databaseportion Use <i>options=nodatabaseportion</i> to tell AutoPatch not to perform database actions. of the driver
generateportion	Purpose: Tells AutoPatch whether to run commands normally found in the generate portion of the driver. Default: generateportion Use <i>options=nogenerateportion</i> to tell AutoPatch not to perform generate actions of the driver.

Option	Description
hotpatch	Purpose: Tells AutoPatch to apply a patch regardless of whether the Oracle E-Business Suite system is in Maintenance mode. AutoPatch aborts the patching session if Maintenance mode is disabled and the <i>options=hotpatch</i> command is not used. Default: nohotpatch
integrity	Purpose: Tells AutoPatch whether to verify that the version of each file referenced in a copy action matches the version present in the patch. Default: nointegrity Comments: Using <i>options=nointegrity</i> is safe and avoids some AutoPatch overhead.
maintenancemode	Purpose: Tells AutoPatch to enable Maintenance mode at the beginning of a patch session and disable it at the end (if patch application was successful). Default: nomaintenancemode The maintenancemode and hotpatch options cannot be used together. If they are, AutoPatch will raise the error 'You cannot specify both "hotpatch" and "maintenancemode" in the same adpatch run'.
parallel	Purpose: Tells AutoPatch whether to run actions that update the database in parallel (such as SQL) and actions that generate files in parallel (such as genform). Default: parallel Comments: Oracle does not recommend changing the default, as Oracle E-Business Suite patches are tested on systems using parallel processing.

Option	Description
phtofile	Purpose: Tells AutoPatch where to place patch history information after applying the patch. Default: nophtofile Use <i>options=phtofile</i> to tell AutoPatch to write patch history information to the patch information files in the file system (\$APPL_TOP/admin/\$TWO_TASK) instead of uploading it to the database. Comments: Using phtofile allows you to defer the uploading of patch history information to the database until after the system downtime. Use the <i>adpatch uploadph=y</i> command to upload patch history information from the patch information files (in \$APPL_TOP/admin/\$TWO_TASK) to the database during uptime.
validate	Purpose: Tells AutoPatch whether to connect to all registered Oracle E-Business Suite schemas at the start of the patch. Default: novalidate Use <i>options=validate</i> to validate password information for all Oracle E-Business Suite schemas. Comments: Useful for finding problems with incorrectly registered Oracle E-Business Suite schemas or schemas with invalid passwords.

The AutoPatch Interface

AutoPatch is run from the command line. It prompts for any information required.

Running AutoPatch

The following is a summary of the steps you use to run AutoPatch. For a complete procedural description of all the steps, see *Creating Customized Instructions for Patching Using PAA*, page 5-1.

Step 1: Set the environment

You must set the environment to apply the configuration parameters that define your

system. This task is common to many AD utilities.

Step 2: Unzip the patch

Create a patch top directory, if it does not already exist. Download the patch into the patch top directory and unzip it.

Step 3: Review the information in the readme file

In the directory where you unzipped the patch, you will find a README.txt file and a README.html file. Review either readme file for information about the patch and for instructions on using Oracle Patch Application Assistant (PAA) to generate customized instructions for your system.

Step 4: Run Oracle Patch Application Assistant

Run PAA (admsi.pl) to generate customized instructions for your system. Follow the steps in the customized instructions to start the patching process.

Step 5: Run AutoPatch

The customized instructions generated by PAA describe how to run AutoPatch using the adpatch command.

Note: You can add arguments on the command line to refine the way AutoPatch runs. See AutoPatch Modes, page 2-10 and Command Line Arguments, page 2-12.

Stopping AutoPatch

You can stop AutoPatch by entering the *abort* command at any prompt. However, after the workers have started running, you can only stop AutoPatch by shutting down the workers in AD Controller.

Note: For detailed instructions on shutting down workers, see: Exiting or Stopping a Utility, *Oracle E-Business Suite Maintenance Utilities*.

Restarting AutoPatch

If you have shut down the workers, or if AutoPatch quits while performing processing actions, it saves all the actions completed up to that point in restart files. Investigate and resolve the problem that caused the failure, then restart AutoPatch. After you restart AutoPatch, it will ask if you want to continue with the previous session (at the point where the processing stopped), or start a new session.

See: Restarting a Utility, *Oracle E-Business Suite Maintenance Utilities*.

AD Merge Patch

When patches are applied individually, AutoPatch tasks such as responding to prompts and linking executables must be performed separately for every patch. This can be time-consuming and prone to error.

An alternative is to use *AD Merge Patch*. This utility merges multiple patches into a single patch, allowing you to reduce patch application time by eliminating the tasks you would otherwise have to have performed for each individual patch.

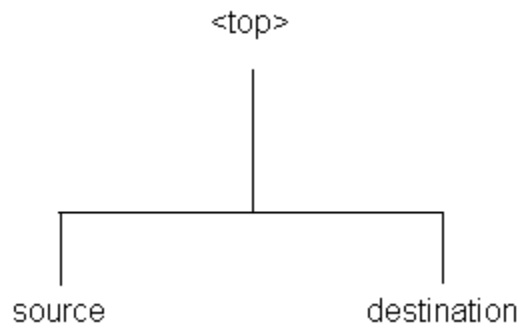
When merging compatible patches, AD Merge Patch bases its actions on metadata. It removes duplicate driver lines from the database portions of the driver. When merging two or more patches that have manual steps, the steps and readme files of both patches are also merged.

Source and Destination Directories

You extract the patches to be merged from the *source* directory. The *destination* directory is where the merged patch is created. AD Merge Patch reads the patch driver files for each patch in the source directory and merges them to create patch driver files in the destination directory. If a file exists in more than one source patch, only the highest revision of the file is copied to the destination directory.

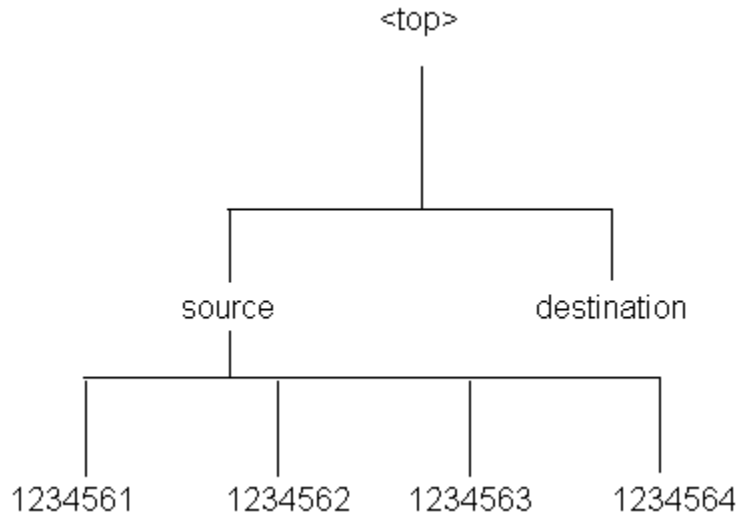
The source and destination directories should be created under the same parent directory. For example, if the parent directory is named <top>, both the source and destination directories should be subdirectories of <top>. The source and the destination directories cannot be child or parent directories of each other.

Directory Structure for Source and Destination Directories - Basic Example



The source directory must have all patches to be merged as immediate child directories. The patch directories cannot be in a lower directory. For example, a directory structure for merging four patches would look like this:

Directory Structure for Source and Destination Directories - Merging Four Patches



Naming the Merged Patch

You should indicate the name of the merged patch on the command line, using the *-merge_name* option to provide a meaningful name. If you do not use this option, the patch will be given the default name of *merged*.

Merging Zipped Patches

The manifest file is a text file in which you document the location and names of the patch zip files. The contents of a manifest file resembles the following:

```
/d01/prodappl/patches/p3903945_12_GENERIC.zip  
/d01/prodappl/patches/p3892799_12_GENERIC.zip  
/d01/prodappl/patches/p3874740_12_LINUX.zip
```

You can use the *-manifest* option to create a manifest file. AD Merge Patch references this file, and unzips the patches listed. It copies the unzipped files into the source directory and includes them, along with any other files in the source directory, in the merged patch.

The AD Merge Patch Interface

You run AD Merge Patch and supply the information it needs from the command line. There are no menus or input screens.

Running AD Merge Patch

AD Merge Patch is located in the AD_TOP/bin directory. However, you run it from the parent directory (<top>) of the source directory. The following is a summary of the steps

you use to run AD Merge Patch. For a complete description of all the steps, see *Creating a Merged Patch*, page 5-21.

Step 1: Set the environment

You must set the environment to indicate the location of the configuration parameters that define your system. This task is common to many AD utilities.

Step 2: Run AD Merge Patch

From the parent directory (<top>), run AD Merge patch using the `admrgpch` command.

AD Merge Patch Enhancements

An upgrade from Release 11i to 12.1.1 could require the use of files that were not included in the upgrade itself. AD Merge Patch can merge the upgrade driver with fixes that were released after it was shipped, in effect providing a single highwatermark driver.

Several other recent AD Merge Patch enhancements take the form of command line options, which are described below and followed by examples.

-driveronly

This option is used to merge only the patch driver files present in the patch tops. AD Merge Patch will merge the actions present in the patch driver files, and write the merged content to the resulting patch driver file. However, the files will not be copied from the source directory to the destination directory. The resulting merged patch driver file will be placed in the destination directory given with the `-d` option.

-preinstall

This option is used to run AD Merge Patch in pre-install mode, where it will only merge the patch driver files present in the `$APPL_TOP/admin/$TWO_TASK/preinstall` directory. The `-preinstall` option implicitly enables the `-driveronly` option, and takes the source directory as `$APPL_TOP/admin/$TWO_TASK/preinstall` directory.

The `-s` option can be used in conjunction with the `-preinstall` option to specify the source directory and merge critical driver files. As pre-install upgrade driver files are copied to the pre-install directory when AutoPatch is used in pre-install mode, the combination of these options merges pre-install upgrade driver files with the master upgrade driver file.

The `-preinstall` option means that there are associated changes in how AutoPatch is used. These are described in *Pre-Install Mode*, page 2-10.

-master

This option is used to specify the master upgrade driver that is to be merged with the

pre-install upgrade drivers. It is only valid with the `-preinstall` or `-driveronly` options.

-admode

AD Merge Patch is now restricted to merge either AD-only patches or non-AD patches. By default, AD Merge Patch will run in non-AD mode unless the `-admode` option is specified. In non-AD mode, AD Merge Patch will merge the non-AD patches present in either the source directory specified by the `-s` option, or the pre-install directory if `-preinstall` is specified.

Note: When merging patches, AD patches present in the source directory are ignored in non-AD mode.

Examples

Merging the non-AD patch driver files that are present under the patchtop:

```
admrpch -s source -d dest -driveronly
```

Merging the non-AD patch driver files with the non-AD upgrade driver file found under upg:

```
admrpch -s source -d dest -driveronly -master upg/upgrade.drv
```

Merging non-AD patch driver files present in the "preinstall" directory with non-AD upgrade driver files, in pre-install mode:

```
admrpch -preinstall -d dest -master upg/upgrade.drv
```

Merging AD patch driver files with AD upgrade driver files in pre-install mode:

```
admrpch -preinstall -d dest -master upg/upgrade.drv -admode
```

Patch Tracking Utilities

It is important to keep track of the patching status of your system. This chapter describes how to identify patches that have not been applied to your system, and how to maintain any customized files.

This chapter covers the following topics:

- Patch Wizard
- Register Flagged Files

Patch Wizard

With Patch Wizard, you can determine patches that have not been applied to your system. It does not report on all available patches. It compares the patches you have already applied against a list of all recommended Oracle E-Business Suite patches. Recommended patches can include high-priority patches or patches that update to a new codelevel, such as release update packs (RUPs), product family RUPs, and pre-upgrade patches.

How Patch Wizard Works

Patch Wizard supplies you with an interface from which you can:

- Set preferences, both site-specific and general, that include the staging directory and various defaults that will apply to the patches you download.
- Set up filters that report only those patches that may affect your system.
- Submit a request for a report of recommended patches, based on the filter(s) you set up.
- Analyze the impact of specific patches from a list you supply to Patch Wizard.
- Download patches, specify the language of the patches to download, and merge

patches.

Before running any of the Patch Wizard tasks, set up your My Oracle Support (Metalink) credentials on the OAM Update Metalink Credentials page. To access this page, go to the Patch Wizard main page, click Setup in the title bar. Alternatively, click the Setup link at the top right of any page of the OAM interface.

The Dashboard Setup page appears. Click the Metalink Credentials link on the left side. The Update Metalink Credentials page appears.

OAM Update Metalink Credentials Page

Update your My Oracle Support credentials by providing your user ID, password, email address, proxy server host name, proxy server port, proxy bypass domains, proxy user name, and proxy password. The recommend, analyze, and download patches features typically require that your My Oracle Support user ID and password are set on the OAM Update Metalink Credentials page. However, the recommend and analyze features can also be used when Patch Wizard does not have access to a direct Internet connection. If this is the case, you can leave the Metalink user ID and password empty.

The Patch Information Bundle

The *Patch Information Bundle* file contains the zip files of recommended patches, the list of recommended patches (Recommended.xml), the latest codelevel patches (Codelevels.xml), and information on products and product families (ProductInfo.xml). Each patch zip file contains a readme file, a patch LDT file, and a patch metadata file (patch_metadata.xml).

The Patch Information Bundle file is updated daily. When you submit a patch analysis request, this file is automatically downloaded (if it is not specified otherwise in your Metalink credentials.)

Patch Wizard loads the Patch Information Bundle data, including LDT files and readme files, into the Oracle E-Business Suite database. It uses the metadata to provide patch recommendations.

Concurrent Programs

When you submit a request for patch analysis, Patch Wizard performs the following tasks using a set of concurrent programs:

- Uploading patch information from the Patch Information Bundle to Patch Wizard tables

Patch Wizard loads the Patch Information Bundle metadata, including LDT files and readme files, into the Oracle E-Business Suite database.

- Recommending patches based on the current environment and the Patch Information Bundle

Patch Wizard reports which patches update Oracle E-Business Suite at the current codelevel and which update to a new codelevel.

- Downloading patches (ad hoc or based on the list of recommended patches)

Patch Wizard can download patches from My Oracle Support, and then merge the patches in the Patch Wizard staging directory.

- Analyzing lists of patches after downloading them from My Oracle Support

Patch Wizard uploads the metadata for a specific patch or set of patches for you to view information reported from the metadata. For example, you can submit a request for patch analysis, and then view any recommended patches that have not yet been applied and the impact of applying this new patch.

Running Patch Wizard Without Access to an Internet Connection

You can run Patch Wizard without access to an Internet connection, if necessary, by downloading the Patch Information Bundle to a system which has Internet access. Once the download is complete, copy the Patch Information Bundle file to the Patch Wizard's staging directory. Then run Patch Wizard as you normally would, to recommend and analyze patches, based on the files you copied to the staging directory.

The Patch Wizard Interface

Patch Wizard is a Web-based utility in Oracle Applications Manager (OAM). The OAM interface gives Patch Wizard pages a uniform look and feel. See: OAM Interface, *Oracle E-Business Suite Maintenance Utilities*.

Main Page

From this page, you have access to task icons used to set up the Patch Wizard staging

directory, manage patch filters, submit concurrent requests, and view recommended patches. In addition, the Recommended Results section of this page displays a list of patches based on submitted requests.

Task Icons

From the main page, access the other Patch Wizard pages by clicking on Task icons. The icons provide links to the following pages: Patch Wizard Preferences, Define Patch Filters, Recommended/Analyze Patches, Download Patches, and Aggregate Patch Impact.

Details Icons

On many Patch Wizard pages, you can drill down to see more detail. For example, from the Recommended Patches Results section of the main page, click the Details icon for a specific recommended patch request to view the recommended patch results

Accessing Patch Wizard

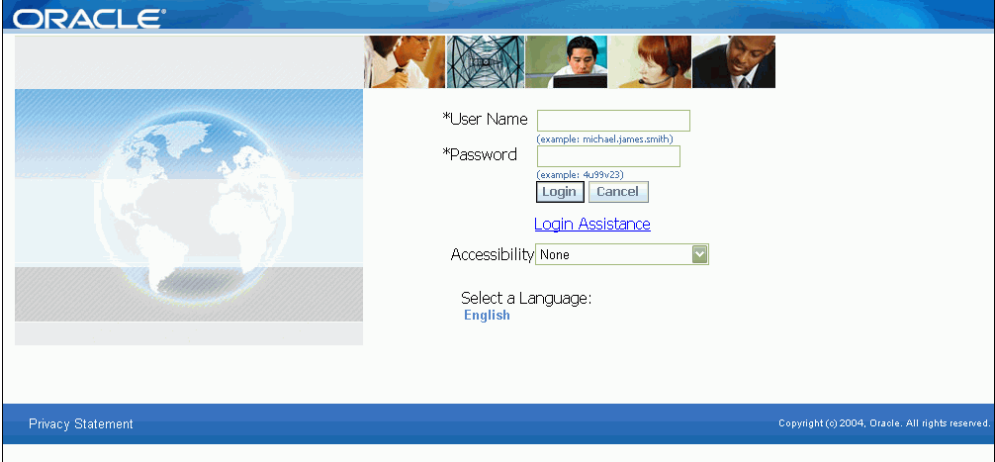
To access Patch Wizard, log in to Oracle Applications Manager (OAM) and choose Patch Wizard from the Navigator pane.

1. Enter the following URL in your browser:

`http://<HTTP hostname>.<domain>:<HTTP port>/OA_HTML/AppsLogin`

The Welcome page appears.

Oracle E-Business Suite Welcome Page



ORACLE

*User Name

*Password

[Login Assistance](#)

Accessibility:

Select a Language:
[English](#)

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Enter your user name and password, and click Login. The Oracle E-Business Suite Home page appears. Click the System Administration link in the Navigator pane. Another Navigator pane appears to the right.

2. Go to the Patch Wizard main page.

Scroll down to the Oracle Applications Manager section of the right-hand Navigator pane, and click Patch Wizard to go to the main page.

Patch Wizard Main Page

Use the main page to access all features of Patch Wizard and to view the results of your requests for recommended patches. The Select Feature drop-down list at the top of the page provides access to the Applied Patches, File History, Timing Reports, and Register Flagged Files features.

Patch Wizard Main Page

Patch Wizard Tasks

Task Name	Description	Tasks	Job Status
Patch Wizard Preferences	Set download, merge, and stage area preferences		
Define Patch Filters	Create custom patch filters		
Recommend/Analyze Patches	Submit requests for patch advice or analysis		
Download Patches	Submit requests to download patches		
Aggregate Patch Impact	Aggregate Patch Impact		

Filter Criteria

Filter Name contains

Completion Date is

(yyyy/MMM/dd)

Recommended Patches Results

Previously submitted Filter Names/ Patch Lists that do not appear in the Recommended Patches Results section have been purged according to the frequency setting in Purge Concurrent Request. Change the frequency setting in Applications Dashboard > Critical Activities if needed.

Filter Name/ Patch List	Total (Applied & Unapplied)	Unapplied	Requested By	Completion Date	Run Status	Request Set	Details
Recommended Patches and New Codelevels	1	1	SYSADMIN	2006/Oct/11	Normal	280040	

Patch Wizard Tasks Table

The Patch Wizard Tasks table lists the tasks available in Patch Wizard. The table contains the following columns of information for each task:

- Task Name: Name of the Patch Wizard task.
- Description: Describes the task.
- Tasks: Link to the page associated with the Patch Wizard task.
- Job Status: Link to the request submission status of the task where you can review warnings or errors for your request.

From the Patch Wizard Tasks table, choose the Tasks icons to view:

- The Patch Wizard Preferences page

From the Preferences page, set the staging directory, merge patch defaults, the languages and platform defaults for downloading patches, and whether to display or hide hidden patches. You must define the values on this page before you use any other Patch Wizard feature. You can also use this page to modify existing preferences at a later date.

- The Define Patch Filters page

Typically, you see only those patches that are recommended for your system. Use this page to set up filters that report only those patches that may affect your system.

- The Recommend/Analyze Patches page

Once you have selected values for a filter, submit the request to create a report of recommended patches based on that filter. You can also analyze specific patches by entering a comma-separated list of patch numbers.

- The Download Patches page

You can download patches, specify the language of patches to download, and merge patches from this page.

Recommended Patches Results

The Recommended Patches Results section of the Patch Wizard main page lists all in-progress and completed requests for patch recommendations, based on the information you entered in the Filter Criteria section of the main page. For example, you can view only the results that contain a certain text string in the filter name, or only the results of requests completed on a certain date.

Patch Wizard Main Page - Recommended Patches Results

Recommended Patches Results							
① Previously submitted Filter Names/ Patch Lists that do not appear in the Recommended Patches Results section have been purged according to the frequency setting in Purge Concurrent Request. Change the frequency setting in Applications Dashboard > Critical Activities if needed.							
Filter Name/ Patch List	Total (Applied & Unapplied)	Unapplied	Requested By	Completion Date	Run Status	Request Set	Details
Recommended Patches and New Codelevels	1	1	SYSADMIN	2006/Oct/11 02:51:41	Normal	280040	
Recommended Patches	0	0	SYSADMIN	2006/Oct/11 02:32:16	Normal	280014	
4502603	1	1	SYSADMIN	2006/Oct/09 00:09:09	Warning	279849	
4502400	1	1	SYSADMIN	2006/Oct/08 23:52:48	Warning	279809	
Recommended Patches and New Codelevels	1	1	SYSADMIN	2006/Oct/08	Normal	279792	

Clicking the icon in the Details column of a specific recommended patch request accesses the Recommended Patches Results page. After setting up and submitting a request, view the details of the recommended patches on this page.

Patch Wizard Preferences

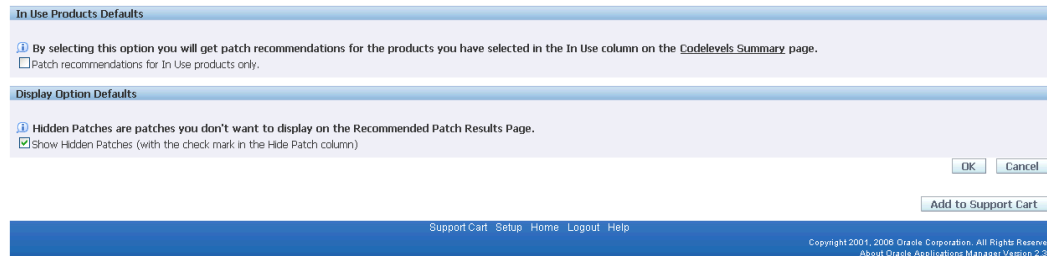
The site-specific information you set on the Patch Wizard Preferences page applies to other functions of Patch Wizard, such as Recommend/Analyze, Download Patches, and Codelevels Summary. From the Patch Wizard main page, click the Tasks icon for Patch Wizard Preferences.

The top portion of the page contains these sections: Staging Directory, Merge Option Defaults, and Language and Platform Details.

Patch Wizard Preferences Page - Top

The bottom portion of the page contains the In Use Products Defaults and the Display Option Defaults sections.

Patch Wizard Preferences Page - Bottom



In Use Products Defaults

By selecting this option you will get patch recommendations for the products you have selected in the In Use column on the [Codelevels Summary](#) page.

☐ Patch recommendations for In Use products only.

Display Option Defaults

Hidden Patches are patches you don't want to display on the Recommended Patch Results Page.

☒ Show Hidden Patches (with the check mark in the Hide Patch column)

OK Cancel

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Staging Directory

Depending on the product type (AD or non-AD), Patch Wizard downloads patches to a subdirectory under the staging directory. If the patch that ADOAM is trying to download is an AD product patch, it will be downloaded to the "ad" subdirectory under the stage directory. Non-AD Patches will be downloaded to "nonad" subdirectory.

The staging directory is also used by Patch Wizard to create temporary files and subdirectories for patch recommendation requests. These temporary files and directories are deleted after processing.

Note: Oracle recommends you use the same staging directory each time you run Patch Wizard.

Merge Option Defaults

Merging patches reduces patch application time by eliminating redundant tasks (such as responding to prompts and linking executables) for each individual patch.

Note: AD product patches cannot be merged with other product patches.

Patch Wizard screens allow you to merge AD and non-AD patches by specifying the appropriate options as discussed below. You can choose to automatically merge patches that you download.

The following merge options can be set:

- **Metalink Credentials:** This link accesses the OAM Update Metalink Credentials page, which allows you to set your My Oracle Support user ID and password. The recommend, analyze, and download patches features typically require that your My Oracle Support user ID and password are set in the OAM Update Metalink Credentials page. The recommend and analyze features can also be used when Patch Wizard does not have access to a direct Internet connection. If this is the case, leave the Metalink user ID and password empty.

The patches will be downloaded to the relevant subdirectory for the patch's product. If the patch that ADOAM is trying to download is an AD product's patch, it will be downloaded to "ad" subdirectory under the stage directory. Otherwise, it will be downloaded to the "nonad" subdirectory.

- Automatically merge downloaded patches: This check box tells Patch Wizard to automatically merge all downloaded patches.
- **Merging Strategy:** The following merging strategies when are available when downloading translation patches:
 - **One merged patch:** If the list of patches contains a single AD product patch or a single non-AD product patch, a single merged patch containing US and non-US patches will be generated. If the list of patches contains both AD and non-AD product patches, two merged patches will be generated: one for the merge of all the AD product patches, and the other for the merge of all non-AD product patches.

For example, if "mrg_2009072781642" is the merged patch name provided in the Downloads page, the merged AD patch directory name will be mrg_2009072781642_A, and the merged non-AD patch directory name will be mrg_2009072781642_N.

- **Two merged patches:** If the list of US patches includes both AD and non-AD product patches, the patches will be merged separately for AD and non-AD product patches. One merged patch will contain all US patches, and a second merged patch will contain all non-US patches.

For example, if "mrg_2009072781642" is the merged patch name provided in the Downloads page, the merged AD US patch directory name will be mrg_2009072781642_US_A, and the merged non-AD US patch directory name will be mrg_2009072781642_US_N.

- **Multiple merged patches:** If the list of US patches includes a combination of AD products, non-AD products, AD language patches, and non-AD language patches, the patches will be merged separately for each of these categories.

For example, if "mrg_2009072781642" is the merged patch name provided in the Downloads page, the merged AD US patch directory name will be mrg_2009072781642_US_A, the merged non-AD US patch directory name will be mrg_2009072781642_US_N, the merged AD NLS patch directory name will be mrg_2009072781642_<lang_abbr>_A, and the merged non-AD NLS patch directory name will be mrg_2009072781642_<lang_abbr>_N.

Language and Platform Details

You can select the languages (one or more) of patches that Patch Wizard will recommend and download. You can also select the platform of the patches you want

recommended and downloaded.

In Use Products Defaults

Selecting the Patch Recommendation for In Use Products Only check box directs Patch Wizard to display on the Recommended Patch Results page only patches for the products marked as in use (active) in your system.

Both Patch Wizard and AutoPatch look at the In Use flag to determine what products you are using. To review the products currently marked as being in use in your system, click the Codelevels Summary Page link. See: Codelevels Introduced by the Patch, page 3-18.

Display Option Defaults

Hidden patches are patches that you choose not to see in your reports. For example, if Patch Wizard recommends patches for products you do not need for your system, you can choose to hide these patches.

However, checking the Show Hidden Patches box in the Patch Wizard Preferences page overrides the hidden patch setting, and all patches, even hidden patches, are reported.

After you have made all your selections on the Patch Wizard Preferences page, click OK to save them or click Cancel to discard.

Define Patch Filters

The Patch Information Bundle file contains information for all recommended patches for all products. If Patch Wizard were to compare patches in the patch information database against all metadata in the Patch Information Bundle file, the number of recommended patches in the report might be too large to be useful for an individual system. Patch Wizards provides filters so that only those patch types and products in the metadata that apply to your system are included in the comparison.

From the main page, click the Tasks icon for Define Patch Filters to see all filters created for the current system. Patch Wizard provides three pre-seeded filters. In addition, you can create your own custom filters.

Define Patch Filters Page

ORACLE Applications Manager

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Applications Dashboard | Site Map

Applications System: ADOAGC05 > Patch Wizard >

Define Patch Filters : ADOAGC05

Last Updated : 2006/Sep/26 15:44:52

The Oracle Patch Filters (Recommended Patches, New Codelevels, Recommended Patches and New Codelevels) cannot be edited.

Create New

Select Patch Filter Name and ... View Create Like Edit Delete

Select Patch Filter Name	Type	Description	Updated By	Updated Date
☒ New Codelevels	Oracle	New Codelevels	INITIAL SETUP	2006/Sep/26 05:30:01
☐ Recommended Patches and New Codelevels	Oracle	Current Recommended Patches and New Codelevels	INITIAL SETUP	2006/Sep/26 05:30:01
☐ Recommended Patches	Oracle	Recommended Patches for Current Codelevel	INITIAL SETUP	2006/Sep/26 05:30:01
☐ create new testing	Custom	This is test filter	SYSADMIN	2006/Sep/26 15:44:52
☐ ATG	Custom	ApplicationsTech	SYSADMIN	2006/Sep/25 04:15:17

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Note that the pre-seeded filters are marked "Oracle" in the Type column, and filters you create are marked "Custom." You cannot edit or delete the pre-seeded filters, but you can use any of them as a template to create a new filter.

The pre-seeded filters are:

- New Codelevels: Determines recommended patches for release update packs (RUPs), product family RUPs, and pre-upgrade patches. These patches update versions of a product, family, or the entire Oracle E-Business Suite system.
- Recommended Patches: Determines recommended patches for the current codelevel.
- Recommended Patches and New Codelevels: Determines recommended patches for both the current and new codelevels.

Creating a New Custom Patch Filter

From the Define Patch Filters page, click Create New to create a new custom filter.

Create Patch Filters Page

ORACLE Applications Manager Support Cart Setup Home Logout Help

Applications Dashboard | Site Map
Applications System: ADOAGC03 > Patch Wizard > Define Patch Filters >
Create Patch Filters : ADOAGC03

Patch Filter

* Indicates a required field.

* Name

* Description

Cancel Continue

Use check boxes to define your Patch Filters.

Licensed Product Families

Product Family	Recommended Patches	New Codelevel
Advanced Planning	☐	☐
Applications Technology	☐	☐
Communications	☐	☐
Contracts Suite	☐	☐
Discrete Manufacturing	☐	☐
E-Business Intelligence	☐	☐
Exchange Suite	☐	☐
Financial Globalizations Suite	☐	☐
Financial Payables Suite	☐	☐
Financial Receivables Suite	☐	☐
Financial Services Applications	☐	☐
Financials	☐	☐

On the Create Patch Filters page, enter a unique name and a description for each new custom filter. All licensed product families are listed in the Licensed Product Families section. Non-licensed product families are listed at the bottom of the page. There are two columns for each product family: Recommended Patches and New Codelevel. Select a box for each product family you want to include in the new filter.

By choosing the Create Like button on the Define Patch Filters page, you indicate you want to use an existing filter as a template to create a new filter. The system supplies the filter criteria from the existing filter for the new filter. Edit the criteria by checking or clearing the boxes. Click Continue to create the new filter.

Recommend/Analyze Patches

After setting up the Patch Wizard staging area (and optionally creating custom filters) on the main page, you can submit requests for processing. Click the Tasks icon for Recommend/Analyze Patches.

Recommend Patches Page - Top

The Options section of the Recommend Patches page contains the following actions:

- Create Recommendation

This generates recommendations based on the patch filter you selected. Choose one of the pre-seeded filters or any custom filter you created on the Define Patch Filters page. Patch Wizard uses the filter and compares the patch information database against the patch metadata to recommend which patches you should apply. For more information on Aggregate Patch Impact, refer to *Oracle E-Business Suite System Administrator's Guide - Maintenance*.

- Analyze Specific Patches

This generates recommendations for specific patches. After downloading specific patches from My Oracle Support and placing them in the staging area, you can analyze these patches to determine their affect on your system by entering the patch numbers in this section. (Enter either bug numbers (for example, 1234567) or full patch names (for example, 1234567_R12.AD.A).) Check the "Analyze Aggregate Patch Impact" box to analyze Aggregate Patch Impact. For more information on Aggregate Patch Impact, refer to *Oracle E-Business Suite System Administrator's Guide - Maintenance*.

You can enter a date and time in the Schedule section of this page to run the request at a later time. The default setting is to run the job immediately. You can also schedule automatic recurring requests by entering the information in the Recurrence section.

Recommend Patches Page - Bottom

Schedule

If no date or an earlier date is specified, the request will be scheduled to run immediately.

Date: 18-Mar-2009 (dd-MMM-yyyy)

Time: 00:00

Recurrence

☒ Never Repeat

☐ Repeat

Every: 1 Days

End Date: 18-Mar-2009 (dd-MMM-yyyy)

End Time: 00:00

OK Cancel

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Click OK to submit the request.

When the request is submitted, Patch Wizard looks in the specific directories under the stage directory for the patches. If the patches are not present, or if there are newer versions available, Patch Wizard downloads them from My Oracle Support before creating recommendations or analyzing patches.

Note: If you want to create recommendations or analyze specific patches without using an Internet connection, refer to *Creating Patch Recommendations Without an Internet Connection*, page 5-39 or *Analyzing Patches Without an Internet Connection*, page 5-50.

Each time you submit a request to analyze specific patches or to recommend patches, Patch Wizard creates a Request Set ID. The Request Set ID is shown in the Results section of the Patch Wizard main page. To check the status of your request, click on the Request Set ID corresponding to your request in the Recommended Patches Results section.

Download Patches

You use the Download Patches page to request a download of specific patches from My Oracle Support. From the main page, click the Download Patches tasks icon. From the Download Patches page, enter the patch numbers in the input field, separated with commas. Enter either bug numbers (for example, 1234567) or full patch names (for example, 1234567_R12.AD.A). You can also choose to analyze the patches while downloading, or analyze and compute aggregate patch impact while downloading.

Download Patches Page - Top

Support Cart Setup Home Logout Help

Applications Dashboard Site Map

Applications System:r121test > Patch Wizard >

Download Patches : r121test

Last Updated : 18-Mar-2009 14:48:20
Staging Directory : /slot/ems1227/appmgr/stage
Oracle MetaLink User ID : murali.kumanduri@oracle.com

OK Cancel

Patch Selection

You must set up your Metalink credentials before downloading patches.

Patch List

(Enter Patch numbers, separated by commas ex: 1234567, 8765432_R12.AD.A, 8888888.AD.B. Maximum number of allowed characters is 175)

Options

☐ Download only
(Download the exact list of patches above)

☐ Download and Analyze
(Download only patches listed above that have not been applied and their prerequisite patches)

☒ Download, Analyze and Aggregate Patch Impact
(Download only patches listed above that have not been applied and their prerequisite patches, analyze them, and compute aggregate patch impact)

Merge Options

☐ Automatically merge downloaded patches
(Merge happens only if all patches are downloaded successfully)

Merged Patch Name: mrng_2009031894820

Merging Strategy

☒ One merged patch: US and non-US

☐ Two merged patches: US; non-US

☐ Multiple merged patches: US; language1;language2;...

The Merge Options section is where you define how patches should be merged after downloading. The defaults for merging are set on the Patch Wizard Preferences page. If you choose to automatically merge patches while downloading, you can modify the merged patch name and specify the merging strategy in this section. The default merged patch name is "merged_YYYYMMDDhhmmss", where "hh" is in 24-hour format.

The Languages and Platform section allows you to select the languages and platform of the downloaded patches. The defaults for languages and platform are set on the Patch Wizard Preferences page. However, you can modify the information on this page. When you provide information in this section, Patch Wizard downloads only patches that match the languages and platform you select.

Download Patches Page - Bottom

The screenshot shows the bottom portion of the Oracle Applications Manager interface. The top section, titled 'Languages and Platform', contains a list of 'Available Languages' (Albanian, Arabic, Brazilian Portuguese, Canadian French, Croatian, Czech, Danish, Dutch, Finnish, French) and a 'Selected Languages' list. Between the lists are buttons for 'Move', 'Move All', 'Remove', and 'Remove All'. Below the language lists is a 'Platform' section with radio buttons for: Linux x86, Linux x86-64, Sun Solaris OS (SPARC 64-bit), Microsoft Windows (32-bit), AIX/SL Based Systems (64-bit), HP-UX PA-RISC (64-bit), and HP-UX Itanium. The bottom section, titled 'Schedule', includes a message: 'If no date or an earlier date is specified, the request will be scheduled to run immediately.' Below this is a 'Date' field set to '18-Mar-2009' and a 'Time' field set to '00:00'. At the bottom right are 'OK' and 'Cancel' buttons, and an 'Add to Support Cart' button. The footer contains navigation links (Support Cart, Setup, Home, Logout, Help) and copyright information: 'Copyright 2001, 2006 Oracle Corporation. All Rights Reserved. About Oracle Applications Manager Version 2.3.1'.

You can also provide information in the Schedule section about downloads you want to perform at a later date.

Recommended Patches Results

From the main page, click the Details icon associated with a patch request in the Results section to access the Recommended Patches Results page. This page presents a set of recommended patches based on the results of the selected Recommend Patches request that you submitted.

The first section lists the recommended patches.

Recommended Patches Results Page

ORACLE Applications Manager
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[Applications Dashboard](#) | [Site Map](#)
 Applications System:ADOAGC03 > [Patch Wizard](#) >
Recommended Patches Results : ADOAGC03
 Last Updated : 10-Aug-2007 20:49:55

Patch Filter/Patch ID
 Requested By
 Completion Date
 View Aggregate Patch Impact

Recommended Patches
 SYSADMIN
 10-Aug-2007 20:38:43
 Aggregate Impact

☐ Show Hidden Patches (with the check mark in the Hide Patch column)
 Redisplay Data

ⓘ If the Show Hidden Patches checkbox is not selected, the number of patches displayed may be less than the number listed on the Patch Wizard page.
 Only patches selected on the current page can be downloaded.

Recommended Patches Results

Select Patch and ... Download
Previous 1-25 of 27 Next 2

[Select All](#) | [Select None](#)

Select Patch	Product	Prerequisites	Codelevel Introduced	Status	PAA	Reason Recommended	Patch Description	Hide Patch	Included in Aggregate Patch Impact	Imp
☐ 4502962.R12.ad		0	No	Applied	Yes	High Priority Patch	Minipack 4502962	☐ No		
☐ 5582560.A	sla	0	No	Unapplied	Yes	High Priority Patch	R12: LEDGER UPGRADE NOT	☐ No		

The second section lists patches that introduce new codelevels.

Recommended Patches Results - Patches that Introduce New Codelevels

Patches that Introduce New Codelevels

Select Patch and ... Download

[Select All](#) | [Select None](#)

Select Patch	Product	Prerequisites	Codelevel Introduced	Status	PAA	Reason Recommended	Patch Description	Hide Patch	Included in Aggregate Patch Impact	Impact
☐ 6435000.R12.au		0	Yes	Unapplied	Yes	Maintpack	ORACLE E-BUSINESS SUITE 12.0.4 RELEASE UPDATE PACK (RUP4)	☐ No		
☐ 6493602.A	fin_pf	0	No	Unapplied	Yes	Familypack	Oracle Financials Release Update Pack 4 for 12.0 (R12.FIN_FF.A.DELTA.4)	☐ No		
☐ 6494646.A	hr_pf	0	No	Unapplied	Yes	Familypack	R12.HR_FF.A.DELTA.4	☐ No		
☐ 6497749.A	prc_pf	0	No	Unapplied	Yes	Familypack	Oracle Procurement Release Update Pack 4 for 12.0 (R12.PRC_FF.A.DELTA.4)	☐ No		
☐ 6507355.A	cc_pf	0	No	Unapplied	Yes	Familypack	Oracle CRM Release Update Pack 4 for 12.0 (R12.CC_FF.A.delta.4)	☐ No		
☐ 6508131.A	scp_pf	0	No	Unapplied	Yes	Familypack	Oracle Supply Chain Planning Release Update Pack 4 for 12.0 (R12.SCP_FF.A.DELTA.4)	☐ No		
☐ 6508212.A	scm_pf	0	No	Unapplied	Yes	Familypack	Oracle SCM Release Update Pack 4 for 12.0 (R12.SCM_FF.A.DELTA.4)	☐ No		

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Both sections display the following columns:

- **Select:** Select this check box and click the Download button if you want the patch number sent to the Download Patches page for submission. You can select any number of patches.
- **Patch:** The patch number of the recommended patch.
- **Product:** The product to which patch applies.

- **Prerequisites:** Specifies the codelevel required before you can apply this patch.
- **Codelevel Introduced:** Indicates whether the patch introduces a new codelevel for that product. If a new codelevel is introduced, the Yes indicator contains a link the Codelevels Introduced by the Patch page.
- **Status:** Indicates whether the patch is applied, unapplied, missing, or obsolete.
- **PAA:** This indicates whether there are manual steps you have to perform if you apply the patch.
- **Reason Recommended:** The reason the patch is recommended, for example, it is a high-priority patch, or part of a maintenance release pack (RUP) or a product family pack (RUP).
- **Patch Description:** Describes the patch.
- **Hide Patch:** Select this check box to hide the patch from the list of recommended patches. Use this feature to hide patches that you do not want to apply to your system. To hide or show selected patches, use the Show Hidden Patches check box at the top of the page and click Redisplay Data to refresh the page. The default values are set in the Patch Wizard Preferences page.
- **Included in Aggregate Patch Impact:** For more information on Aggregate Patch Impact, refer to *Oracle E-Business Suite System Administrator's Guide - Maintenance*.
- **Impact:** (For unapplied or missing patches only) Click this icon to access the Patch Impact Analysis page. If you submitted a specific patch to analyze, click the Impact icon on the Recommended Patches Request page to view this report.

Click the Download button to transfer the selected patch number(s) to the Download Patches page for submission.

Codelevels Introduced by the Patch

If new codelevels are introduced by the patch, the Yes indicator in the Codelevel Introduced column of the Recommended Patches Results page is a link that takes you to the Codelevels Introduced by the Patch page.

Codelevels Introduced by the Patch Page

ORACLE Applications Manager

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Applications Dashboard | Site Map

Applications System:ADOAGC03 > Patch Wizard > Recommended Patches Results >

Codelevels Introduced by the Patch : ADOAGC03

Last Updated : 15-Jun-2007 00:15:22

Patch: 5082400

Product **au**
Description **12.0.1 : RUP1 FOR ORACLE APPLICATIONS RELEASE 12**

Reason Recommended **Maintpack**

i This table lists all the Codelevels introduced by the above patch. To see the Codelevels of all products and product families available in your system, see the [Codelevels Summary](#) page

Abbreviation	Name	Type	Codeline	New Codeline	Codelevel Introduced
pj_pf	Projects Suite	product_family		Yes	A
pjb	Project Billing	product		Yes	A
pjc	Project Costing	product		Yes	A
pjf	Project Foundation	product		Yes	A
pjl	Project Collaboration	product		Yes	A
pjr	Project Resource Management	product		Yes	A
pjt	Project Management	product		Yes	A

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This page contains the following information.

Patch Information

This section includes the following information:

- Product: Product name associated with the patch.
- Description: Describes the selected patch.
- Reason Recommended: The reason for which the patch is recommended.

Codelevels Information

This section includes the following information:

- Abbreviation: The abbreviation for the product, product family, or feature to which this patch applies.
- Name: The full name of the product, product family, or feature to which this patch applies.
- Type: Indicates whether this patch applies to a product, product family, or feature.
- Codeline: Indicates the codeline of the product, product family, or feature in your current system.
- New Codeline: Indicates whether this patch introduces a new codeline.

- **Codelevel Introduced:** The new codelevel that this patch introduces for the product, product family, or feature.

To view the codelevels of all the products and product families available and in use in your system, click the Codelevels Summary link in the Patch Information section.

Codelevels Summary Page

ORACLE® Applications Manager					
Support Cart Setup Home Logout Help					
Applications Dashboard Site Map					
Applications System: ADOAGC01 > Patch Wizard > Patch Wizard Preferences >					
Codelevels Summary : ADOAGC01					
Last Updated : 05-Feb-2008 20:35:25					
Filter: Name contains Go					
Patch Wizard and AutoPatch look at the In Use flag to determine what products you are using. Make sure you do not uncheck any products that are active in your system or are required for system operation.					
Previous 1-15 of 223 Next 15 Update					
Short Name	Name	Type	Codeline	Codelevel	In Use
ad	Applications DBA	product	A	a.3	☒
ahl	Complex Maintenance, Repair & Overhaul	product	A	A	☒
ak	Common Modules	product	A	A	☒
alr	Alert	product	A	A	☒
ame	Approval Management Engine	product	A	A	☒
aml	Leads Management	product	A	A	☒
ams	Marketing	product	A	A	☒
amv	Marketing Encyclopedia System	product	A	A	☒
amw	Internal Controls Manager	product	A	A	☒
ap	Payables	product	A	A	☒
ar	Receivables	product	A	A	☒
as	Sales Foundation	product	A	A	☒
asf	Sales Online	product	A	A	☒
asg	CRM Gateway for Mobile Devices	product	A	A	☒
asl	Sales Offline	product	A	A	☒
Previous 1-15 of 223 Next 15 Update					
Support Cart Setup Home Logout Help					
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This page summarizes available products. For each product, it indicates the current Codeline and Codelevel and whether it is in use (active) in your system. Patch Wizard and AutoPatch look at the In Use flag to determine active products.

Caution: If you use this page to update your In Use products list, be sure you do not uncheck any products that are active in your system, or are required for system operation.

Patch Impact Analysis

From the Recommended Patches Results page, click an icon in the Impact column to view the Patch Impact Analysis page for that patch.

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Applications Dashboard | Site Map

Applications System: ADOAGC03 > Patch Wizard > Recommended Patches Results >

Patch Impact Analysis for Patch 4630372-R12: ADOAGC03

Patch Description **R12 izu: R12.IZU.A**

Patch Readme

Total Files in Patch **4**

Files to install **4** (100.00%)

Direct Impact Summary		Indirect Impact Summary	
Applications Patched	2	Unchanged Files Affected	0 JSPs
File Types Installed	2	Menu Navigation Trees Affected	0 Responsibilities, 0 Paths
New Files Introduced	4	Diagnostics Tests to Re-Run	0 Test(s)
Existing Files Changed	0		
Flagged Files Changed	0		
Existing Files Unchanged	0		
Non-US Language Patches Required	0		

TIP Analysis on Unchanged Files Affected only available for JSPs
TIP Click on the Prerequisite Patches link to toggle between Aggregate and Individual Impact Analysis
TIP Aggregate Impact Analysis only for patches with metadata uploaded from InfoBundle.zip
TIP Click on Patch ID in the Aggregate Impact Analysis Table to view individual Impact Analysis for Pre-reqs
TIP Non-US Language Patches are considered required when there are non-US languages installed and the base patch contains new or changed files of translated file types.

[Add to Support Cart](#)

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This page displays a list of summary information about which files are new, which files are changed, and which files are ignored when you apply the patch. Prerequisite patches and the readme file for this patch are also shown. Each of the summary items is a link to more complete information.

The key information on this page is separated into these sections.

General Patch Information

General patch information includes:

- Patch Description: Describes the patch.
- Patch Readme: Click this icon to see the readme file for the patch.
- Total Files in Patch: The total number of files in the patch. Click the number link to access the Patch Impact Details page, which lists each file in the patch.
- Files to Install: The number of files the patch will install.

Summary Information

There are two types of summary information: Direct Impact and Indirect Impact. Each summary item is a link to a page that lists the details for the summary count. For example, if you the number of Existing Files Changed, the details might look similar to this:

ORACLE Applications Manager Support Cart Setup Home Logout Help

Applications Dashboard | Site Map
 Applications System:AD0AGC01 > Patch Wizard > Recommended Patches Results > Patch Impact Analysis >
Patch Impact File Details for Patch 6435000-R12: AD0AGC01

Patch Description: **R12 au: ORACLE E-BUSINESS SUITE 12.0.4 RELEASE UPDATE PACK (RUP4)**

App Short Name:
 File Name:
☐ View Only Flagged Files
☐ View Only Branched Files

Directory:
 Impact Type: **Changed File**
 Object Type: **All Types**

Previous 1-15 of 27246 Next 15

Application	Directory	File Name	Impact Type	Version in APPL_TOP	Version in Patch	Objects Affected	Flagged Files
[AD] Applications DBA	java/clone/util	CloneCleaner.class	Changed File	120.5	120.5.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/history	CodeLevels.class	Changed File	120.3	120.3.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/history	CodeLevelsComponent.class	Changed File	120.1	120.1.12000000.1	N/A	No
[AD] Applications DBA	java/advisor	PAProcessExec.class	Changed File	120.6	120.6.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/advisor	RecommCodeLevels.class	Changed File	120.4	120.4.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/advisor	RecommCodeLevelsComparator.class	Changed File	120.2	120.2.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/advisor	RecommCodeLevelsComparator.class	Changed File	120.1	120.1.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/timing	TimingReports.class	Changed File	120.7	120.7.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/timing	TimingReportsComparator.class	Changed File	120.4	120.4.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/timing	TimingReportsComparator.class	Changed File	120.5	120.5.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/advisor	ViewAdvice.class	Changed File	120.13	120.13.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/advisor	ViewAdviceComparator.class	Changed File	120.2	120.2.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/advisor	ViewAdviceComponent.class	Changed File	120.4	120.4.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/advisor	ViewPAResultsComparator.class	Changed File	120.3	120.3.12000000.1	N/A	No
[AD] Applications DBA	java/oam/bobj/advisor	ViewPAResultsComponent.class	Changed File	120.7	120.7.12000000.1	N/A	No

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☒ TIP Use (%) as wildcard in filters
☒ TIP Use Application Short Name in filter

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Direct patch impact includes:

- **Applications Patched:** The number of products that will have files updated. Click the number link to see details of each product affected, and how.
- **File Types Installed:** The number of different file types in the patch. Click the number link to see the file types and how they impact the system.
- **New Files Introduced:** The number of new files that will be introduced by the patch. Click the number link to details about each new file introduced.
- **Existing Files Changed:** The number of existing files in the system that will be changed by the patch. Click the number link to see the existing files changed and the new version numbers.
- **Flagged Files Changed:** The number of custom files that will be changed by this patch. Click the number link to identify the custom files changed by this patch.
- **Existing Files Unchanged:** The number of files unchanged because the version in the patch is older than the version in the system. Click the number link to see the files in the patch that are of the same or of earlier versions than those currently in the system.
- **Non-US Language Patches Required:** If the patch supports multiple languages, click the number link to identify the other languages available.

Indirect summary information includes:

- **Unchanged Files Affected:** The number of system files with dependencies on patched files.
- **Menu Navigation Trees Affected:** The number of menu navigation trees that will be updated by the patch.

Register Flagged Files

With the Register Flagged Files tool, you can record any files in which you have made customizations. In previous releases of Oracle E-Business Suite, the applcust.txt file contained the records for all customized files. You had to maintain your custom files records in this file. In this release, information about customized files is still written to the applcust.txt file. However, with the Register Flagged Files tool you can download the files and maintain them in a web-based interface.

The Register Flagged Files tool displays the following information about customized files:

- Product abbreviation
- Directory where the files are located
- Name of modified file
- Comments

The Register Flagged Files Interface

The Register Flagged Files tool is a Web-based utility in Oracle Applications Manager. From the Register Flagged Files home page, you can import, export, add, delete, and view records of customized files.

Accessing Register Flagged Files

To access the Register Flagged Files tool, log in to Oracle Applications Manager (OAM) and choose Register Flagged Files from the Site Map.

Step 1: Log in to Oracle Applications Manager

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM. From the Applications Dashboard, click the Site Map tab.

Step 2: Go the Register Flagged Files home page

On the Site Map page, Register Flagged Files is included on the Maintenance tab under the Patching and Utilities heading. Click the Register Flagged Files link to go to the home page.

Step 3: Select filter criteria

From the Register Flagged Files home page, you can search the records of customized files by product abbreviation, directory, file name, or a combination of product abbreviation, and directory or file name.

Register Flagged Files Home Page

This section describes the Register Flagged Files home page.

Register Flagged Files Home Page

ORACLE Applications Manager

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Applications Dashboard | Site Map

Applications System:ADOAGC03 >

Register Flagged Files : ADOAGC03

Select Feature Register Flagged Files Go

Last Updated : 14-Aug-2006 16:50:50

Import Export Add Cancel Apply

Filter Criteria

Product Abbreviation contains

Directory contains

Go Clear

Select and ... Delete

Select All Select None

Select	Product Abbreviation	Directory	File Name	Comments
☐	FND	3rdparty/wintertree	accent.tlx	You can put your local directory name in here to note the location of the customized files.
☐	FND	3rdparty/wintertree/N	sscnb2.clx	The directory of the customized files is : xx/3rdparty/wintertree/N
☐	FND	3rdparty/wintertree/NL	sscedu.tlx	

Add to Support Cart Import Export Add Cancel Apply

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Use the following buttons to:

- **Import:** Import a list of customized files from the applcust.txt file in csv format. Use this option to import a local applcust.txt file to the current system or from another system to the current one.
- **Export:** Export a list of customized files in csv format. The default name of the exported file is oamreport.csv. You can use this function to export a list of customized files for import into another system.
- **Add:** Add a record of a customized file.
- **Cancel:** Return to the Applications Dashboard home page.
- **Apply:** Apply and save any changes made to the Comments field of the list of customized files.

You can filter results either by product abbreviation, by directory/file name, or by a combination of product abbreviation, and directory or file name.

- **Product Abbreviation:** To search by product abbreviation, enter the abbreviation of the product for which the customization is made.
- **Directory/File Name:** You can filter the results by directory or file name. Enter the directory or file name for which the customization is made.

List of Customized Files

The list of customized files appears at the bottom of the Register Flagged Files home page. Each line item represents a customized file.

The details provided for each line item are:

- **Select:** Select and delete the corresponding customized file. You can select and delete one file or multiple files at a time.
- **Product Abbreviation:** The abbreviated name of the Oracle E-Business Suite product family for which there is a customization.
- **Directory:** Directory path of the customized file.
- **File Name:** Name of the modified file.
- **Comments:** Use this area to add any comments associated with the customization. Oracle recommends using this area to record the exact location of the customized file.

Adding a Flagged File

Click the Add button on the Register Flagged Files main page to access the Add Flagged Files page. From this page, you can add customized files. Use the Filter Criteria section to search for files you want to add.

Add Flagged Files Page

ORACLE Applications Manager

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Applications Dashboard | Site Map

Applications System: ADOAGC03 > Register Flagged Files >

[Search Results](#) [Selected Data](#)

Add Flagged Files : ADOAGC03

Last Updated : 14-Aug-2006 16:55:31 [Apply](#) [Cancel](#)

Filter Criteria

At least one filter must have a value.

Product Abbreviation contains gl

Filename contains glcon

[Go](#) [Clear](#)

Search Results [Return to Top](#)

Select and ... [Add](#)

[Select All](#) | [Select None](#)

Select	Product Abbreviation	Directory	File Name
☐	GL	admin/driver	glcon.drv
☐	GL	patch/115/import/US	glconreg.ldt
☐	GL	patch/115/odf	glcon.odf

Selected Data [Return to Top](#)

Product Abbreviation	Directory	File Name	Comments	Delete
GL	patch/115/import/US	glconreg.ldt	The local directory is xx/patch/115/import/US	Delete

You can filter results either by product abbreviation, by directory/file name, or by a combination of product abbreviation, and directory or file name.

- **Product Abbreviation:** To search by product abbreviation, enter the abbreviation of the product for which the customization is made.
- **Directory/File Name:** You can filter the results by directory or file name. Enter the directory or file name for which the customization is made.

From the Search Results section, select a file, then click the Add button. The files you select appear in the Selected Data section. Use this section to add any comments you have for each file. Then click the Apply button to confirm your selection.

Importing a Flagged File

Click the Import button on the Register Flagged Files main page to access the Import Flagged File page. From the this page, you can import one file or a list of customized files in csv format.

You can import an existing applcust.txt file or a file from another system to the current one. This features saves you the time of using the Add button to add flagged files individually.

Import Flagged File Page

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Applications Dashboard | Site Map

Applications System: ADOAGC03 > Register Flagged Files >

Import Flagged File : ADOAGC03

The imported file must be in csv format.

Select File

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In the Select File field, enter the name of the file you want to import or click the Browse button to navigate to the file. Then click Import. Click Cancel to return to the Register Flagged Files main page.

Patch Reporting Utilities

As you apply patches and perform other maintenance tasks that modify your system, you may need to refer to the numerous reports that are automatically created as a record of these activities. This chapter explains how to do this, and lists the options available. For example, you can query the patch information files to see lists of patches applied and files affected, or you can generate a report about the version and translation level of your files. You can also generate reports that contain statistics about maintenance sessions, including the number of jobs in each session, the time taken to complete each job, and the time taken to complete the whole session.

This chapter covers the following topics:

- Applied Patches
- Timing Reports
- Software Updates

Applied Patches

With the Applied Patches reporting tool, you can view information about the patches applied to your system. This patch history includes information such as:

- Patch number
- Driver file name
- Platform
- APPL_TOP on which the patch was applied
- Contents and language of the patch
- Files changed or copied
- Bug fixes included in each driver file

- Whether the fix was applied successfully, or reason it was not applied
- Timing information (start time, end time, elapsed time during application, restart time)

How Patch Information Is Stored

AutoPatch stores patch information in the database automatically each time it successfully applies a patch. However, if the patch is not applied successfully, or when you run AutoPatch in pre-install mode, patch history is not written directly to the database, but instead is written to these *patch information files*:

- `javaupdates<YYYYMMDDhhmiss>.txt`, which contains information about changes to Java files
- `adpsv<YYYYMMDDhhmiss>.txt`, which contains information about changes to all files *except* Java files

Note: In the file name, *hh* is in 24-hour format.

Both files are located in the `<APPL_TOP>/admin/<SID>` directory. Each time you run AutoPatch, it checks this directory for the existence of the patch information files. If it finds them, it automatically uploads the information they contain to the patch history database. If the upload is successful, AutoPatch then deletes the files from the directory. The AutoPatch log file records whether the upload was successful or unsuccessful.

AutoPatch Modes

The way you run AutoPatch affects the way it stores patch history information. When you apply a patch in test mode (using `apply=no` on the command line), AutoPatch does not write to the patch information files, and it does not upload patch history information to the database. When you apply a patch in pre-install mode (using `preinstall=y` on the command line), AutoPatch writes patch history information to the patch information files, and it uploads the contents of these files to the database the next time it runs. See: AutoPatch Modes, page 2-10.

Note: Running AutoPatch interactively or non-interactively does not affect the way information is stored in the database.

The Applied Patches Interface

The Applied Patches reporting tool is a Web-based utility in Oracle Applications Manager. The Simple Search page serves as a home page.

Simple Search page

From this page, you can perform a simple search or access the Advanced Search page. You can use either of these pages to query the database for applied patches (the default) or to see a history of changed files. The results of either type of query appear at the bottom of the search page.

Patch Details page

In the search results for both applied patches or file history, there is a Details column. Clicking any link in this column accesses the Patch Details page. From this page, you can go to the Timing Details page, the Files Copied page, the Bug Fixes page, or the Action Summary page.

Note: The discussion of each page contains more detail. The OAM help feature also contains information about the Applied Patches utility.

Accessing Applied Patches Information

To query the patch history database for information about patches applied to your system and the files affected, log in to Oracle Applications Manager and choose Applied Patches from the Site Map.

Step 1: Log in to Oracle Applications Manager

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM. From the Applications Dashboard, click the Site Map tab.

Step 2: Go the Simple Search page

From the Site Map, Applied Patches is on the Maintenance tab under the Patching and Utilities heading. Click the Applied Patches link to go to the Simple Search page.

Step 3: Select search criteria

From the Simple Search page, you can perform a query for applied patches or file history. Or, you can go to the Advanced Search page to perform a more detailed search.

Note: See detailed descriptions of individual pages in this chapter. See also Analyzing Applied Patches, page 5-40.

Applied Patches Search Pages

This section describes queries for applied patches.

Simple Search

You can perform a Simple Search from this page by entering the required information in the input fields.

Applied Patches Page - Simple Search

ORACLE Applications Manager

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Applications Dashboard | Site Map

Applications System: ADOAGC04 >

Applied Patches : ADOAGC04 Select Feature Applied Patches Go

Last Updated : 08-Jun-2006 18:46:09

Simple Search

At least one field must be completed. [Advanced Search](#)

Querying by a specific patch ID will return all patches that are included in the specified patch ID.

Patch (Enter either a 7-digit patch number or merge patch name)

Applied Within Last Days

Applied From Date To Date (dd-MMM-yyyy) (dd-MMM-yyyy)

Language

Go Reset

A Bug Fix resolves a specific issue and a patch may contain one or more Bug Fixes.

Previous 1-25 of 36 Next 11

Patch Name	Patch Description	Merged Patches	APPL_TOP Name	Language	Completion Date	Details
4502962.R12		No	ADOAGC04_ap6191rt	US	30-May-2006 03:46:17	
4502962.AD.1.0		No	ADOAGC04_ap6191rt	US	30-May-2006 03:46:17	
5106018.R12		No	ADOAGC04_ap6191rt	US	29-May-2006 08:28:01	
7260000.A		No	ADOAGC04_ap6191rt	US	26-May-2006 11:33:27	
5251362.AD.1.0		No	ADOAGC04_ap6191rt	US	26-May-2006 11:31:21	

There are four fields in the Simple Search section:

- Patch: Enter the patch number in this field.
- Applied Within Last <number> Days: This field allows you to restrict the search to a specific timeframe. The default is 60 days.
- Applied From Date <begin date> To Date <end date>: This field allows you to search for patches that were applied during a specified period of time. Click the calendar icon to select the date or enter the date directly in the field. Some examples for the use of this field are:
 - Enter only the begin date. This search returns all patches applied from the begin date through today's date.
 - Enter only the end date. This search returns all patches applied up to the end date.
 - Enter the begin date and the end date. This search returns all patches applied between the begin date and the end date.
- Language: This drop-down list allows you to select the language of a patch to be

queried. You can select only one language in this field. To select multiple languages, go to the Applied Patches Advanced Search page.

You must enter a value in at least one of the fields. If you do not, an error page reminds you to go back and enter a value. To submit the query, click the Go button. The Reset button clears the entered search criteria.

Advanced Search

Click the Advanced Search button to see the Applied Patches Advanced Search page, then enter the search criteria information.

Applied Patches Page - Advanced Search

The screenshot displays the Oracle Applications Manager interface for the 'Applied Patches' section. The page title is 'Applied Patches : ADOAGC04'. Below the title, there is a 'Last Updated' timestamp and a 'Simple Search' button. The main section is titled 'Advanced Search' and includes a note: 'Indicates required field. Querying by a specific patch ID will return all patches that are included in the specified patch ID.' The search criteria fields are as follows:

- Applications System Name:** ADOAGC04
- APPL_TOP:** Name (selected), All APPL_TOP Server Types, Specific Server Type (Form, Concurrent, Web, Administration)
- Product:** (empty field)
- Patch:** (empty field)
- Applied Within Last:** 60 Days
- Applied From Date:** (empty field)
- To Date:** (empty field)
- Language:** A list of available languages (AR - Arabic, CS - Czech, D - German, DK - Danish, E - Spanish, EL - Greek, ESA - Latin American Spanish, F - French, FRC - Canadian French, HR - Croatian) and a 'Selected Languages' list.

At the bottom of the page, there are 'Go' and 'Reset' buttons.

On the Advanced Search page, there are additional search criteria to narrow the results of a query:

- **Applications System Name (required):** Defaults to the name of your Oracle E-Business Suite system. If you have migrated applied patches information from another system, and want to search those records, enter the name of that system.
- **APPL_TOP:** Select Name and enter the name of the APPL_TOP where the patches were applied.
- **Product:** Enter the product short name of the product that owns the patch in this field. The product short names for gl, ap, and fa are SQLGL, SQLAP, and OFA respectively. For all other products, the short name is the uppercase equivalent to the product abbreviation. For example, "AD" or "INV". This field is not case

sensitive.

- Patch: Enter the patch number in this field.
- Applied Within Last <number> Days: Restricts the timeframe during which the patches were applied.
- Applied From Date <begin date> To Date <end date>: Narrows the search to a specified period of time. Click the calendar icon to select the date or enter the date directly in the field.
- Language: Select the language of a patch to be queried. Select one language or multiple languages in the Available Languages box and click the Move button.

Search Results

After a search, the results appear at the bottom of the search page. If the results section contains multiple pages of retrieved information, use the Previous and Next links or the drop-down list to navigate from page to page. The retrieved patch information is presented in increments of 25 line items per page. Each line item represents an applied patch.

The details provided for each patch are:

- Patch Name: Name of the patch.
- Patch Description: Describes the patch.
- Merged Patches: Lists patches that have been merged.
- APPL_TOP Name: Name of the APPL_TOP where the patches were applied.
- Language: Patch language.
- Completion Date: Date and time the patch application was completed.
- Details: Provides access to the Patch Details report.

Click a Details icon in the report to open the Patch Details report, which provides details for a specific patch. From the Patch Details report, you can drill down and access reports showing timing details for the patch, all files copied to the file system by this patch, all bug fixes that were applied by this patch, and all actions taken by the patch driver.

Note: For more information on the Patch Details report, see: Patch Details, page 4-9.

File History Search Pages

To search for files that have been updated by a patch, click the File History option in the Select Feature drop-down list on the Applied Patches search pages.

Simple Search

You can perform a Simple Search from this page by entering the required information in the input fields.

File History Page - Simple Search

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Applications Dashboard Site Map

Applications System: ADOAGC04 >

File History : ADOAGC04 Select Feature File History Go

Last Updated : 08-Jun-2006 18:57:11

Simple Search Advanced Search

* Indicates required field.

File Name format is <name>.<extension>. Do not enter the full path to <name>. Use % as a wildcard character in the File Name field.

* File Name

Applied Within Last Days

Changed From Date To Date

Language

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APPL_TOP Name	Product	Directory	File	Version	Changed Date	Patch Details	Action
ADOAGC04_ap6191rt	AD	patch/115/sql	adpamlsd.sql	120.6	17-May-2006 15:18:35	94464216	
ADOAGC04_ap6191rt	AD	patch/115/sql	adpamlsd.sql	120.4	16-May-2006 16:28:22	4461237	
ADOAGC04_ap6191rt	AD	patch/115/sql	adpaupg.sql	120.4	16-May-2006 16:28:22	4461237	
ADOAGC04_ap6191rt	AD	patch/115/sql	adpfamsd.sql	120.1	17-May-2006 15:18:35	94464216	
ADOAGC04_ap6191rt	AD	patch/115/sql	adpfamsd.sql	120.1	17-May-2006 15:18:35	94464216	

The following fields are in the Simple Search section:

- **File Name (required):** Enter the name of a file in this field. Do not include a directory path. This field is case-sensitive and accepts a % wildcard symbol in combination with literal characters.
- **Applied Within Last <number> days:** Enter the number of days to include in the search. The default is 60 days.
- **Changed From Date <begin date> To Date <end date>:** Search for files that were updated during a specified period of time. Click the calendar icon to select the date or enter the date directly in the field. Some examples for the use of this field are.
 - Enter only the begin date. This search returns file history information from the begin date through today's date.
 - Enter only the end date. This search returns file history information up to the end date.

- Enter the begin date and the end date. This search returns file history information between the begin date and the end date.
- Language: Select the language of a file to be queried. You can select only one language in this field. To select multiple languages, go to the File History Advanced Search page.

To submit the query, click the Go button. The Reset button clears the entered search criteria.

Note: If you have not entered a value in the File Name field, a message prompts you to go back and complete the field.

Advanced Search

Click the Advanced Search button. Then enter the search criteria information on the Advanced Search page.

File History Page - Advanced Search

The screenshot displays the 'File History : ADOAGC04' page in the Oracle Applications Manager. The 'Advanced Search' section is active, showing various search criteria. The 'Applications System Name' is set to 'ADOAGC04'. The 'APPL_TOP Name' and 'File Name' fields are empty. The 'Latest Version Only' option is set to 'No'. The 'Applied Within Last' is set to '60 Days'. The 'Changed From Date' is set to 'dd-MMM-yyyy'. The 'Language' section shows a list of 'Available Languages' including AR - Arabic, CS - Czech, D - German, DK - Danish, E - Spanish, EL - Greek, ESA - Latin American Spanish, F - French, FRC - Canadian French, and HR - Croatian. The 'Selected Languages' section is empty. The 'Go' and 'Reset' buttons are at the bottom.

There are additional search criteria on the Advanced Search page to narrow the results of a query:

- Applications System Name (required): Defaults to the name of your Oracle E-Business Suite. If you have migrated file history information from another system, and want to search those records, enter the name of that system.
- APPL_TOP name: Name of the APPL_TOP containing the file.

- **File Name (required):** Enter the name of a file in this field. Do not include a directory path. This field is case-sensitive and accepts a % wildcard symbol in combination with literal characters.
- **Latest Version Only:** The options are Yes or No. Yes returns information for only the latest version of the file. No returns information for all versions of the selected file.
- **Applied Within Last <number> days:** Enter the number of days.
- **Changed From Date <begin date> To Date <end date>:** Search for file history information spanning a specified period of time. Click the calendar icon to select the date or enter the date directly in the field.
- **Language:** Select the language of a patch to be queried. Select one language or multiple languages in the Available Languages box and click the Move button.

Search Results

After a search, the results appear at the bottom of the page. Each line item represents a file that was changed due to its inclusion in a patch. The details provided for a file are:

- **APPL_TOP Name:** This is the name of the APPL_TOP containing the files.
- **Product:** Name of the product that owns the file.
- **Directory:** Directory path where the file is located.
- **File:** Name of the file.
- **Version:** Version number of the file.
- **Changed Date:** Date this version of the file was updated by a patch.
- **Patch Details:** Click on the patch number to see the Patch Details report for the patch in which the file was included.
- **Action:** Click on the icon to see the Action Summary report for the action that updated the file.

If a file has never been patched, the message "The above criteria resulted in no rows" appears in the APPL_TOP Name column. If the number of files retrieved exceeds 200, the report lists only the first 200 files. Use the filter to reduce the number of files in the report.

Patch Details

From the Applied Patches page, click the Details icon in a selected row from the results

section, or from the File History page, click the patch number link in the Patch Details column, to open the Patch Details report. This report provides details for a specific patch. The patch summary information is carried over and appears at the top of the Patch Details report.

Patch Details Report

The screenshot shows the Oracle Applications Manager interface. At the top, there's a navigation bar with 'Support Cart', 'Setup', 'Home', 'Logout', and 'Help'. Below this is the 'Applications Dashboard' and 'Site Map' section. The main content area is titled 'Patch Details : 6016104.A : ADOAGC03'. It displays the following information:

- Last Updated : 11-May-2007 18:17:41
- APPL_TOP Name : ap6277rt
- Patch : 6016104.A
- Merged Patches : No
- Language : US
- Drivers Applied : 1
- Completion Date : 03-May-2007 03:41:39
- Patch Description : R12.0.2 - CONSOLIDATED PATCH FOR ALL ADOAM BUG FIXES

Below this information, there's a note: 'If the same patch is applied multiple times, this page displays all of them.' Then, there's a table with tabs: 'Select Driver File and view...', 'Timing Details', 'Files Copied', 'Bug Fixes', and 'Action Summary'. The 'Select Driver File and view...' tab is active, showing a table with the following data:

Select	Driver File	Start Date	End Date	AutoPatch Options	Platform	Patch Top	Codelevel Introduced
	u6016104.drv	03-May-2007 03:34:19	03-May-2007 03:41:39	hotpatch	GENERIC	/ SLOTS/ slot03/ appmgr/ patch/ 6016104	

At the bottom right of the table, there's a button 'Add to Support Cart'. The footer of the page contains the text: 'Support Cart Setup Home Logout Help' and 'Copyright 2001, 2006 Oracle Corporation. All Rights Reserved. About Oracle Applications Manager Version 2.3.1'.

This report contains the following information:

- **Select:** This option button determines which driver file details are presented in the Timing Details report, Files Copied report, the Bug Fixes report, or the Action Summary report.
- **Driver File:** Name of the driver file.
- **Start Date:** Date and time the application of the driver file began.
- **End Date:** Date and time the application of the driver file was complete.
- **AutoPatch Options:** Displays any command line options used to run the driver file.
- **Platform:** Platform of the driver file.
- **Patch Top:** Location of the driver when it was run.
- **Codelevel Introduced:** Link to the Codelevel Introduced report for the patch.

To see additional details for a patch, click one of the following buttons on the report:

- **Timing Details:** Takes you to the AutoPatch Timing Details report.
- **Files Copied:** Takes you to the Files Copied report.
- **Bug Fixes:** Takes you to the Bug Fixes report.

- Action Summary: Takes you to the Action Summary report.

Codelevel Introduced

From the Patch Details page, click the Codelevel Introduced icon to access the Codelevel Introduced report.

Codelevel Introduced Report

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:ADOAGC03 > Applied Patches > Patch Details >

Codelevel Introduced : u5525109.drv : ADOAGC03

Last Updated : 10-Oct-2006 16:58:54

Start Date
AutoPatch
Options
Driver File

18-Sep-2006 06:21:45
hotpatch
u5525109.drv

End Date
Platform
Patch Top

18-Sep-2006 06:22:30
GENERIC
/ SLOTS/ slot04/ appmgr/ patches/
5525109

Abbreviation	Name	Type	Codeline	Codelevel
ce	Cash Management	product	A	A
ecx	XML Gateway	product	A	A.2.1
jta	CRM Applications Foundation	product	A	A.1.0.1

Add to Support Cart

Support Cart Setup Home Logout Help

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This report contains the following information about the codelevel introduced:

- Abbreviation: The abbreviation for the product, product family, or feature to which this patch applies.
- Name: The full name of the product, product family, or feature to which this patch applies.
- Type: Indicates whether this patch applies to a product, product family, or feature.
- Codeline: Indicates the codeline of the current product, product family, or feature in the patch. (For example, codeline A for Release 12.0, codeline B for Release 12.1, and so on.)
- Codelevel: Indicates the codelevel of the current product, product family, or feature in the patch. (For example, codelevel A.1 for RUP1, A.2 for RUP 2, and so on.)

You can sort each of these columns by clicking the column title at the top of the report.

Timing Details

The AutoPatch Timing Details can also be accessed through the Timing Reports link from the Maintenance tab on the OAM Site Map.

See Timing Reports, page 4-15 for more information on Timing Details.

Files Copied

The Files Copied report lists all files copied to the file system as a result of the actions in the selected driver file. You access this report by selecting a driver file in the Patch Details report and clicking the Files Copied button.

Files Copied Report

The screenshot shows the Oracle Applications Manager interface. At the top, there's a navigation bar with 'Support Cart', 'Setup', 'Home', 'Logout', and 'Help'. Below this, the 'Applications Dashboard' and 'Site Map' are visible. The main content area is titled 'Files Copied : u6251362.drv : ADOAGC04'. It includes a 'Last Updated' timestamp of '08-Jun-2006 19:05:25'. A table of metadata is displayed with columns for 'Start Date', 'AutoPatch Options', 'Driver File', 'End Date', 'Platform', and 'Patch Top'. The values are: Start Date: 26-May-2006 10:31:16, AutoPatch Options: hotpatch, Driver File: u5251362.drv, End Date: 26-May-2006 10:34:19, Platform: LINUX, Patch Top: / SLOTS/ slot03/ appmgr/ patches/ 5251362. Below the metadata, there's a filter section with 'Product' and 'contains' dropdowns, and a 'Go' button. A table of copied files is shown with columns 'Product', 'Directory', 'File', and 'Version'. One row is visible: Product: AD, Directory: lib, File: adphist.o, Version: 120.14. At the bottom right, there's an 'Add to Support Cart' button. The footer contains copyright information: 'Copyright 2001, 2006 Oracle Corporation. All Rights Reserved. About Oracle Applications Manager Version 2.3.1'.

Product	Directory	File	Version
AD	lib	adphist.o	120.14

This report contains the following information about the files copied:

- Product: Short name for the product that owns the file.
- Directory: Directory path where the file was copied.
- File: Name of the file.
- Version: Version number of the copied file.

You can sort each of these columns by clicking the column title at the top of the report. If there are no files copied in the patch, no rows are displayed. If the number of files copied exceeds 200, the report lists only the first 200 files. Use the filter to reduce the number of files in the report.

Bug Fixes

The Bug Fixes report lists all bug fixes included in the selected driver file. Select a driver file in the Patch Details report and click the Bug Fixes button.

Bug Fixes Report

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:ADOAGC04 > Applied Patches > Patch Details >

Bug Fixes : u5251362.drv : ADOAGC04

Last Updated : 08-Jun-2006 19:06:19

Start Date
AutoPatch Options
Driver File

26-May-2006 10:31:16
hotpatch
u5251362.drv

End Date
Platform
Patch Top

26-May-2006 10:34:19
LINUX
/ SLOTS/ slot03/ appmgr/
patches/ 5251362

Filter

Bug Fix

contains

Go

Bug Fix	Product	Applied	Remarks
5251362	ad	Y	
4654046	ad	Y	

Add to Support Cart

Support Cart Setup Home Logout Help

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About Oracle Applications Manager Version 2.3.1

This report contains the following information about bug fixes:

- Bug Fix: Number of the bug fixed as a result of the selected driver file. Some items in this column are links. Clicking a linked item accesses the Action Summary report.
- Product: Short name for the product for which the bug was fixed.
- Applied: Indicates whether the bug fix was applied.
- Remarks: If the bug fix was not applied, the reason is stated here.

You can sort each of these columns by clicking the column title at the top of the report. If there are no bug fixes in the patch, no rows are displayed. If the number of bug fixes exceeds 200, the report lists only the first 200. Use the filter to reduce the number of items in the report.

Action Summary

The Action Summary report provides summary information for the actions of a selected driver file. Each line item represents a performed action. You access this report either by selecting a driver file in the Patch Details report and clicking the Action Summary button, by clicking the Action icon in the File History search results, or by clicking a bug fix number in the Bug Fix column of the Bug Fixes report.

Action Summary Report

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:ADOAGC04 > Applied Patches > Patch Details >

Action Summary : u5251362.drv : ADOAGC04

Last Updated : 08-Jun-2006 19:07:23

Start Date 26-May-2006 10:31:16

AutoPatch Options hotpatch

Driver File u5251362.drv

End Date 26-May-2006 10:34:19

Platform LINUX

Patch Top / SLOTS/ slot03/ appmgr/ patches/ 5251362

Filter Bug Fix ☒ contains ☒ Go

The details icon displays additional information about database updates.

Previous 1-25 of 189 ☒ Next 25

Product	Directory	File	Action	Phase	Run	Bug Fix	Details
FND	include	afugai.h	copy		N	5251362	
AD	bin	adadmin	link		Y	5251362	
AD	bin	adident	link		Y	5251362	
AD	bin	adjkey	link		Y	5251362	
AD	bin	admrpoch	link		Y	5251362	

The Action Summary report contains the following summary information:

- Product: Short name for the product that owns the file referenced by the action.
- Directory: Directory path for the file referenced by the action.
- File: Name of the file referenced by the action.
- Action: Type of action performed on the updated file.
- Phase: Phase in which the action occurred.
- Run: Signifies whether the action was executed.
- Bug Fix: Number of the bug fixed as a result of the selected driver file.
- Details: This link is active if AutoPatch performed database actions, usually SQL or EXEC actions where Run = y. Click this link to access the Action Details report.

You can sort each of these columns by clicking the column title at the top of the report. If the number of actions exceeds 200, the report lists only the first 200. Use the filter to reduce the number of items in the report.

Action Details

To access this report, click the Details icon in a selected row of the Action Summary report. The Action Summary information is carried over and presented at the top of the report.

Action Details Report

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Action Details : jtfhcde.sql : x6Sanity

Last Updated : 28-Jul-2006 18:58:33

Bug Fixes5082400

RunY

Actionsql

Phasefirst

ProductJTF

Directorypatch/ 115/ sql

jtfhcde.sql

Before VersionN/A

After VersionN/A

Arguments	Command Modifier	Check Object	Elapsed Time	Start Time	Restart Time	End Time	Restarted?
N/A	sql	JTF_CAL_ADDRESSES &un_jtf &pw_jtf	0 sec	12-Jun-2006 12:44:38		12-Jun-2006 12:44:38	N

Add to Support Cart

Support Cart Setup Home Logout Help

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This report contains the following information about action details:

- Arguments: Specific argument for SQL and EXEC commands.
- Command Modifier: SQL or EXEC command modifier in the database section of the driver.
- Check Object: Name of the database object to check for, along with name and password of the schema where AutoPatch looks for the checked object.
- Elapsed Time: Time required to complete the action.
- Start Time: Date and time the action began.
- Restart Time: Date and time the action was restarted.
- End Time: Date and time the action was complete.
- Restarted?: States whether the action was restarted.

N/A in the report represents action details that are not specified. For example, in the Arguments field, N/A means no additional arguments were specified.

Timing Reports

The Timing Reports utility provides the job history of applied patches. It captures statistics about, and job timing information for, AutoPatch and AD Administration maintenance sessions that run parallel workers. Both AutoPatch and AD Administration store information about a processing session in database tables. You can access this information, either during the session or after it is complete, through the OAM interface.

Note: You can also access job timing information during a current session or for a completed session by running `adtimrpt.sql` from the command line. This script creates the `adt<session_id>.lst` report. For more information, see: AD Job Timing Report, *Oracle E-Business Suite Maintenance Utilities*.

During a parallel session, AD utilities assign processing jobs to workers. For jobs that affect the database, job actions are grouped in phases to reduce dependencies between jobs - workers do not have to wait for another worker to complete a dependent job before completing their assigned task. See: Using Parallel Processing, *Oracle E-Business Suite Maintenance Utilities*.

The Timing Reports utility lists processing tasks and provide details about the elapsed time for phases, jobs, and sessions. The information includes:

- Jobs run successfully on the first try
- Failed jobs that were restarted and then run successfully
- Failed jobs that were skipped
- Long-running jobs
- Summary information for each parallel phase
- Time taken to run a job
- Overall elapsed time for each session

The Timing Reports Interface

The Timing Reports interface consists of a main page, a Timing Details page, and a View Log Files page which provides links to reports about specific maintenance session information.

Main Page

From the Timing Reports main page, you can view a list of all in-progress, stopped, aborted, and completed maintenance sessions. Click the Details icon to access the Timing Details page or click the Log Files icon to access the View Log Files page.

Timing Details Page

There are two types of Timing Details reports - those associated with an AutoPatch session and those associated with an AD Administration session.

Note: The discussion of each page contains more detail. The OAM help feature also contains information about the Timing Reports.

View Log Files Page

This page contains a list of log files generated for the corresponding maintenance session.

Accessing Timing Reports

To access the Timing Reports main page, log in to Oracle Applications Manager and choose Timing Reports from the Site Map.

Step 1: Log in to Oracle Applications Manager

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM. From the Applications Dashboard, click the Site Map tab.

Step 2: Access Timing Reports

From the Site Map, Timing Reports is on the Maintenance tab under the Patching and Utilities heading. Click the Timing Reports link to go to the main page.

Step 3: Filter the results

There is a filter at the top of the page that allows you to narrow the contents of the list. You can filter based on the following status of the tasks: Any tasks, In-progress tasks, Completed tasks, Stopped tasks, or Aborted tasks. You can also filter by Task Name, Status, Start Date, and Run Time. Click Go to activate the filter.

Note: See descriptions of individual pages in this chapter for details. See also AD Administration in *Oracle E-Business Suite Maintenance Utilities*.

Timing Reports Main Page

The Timing Reports main page shows information for each maintenance session.

Timing Reports Main Page

ORACLE[®] Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:ADOACC04 >

Timing Reports : ADOACC04

Select Feature Timing Reports Go

Last Updated : 11-Aug-2006 18:06:08

Filter Status is Any Go

Only the last 90 days program runs are displayed.

In Progress; Stopped (no update in past one hour); Aborted; Completed.

Previous 1-25 of 37 Next 12

Task Name	Status	Start Date	Run Time	Last Update	Details	Log Files
AD Administration - Check for missing files	✓	08-Aug-2006 06:02:05	1 min, 38 sec	08-Aug-2006 06:03:43		
AutoPatch - u3456789.drv	✓	08-Aug-2006 05:03:51	2 min, 16 sec	08-Aug-2006 05:06:07		
AutoPatch - c5400663.drv	✓	02-Aug-2006 07:13:43	38 sec	02-Aug-2006 07:14:21		
AutoPatch - u5414900.drv	✓	02-Aug-2006 07:09:32	2 min, 59 sec	02-Aug-2006 07:12:31		
AutoPatch - u94464216.drv	✓	01-Aug-2006 23:24:59	7 min, 24 sec	01-Aug-2006 23:32:23		
AD Administration - Compile APPS schema	✓	17-Jul-2006 18:15:51	42 sec	17-Jul-2006 18:16:33		
AD Administration - Disable Maintenance Mode	✓	17-Jul-2006 18:15:46	1 sec	17-Jul-2006 18:15:47		
AD Administration - Compile APPS schema	✓	17-Jul-2006 09:43:40	50 sec	17-Jul-2006 09:44:30		
AutoPatch - c2647958.drv	✓	17-Jul-2006 09:40:42	1 min, 1 sec	17-Jul-2006 09:41:43		
AutoPatch - c2647958.drv	✗	17-Jul-2006 09:35:37	54 sec	17-Jul-2006 09:36:31		
AD Administration - Enable Maintenance Mode	✓	17-Jul-2006 09:23:11	1 sec	17-Jul-2006 09:23:12		

- Task Name: Name and brief description of the maintenance session.
- Status: Status of the timing report. A clock icon means the session is still in-progress, an exclamation icon means the session has stopped, an X icon means the session was aborted (that is, the AD utility was restarted with the gf option), and a check mark means the session has completed.
- Start Date: Date and time the maintenance session began.
- Run Time: Time required to complete the maintenance session.
- Last Update: Time the timing information was last updated.
- Details: Access the Timing Details for the maintenance session.
- Log Files: Access the log files of the maintenance session.

AutoPatch Timing Details

Click the Details icon of a selected row (with an AutoPatch task name) in the Timing Reports list to open the AutoPatch Timing Details report. This report provides details for a specific session of AutoPatch.

AutoPatch Timing Details Report

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:ADOAGC04 > Timing Reports >

AutoPatch Timing Details : u5251362.drv : ADOAGC04

Last Updated : 08-Jun-2006 19:19:02

Filter

(Enter number of seconds)

Timing Details

[Expand All](#) | [Collapse All](#)

Focus Task Name	Elapsed Time	Start Date	End Date
AutoPatch			
Run a single patch driver file	1 min, 38 sec	26-May-2006 11:25:53	26-May-2006 11:27:31
Copy portion steps	42 sec	26-May-2006 11:25:55	26-May-2006 11:26:37
Relink executables	32 sec	26-May-2006 11:26:04	26-May-2006 11:26:36
Database portion steps	41 sec	26-May-2006 11:26:37	26-May-2006 11:27:18
Run SQL scripts and EXEC commands	5 sec	26-May-2006 11:26:40	26-May-2006 11:26:45
Running database update commands	5 sec	26-May-2006 11:26:40	26-May-2006 11:26:45
Running SQL and EXEC commands in parallel	5 sec	26-May-2006 11:26:40	26-May-2006 11:26:45
Running parallel SQL and EXEC commands	5 sec	26-May-2006 11:26:40	26-May-2006 11:26:45
Compile invalid objects in DB	30 sec	26-May-2006 11:26:45	26-May-2006 11:27:15
Run ST parallel compile (APPS)	14 sec	26-May-2006 11:26:45	26-May-2006 11:26:59
Steps after generate portion	13 sec	26-May-2006 11:27:18	26-May-2006 11:27:31
Save Patch History	13 sec	26-May-2006 11:27:18	26-May-2006 11:27:31
Save Patch History to database	13 sec	26-May-2006 11:27:18	26-May-2006 11:27:31

Run Information

The AutoPatch Timing Details report lists every task performed in a maintenance session. The Timing Details section contains the following information for each task:

- Focus: Select the circle icon next to a task to see just the sub-tasks within it.
- Task Name: Name of the task. Click the plus-sign icon to expand or contract the sub-tasks within the task. The underlined Task Names are links to the Job Timing report for that particular task.
- Elapsed Time: Time required to complete the task. This field is not applicable for stopped or in-progress tasks.
- Start Date: Date and time the task began.
- End Date: Date and time the task was complete. This field is not applicable for stopped or in-progress tasks.

Use the filter to adjust the list of tasks based on their elapsed time. The default list shows all tasks with elapsed time of greater than 4 seconds. Use the Expand All link to see all sub-tasks and the Collapse All to see just the top-level task.

When you access the AutoPatch Timing Details report for a stopped or in-progress task, the page defaults to display the most recently performed sub-tasks. For in-progress tasks, you can use the Refresh icon to get the latest running tasks. The Refresh icon is a picture of a page with a blue circular arrow.

Run Information

Additional AutoPatch task information is available by clicking the plus-sign icon for the Run Information section at the bottom of the page. The subsections in Run Information are General, Timing Summary, and Files Installed on this APPL_TOP.

AutoPatch Timing Details Report - Run Information

Run Information	
General	Timing Summary
Utility Name: AutoPatch	Start Date: 26-May-2006
Task: u5251362.drv	11:25:49
Log File: / slot03/ appmgr/ ADOAGC04appl/ admin/ ADOAGC04/ log/ u5251362.log	End Date: 26-May-2006
Driver File: / SLOTS/ slot03/ appmgr/ patches/ 5251362/ u5251362.drv	Total Run Time: 1 min, 42 sec
Patch Top: / SLOTS/ slot03/ appmgr/ patches/ 5251362	
Options: hotpatch	
Platform: LINUX	
Applications System Name: ADOAGC04	
Oracle Database: ADOAGC04	
Oracle Home: / slot03/ appmgr/ ADOAGC04ora/ 8.0.6	
APPL_TOP Name: ADOAGC04_ap6191rt	
APPL_TOP Directory: / slot03/ appmgr/ ADOAGC04appl	
	Files Installed on this APPL_TOP
	Administration: Yes
	Java and HTML: Yes
	Forms: Yes
	Concurrent Processing: Yes

General

This subsection contains the following information:

- Utility Name: Name of the utility used to perform the task.
- Task: Task performed.
- Log File: Name and location of the log file.
- Driver File: Name and location of the patch driver file.
- Patch Top: Location of the patch driver files.
- Options: Command options used when running AutoPatch.
- Platform: Platform of the system.
- Applications System Name: Name of the Applications system on which the task was performed.
- Oracle Database: Name of the database.
- Oracle Home: Directory path to the Oracle home used to link the executables.
- APPL_TOP Name: Name of the APPL_TOP.
- APPL_TOP Directory: APPL_TOP directory path.

Timing Summary

This subsection contains the following information:

- Start Date: Date and time the task began.
- End Date: Date and time the task was complete. This field does not apply for stopped or in-progress tasks.
- Total Run Time: Time required to complete the task. This field does not apply for stopped or in-progress tasks.

Files Installed on this APPL_TOP

This subsection contains the following information:

- Java and HTML: States whether the APPL_TOP on which the task was performed is a Web server.
- Forms: States whether the APPL_TOP on which the task was performed is a forms server.
- Concurrent Processing: States whether the APPL_TOP on which the task was performed is a concurrent processing server.

AD Administration Timing Details

Click the Details icon of a selected row (with an AD Administration task name) in the Timing Reports list to open the AD Administration Timing Details report. This report provides details for a specific session of AD Administration.

AD Administration Timing Details Report

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:ADOAGC04 > Timing Reports >

AD Administration Timing Details : Compile APPS schema : ADOAGC04

Last Updated : 08-Jun-2006 19:22:12

Filter Elapsed Time greater than 4 Go
(Enter number of seconds)

Timing Details

Expand All | Collapse All

Focus Task Name	Elapsed Time	Start Date	End Date
AD Administration			
Compile APPS schema	43 sec	16-May-2006 12:57:28	16-May-2006 12:58:11
Compiling APPS	41 sec	16-May-2006 12:57:30	16-May-2006 12:58:11
Run ST parallel compile (APPS)	20 sec	16-May-2006 12:57:30	16-May-2006 12:57:50
Run AD parallel compile (APPS)	21 sec	16-May-2006 12:57:50	16-May-2006 12:58:11
Parallel Compile - Compile	7 sec	16-May-2006 12:57:55	16-May-2006 12:58:02

Run Information

General		Timing Summary	
Utility Name	AD Administration	Start Date	16-May-2006
Task	Compile APPS schema	End Date	16-May-2006
Log File	/ slot03/ appmgr/ ADOAGC04appl/ admin/ ADOAGC04/ log/ adadmin.log	Total Run Time	43 sec
Driver File	N/A	Files Installed on this APPL_TOP	
Patch Top	N/A	Administration	Yes
Options	N/A	Java and HTML	Yes
Platform	LINUX	Forms	Yes
Applications System Name	ADOAGC04	Concurrent Processing	Yes
Oracle Database	ADOAGC04		
Oracle Home	/ slot03/ appmgr/ ADOAGC04ora/ 8.0.6		
APPL_TOP Name	ADOAGC04_ap6191rt		
APPL_TOP Directory	/ slot03/ appmgr/ ADOAGC04appl		

The Timing Details and Run Information sections contain the same types of information for each task as the AutoPatch Timing Details report. See: AutoPatch Timing Details, page 4-18.

In-Progress Timing Details

You can use the In-Progress Timing Details page to monitor the job while it is running. Click the Refresh icon to view the steps that are in progress.

In-Progress Timing Details Page

[Run Information](#)

In Progress AD Utility : u94464216.drv : ADDAGC05

Last Updated : 10-Aug-2006 13:58:48 [🔍](#)

Filter [Go](#)
(Enter number of seconds)

AutoPatch Timing Details

[Expand All](#) | [Collapse All](#)



Focus Task Name	Elapsed Time	Start Date	End Date	Number of jobs in this task	Number of jobs completed
 AutoPatch					
 AutoPatch startup after aimini	9 sec	10-Aug-2006 13:57:46	10-Aug-2006 13:57:55	N/A	N/A
 Run a single patch driver file		10-Aug-2006 13:58:18			0
 Copy portion steps	25 sec	10-Aug-2006 13:58:22	10-Aug-2006 13:58:47	N/A	N/A
Read file driver files to get list of valid files	9 sec	10-Aug-2006 13:58:22	10-Aug-2006 13:58:31	N/A	N/A
 Maintain Oracle Applications Java files	12 sec	10-Aug-2006 13:58:35	10-Aug-2006 13:58:47	N/A	N/A
 Perform jcopy actions	12 sec	10-Aug-2006 13:58:35	10-Aug-2006 13:58:47	N/A	N/A
Run adjcopy.class	11 sec	10-Aug-2006 13:58:36	10-Aug-2006 13:58:47	N/A	N/A
 Database portion steps		10-Aug-2006 13:58:47			0
Get initial list of invalid objects in DB		10-Aug-2006 13:58:47			0

Last Updated : 10-Aug-2006 13:58:48 [🔍](#)

[Run Information](#) [Return to Top](#)

Support Cart Setup Home Logout Help

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Patch Reporting Utilities 4-23

In the In-Progress AD Utility section, you can filter the results by elapsed time.

The AutoPatch Timing Details section contains the following information for each task:

- **Focus:** Select the circle icon next to a task to see just the sub-tasks within it.
- **Task Name:** Name of the task. Click the plus-sign icon to expand or contract the sub-tasks within the task. The underlined Task Names are links to the Job Timing report for that particular task.
- **Elapsed Time:** Time required to complete the task. This field is not applicable for stopped or in-progress tasks.
- **Start Date:** Date and time the task began.
- **End Date:** Date and time the task was complete. This field does not apply for stopped or in-progress tasks.
- **Number of jobs in this task:** Number of jobs contained within each level of the task.
- **Number of jobs completed:** Number of jobs completed within this level of the task.

Job Timing

The underlined Task Names in the AutoPatch Timing Details report and the AD Administration Timing Details report link to the Job Timing report for that particular task. This report provides timing information for each job within the selected task and

allows you to drill down into each task to view any exception reports.

Job Timing Report

ORACLE Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:r1206 > Applied Patches > Patch Details > AutoPatch Timing Details >

Job Timing Report : Running parallel SQL and EXEC commands : r1206

Last Updated : 05-Apr-2010 10:29:41

Driver File **u6688850.drv** Task Name **Running parallel SQL and EXEC commands**

Job Timing Summary

Jobs that ran successfully	3	Total Elapsed Time	12 sec
Exceptions	0	Total Job Time	10 sec
Total Number of Jobs	3	Total Number of Workers	1

Filter Criteria

Phase contains (Case sensitive)

Run Time greater than (Enter number of seconds) Go

Phase Info Product Info

Restarted jobs may have Run Time not equal to the difference between Start Time and End Time.

Phase	Product	Directory	File	Action	Start Time	End Time	Run Time	Restarted?
pls	ad	patch/ 115/ sql	adpamiss.pls	package	28-Mar-2010 02:22:21	28-Mar-2010 02:22:22	1 sec	N
plb	ad	patch/ 115/ sql	adpamisb.pls	package	28-Mar-2010 02:22:23	28-Mar-2010 02:22:23	0 sec	N
daa+51	fnd	patch/ 115/ import/ US	afoamadmmenu.ldt	bin	28-Mar-2010 02:22:24	28-Mar-2010 02:22:33	9 sec	N

Add to Support Cart

Click a Task Name on the Timing Details report to open the Job Timing report. The Job Timing Summary information appears at the top of the Job Timing report and the details appear at the bottom.

The summary information includes:

- Jobs that ran successfully: Number of successful jobs.
- Exceptions: Number of jobs that were not completed successfully. If exceptions exist, it is a hyperlink to the Exception report.
- Total Number of Jobs: Number of jobs within the task.
- Total Elapsed Time: Time required to complete the task.
- Total Job Time: Time required to complete the jobs within the task.
- Total Number of Workers: Number of workers used to perform the task.

The Job Timing Details section contains the following information for each job:

- Phase: Database processing phase.
- Product: Abbreviation for the product being updated.

- Directory: Directory path of the file run by the job.
- File: File used to perform the job.
- Action: Action of the job.
- Start Time: Date and time the job began.
- End Time: Date and time the job completed.
- Run Time: Total time of the job.
- Restarted?: States whether the job was restarted.

The filters at the top of the Details section allow you to adjust the list of jobs based on the property and run time of jobs. You can filter based on the following properties of the jobs: Phase, Product, Directory, File, Action, or Restarted. Click Go to activate the filter.

Click the Phase Info button to open the Phase Information report.

Phase Information

Clicking the Phase Info button provides timing information by phase for a task selected in either the AutoPatch Timing Details report or the AD Administration Timing Details report.

Phase Information Report

ORACLEApplications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:ADOAGC04 > Timing Reports > AD Administration Timing Details > Job Timing Report >

Phase Information : Run AD parallel compile (APPS) : ADOAGC04

Last Updated : 08-Jun-2006 19:25:22

Driver File N/A

	Task Name	Run AD parallel compile (APPS)
Phase	Start Time	Elapsed Time Jobs Total Job Time Restarted? Skipped
Parallel Compile - Setup	16-May-2006 12:57:54	1 sec 1 1 sec N 0
Parallel Compile - Compile	16-May-2006 12:57:55	7 sec 8 42 sec N 0
Parallel Compile - Cleanup	16-May-2006 12:58:02	1 sec 1 1 sec N 0
Parallel Compile - Error Check	16-May-2006 12:58:03	3 sec 1 3 sec N 0

Add to Support Cart

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About Oracle Applications Manager Version 2.3.1

The general information presented at the top of the Phase Information report are:

- Driver File: Name of the driver file.
- Task Name: Name of the task performed.

The Phase Information details include:

- Phase: Database processing phase.

- Start Time: Date and time the phase began.
- Elapsed Time: Time required to complete the phase.
- Jobs: Number of jobs in the phase.
- Total Job Time: Time required to complete the jobs within the phase.
- Restarted?: States whether any jobs within the phase was restarted.
- Skipped: Number of jobs within the phase that were skipped.

Product Information

Clicking the Product Info button displays timing information for all products, with the aggregate timing information for database tasks being shown in the Total Job Time column for each product.

Overall Product Summary

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System:r1206 > Applied Patches > Patch Details > AutoPatch Timing Details > Job Timing Report >

Last Updated : 05-Apr-2010 10:30:56

Driver File u6688850.drv

Task Name Running parallel SQL and EXEC commands

Product	Phase	Jobs	Total Job Time
fnd	daa+51	1	9 sec
ad	plb	1	0 sec
ad	pls	1	1 sec

Add to Support Cart

Add to Support Cart

Clicking the link for an entry in the Product column displays full status details for a specific product. The example shown below is for FND.

Specific Product Details

ORACLE® Applications Manager Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Products Licensed with Base Version 12.0.0: r1206
 Last Updated: 05-Apr-2010 10:31:59

Summary

Status	Count
Licensed	196
Shared	5

List of Products

Filter: Product Abbreviation is
If searching by 'status', please input 'licensed', 'shared' or 'not licensed' as the search keyword.

Select a Product and View...

Select	Product Abbreviation	Product Name	Patch set	Status
☒	FND	Application Object Library	R12.FND.B.1	Licensed

Exceptions

Clicking the Exceptions number in the Job Timing report opens the Exception report. This report is available only for jobs that have an Exceptions value greater than zero in the Job Timing report. It provides a list of exceptions encountered during the maintenance session.

Exception Report

ORACLE® Applications Manager Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System: ADOACC04 > Timing Reports > AutoPatch Timing Details > Job Timing Report >

Exception Report : Running parallel SQL and EXEC commands : ADOACC04

Last Updated : 10-Aug-2006 19:55:19
 Driver File **u4440000.drv**
 Task Name **Running parallel SQL and EXEC commands**

Jobs failed, restarted manually, then run successfully **0**
 Jobs failed and skipped **3**

Phase	Status	Product	Directory	File	Run Time	Restarted?
last+1	Skipped	java	oracle/ apps/ xdo/ oa/ util	XLIFFLoader.class	7 sec	N
last+1	Skipped	java	oracle/ apps/ xdo/ oa/ util	XLIFFLoader.class	7 sec	N
last+1	Skipped	java	oracle/ apps/ xdo/ oa/ util	XLIFFLoader.class	8 sec	N

TIP Skipped : Jobs failed and skipped
 Restarted : Jobs failed, restarted automatically, then run successfully

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The general information includes:

- Driver File: Name of the driver file being run when the exception occurred.
- Task Name: Task being performed when the exception occurred.

- Jobs Failed, then restarted successfully: Number of jobs that initially failed but were restarted successfully.
- Jobs Failed and skipped: Number of failed jobs that were skipped.

The Exception details include:

- Phase: Database processing phase.
- Status: Status of the exception.
- Product: Owner of the file with the exception.
- Directory: Location of the file.
- File: File being processed when the exception occurred.
- Run Time: Total time the process ran.
- Restarted?: States whether the job with the exception was restarted.

View Log Files

Clicking the Log Files icon of a selected row opens the View Log Files page. This page lists all the log files generated for a specific maintenance session. You can view log files of completed jobs or jobs that are in progress.

View Log Files Page

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard Site Map

Applications System: ADOAGC04 >

View Log Files : ADOAGC04

Last Updated : 08-Jun-2006 20:38:12

* Indicates required field.

Task Name: AutoPatch - u4502962.drv
Status: Completed
Start Date: 29-May-2006 09:18:43
Last Updated: 30-May-2006 03:47:00
Run Time: 18 hr, 28 min

Log Directory: /slot03/appmgr/ADOAGC04appl/admin/ADOAGC04/log

Log Files

Select a Log File and... View Download

Select Log File	Log Type
☒ adpatch.log	Main Log File
☐ adpatch.lgi	Other Log File
☐ adlibout.log	Other Log File
☐ adlibin.log	Other Log File
☐ adrelink.log	Other Log File
☐ adwork001.log	Worker Log File
☐ adwork002.log	Worker Log File
☐ adwork003.log	Worker Log File
☐ adwork004.log	Worker Log File
☐ adwork005.log	Worker Log File
☐ adwork006.log	Worker Log File

The View Log Files page contains the following information:

- Task Name: Name of the task for which these log files have been generated.
- Status: Status of the task. Valid status types are: In-progress, Completed, Stopped, or Aborted.
- Log Directory: Location of the listed log files. It is defined by the user when the task is run. This is a required field.
- Start Date: Date and time the task was started.
- Last Updated: Date and time the task was completed.
- Run Time: Time required to complete the task.

The following buttons apply to the Log Files section:

- View: Use this button to view a log file after you have selected the radio button of the corresponding log file.
- Download: Use this button to download a log file after you have selected the radio button of the corresponding log file.

The Log Files section contains the following information:

- Select: Use this radio button to select the corresponding log file for viewing or downloading.

- Log File: Name of the log file.
- Log Type: Log files can be one of these types:
 - Main - primary log files for patch applications and AD Administration tasks
 - Worker - generated by the processes that run in parallel, using workers
 - Other - informational log files (adpatch.lgi) and log files created by the copy portion of the universal (u) driver, for example

View Log Details

Details of each log file are displayed on the View Log Details page. To access this page, select the radio button next to one of the log files and click the View button. The page displays up to 500 lines. It automatically defaults to the last page in the log file.

View Log Details Page

ORACLE Applications Manager Support Cart Setup Home Logout Help

Applications Dashboard Site Map
Applications System: ADOAGC04 > View Log Files >

View Log Details : AutoPatch - u4502962.drv : ADOAGC04

Last Updated : 08-Jun-2006 20:40:48

Number of lines per page (Limit 500 lines)
View specific page number

By default, the last page of the log file is displayed.

First Previous Next Last
Page 134 of 134
[Go to bottom](#)

Contents of adpatch.log:

```
Attempting to process IREP files ...
Successfully processed IREP files.
Done IREP processing.

STOP_TASK: [IREP steps] [] [Mon May 29 2006 22:47:04]

STOP_TASK: [Steps after generate portion] [] [Mon May 29 2006 22:47:04]

STOP_TASK: [Run a single patch driver file] [] [Mon May 29 2006 22:47:04]
```

The View Log Details page contains the following information:

- Number of lines per page: Use this to specify the number of lines per page you want to display. The maximum number of lines per page you can display is 500.
- View specific page number: Use this to view a specific page. Enter the page number in the field and click the Go button.

You can use the following buttons to navigate to specific portions of the log file:

- First: Go to the first page.

- Previous: Go to the previous page.
- Next: Go to the next page.
- Last: Go to the last page.

Contents of ...

This section displays the contents of the log file. Click the Go to bottom link to navigate to the last page of the log file. From the last page of the file, click the Return to top link to go back to the first page.

Software Updates

Software Updates is a portal from which you can view all the patching-related activities of your system. From the Software Updates main page, you can access information such as:

- patches that have or have not been applied
- latest three patch recommendation requests from the Patch Wizard page
- latest eight jobs run from the Timing Reports page
- links to patching related pages

The Software Updates Interface

The Software Updates page is a Web-based utility in Oracle Applications Manager. From this page, you can get an overview of all patching-related information.

Accessing Software Updates

To view patching-related activities for your system, log in to Oracle Applications Manager and click the Software Updates tab.

Step 1: Log in to Oracle Applications Manager

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM.

Step 2: Click on the Software Updates tab

From the Applications Dashboard, click the Software Updates tab.

Software Updates Page

This section describes the Software Updates page.

Software Updates Page

Oracle Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications Dashboard: ADOAGC01

Overview | Performance | Critical Activities | Diagnostics | Business Flows | Security | Software Updates

Navigate to: Application Services Go

Applications System Version: 12.0.0

Applied Patch Check

Use this function to determine if a patch has been or has not been applied.

Patch Go

(Enter Patch numbers, separated by comma)

Applied	Not Applied
---------	-------------

Patch Recommendation Requests

Full List

Filter Name / Patch List	Total	Unapplied	Status	Details
No records found.				

Related Links

Setup Tasks	Other Links
Patch Wizard Preferences Define Patch Files Update Metalink Credentials Register Flagged Files	Applied Patches File History Products Installed Codelevels Summary

Support Cart Setup Home Logout Help

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About Oracle Applications Manager Version 2.3.1

The top of the page indicates the version of your Oracle E-Business Suite system.

Applied Patch Check

Use the Applied Patch Check field to check if a patch or a series of patches have been applied to your system. Enter a patch ID or a series of IDs separated by commas to check if the patch or patches have been applied to your system. The table below the field contains two columns: Applied and Not Applied. Your queried patch ID appears in the corresponding column depending on whether it has been applied or not.

Patch Recommendation Requests

This section lists the latest three patch recommendation requests from the Patch Wizard main page. From this section, you can view the following information: Filter Name/Patch List, Total (Applied and Unapplied), Unapplied, Status, and Details.

Click the Full List button in the Patch Recommendation Results section to go directly to the Patch Wizard main page. Click the Details icon to go directly to the Recommended Patches Results of the associated patch. See: Patch Wizard, page 3-1.

Maintenance Activities

This section lists the latest eight jobs from the Timing Reports page. From this section, you can view the following information: Task Name, Status, Last Updated, Details, and Log Files.

Click the Full List button in the Maintenance Activities section to go directly to the Timing Reports main page. Click the Details icon to go directly to the Timing Details report of the associated task, or click the Log Files icon to go directly to the View Log

Files page of the associated task. See: Timing Reports, page 4-15.

Related Links

This section lists the links related to patching activities for your system.

Patching Procedures

How patches are applied to an Oracle E-Business Suite system depends in part on the various strategies or options that may be chosen. In some cases, existing features of the system may determine how patches are applied.

This chapter covers the following topics:

- Preparing for Patching
- Performing Interactive Patching
- Performing Non-Interactive Patching
- Patching NLS Systems
- Applying Patches to a Multi-Node System
- Reducing Downtime
- Keeping Patches Current
- Analyzing Applied Patches
- Backing Out Patches

Preparing for Patching

For patches that have manual steps, the patch readme file instructs you to use Oracle Patch Application Assistant (PAA) to create customized instructions for your system. PAA consolidates and displays only the relevant manual steps for all the patches you want to apply, including steps that you have completed. It also automatically merges the contents of individual patch readme files for a merged patch.

Creating Customized Instructions for Patching Using PAA:

Requirement: How do I know which manual steps associated with a patch apply to my system?

Sorting through the manual steps in a patch readme file to determine which ones apply

to your system can be time-consuming. The Patch Application Assistant allows you to create a customized set of steps to that apply to your unique instance. Using the information on this list reduces the possibility of performing steps that are not necessary or that have been completed previously during the application of another patch.

When you download and unzip a patch, it delivers a static README.html file that advises you if the patch requires manual steps. If manual steps are required, you can generate a list of the steps by running a Perl script (admsi.pl) to initiate PAA. Once you have generated the list, use the PAA interface to see a full list of steps, or only those steps that apply to your system.

After successfully performing each manual step, you can record that it was *completed*. When applying patches in the future, this information is displayed in the PAA interface so that you can see which manual steps you have already performed. Unless specified otherwise, you can previously completed steps.

To run PAA

1. Download the patch that you want to apply and set (source) your environment. On UNIX systems, you must also set the environment variable DISPLAY to an active and authorized display.

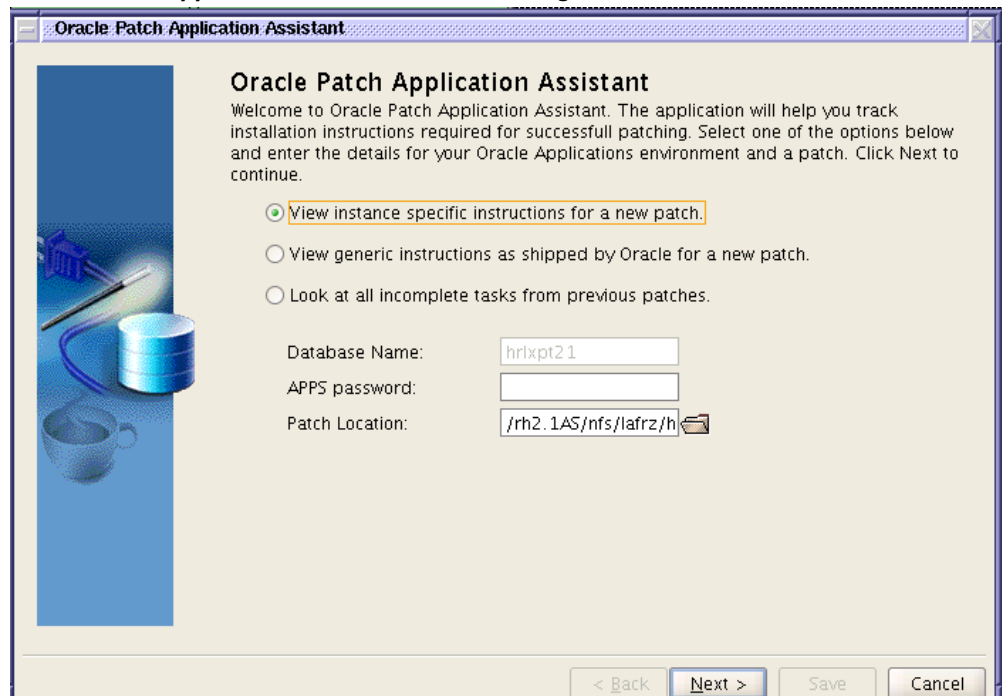
For instructions on setting your environment, see: *Running AD Utilities, Oracle E-Business Suite Maintenance Utilities*.

2. Run the admsi.pl script to generate customized installation instructions.

```
$ admsi.pl
```

The Oracle Patch Application Assistant welcome page appears:

Oracle Patch Application Assistant Welcome Page

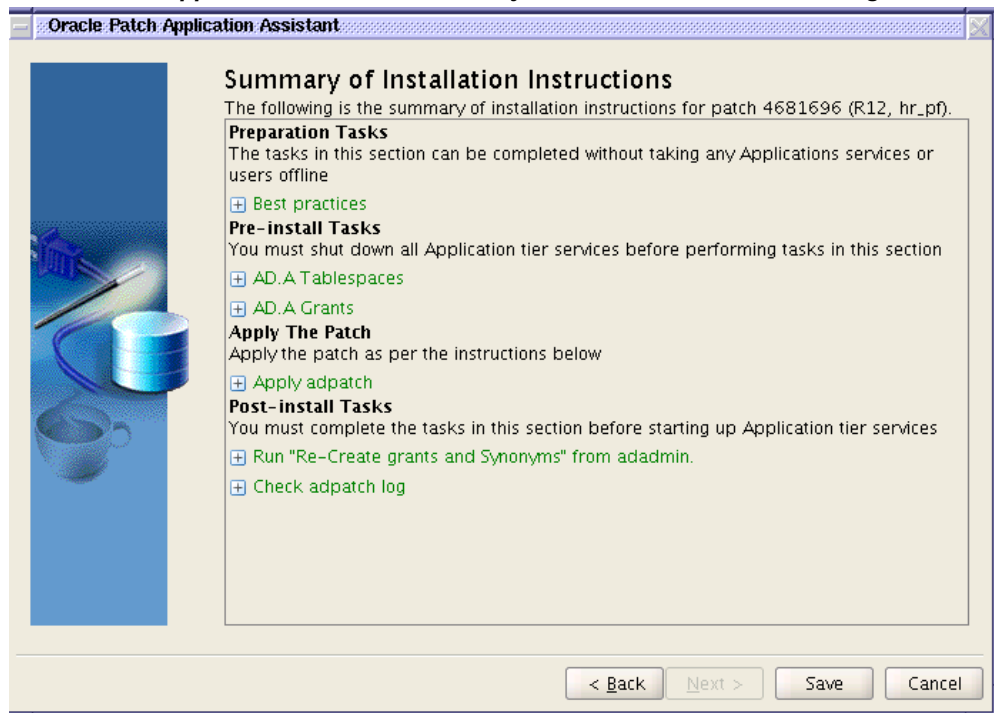


You can select:

- View instance-specific instructions for a new patch.
 - View generic instructions as shipped by Oracle for a new patch - to view all the generic manual steps for a particular patch, including the completed steps.
 - Look at all incomplete tasks from previous patches - to view all the manual steps that have not been completed from previous patches.
3. Select View instance-specific instructions for a new patch. Enter the APPS password, and select the location where the patch is staged. Click Next.

The Summary of Installation Instructions page appears:

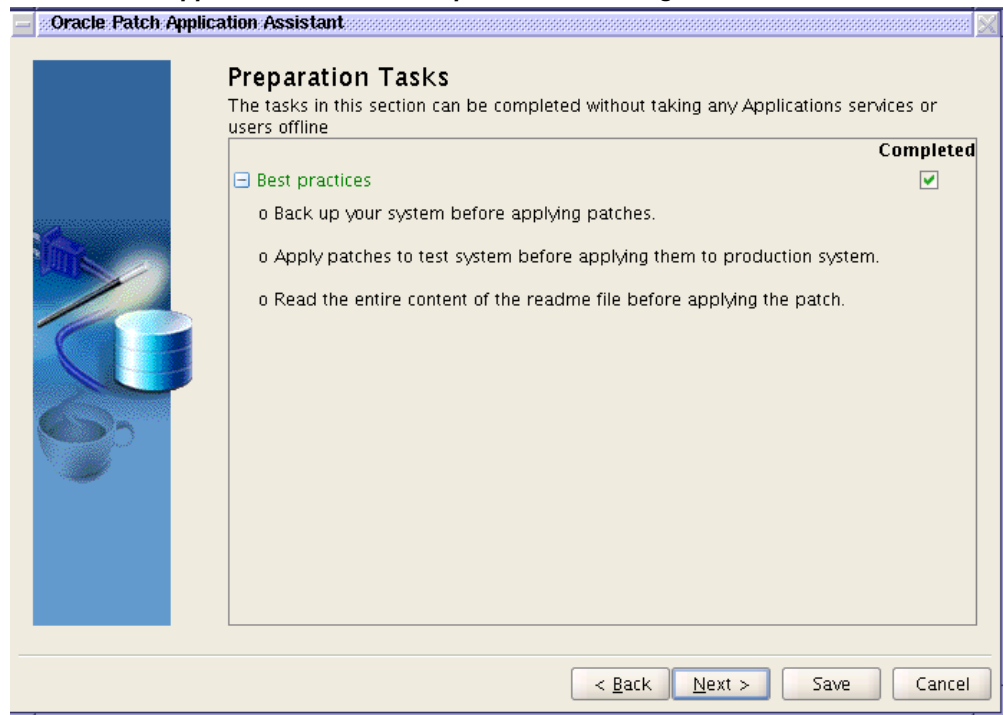
Oracle Patch Application Assistant Summary of Installation Instructions Page



This page summarizes all the manual steps for the patch, grouped into the following categories: Preparation Tasks, Pre-Install Tasks, Apply the Patch, Post-Install Tasks, Finishing Tasks, and Additional Information. This page displays only those categories in which there are manual steps.

4. Click the plus-sign icon in each category for more detailed information. For example, if you click the plus-sign icon next to Best Practices, the Preparation Tasks screen appears with the tasks suggested for preparing your system for patching.

Oracle Patch Application Assistant Preparation Tasks Page



5. After you have completed all the manual steps in a category, check the Completed box to record the completion status in the database, then click Next. If a patch that you apply in the future contains any of the same manual steps, it will be marked as *completed* to inform you that you do not have to perform that task again.

After you have completed all manual steps in all categories, the system returns you to the Summary of Installation Instructions page.

Oracle Patch Application Assistant Summary of Installation Instructions Page

Summary of Installation Instructions	
The following is the status of installation instructions for patch 4681696 (R12, hr_pf). Click Save to save any pending changes to the database hr1xpt21.	
Preparation Tasks	Completed
+ Best practices	☒
Pre-install Tasks	
+ AD.A Tablespaces	☒
+ AD.A Grants	☒
Apply The Patch	
+ Apply adpatch	☒
Post-install Tasks	
+ Run "Re-Create grants and Synonyms" from adadmin.	☒
+ Check adpatch log	☒

Note the column of Completed boxes that corresponds to each task in a category. Check marks appear in the boxes for which you have completed manual steps.

6. Click Save to record tasks completed in the database. Click Cancel to exit PAA.

Performing Interactive Patching

Patches and updates to the Oracle E-Business Suite file system or database are applied using AutoPatch, which identifies the servers set up during your installation and performs the actions required by the patch on each APPL_TOP. In a shared application tier file system, changes made during patching sessions on one node are immediately available on all nodes.

You can apply a patch interactively or non-interactively. *Interactive* patching - the "normal" patching method - means that you supply all the information that AutoPatch needs by responding to a series of prompts. You can also apply a patch *non-interactively* to avoid having to respond to some of the AutoPatch prompts and to accommodate special types of patches. See: AutoPatch, page 2-2 and Performing Non-Interactive Patching, page 5-13.

To ensure optimal performance and reduce downtime during patching sessions, AutoPatch requires that you enable Maintenance mode when you apply a patch. Enabling this feature shuts down the Workflow Business Events System and sets up

function security so that Oracle E-Business Suite functions are unavailable to users. This provides a clear separation between normal runtime operation and system downtime for patching.

When the patching session is complete, you can disable Maintenance mode, allowing users full access to the newly updated system.

Note: When Maintenance mode is disabled, you can run AutoPatch by using *options=hotpatch* on the command line, if necessary. However, doing so can cause a significant degradation of performance.

See: Preparing your System for Patching, page 2-3.

Applying a Patch Interactively:

Requirement: How do I apply a patch?

After you have determined that you need to patch your system, download the patch and use AutoPatch to apply it. Apply the unified driver to all APPL_TOPs. AutoPatch determines which actions are required for the current APPL_TOP.

Patches may require prerequisite patches and manual steps. Use PAA to generate customized instructions. These instructions contain all the required manual steps that are specific to your system.

Note: Some of the installation instructions generated by PAA may specify pre-install mode. If so, follow the instructions in Pre-Install Mode, page 2-10.

Caution: It is very important that you back up the file system and database before you apply large patches (such as release update packs, product family release update packs, or pre-upgrade patches). If the patching process fails when running the database portion of the unified driver, you will not be able to back out the patch. You must restart the patching process with a restored backup of the file system and database.

To apply a patch

This procedure describes the typical steps for applying a patch. Subsequent procedures describe command line options that change the default behavior of AutoPatch.

1. Log in as applmgr (Applications file system owner) and set the environment:

UNIX:

The environment file is typically APPS<CONTEXT_NAME>.env, and is located under the APPL_TOP. From a Bourne, Korn, or Bash shell, enter the following:

```
$ . APPS<CONTEXT_NAME>.env
```

Windows:

Run %APPL_TOP%\envshell.cmd using either Windows Explorer or the Run command from the Start menu. This creates a Command Prompt window that contains the required environment settings for Oracle E-Business Suite. Run all subsequent commands in this Command Prompt window.

If you are running on a Windows platform, ensure that all necessary tools are installed properly. In addition, all %JAVA_TOP% and %JAVA_TOP%\loadjava.zip files are included in the set CLASSPATH statement of %APPL_TOP%\admin\adovars.cmd.

2. Create a patch top directory, if it does not already exist. Download the patch into a staging directory and unzip the patch into the patch top directory. Do not use the patch subdirectory under the <PROD>_TOP directories as your patch top directory.

3. Change directory to the patch top directory where you unzipped the patch.

4. Review the readme file in the patch top directory.

Review the readme file (README.txt or README.html). It contains an abstract of the patch. If the patch contains manual steps, the readme file will contain instructions for running Oracle Patch Application Assistant (PAA) to generate customized manual steps for your system.

5. If indicated in the patch readme, run PAA to generate customized instructions for applying the patch. You will need to provide the location of your patch top directory and the applmgr password.

```
$ admsi.pl
```

Perform the manual steps contained in the customized instructions generated by PAA. Additional steps may also be detailed depending on the patch, the state of your system, and the products you have installed.

Perform the following steps, in addition to the steps detailed in the customized instructions, to apply the patch.

6. Shut down services.

Run the adstpall.sh script to shut down the services appropriate to your system. You will need to provide the applmgr user name and password.

Note: For more information on patching a multi-node system, see:
Applying Patches to a Multi-Node System, page 5-19.

UNIX:

```
$ adstpall.sh
```

Windows:

```
C:\> adstpall.cmd
```

Note: You must complete all tasks associated with applying a patch before you access Oracle E-Business Suite.

7. Enable Maintenance Mode.

Use the Change Maintenance Mode menu (Option 1) of AD Administration to enable Maintenance mode. See: Enable Maintenance Mode, page 2-3.

8. Start AutoPatch.

Use the *adpatch* command to start AutoPatch from the patch top directory (the directory where you downloaded the patch files). You can customize the way AutoPatch runs by adding arguments to the command line. See Command Line Arguments, page 2-12.

9. Respond to the AutoPatch prompts. You are prompted for the following information required to apply the patch:

- Name of the APPL_TOP where you want to apply the patch
- Log file name: Select a name for the log file, for example, u<patchnum>.log
- Email where you want to receive notifications
- Batch size (default is 1000)
- Database name
- Patch top directory where you unzipped the patch
- Driver file name: Provide the name of the driver file located in the patch top directory, for example, u<patchnum>.drv

10. Apply the driver.

At the AutoPatch prompt for the driver name, specify the name of the driver.

11. Review customizations.

Customized files are registered on the OAM Register Flagged Files page. If AutoPatch displays a message indicating that previously registered, customized files will be replaced by the patch, review those files in the Register Flagged Files page to determine if the customizations need to be reregistered or removed. See: Register Flagged Files, page 1-8.

12. After AutoPatch exits, review the log files.

Review the AutoPatch log file after the application of each driver file for warnings or errors. The log file (named u<patchnum>.log in step 9 is located in <APPL_TOP>/admin/<SID>/log. In addition, some patch tasks may create separate log files in the same directory. If the patching process used multiple workers, each worker creates its own log file. You can also use the View Log Files feature in Timing Reports to view the files. See: Log Files, page 2-3 and View Log Files, page 4-28.

13. Preallocate space for packages, functions, and sequences (optional).

If AutoPatch has modified Oracle E-Business Suite database objects, you may want to run ADXGNPIN.sql and ADXGNPNS.sql to allocate space ("pin") for new packages and sequences in the Oracle System Global Area. These scripts are located in AD_TOP/sql.

See: Pre-allocating Space for Packages and Functions, *Oracle E-Business Suite Maintenance Procedures*.

14. Disable Maintenance Mode.

Use the Change Maintenance Mode menu (Option 2) of AD Administration to disable Maintenance mode.

15. Restart server processes.

After verifying that the patch was applied successfully, start all services. Once the services are running, you can allow users to access the system again.

UNIX:

```
$ adstrtal.sh
```

Windows:

```
C:\> adstrtal.cmd
```

See: Stopping or Starting Application Tier Services, *Oracle E-Business Suite Maintenance Procedures*.

16. Delete or archive AutoPatch backup files (optional).

After you have tested the patched system, you can delete the backup copies of files from the patch top directories to recover disk space, as necessary. Oracle recommends archiving these files if you have space available.

See: Compressing, Archiving, and Deleting Files, *Oracle E-Business Suite Maintenance Procedures*.

Applying Unified Drivers:

Requirement: I received a patch that contains a unified driver. However, the instructions state that I run only the database portion of the patch.

Certain procedures, such as patching with a staged APPL_TOP, may require you to apply only the database portion of a unified driver. In these cases, use command line options to tell AutoPatch which portions of the patch to omit.

Important: AutoPatch will apply all portions of the patch except those that you specifically omit on the command line.

To apply only a portion of a unified driver

1. Follow the instructions in Steps 1 through to 7 in Applying a Patch Interactively, page 5-7.
2. Enter the *adpatch* command as indicated in Step 8, adding the following options on the command line: *nocopyportion,nogenerateportion*. The command line syntax should look like this:

```
$ adpatch options=nocopyportion,nogenerateportion
```


See: Command Line Arguments, page 2-12.
3. At the prompt for the driver name, specify the unified (u) driver. AutoPatch runs the driver, applying only the database portion of the patch.
4. Respond to the AutoPatch prompts. See: AutoPatch, page 2-2.
5. Finish applying the patch as directed in Steps 12 through to 16 in Applying a Patch Interactively, page 5-7.

Testing a Patch Before Applying It:

Requirement: How do I test the effects of a patch on my system before I apply it?

One way to see how applying a patch will affect your system is to first apply it on a test system. If you do not, or cannot, use a test system, you can apply the patch on your production system using the AutoPatch test mode argument (*apply=no*). AutoPatch lists the actions it will take, but does not actually perform any of the actions.

In test mode, AutoPatch reads and validates the patch driver file, reads product file driver files, extracts object modules from product libraries (for version checking), performs version checking, and runs AutoConfig (in test mode). It does not, however, update the database or file system. See: AutoConfig Test Mode, *Oracle E-Business Suite Maintenance Utilities*.

To determine how a patch will affect the files in your system, use the Patch Impact Analysis Report in Patch Wizard. See: Determining Patch Impact on System Files, page 5-36.

To test a patch

1. Follow the steps in Applying a Patch Interactively, page 5-7.

2. When directed to run AutoPatch, add the test mode argument to the command line:

```
$ adpatch apply=no
```
3. Complete steps 11 and 12 in Applying a Patch Interactively, page 5-7. You must also complete steps 14 and 15 if you shut down your servers and enabled Maintenance mode before you ran AutoPatch.

Enabling Password Validation:

Requirement: How can I validate passwords before I apply a patch?

To reduce the time it takes to apply a patch, AutoPatch (by default) does not validate Oracle schema passwords. If you need to enable password validation, you can do so by supplying the validate option (*options=validate*) on the command line when you run AutoPatch.

If you are applying multiple patches, you should use AD Merge Patch to combine the patches (where compatible) so that you apply them in a single AutoPatch session. In this case, you need to validate passwords only once. See: Creating a Merged Patch, page 5-21.

If you have several patches that cannot be merged, you can save time by turning on the validate option only for the application of the first patch, and then leaving it off for the subsequent patches.

To validate passwords

1. Follow the instructions in Applying a Patch Interactively, page 5-7.
2. When directed to run AutoPatch, use the validate command. It should look like this:

```
$ adpatch options=validate
```
3. Complete the remaining steps in Applying a Patch Interactively, page 5-7.

Applying Emergency Patches:

Requirement: Can I apply a patch without shutting down system services?

If an emergency patch can be applied without shutting down services, the customized instructions generated by PAA will explicitly state so. If the customized instructions do not explicitly state this, assume that you need to shut down services and enable Maintenance mode before applying the patch.

Tip: You can always apply documentation patches (Oracle E-Business Suite Online Help) without shutting down services.

To apply an emergency patch

1. Apply the patch on a test version of your production database. Make sure the test copy is recent so that it closely approximates your production system.
2. Run AutoPatch using *options=hotpatch* and apply the patch. You may not have to shut down the server processes. See: AutoPatch Options, page 2-14.

Performing Non-Interactive Patching

You can apply patches interactively or non-interactively. *Interactive* patching means that you supply basic information that AutoPatch needs by responding to a series of prompts. See: Performing Interactive Patching, page 5-6.

Applying a patch *non-interactively* substantially reduces the need for user intervention when AutoPatch processes patching tasks. You create a defaults file that contains much of the information you would have supplied at the AutoPatch prompts. Then, when you run AutoPatch, you specify the name of the defaults file, the location of the patch top directory, the name of a driver file, and other parameters on the command line. AutoPatch performs the remaining actions based on the information in the defaults file.

Caution: You should always back up the file system and database before you apply large patches such as release update packs (RUPs), product family RUPs, or pre-upgrade patches.

Applying a Patch Non-Interactively:

Requirement: How do I apply a patch non-interactively?

Instead of responding to AutoPatch prompts each time you initiate a patching session, you can store the responses in a defaults file. Then you specify the name of the defaults file when you run patches non-interactively. As it runs, AutoPatch uses the responses to complete the information for the corresponding prompts, and completes patch processing with little or no user intervention.

To set up a non-interactive patching session, first create and save a *defaults file* by using the *defaultsfile=<defaults file name>* argument when you run AutoPatch. This causes the information you provide at the prompts, and other pertinent information, to be captured and saved.

Note: AutoConfig automatically creates a defaults file (adalldefaults.txt) each time it runs. This file can be used as a template to create a customized defaults file. However, we recommend that you create the defaults file as described in this procedure.

To apply a patch non-interactively

1. Create the defaults file.

Start AutoPatch, using the *defaultsfile=* argument, and specify the file name and the path to the defaults file. This creates a defaults file for the current environment.

UNIX:

The file must be under the \$APPL_TOP/admin/<SID> directory, where <SID> is the database name (ORACLE_SID/TWO_TASK). For example:

```
$ adpatch defaultsfile=$APPL_TOP/admin/testdb1/adpatchdef.txt
```

Windows:

The file must be under the %APPL_TOP%\admin\<SID> directory, where <SID> is the database name (LOCAL). For example:

```
C:\> adpatch defaultsfile=%APPL_TOP%\admin\testdb1\adpatchdef.txt
```

2. Run AutoPatch to the point where it prompts for the directory where the Oracle E-Business Suite patch has been unloaded. Enter *abort* at this prompt.
3. Verify that the defaults file exists.
4. Run AutoPatch non-interactively to apply a single patch driver, all drivers, or any of the other procedures in this section.

Applying a Single Patch Driver:

Requirement: How do I apply a single patch driver non-interactively?

If you have created a defaults file, specify AutoPatch to run non-interactively and specify the location and name of the defaults file and the driver.

To apply a single patch driver

1. Create the defaults file as described in Applying a Patch Non-Interactively, page 5-13.
2. Follow steps 1 through to 7 in Applying a Patch Interactively, page 5-7.
3. Run the AutoPatch command, adding the following arguments: location of the defaults file (*defaultsfile=*), a name for the log file (*logfile=*), location of the patch top directory (*patchtop=*), name of the driver file (*driver=*), number of workers to use for applying the patch (*workers=*), and *interactive=no*.

For example, if the defaults file is APPL_TOP/admin/testdb1/def.txt, the driver file is u1234567.drv for patch 1234567 (located in APPL_TOP/patches/1234567), you will use three parallel workers, and the AutoPatch log file name is 1234567.log, you would enter the following.

UNIX:

```
$ adpatch defaultsfile=$APPL_TOP/admin/testdb1/def.txt \
logfile=1234567.log

patchtop=$APPL_TOP/patches/1234567 driver=ul234567.drv \
workers=3 interactive=no
```

Windows:

```
C:\> adpatch defaultsfile=%APPL_TOP%\admin\testdb1\def.txt
logfile=1234567.log patchtop=%APPL_TOP%\patches\1234567
driver=ul234567.drv workers=3 interactive=no
```

4. Perform the remaining steps in Applying a Patch Interactively, page 5-7 (as necessary).

Applying a Non-Standard Patch:

Requirement: I need to apply a patch that was not created with the standard patch naming convention. I would like to apply it non-interactively.

A *non-standard* patch is one where the structure is standard, but the naming convention is not. That is, the last component of the patch directory is not a 6- to 8-digit number, or the patch driver files are not named **<patchnum>.drv*, or both. Most merged patches are non-standard because of the way they are named.

To apply a non-standard patch

1. Create the defaults file as described in Applying a Patch Non-Interactively, page 5-13.
2. Follow steps 1 through to 7 in Applying a Patch Interactively, page 5-7.
3. Run the AutoPatch command as described in Applying a Single Patch Driver, page 5-14. For the *driver=<values>* argument, use a comma-separated list of the patch driver names.
4. Perform the remaining steps in Applying a Patch Interactively, page 5-7 (as necessary).

Restarting a Non-Interactive AutoPatch Session:

Requirement: AutoPatch failed with an error while I was applying patches non-interactively. I have resolved the issue that caused the error and want to restart the failed session.

When AutoPatch is running non-interactively and encounters an error, it exits to the operating system and reports a failure. The restart argument is intended specifically for this circumstance. When AutoPatch sees the *restart=yes* argument, it assumes that there is an old session, and expects to find one. If it cannot, it will fail. Do *not* specify *restart=yes* to start a new AutoPatch session.

To restart a non-interactive AutoPatch session

1. Look through the log files, diagnose the error, and fix it.
2. Use the same command line options that you used initially, but add *restart=yes*. As an illustration, the following command can be used to restart the previous example given of Applying a Single Patch Driver, page 5-14.

UNIX:

```
$ adpatch defaultsfile=$APPL_TOP/admin/testdb1/def.txt \
logfile=1234567.log patchtop=$APPL_TOP/patches/1234567 \
driver=u1234567.drv workers=3 interactive=no restart=yes
```

Windows:

```
C:\> adpatch defaultsfile=%APPL_TOP%\admin\testdb1\def.txt
logfile=1234567.log patchtop=%APPL_TOP%\patches\1234567
driver=u1234567.drv workers=3 interactive=no restart=yes
```

Warning: Do not omit any of the original command line arguments, as this could change the behavior of AutoPatch and cause unpredictable results.

Abandoning a Non-Interactive AutoPatch Session:

Requirement: AutoPatch failed with an error while I was applying patches non-interactively. I do not want to restart the failed session, but would rather apply another patch non-interactively.

When you specify *interactive=no* on the AutoPatch command line, AutoPatch expects that there is no existing failed session. AutoPatch aborts if it finds restart files from a failed session. Running AutoPatch with the *interactive=no* and *restart=yes* command line arguments restarts the previously incomplete session.

To start a completely new AutoPatch session when there is an existing failed session, specify *interactive=no* and *abandon=yes* on the AutoPatch command line. With this command, AutoPatch deletes the restart files and any leftover database information from the failed session.

Caution: If you use the *abandon=yes* argument, you cannot subsequently restart the failed session as the restart files are no longer available. Do not specify *abandon=yes* if you might want to restart the session later.

To abandon a non-interactive AutoPatch session

1. Verify that you do not want to restart the previous failed session.
2. Start AutoPatch with the *abandon=yes* option:

UNIX:

```
$ adpatch defaultsfile=$APPL_TOP/admin/testdb1/def.txt \
logfile=7654321.log patchtop=$APPL_TOP/patches/7654321 \
driver=c7654321.drv workers=3 interactive=no abandon=yes
```

Windows:

```
C:/> adpatch defaultsfile=%APPL_TOP%\admin\testdb1\def.txt
logfile=7654321.log patchtop=%APPL_TOP%\patches\7654321
driver=c7654321.drv workers=3 interactive=no abandon=yes
```

Patching NLS Systems

These patching procedures apply regardless of whether you are running American English (US) and one additional language, or American English (US) and several additional languages. If your system uses multiple languages, you can use AD Merge Patch to create merged patches in the following ways:

- A single, merged patch that contains all languages (including US).
- One merged patch for US and a second merged patch for all other languages.
- A separate merged patch for each language.

Each of these options has advantages and disadvantages. The first option is the simplest to apply because there is only one patch involved. However, it requires the longest system downtime of the three options, as the patch can be large. The second option is relatively easy to apply, and allows you to bring US users back online while you apply the patch for non-US languages. The third option is the most difficult to apply, but allows you to bring users for various non-US languages back online in a phased approach, which could be useful for multi-national corporations in some situations. Oracle generally recommends the second option because it provides the best compromise between easy application and minimum downtime.

When merging multiple language patches, AD Merge Patch converts the character set according to the NLS_LANG variable in the Oracle E-Business Suite environment file. If you changed your character set since the initial installation, you might need to update the NLS_LANG variable. If this variable is not set properly, run OAM AutoConfig to update the Oracle E-Business Suite context with the correct character set information, then run the AutoConfig script to recreate the Oracle E-Business Suite environment file. Reset the environment using the new environment file before merging patches.

See: AD Merge Patch, page 2-20, and Managing Configuration Parameters, *Oracle E-Business Suite Maintenance Utilities*.

Applying a Single Patch to an NLS Installation:

Requirement: I need to apply a single patch to an Oracle E-Business Suite NLS installation.

If an Oracle E-Business Suite system contains languages other than American English (US), the recommended method is to apply the US patch first and then apply the

translation patch for each installed language. If you have installed more than one additional language, you can merge all the translation patches and apply them as a single, merged NLS patch.

You can also merge US patches with the additional language patches. However, depending on your downtime window and your system topology, it may be necessary to keep the US and non-US patches separate. See: Applying an Emergency NLS Patch, page 5-19.

To apply a single patch to an NLS installation

This procedure assumes that you will apply US and language patches separately.

1. Use AutoPatch to apply the patch driver of the US patch.
2. Use AutoPatch to apply the patch drivers of each NLS patch. If you have merged the individual NLS patches for a system that runs multiple languages, apply the driver for the merged NLS patch. See: Applying a Patch Interactively, page 5-7.

Applying Multiple Patches to an NLS Installation:

Requirement: I need to apply several patches to an Oracle E-Business Suite NLS installation.

If an Oracle E-Business Suite system contains multiple languages other than American English (US) and you are applying multiple patches for each language, the recommended method is to merge all US patches into a single patch and all patches for every non-US language into a single patch. Then apply the merged US patch followed by the merged language patch.

You can also merge US patches with the additional language patches or merge each language in separate language-specific patches. Depending on your downtime window and your system topology, it may be necessary to keep the US and non-US patches separate. This procedure assumes that you will apply US and language patches separately.

See: Applying an Emergency NLS Patch, page 5-19.

To apply multiple patches to an NLS installation

This example assumes the system has American English, French, and German installed.

1. Use AD Merge Patch to merge the US (American English) patches into a single patch.
2. Use AD Merge Patch to merge the French and German patches into a single NLS patch.
3. Use AutoPatch to apply all drivers of the merged US patch.
4. Use AutoPatch to apply all drivers of the merged NLS patch.

Applying an Emergency NLS Patch:

Requirement: I do not want to shut down my system to apply all the translation patches.

When applying a patch that requires a language translation, you can defer the application of the database portion of the translation driver until after you have applied the other drivers. This allows the system to be available to all users during the time the language translation is being applied. Remember that you can merge NLS patches if you have several to apply.

See: Creating a Merged Patch, page 5-21.

To apply an emergency NLS patch

1. Shut down the system (all services) and log off users.
2. Enable Maintenance Mode.
3. Apply the US copy portion of the unified driver to all servers.
4. Apply the US database portion of the unified driver to the administration server.
5. Apply the US generate portion of the unified driver to all servers.
6. Disable Maintenance Mode.
7. Bring up the system and allow US users to log on.
8. Apply the translation copy portion of the unified driver to all servers using *options=hotpatch* on the command line.
9. Apply the translation generate portion of the unified driver to all servers using *options=hotpatch* on the command line. See: AutoPatch Options, page 2-14.
10. Allow translation users to log on.
11. Apply the translation database portion of the unified driver to the administration server using *options=hotpatch* on the command line.

Applying Patches to a Multi-Node System

In a multi-node system, servers are installed on more than one node. The core technology directories (admin, ad, au, and fnd) and all product directories are installed under the APPL_TOP on all nodes, except for any node that contains only a database.

Oracle E-Business Suite Release 12 introduced the concept of *unified APPL_TOPs*. On a multi-node system, exactly the same files are stored on every APPL_TOP. This architectural enhancement allows you to switch the function of a node easily if another

node fails, by starting the application services on a different machine, with only minimal changes to the overall configuration. When maintaining this type of system, patches will perform the same tasks in the file system, but the database actions will be performed only once.

Alternatively, a system can be configured to share an APPL_TOP in situations where failover is not a concern. In a *shared application tier file system*, the APPL_TOP, COMMON_TOP, OracleAS 10.1.2 Oracle home, and OracleAS 10.1.3 Oracle home file systems are installed on a shared disk resource that is mounted on each node in the system. Any changes made to a shared file system environment are immediately available on all nodes.

For more information, see: Managing Distributed Installations, *Installing Oracle E-Business Suite*; Shared Application Tier File System, *Oracle E-Business Suite Concepts*; My Oracle Support Knowledge Document 384248.1, *Sharing the Application Tier File System in Oracle E-Business Suite Release 12*; and Patching the APPL_TOP in a Shared Application Tier File System, page 5-20.

Running a Unified Driver on Multiple Nodes:

Requirement: How do I run a unified driver patch on a multi-node system?

Apply the unified driver to all APPL_TOPs. AutoPatch determines which actions in the unified driver are required for the current APPL_TOP.

To apply a unified driver on multiple nodes

1. Complete Steps 1 through to 9 in Applying a Patch Interactively, page 5-7.
2. Apply the unified driver on the node where the administration server is located.
3. Apply the unified driver on the node where the concurrent processing server is located.
4. Start the concurrent managers.
5. Apply the unified driver on the remaining nodes in the application tier.
6. Disable Maintenance mode.
Use the Change Maintenance Mode menu of AD Administration to disable Maintenance mode. See: Changing Maintenance Mode, *Oracle E-Business Suite Maintenance Utilities*.
7. Start other services and restart the Web services, if necessary.

Patching the APPL_TOP in a Shared Application Tier File System:

Requirement: How do I apply patches to a system with a shared application tier file system configuration?

A traditional multi-node system requires the application tier file system on each node. In a shared application tier file system, the APPL_TOP, COMMON_TOP, 10.1.2 Oracle home, and 10.1.3 Oracle home file systems are installed on a shared disk resource mounted to each node in the system. These nodes can be used to provide standard application tier services, such as forms, Web, and concurrent processing. Any changes, including patching, made to a shared file system are immediately visible on all nodes.

Although it is possible to apply patches from any node, Oracle recommends you choose one node as primary and apply all patches from this node. When you choose a primary node, AutoPatch and AutoConfig log files are consistently written to the same location.

You can further reduce patching downtime by employing more than one node when applying patches. See: Distributing the Processing Tasks, page 5-25.

To patch the APPL_TOP in a shared application tier file system

For the APPL_TOP of a shared application tier file system, apply the patch once, as outlined in Applying a Patch Interactively, page 5-7.

Reducing Downtime

This section contains procedures designed to help reduce the time it takes to apply patches, and consequently reduce the time your system is offline and unavailable to users.

Creating a Merged Patch:

Requirement: I need to apply several patches. Is there any way to reduce the time it takes to apply them?

You can merge multiple patches into a single patch by using *AD Merge Patch*. This AD command line utility merges multiple AutoPatch-compatible patches into a single, integrated patch. After the merged patch is created, you use AutoPatch to apply it in a single operation. Applying a merged patch reduces the time it takes to complete the patching process. See: AD Merge Patch, page 2-20.

In general, you can safely merge any Oracle E-Business Suite patch with another Oracle E-Business Suite patch. Patches can and should be merged with their listed prerequisite patches to make patch application easier.

Note: AD Merge Patch can merge patches for a specific platform with a generic patch, or patches with different source character sets. It cannot merge patches of different releases, different parallel modes, or different platforms. AD Merge Patch notifies you if you try to merge incompatible patches.

Patches that affect the Applications DBA (AD) product must be handled separately. AD patches can be merged with other AD patches, but AD patches and non-AD patches cannot be merged because AD patches may change the AutoPatch utility itself. Merged

AD patches must be created separately and applied before you apply non-AD patches.

When merging patches on systems that use languages other than American English, different considerations apply. For information about merging and applying NLS patches, see *Applying Multiple Patches to an NLS Installation*, page 5-18.

Use either the command-line procedure or the OAM (Web-based) procedure to create a merged patch.

Command-line procedure

1. Set the environment to indicate the location of the configuration parameter that define your system:

UNIX:

The environment file is typically APPS<CONTEXT_NAME>.env, and is located under the APPL_TOP. From a Bourne, Korn, or Bash shell, enter the following:

```
$ . APPS<CONTEXT_NAME>.env
```

Windows:

Run %APPL_TOP%\envshell.cmd using either Windows Explorer or the Run command from the Start menu. This creates a Command window that contains the required environment settings for Oracle E-Business Suite. Run all subsequent commands in this Command window.

2. Create directories.

AD Merge Patch merges the set of files in individual patches under a source directory according to file revision and copies them to a destination directory. Run AD Merge Patch from the parent directory of the source directory. The destination directory should be located in the same parent directory.

In the patch top area, create a source directory and a destination directory. Choose any name for these directories.

For information on setting up the directories, see: *Source and Destination Directories*, page 2-20.

3. Download patches.

Download all the patches you want to merge to the source directory.

4. Review the patch readme files.

Some patches require special attention and additional steps if the patch is to be merged. Carefully review the readme file and follow the instructions.

5. Run AD Merge Patch.

The merged patch is created in the destination directory. Run AD Merge Patch and supply the arguments for the destination directory name, and the source directory name.

```
$ admrgpch -s <source directory> -d <destination directory>
```

You can specify the merged patch name with *-merge_name <name>*, or accept the default.

You can merge patches before you unzip them by running AD Merge Patch with the *-manifest* command line argument. You must initially create a manifest file, which lists only the zip files. AD Merge Patch unzips these files into the source directory and includes them, along with any existing files in the source directory, in the merged patch. To use a manifest file, add the *-manifest* argument to the command line.

```
$ admrgpch -s <source directory> -d <destination directory> \
-merge_name <name> [-manifest <manifest filename>]
```

For example, if you have four patches named 1234561, 1234562, 1234563, and 1234564 located in the source directory /d01/patch_merge/source, and the destination directory is /d01/patch_merge/destination. To create a merged patch named "merge99", you would use commands similar to the following:

UNIX:

```
$ cd /d01/patch_merge
$ admrgpch -s /d01/patch_merge/source \
-d /d01/patch_merge/destination \
-merge_name merge99
```

Windows:

```
C:\> cd \d01\patch_merge
C:\> admrgpch -s d:\patch_merge\source -d d:\patch_merge\destination
-merge_name merge99
```

For more information on creating a manifest file, see: Merging Zipped Patches, page 2-21.

Tip: If you do not want to create a manifest file, unzip all the patches to be merged into the source directory and omit the manifest file argument.

6. Check AD Merge Patch log files.

After AD Merge Patch runs, check the admrgpch.log file for errors. The file is located in the current working directory (where AD Merge Patch was run).

7. Apply the patch.

After a merged patch is created, apply it just like a single patch, either interactively or non-interactively. If you apply it non-interactively, follow the instructions for Applying a Non-Standard Patch, page 5-15.

OAM (Web-based) procedure

1. Access the Oracle Applications Manager.

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM.

2. From the Patch Wizard Tasks table, click the Tasks icon corresponding to Download Patches.

The Download Patches page appears.

Download Patches Page - Top

The screenshot shows the 'Download Patches' page in the Oracle E-Business Suite Patch Wizard. The page has a blue header with navigation links: Support, Cart, Setup, Home, Logout, Help. Below the header, there's a breadcrumb trail: Applications Dashboard > Site Map > Applications System:r121test > Patch Wizard >. The main content area is titled 'Download Patches : r121test'. It shows the last updated time as 18-Mar-2009 14:48:20, the staging directory as /slot/ems1227/appmgr/stage, and the Oracle MetaLink User ID as muralikumanduri@oracle.com. There are 'OK' and 'Cancel' buttons. The 'Patch Selection' section has a message: 'You must set up your MetaLink credentials before downloading patches.' Below this is a 'Patch List' field with a text input and a 'Download' button. A note below the field says: 'Enter Patch numbers, separated by commas ex: 1234567, 8765432_P12.AD.A, 9888888.AD.B. Maximum number of allowed characters is 175'. There are three 'Options' radio buttons: 'Download only' (selected), 'Download and Analyze', and 'Download, Analyze and Aggregate Patch Impact'. The 'Merge Options' section has a checkbox for 'Automatically merge downloaded patches' which is checked. Below it is a 'Merged Patch Name' field with the value 'mrg_2009031894820'. There are three 'Merging Strategy' radio buttons: 'One merged patch: US and non-US' (selected), 'Two merged patches: US; non-US', and 'Multiple merged patches: US; language1;language2;...'.

3. Enter the patch numbers of the patches you want to merge in the Patch List field.
4. In the Merge Options area, select Automatically merge downloaded patches. Also, specify the merged patch name and the merging strategy in this section. Click OK to begin downloading and merging the patches.

Deferring the Upload of Patch Information:

Requirement: Is there any task in the AutoPatch process that I can defer until after the system downtime?

AutoPatch uploads patch history information to the database automatically each time it successfully applies a patch. The time required for the upload may be substantial depending on the size of the patch. You can defer this task during the AutoPatch session and upload the patch history information while the Oracle E-Business Suite system is in use.

When you defer the uploading of patch history information to the database, AutoPatch writes it to the patch information files:

- javaupdates<YYYYMMDDhhmiss>.txt, which contains information about changes to Java files

- adpsv<YYYYMMDDhhmiss>.txt, which contains information about changes to all files except Java files

Both files are located in the APPL_TOP/admin/<SID> directory. After the AutoPatch session is complete and the Oracle E-Business Suite system is back online, run AutoPatch with the *uploadph=y* argument to upload the contents of the patch information files to the database.

To defer the upload of patch information

1. Perform preparatory patch steps. See: Applying a Patch Interactively, page 5-7.
2. Apply the patch by running AutoPatch with the defer patch history information upload option. See: phtofile AutoPatch option, page 2-18.

```
$ adpatch options=phtofile
```
3. After the patch session is complete, disable Maintenance mode, restart all services and allow users to access the system.
4. Run AutoPatch with the upload patch history information argument. See: uploadph AutoPatch option, page 2-14

```
$ adpatch uploadph=y
```

AutoPatch uploads the patch history information to the database and exits.

Distributing the Processing Tasks:

Requirement: How can I use the processing capacity on the other nodes in my system when I apply a patch?

Creating a multi-node system with a shared application tier file system saves patching time because you apply patches only once, on the primary node. However, when applying a patch that includes a large number of processes that affect the database, you can reduce the downtime even further by distributing the worker processes across multiple servers on multiple nodes.

This distributed AD feature of AutoPatch and AD Controller allows you to assign workers to run not only on the primary node but also on the secondary nodes that share the application tier file system.

See: Distributing Processing Tasks Across Nodes, *Oracle E-Business Suite Maintenance Utilities*.

To distribute processing tasks

1. Start AutoPatch on the primary node with the following command options:

```
$ adpatch workers=<total number of workers> \
localworkers=<number of workers on primary node>
```

For example, this command runs an AutoPatch session with three workers on the primary node and five workers on a remote node:

```
$ adpatch workers=8 localworkers=3
```

2. Start an interactive AD Controller session on each of the secondary nodes that will run workers by using the *distributed=y* argument.

```
$ adctrl distributed=y
```

3. On each secondary node, AD Controller prompts for the range of workers to start. For example, to start workers 5 through 8 on a node, enter "5-8" in response to the "Enter the worker range" prompt.

```
Enter the worker range: 5-8
```

Note: Workers must be in contiguous groups. For example, you cannot start workers 4, 6, 8 on one node, and 5, 7, 9 on another.

Using a Staged Applications System:

Requirement: How can I reduce the time my system is down when I apply large patches?

A staged Oracle E-Business Suite system represents an exact copy (clone) of your production system, including all APPL_TOPs as well as a copy of the production database. You can apply patches to a staged system while the production system remains in operation. Then you connect the staged system to the production system, update the database, and synchronize the APPL_TOPs.

The downtime for the production system begins only after all patches have been successfully applied to the staged system, and you have tested the newly patched environment.

Note: The AD codelevels of the staged system and the production system must be identical. You cannot use a staged system to apply AD release update packs (RUPs) or new product patches associated with a pre-upgrade patch.

After the patches are applied to the staged system, and the production system is updated, you must export applied patches information from the staged system and import it to the production system. This ensures that the OAM patch history database in the production system is up-to-date and that you can continue to use patch-related features.

There are several phases to creating a staged system, patching it, and updating the production system.

Complete Prerequisite Tasks

A staged system must be an exact duplicate of the production system. Each physical APPL_TOP in the production system must exist in the staged system. Note the following conditions:

- The APPL_TOPs in the staged system must have the same name as the APPL_TOPs in the production system to ensure consistency of the patching history in the production system. When patch history data is imported from the staged system to the production system, each system must have the same APPL_TOP names.
- The database in the staged system should have a different <SID> to avoid accidental connections to the production system. Passwords, ports, and any process or service-related parameters can be changed to further reduce risks.
- You must have different Oracle E-Business Suite system names for the staged and the production systems. AutoPatch will correct the historical information.

Complete the following tasks:

1. Update the production system snapshot.

Verify that your system current view snapshot is up-to-date by running the Maintain Current Snapshot task in AD Administration. Run the task on all APPL_TOPs in your system. See: Maintain Applications Files Tasks, *Oracle E-Business Suite Maintenance Utilities*.

2. Create the staged system.

Create a clone of the production database, the application tier components, and each APPL_TOP to use as the staged system. See: Cloning, *Oracle E-Business Suite Maintenance Procedures*.

Apply Patches to the Staged System

You patch the staged system in the same way that you patch any other system by using AutoPatch to apply the patch drivers. See AutoPatch, page 2-2 and Performing Interactive Patching, page 5-6 for details. If you need to apply more than one patch, consider merging the patches to further reduce downtime.

Important: Do not apply any other patches to the production system during this process. If you do, you will have to recreate the staged system.

Apply Patches to the Production System

After the patching is complete on the staged system, you are ready to update the production system.

1. Enable a connection from the staged system to the production system.

Add the production system information to the tnsnames file on the staged system. Update the s_ifile AutoConfig variable in the APPL_TOP context file on the staged system to "<AS Oracle Home>/network/admin/globaltns.ora". For instructions on updating configuration parameters and variables, see: Managing Configuration Parameters, *Oracle E-Business Suite Maintenance Procedures*.

2. Shut down the production system.

On the production system, set the environment, shut down all services, and enable Maintenance mode.

3. Update the production database.

On the staged system, set the environment, then run AutoPatch to apply patches to the production system.

For each patch, apply the driver for the patch with the *options=nocopyportion,nogenerateportion* options to the AutoPatch start command, *adpatch*. Make sure the database name in the AutoPatch prompt is correct.

4. Update the production APPL_TOPs.

Synchronize all the production APPL_TOPs with the staged APPL_TOPs. To minimize downtime, you can complete this task while the production database is being updated. For example, on UNIX you can either do a simple copy with *cp*, or use utilities such as *rdist*, *rcp*, or *zip*.

Note these conditions:

- If your staged system contains multiple APPL_TOPs, you must synchronize each one to the respective APPL_TOP on the production system.
- If you share a single APPL_TOP, you need to synchronize only one APPL_TOP.
- The COMMON_TOP directory, which may reside outside the APPL_TOP, must be updated for each APPL_TOP.

Certain configuration files, log directories, and environment scripts are specific to an APPL_TOP. You do *not* have to copy the following files and directories when you copy the APPL_TOP:

- \$APPL_TOP/admin/<SID>
- \$FND_TOP/out
- \$FND_TOP/log
- \$COMMON_TOP/html/_pages
- \$APPL_TOP/log/

If you use the *rdist* utility, you can use a distfile to exclude these files. Run AutoConfig on the production APPL_TOP to configure the environment.

Create a Complete Production Patch History

At this point, the copy and generate portions of the patch history for patches applied to the staged system are stored in the staged system database, and the database portion of

the patch history is stored in both the staged system database and the production system database. To create a complete copy of the patch history on the production system, use the `adphmigr.pl` utility to load the applied patches information from the copy and generate portions of all patches into the production database.

For each patch applied to the staged system, you must export patch history for each APPL_TOP in the staged system and import it for the corresponding APPL_TOP in the production system. Users do not have to log off the production system while you perform the import and export tasks. Finish consolidating the production system patch history before you apply any additional patches to it, or before you use any patch-related Oracle Applications Manager (OAM) features.

1. Export applied patches information.

From the staged APPL_TOP, run the `adphmigr.pl` script (located in `<AD_TOP>/bin`). Enter `adphmigr.pl -help` to see all valid options for running the utility. Oracle recommends you export patch history separately for each APPL_TOP, as you will need to import it separately.

Specify `nodatabaseportion=y` on the command line to ensure that the patch history data for the database portion of the patches applied is not exported. For example:

```
$ perl $AD_TOP/bin/adphmigr.pl userid=apps/apps \
startdate='2003/10/10 00:00:00' enddate='2003/14/10 00:00:00' \
appsystemname=stage appltopname=tafnwl nodatabaseportion=Y
```

You can obtain the `appsystemname` and the `appltopname` by looking up the values of `s_atName` and `s_systemname` in the AutoConfig-generated environment XML file.

2. Verify export data.

The script generates two data files for each run of AutoPatch on the staged APPL_TOP, one for java updates and one for all other patch actions. Check `adphmigr.log` to ensure the data files represent the patch runs you wish to export, and that the start and end times specified did not include any unwanted AutoPatch runs.

3. Import applied patches information.

For each APPL_TOP in the production system, copy the data files extracted for the corresponding APPL_TOP in the staged system to the `<APPL_TOP>/admin/<SID>` directory. The next time you run AutoPatch in this APPL_TOP, it will automatically upload these files.

To load the files immediately, run AutoPatch interactively, answer the prompts until you are prompted for the name of the patch driver file. At that point, exit AutoPatch by entering `abort` at the patch driver file prompt.

Important: The FNDLOAD method of transferring patch history is no longer recommended. The `adphmigr.pl` script method is easier

to use and more efficient.

Keeping Patches Current

Each time you apply a patch, AutoPatch stores the associated information in the Oracle Applications Manager (OAM) patch history database. The OAM Patch Wizard and Applied Patches tools provide graphical user interfaces that you can use to query the database for a complete history of patches applied to your system, to search for the patches you have already applied, and to determine existing patches that should be applied to keep your system current. Patch Wizard determines which recommended patches you should apply to your system, and the impact of applying these patches.

Before running Patch Wizard, you must set up My Oracle Support credentials. You must also set up preferences and filters that govern the way you download patches. To see how to complete these one-time tasks, as well as learn about navigating the Patch Wizard pages and submitting requests, see: Patch Wizard, page 3-1.

Creating a List of Recommended Patches:

Requirement: How do I determine if there are patches that I have not yet applied?

Patch Wizard creates a list of patches by comparing the patches in the patch history database against a list of recommended patches in a Patch Information Bundle file downloaded from My Oracle Support. It then determines which of the recommended patches you should apply to your system and reports the contents of the patch and the files that it will update when applied.

It does not report on all available patches, but only patches at the current codeline, such as high-priority patches, and those that update your system to a new codeline (pre-upgrade patches).

To see a list of patches recommended for your system

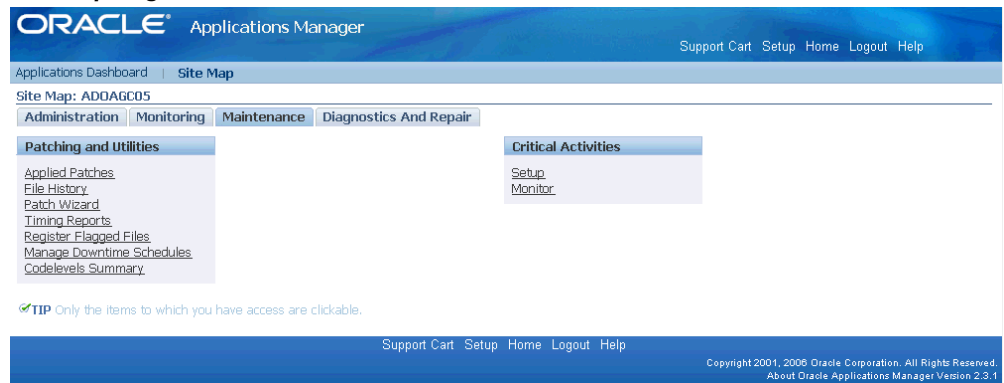
1. Access Oracle Applications Manager.

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM. All procedures in this section begin with the Site Map.

2. Access the Patch Wizard home page.

From the Site Map (Maintenance tab), click Patch Wizard under the Patching and Utilities heading.

Site Map Page

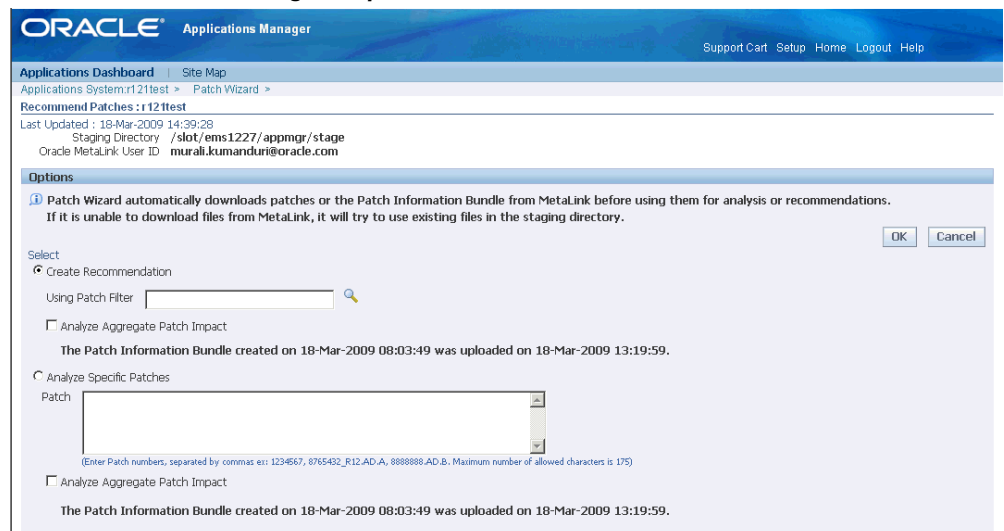


The Patch Wizard home page appears.

3. Submit a request for recommended patches.

From the Recommend Patches page, select a patch filter. Use the magnifying glass icon to see a list of available patch filters.

Recommend Patches Page - Top



After you have entered the request information, click OK. The results of your request are shown in the Results section of the Patch Wizard main page. You can also schedule the request for a future date.

4. Track the status of your request.

From the main page, you can track the status of your recommended patch request. Click the Job Status icon for the Recommend/Analyze Patches task.

Job Status Page

ORACLE® Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System: ADOACC04 > Patch Wizard >

Job Status: Recommend/Analyze Patches: ADOACC04

Last Updated : 11-Aug-2006 14:37:05

New Search Modify Search

Details	Request ID	Program	Phase	Status	Requestor	Requested Start Date	Duration	Wait Time
☐ Hide	5265804	PatchWizard - Recommend Patches (Request Set SubmitAdvisorCriteria)	Running	Paused	SYSADMIN	11-Aug-2006 14:35:44	00:00:01	00:00:01

Short Name: FNDRSSUB1243
 Application Name: Applications DBA
 Submission Date: 11-Aug-2006 14:35:44
 Actual Start Date: 11-Aug-2006 14:35:45
 Completion Date: 11-Aug-2006 14:35:45
 Style: Portrait, Program Name: noprint, Copies: 0, Language:
 Print to:
 Notify:
 Parameters: 50, 1408
 Repeat Interval: PatchWizard - Recommend Patches
 Completion Text:

Priority: 50
 Responsibility: System Administration
 Language: AMERICAN
 Territory: AMERICA
 Numeric Characters:

Sub Requests Cancel View Diagnostics Manager Log Request Log Detailed Logs Environment

✓ **TIP** Duration is the total time(HRS:MI:SS) the request has been running or the request ran.
 ✓ **TIP** Wait Time is the time(HRS:MI:SS) the request has waited.
 ✓ **TIP** To display the available actions on a request, please click on show details.

Add to Support Cart

Support Cart Setup Home Logout Help

The Job Status page displays summary information. If you click the Show/Hide icon corresponding to your request ID, the page displays more details. For more information about the fields and functions on this page, see: Patch Wizard, page 3-1.

Downloading Recommended Patches:

Requirement: How do I use Patch Wizard to download patches?

Patch Wizard can download patches based on either the list created by the "recommend patches" request or any list of patches entered in the Download Patches page.

The Download Patches page prompts you for information about the patches to download, then downloads them directly from My Oracle Support. The Merge Options section of this page defines how patches should be merged after they are downloaded.

To download patches using Patch Wizard

1. Access Oracle Applications Manager.

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM. All procedures in this section begin with the Site Map.

2. Access the Patch Wizard home page.

From the Site Map (Maintenance tab), click Patch Wizard under the Patching and Utilities heading.

Site Map Page

ORACLE Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Site Map: ADOAGC05

Administration Monitoring Maintenance Diagnostics And Repair

Patching and Utilities

- Applied Patches
- File History
- Patch Wizard
- Timing Reports
- Register Flagged Files
- Manage Downtime Schedules
- Codelevels Summary

Critical Activities

- Setup
- Monitor

TIP Only the items to which you have access are clickable.

Support Cart Setup Home Logout Help

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About Oracle Applications Manager Version 2.3.1

The Patch Wizard home page appears.

Patch Wizard Home Page

ORACLE Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System: ADOAGC05 >

Patch Wizard : ADOAGC05 Select Feature Applied Patches Go

Last Updated : 2006/Oct/11 17:29:08

Patch Wizard Tasks

Task Name	Description	Tasks	Job Status
Patch Wizard Preferences	Set download, merge, and stage area preferences		
Define Patch Filters	Create custom patch filters		
Recommend/Analyze Patches	Submit requests for patch advice or analysis		
Download Patches	Submit requests to download patches		
Aggregate Patch Impact	Aggregate Patch Impact		

Filter Criteria

Filter Name contains [text]

Completion Date is [date]

(yyyy/MM/dd)

Go

Recommended Patches Results

Previously submitted Filter Names/Patch Lists that do not appear in the Recommended Patches Results section have been purged according to the frequency setting in Purge Concurrent Request. Change the frequency setting in Applications Dashboard > Critical Activities if needed.

Filter Name/ Patch List	Total (Applied & Unapplied)	Unapplied	Requested By	Completion Date	Run Status	Request Set	Details
Recommended Patches and New Codelevels	1	1	SYSADMIN	2006/Oct/11	Normal	280040	

3. Submit a request to download patches.

Click the Tasks icon for Download Patches. The Download Patches page appears.

Support Cart Setup Home Logout Help

Applications Dashboard Site Map

Applications System.r121test > Patch Wizard >

Download Patches : r121test

Last Updated : 19-Mar-2009 14:48:20

Staging Directory /slot/ems1227/appmgr/stage

Oracle MetaLink User ID murali.kumanduri@oracle.com

OKCancel

Patch Selection

You must set up your Metalink credentials before downloading patches.

Patch List

Enter Patch numbers, separated by commas ex: 1234567,8754321_R12.AD.A,8888888.AD.B. Maximum number of allowed characters is 175

Options

☐ Download only
(Download the exact list of patches above)

☐ Download and Analyze
(Download only patches listed above that have not been applied and their prerequisite patches)

☒ Download, Analyze and Aggregate Patch Impact
(Download only patches listed above that have not been applied and their prerequisite patches, analyze them, and compute aggregate patch impact)

Merge Options

☐ Automatically merge downloaded patches
(Merge happens only if all patches are downloaded successfully)

Merged Patch Name

☒ One merged patch: US and non-US

☐ Merging Strategy

☐ Two merged patches: US; non-US

☐ Multiple merged patches: US; language1;language2;...

Another option is to click the Details icon for a recommended patch request in the Results section of the Patch Wizard home page.

Recommended Patches Results							
Previously submitted Filter Names/Patch Lists that do not appear in the Recommended Patches Results section have been purged according to the frequency setting in Purge Concurrent Request. Change the frequency setting in Applications Dashboard > Critical Activities if needed.							
Filter Name/Patch List	Total (Applied & Unapplied)	Unapplied	Requested By	Completion Date	Run Status	Request Set	Details
Recommended Patches and New Codelevels	1	1	SYSADMIN	2006/Oct/11 02:51:41	Normal	280040	
Recommended Patches	0	0	SYSADMIN	2006/Oct/11 02:32:16	Normal	280014	
4502603	1	1	SYSADMIN	2006/Oct/09 00:09:09	Warning	279849	
4502400	1	1	SYSADMIN	2006/Oct/08 23:52:48	Warning	279809	
Recommended Patches and New Codelevels	1	1	SYSADMIN	2006/Oct/08	Normal	279792	

5-34 Oracle E-Business Suite Patching Procedures

Recommended Patches Results Page

ORACLE Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System: ADOAGC03 > Patch Wizard >

Recommended Patches Results : ADOAGC03

Last Updated : 10-Aug-2007 21:11:44

Patch Filter/Patch ID: **Recommended Patches**

Requested By: **SYSADMIN**

Completion Date: **10-Aug-2007 20:38:43**

View Aggregate Patch Impact:

☐ Show Hidden Patches (with the check mark in the Hide Patch column)

Recommended Patches Results

Select Patch and ...

Select All | Select None

Select Patch	Product	Prerequisites	Codelevel Introduced	Status	PAA	Reason Recommended	Patch Description	Hide Patch	Included in Aggregate	Impact
☐	6166150.A.2x	0	No	Unapplied	Yes	High Priority Patch	E-Business Tax: Consolidated upgrade script changes post R12	☐	No	Download

Patches that Introduce New Codelevels

Patch	Product	Codelevel Introduced	Included in Aggregate

Select any number of recommended patches on this page and click the Download button. This populates the Patch List field in the Download Patches page with the selected patch numbers.

4. Set download options.

On the Download Patches page, set Merge options and indicate information about languages and platforms. If you choose to automatically merge patches while downloading, specify the merged patch name and the merging strategy. You can select the languages and platform of the patches to download. When you provide information in this section of the page, Patch Wizard only downloads patches that match the selected languages and platform. You can also schedule the download for a future date.

5. Submit request.

After you have entered the patch information, click OK.

6. Track the status of your request.

From the main page, you can track the status of your patch request. Click the Job Status icon for Download Patches.

Job Status Page

ORACLE Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard Site Map

Applications System:AD0ACC04 > Patch Wizard >

Job Status:Download Patches:ADDACC04

Last Updated : 11-Aug-2006 14:32:28

New Search Modify Search

Details	Request ID	Program	Phase	Status	Requestor	Requested Start Date	Duration	Wait Time
☐ Hide	S265800	DownloadPatches (Request Set DownloadPatches)	Completed	Error	SYSADMIN	11-Aug-2006 14:28:01	00:01:40	00:00:11
Short Name: FNDRSSUB1623 Application Name: Applications DBA Submission Date: 11-Aug-2006 14:28:00 Actual Start Date: 11-Aug-2006 14:28:12 Completion Date: 11-Aug-2006 14:29:52 Style: Portrait, Program Name: noprint, Copies: 0, Language: English Priority: 50 Responsibility: System Administration Language: AMERICAN Territory: AMERICA Numeric Characters: 50, 2152 Repeat Interval: DownloadPatches Completion Text: The set completed normally with outcome Error. The outcome was determined by the stage Submit Download Patches (10).								

Restart Sub Requests View Diagnostics Manager Log Request Log Detailed Logs Output

☒ TIP Duration is the total time(HRS:MI:SS) the request has been running or the request ran.
☒ TIP Wait Time is the time(HRS:MI:SS) the request has waited.
☒ TIP To display the available actions on a request, please click on show details.

Add to Support Cart

The Job Status page displays. If you click the Show/Hide icon corresponding to you request ID, the page displays more details. For more information about the fields and functions on this page, see: Patch Wizard, page 3-1.

Determining Patch Impact on System Files:

Requirement: Before I apply a patch, can I see which system files will be affected?

Patch Wizard provides a Patch Impact Summary page that shows the impact of a specific patch if applied to your system. It contains the following information: Patch Impact Analysis, Direct Impact Summary, and Indirect Impact Summary. By reviewing these results, you can see detailed information about files included in a patch, as well as the effect a specific patch will have on your existing system files. For example, you can see information about total files in the patch, the number and type of files that will be installed, and which existing files will be changed. See: Patch Wizard, page 3-1.

To view the information on the Patch Impact Summary page

1. Access Oracle Applications Manager.

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM. All procedures in this section begin with the Site Map.

2. Access the Patch Wizard home page.

From the Site Map (Maintenance tab), click Patch Wizard under the Patching and Utilities heading.

Site Map Page

ORACLE Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Site Map: ADDAGC05

Administration | Monitoring | Maintenance | Diagnostics And Repair

Patching and Utilities

- Applied Patches
- File History
- Patch Wizard
- Timing Reports
- Register Flagged Files
- Manage Downtime Schedules
- Codelevels Summary

Critical Activities

- Setup
- Monitor

TIP Only the items to which you have access are clickable.

Support Cart Setup Home Logout Help

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About Oracle Applications Manager Version 2.3.1

3. View recommended patches results.

From the home page, click the Details icon for an item in the Results section.

Recommended Patches Results Page

Patch Wizard Tasks

Task Name	Description	Tasks	Job Status
Patch Wizard Preferences	Set download, merge, and stage area preferences		
Define Patch Filters	Create custom patch filters		
Recommend/Analyze Patches	Submit requests for patch advice or analysis		
Download Patches	Submit requests to download patches		
Aggregate Patch Impact	Aggregate Patch Impact		

Filter Criteria

Filter Name contains

Completion Date is

(yyyy/MMM/dd)

Recommended Patches Results

Previously submitted Filter Names/Patch Lists that do not appear in the Recommended Patches Results section have been purged according to the frequency setting in Purge Concurrent Request. Change the frequency setting in Applications Dashboard > Critical Activities if needed.

Filter Name/Patch List	Total (Applied & Unapplied)	Unapplied	Requested By	Completion Date	Run Status	Request Set	Details
Recommended Patches and New Codelevels	1	1	SYSADMIN	2006/Oct/11 02:51:41	Normal	280040	
Recommended Patches	0	0	SYSADMIN	2006/Oct/11 02:32:16	Normal	280014	
4502603	1	1	SYSADMIN	2006/Oct/09 00:09:09	Warning	279849	
4502400	1	1	SYSADMIN	2006/Oct/08 23:52:48	Warning	279809	

The Recommended Patches Results page for the recommended patch request appears.

Recommended Patches Results Page

ORACLE Applications Manager
 Support Cart Setup Home Logout Help

[Applications Dashboard](#) | [Site Map](#)
[Applications System: ADOAGC03](#) > [Patch Wizard](#) >
Recommended Patches Results : ADOAGC03
 Last Updated : 10-Aug-2007 21:11:44

Patch Filter/Patch ID: **Recommended Patches**
 Requested By: **SYSADMIN**
 Completion Date: **10-Aug-2007 20:38:43**
 View Aggregate Patch Impact: **Aggregate Impact**

☐ Show Hidden Patches (with the check mark in the Hide Patch column) **Redisplay Data**

ⓘ If the Show Hidden Patches checkbox is not selected, the number of patches displayed may be less than the number listed on the Patch Wizard page.
 Only patches selected on the current page can be downloaded.

Recommended Patches Results
 Select Patch and ...

[Select All](#) | [Select None](#)

Select	Patch	Product	Prerequisites	Codelevel Introduced	Status	PAA	Reason Recommended	Patch Description	Hide Patch	Included in Aggregate Patch Impact	Impact
☐	6166150.Azx	0	No	Unapplied	Yes	High Priority Patch	E-Business Tax: Consolidated upgrade script changes post R12	☐	No		

Patches that Introduce New Codelevels

										Included in Aggregate

4. Access the Patch Impact Analysis page.

Clicking the Impact icon in the Recommended Patches Results page opens the Patch Impact Analysis page for the selected patch.

Patch Impact Analysis Page

The screenshot shows the Oracle Applications Manager interface. The top navigation bar includes 'Support Cart', 'Setup', 'Home', 'Logout', and 'Help'. The breadcrumb trail is 'Applications System: ADOAGC03 > Patch Wizard > Recommended Patches Results >'. The main title is 'Patch Impact Analysis for Patch 4630372-R12: ADOAGC03'. Below this, there is a 'Patch Description' section with 'R12 izu: R12.IZU.A' and a 'Patch Readme' icon. The 'Total Files in Patch' is 4, and 'Files to install' is 4 (100.00%). The page is divided into two main sections: 'Direct Impact Summary' and 'Indirect Impact Summary'. The 'Direct Impact Summary' table shows: Applications Patched (2), File Types Installed (2), New Files Introduced (4), Existing Files Changed (0), Flagged Files Changed (0), Existing Files Unchanged (0), and Non-US Language Patches Required (0). The 'Indirect Impact Summary' table shows: Unchanged Files Affected (0 JSPs), Menu Navigation Trees Affected (0 Responsibilities, 0 Paths), and Diagnostics Tests to Re-Run (0 Test(s)). Below these tables, there are four tips: 1. Analysis on Unchanged Files Affected only available for JSPs. 2. Click on the Prerequisite Patches link to toggle between Aggregate and Individual Impact Analysis. 3. Aggregate Impact Analysis only for patches with metadata uploaded from InfoBundle.zip. 4. Click on Patch ID in the Aggregate Impact Analysis Table to view individual Impact Analysis for Pre-reqs. At the bottom, there is an 'Add to Support Cart' button and a footer with 'Support Cart Setup Home Logout Help' and 'Copyright 2001, 2006 Oracle Corporation. All Rights Reserved. About Oracle Applications Manager Version 2.3.1'.

Direct Impact Summary		Indirect Impact Summary	
Applications Patched	2	Unchanged Files Affected	0 JSPs
File Types Installed	2	Menu Navigation Trees Affected	0 Responsibilities, 0 Paths
New Files Introduced	4	Diagnostics Tests to Re-Run	0 Test(s)
Existing Files Changed	0		
Flagged Files Changed	0		
Existing Files Unchanged	0		
Non-US Language Patches Required	0		

TIP Analysis on Unchanged Files Affected only available for JSPs
TIP Click on the Prerequisite Patches link to toggle between Aggregate and Individual Impact Analysis
TIP Aggregate Impact Analysis only for patches with metadata uploaded from InfoBundle.zip
TIP Click on Patch ID in the Aggregate Impact Analysis Table to view individual Impact Analysis for Pre-reqs
TIP Non-US Language Patches are considered required when there are non-US languages installed and the base patch contains new or changed files of translated file types.

[Add to Support Cart](#)

Support Cart Setup Home Logout Help

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About Oracle Applications Manager Version 2.3.1

Many of the line items on this page are links to detailed information about the impact of the patch on the system. For example, the File Types Installed value is a link to a page that lists the file types and the number of unchanged, changed, and new files in the file system as a result of applying the selected patch.

Creating Patch Recommendations Without an Internet Connection:

Requirement: How do I use the features of creating patch recommendations if I do not have access to an Internet connection?

You can run Patch Wizard without access to an Internet connection, if necessary, by downloading the Patch Information Bundle to a system which has Internet access. Once the download is complete, copy the Patch Information Bundle file to the Patch Wizard's staging directory. Then run Patch Wizard as you normally would based on the files you copied to the staging directory.

To create recommendations without using an Internet connection

1. Download the Patch Information Bundle to a system which has Internet access.
2. Set up a staging directory on a system that does not have Internet access. Patch Wizard must be able to read from and write to this staging directory.
3. Copy the Patch Information Bundle zip file to the staging directory. The zip file must be copied to a system that can access the Patch Wizard staging directory. If the staging directory is on a local disk, the zip file must be copied to the system where you run Patch Wizard. If the staging directory is on a shared (network) disk, it can be copied to any system with access to the shared disk.

4. Run Create Recommendations as you normally would from this point.

Analyzing Applied Patches

As you apply patches, AutoPatch records the actions in the Oracle E-Business Suite patch history database. You can query this database using the Oracle Applications Manager (OAM) Applied Patches feature, which provides easy access to reports based on your search criteria.

Note: Patch information is not stored in the database if the patch is applied in pre-install mode or test mode. Also, if patch application does not run successfully to completion, the associated information is neither uploaded to the patch history database nor available in the Applied Patches feature.

You enter search criteria on a search patches page, either Simple Search or Advanced Search. A summary report is displayed at the bottom of the search page.

Several detailed reports are also available, including Timing Details, Files Copied, Bug Fixes, and Action Summary. Most of these detailed reports have a standard layout. The top portion displays the criteria that were used for the search, and the bottom portion displays the results of the search.

See also Applied Patches in the OAM Help system.

Determining If a Patch Was Applied:

Requirement: Can I determine if a specific patch has been applied to my Oracle E-Business Suite system?

To determine which patches were applied, enter a patch ID in the Applied Patch Check area of the Software Updates page. You can perform a simple search by entering an ID or a series of IDs separated by commas.

To determine if a patch was applied

1. Access Oracle Applications Manager.

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM.

2. Access the Software Updates page.

From the Applications Dashboard, click the Software Updates tab. The Software Updates page appears.

Software Updates Page

ORACLE Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard: ADDAGC01

Overview Performance Critical Activities Diagnostics Business Flows Security **Software Updates**

Applications System Version: 12.0.0

Applied Patch Check

Use this function to determine if a patch has been or has not been applied.

Patch

(Enter Patch numbers, separated by commas)

Applied	Not Applied

Patch Recommendation Requests

Filter Name / Patch List	Total	Unapplied	Status	Details
No records found.				

Related Links

Setup Tasks

- Patch Wizard Preferences
- Define Patch Filters
- Update Metadata Credentials
- Register Flagged Files

Other Links

- Applied Patches
- File History
- Products Installed
- Codelevels Summary

Support Cart Setup Home Logout Help

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About Oracle Applications Manager Version 2.0.1

3. Enter a patch ID.

In the Applied Patch Check area of the Software Updates page, enter a patch ID or a series of IDs separated by commas. Your queried ID appears in the corresponding column depending on whether it has been applied.

Searching for Patch Details:

Requirement: What information is available on the Patch Details report? How do I create the report?

From any Patch Summary report, you can click the Details icon for a selected row to open the Patch Details report, which displays summary information carried over from the Results portion of either the Simple Search or Advanced Search page.

This report also contains more specific information about the patch, including:

- Name of the driver file and the date and time it was applied
- Command line options used to run the file
- Platform of the driver file
- Location where the driver was run
- Report on whether a codelevel was introduced, and if so, which one

From the Patch Details page, you can also access additional information about a patch, including timing details, files copied, bug fixes, and a summary of actions performed.

See: Applied Patches, page 4-1. See also Applied Patches in the OAM Help.

To review patch details

1. Access Oracle Applications Manager.

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM.

2. Create a Patch Summary report.

From the Site Map (Maintenance tab), click Applied Patches under the Patching and Utilities heading. From either the Simple Search or Advanced Search page, enter a patch number or a date range to create a Patch Summary report. Click *Go*.

3. Select the patch.

Click the Details icon in any selected row of the Patch Summary report. The Patch Details report appears.

Patch Details Report

The screenshot shows the Oracle Applications Manager interface. The top navigation bar includes 'Support Cart', 'Setup', 'Home', 'Logout', and 'Help'. The breadcrumb trail is 'Applications Dashboard > Site Map > Applications System: ADOAGC05 > Applied Patches > Patch Details : 5336717.A : ADOAGC05'. The main content area displays patch details for '5336717.A'.

Patch Details:

Last Updated :	2006/Oct/11 15:44:46	Drivers Applied :	1
APPL_TOP Name :	ap6049rt	Completion Date :	2006/Oct/06 13:45:39
Patch :	5336717.A	Patch Description :	AD OAM DOC FOR RELEASE 12
Merged Patches :	No		
Language :	US		

ⓘ If the same patch is applied multiple times, this page displays all of them.

Select Driver File and view... **Timing Details** | Files Copied | Bug Fixes | Action Summary

Select	Driver File	Start Date	End Date	AutoPatch Options	Platform	Patch Top	Codelevel Introduced
☒	u5336717.drv	2006/Oct/06 13:44:41	2006/Oct/06 13:45:39	novalidate, hotpatch	GENERIC	/ SLOTS/ slot05/ appmgr/ patches/ 5336717	

[Add to Support Cart](#)

Support Cart Setup Home Logout Help

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The report displays patch details such as driver files, start and end dates, and platform. It also provides access to other patch details related to the driver files, such as files copied and bug fixes. You can select a driver from the list, and click one of the additional detail buttons to see other reports.

4. View additional details.

As an example of the details that are available for a selected driver, click *Files Copied*.

Files Copied Report

The screenshot shows the Oracle Applications Manager interface. The top navigation bar includes 'Support Cart', 'Setup', 'Home', 'Logout', and 'Help'. The breadcrumb trail is 'Applications Dashboard > Site Map > Applications System: ADOAGC04 > Applied Patches > Patch Details'. The report title is 'Files Copied : u5251362.drv : ADOAGC04'. Below the title, it shows 'Last Updated : 08-Jun-2006 21:11:25'. The report details include: Start Date: 26-May-2006 10:31:16, End Date: 26-May-2006 10:34:19, AutoPatch: hotpatch, Platform: LINUX, Options: hotpatch, Patch Top: / SLOTS/ slot03/ appmgr/ patches/ 5251362, Driver File: u5251362.drv. A filter section shows 'Product' set to 'AD' and 'contains' selected. The main table lists the files copied:

Product	Directory	File	Version
AD	lib	adphisto	120.14

At the bottom right, there is an 'Add to Support Cart' button. The footer contains 'Copyright 2001, 2006 Oracle Corporation. All Rights Reserved. About Oracle Applications Manager Version 2.3.1'.

For each file, the Files Copied report shows the product short name, the directory where the file was copied, the name of the file, and the version number. To view other information associated with the driver file, click the Patch Details link at the top of the page to return to the previous page.

As another example, click the Bug Fixes button.

Bug Fixes Report

The screenshot shows the Oracle Applications Manager interface. The top navigation bar includes 'Support Cart', 'Setup', 'Home', 'Logout', and 'Help'. The breadcrumb trail is 'Applications Dashboard > Site Map > Applications System: ADOAGC04 > Applied Patches > Patch Details'. The report title is 'Bug Fixes : u5251362.drv : ADOAGC04'. Below the title, it shows 'Last Updated : 08-Jun-2006 21:12:38'. The report details include: Start Date: 26-May-2006 10:31:16, End Date: 26-May-2006 10:34:19, AutoPatch: hotpatch, Platform: LINUX, Options: hotpatch, Patch Top: / SLOTS/ slot03/ appmgr/ patches/ 5251362, Driver File: u5251362.drv. A filter section shows 'Bug Fix' set to 'AD' and 'contains' selected. The main table lists the bug fixes:

Bug Fix	Product	Applied	Remarks
5251362	ad	Y	
4654046	ad	Y	

At the bottom right, there is an 'Add to Support Cart' button. The footer contains 'Copyright 2001, 2006 Oracle Corporation. All Rights Reserved. About Oracle Applications Manager Version 2.3.1'.

The Bug Fixes report lists all bug fixes included in the selected driver file. It contains the bug number, the associated product, and whether the bug fix was applied. If the fix was not applied, the Remarks column explains why.

5. View the Action Summary report.

You can create a report that summarizes the actions of a selected driver file. Click the Patch Details link at the top of the page to return to the Patch Details page. (You can also access the Action Summary report by clicking the bug fix number on the Bug Fixes report.)

From the Patch Details page, select a driver and click the Action Summary button.

Action Summary Report

ORACLE Applications Manager

Support Cart Setup Home Logout Help

Applications Dashboard | Site Map

Applications System: ADOAGC04 > Applied Patches > Patch Details >

Action Summary : u5251362.drv : ADOAGC04

Last Updated : 08-Jun-2006 21:13:58

Start Date26-May-2006 10:31:16End Date26-May-2006 10:34:19

AutoPatchhotpatchPlatformLINUX

Optionsu5251362.drvPatch Top/ SLOTS/ slot03/ appmgr/ patches/

Driver File5251362

Filter Bug Fix contains Go

The details icon displays additional information about database updates.

Previous1-25 of 189Next 25

Product	Directory	File	Action	Phase	Run	Bug Fix	Details
FND	include	afugai.h	copy		N	5251362	
AD	bin	adadmin	link		Y	5251362	
AD	bin	adident	link		Y	5251362	
AD	bin	adjkey	link		Y	5251362	
AD	bin	admrgpch	link		Y	5251362	
AD	bin	adncrv	link		Y	5251362	
AD	bin	adpatch	link		Y	5251362	
FND	include	wfmlr.h	copy		N	5251362	
FND	include	wfntf.h	copy		N	5251362	
FND	include	afncrm.h	copy		N	5251362	

The Action Summary report shows more information about the driver and its actions. For definitions of the column headings, see Action Summary, page 4-13.

If the driver selected contains a database portion, the Patch Summary report shows the driver actions, such as sql and exec. If the driver performed actions on the database, the Details icon is active. Click it to see the Action Details report.

Searching for Translation Patches:

Requirement: My Oracle E-Business Suite system operates in multiple languages. I want to make sure translation patches have been applied successfully.

If a patch has an associated translation patch, you apply the translation patch separately. AutoPatch stores information in the patch history database about all translation patches you apply.

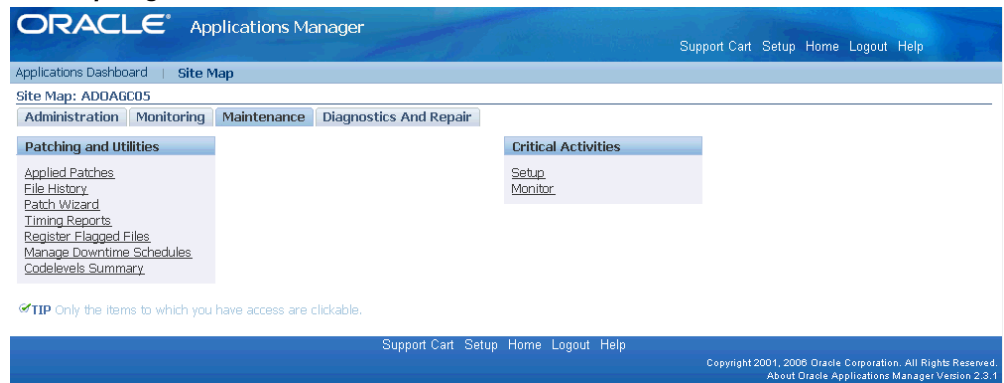
To search for translation patches

1. Access the Oracle Applications Manager.

Follow the instructions in Accessing Patch Wizard, page 3-4 to access OAM.

2. Access the Simple Search page.

Site Map Page



From the Site Map (Maintenance tab), click Applied Patches under the Patching and Utilities heading. The Simple Search page appears.

Enter the search criteria. For details about using the Simple Search page, see: Determining If a Patch Was Applied, page 5-40, or click the OAM Help button.

3. Specify the patch.

On the Simple Search page, enter the ID of the translation patch in the Patch field. Click Go.

4. Review the Patch Summary report

All applications of the patch are displayed. If multiple translations were applied, there will be multiple rows. The Language column shows the languages applied.

Applied Patches Page - Simple Search

ORACLE Applications Manager

[Support Cart](#)
[Setup](#)
[Home](#)
[Logout](#)
[Help](#)

[Applications Dashboard](#)
[Site Map](#)

Applications System: ADOAGC05 >

Applied Patches : ADOAGC05
 Select Feature
Patch Wizard
Go

Last Updated : 2006/Oct/11 15:46:45

Simple Search
Advanced Search

At least one field must be completed.

Querying by a specific patch ID will return all patches that are included in the specified patch ID.

Patch

(Enter either a 7-digit patch number or merge patch name)

Applied Within Last Days

Applied From Date To Date

(yyyy/MMMM/dd) (yyyy/MMMM/dd)

Language

Go Reset

A Bug Fix resolves a specific issue and a patch may contain one or more Bug Fixes.

Patch Name	Patch Description	Merged Patches	APPL_TOP Name	Language	Completion Date	Details
5336717.A	AD OAM DOC FOR RELEASE 12	No	ap6049rt	US	2006/Oct/06 13:45:39	Details
5553100.A	CONNECTION LEAK	No	ap6049rt	US	2006/Oct/04 14:11:36	Details
4461237.0		No	ap6049rt	KO	2006/Oct/03 07:14:18	Details
4461237.0	R12 ATG Family Pack A	No	ap6049rt	US	2006/Oct/02 16:36:18	Details

Viewing Applied Patches in a Report Format:

Requirement: Can I review applied patches information without the OAM screens?

There may be times when you want to view applied patch history without running the Oracle Applications Manager. For example, you may need to view large amounts of data, or you may just need a list of patches without the detail provided in the OAM Patch History reports. In these cases, you can run command line scripts that list all patches applied in each AutoPatch session, all files affected by a patch, or all patches applied within a certain date range. The scripts, and a description of the reports they produce, are listed in the following table.

Patch Report Scripts

Script Name	Report Content	Output Format
adphrept.sql	Lists patches applied in individual AutoPatch sessions, and includes details.	XML
adfhrept.sql	Displays information about files changed by patches.	XML

Script Name	Report Content	Output Format
adpchlst.sql	Lists patches applied in a given date range.	Text

The XML reports produced by adphrept.sql and adfhrept.sql can either be processed as XML or viewed as HTML.

To run a report that provides a listing of applied patches, follow the appropriate instructions in this section.

To see a list of all completed AutoPatch sessions with patch details

Run the adphrept.sql script (located in <AD_TOP>/patch/115/sql). This script produces an XML report showing individual AutoPatch sessions. If a patch was applied more than once, this report lists each application of the patch. If a merged patch was applied, it lists the merged patch by patch name. It does not list the individual patches within the merged patch.

To run adphrept.sql, use the following parameters:

```
<query_depth> <bug_number or ALL> <bug_product or ALL> \
<start_date_from (mm/dd/rr or ALL)> <end_date_to (mm/dd/yyyy or ALL)> \
<patchname/ALL> <patchtype/ALL> <level/ALL> <language/ALL> \
<apptop/ALL> <limit to forms server? (Y/N)> \
<limit to web server? (Y/N)> \
<limit to node server? (Y/N)> \
<limit to admin server? (Y/N)> \
<only patches that change DB? (Y/N)> <report_name>.xml
```

For <query_depth>, specify 1 (details of patches only), 2 (details of patches and their bug fixes only), or 3 (details of patches, bug fixes, and bug actions).

At the command prompt, enter the report command and enter values for the parameters and prompts. For example, to see complete patch details for AutoPatch sessions that were run during January 2009, enter the following, using the mm/dd/yyyy date format:

UNIX:

```
$ cd $AD_TOP/patch/115/sql
$ sqlplus <APPS username>/<APPS password> \
@adphrept.sql 3 ALL ALL 01/01/2009 01/31/2009 \
ALL ALL ALL ALL ALL N N N N N jan09.xml
```

Windows:

```
C:>\ cd %AD_TOP%\patch\115\sql
C:>\ sqlplus <APPS username>/<APPS password> @adphrept.sql 3 ALL ALL
01/01/2009 01/31/2009 ALL ALL ALL ALL ALL N N N N N jan09.xml
```

The <AD_TOP>/html directory contains the adpchrep.xsl style sheet for displaying the XML output file in HTML format. To view the XML file as HTML, copy both the adpchrep.xsl style sheet and XML output report to a directory accessible by a browser.

Open the directory in your browser and click the XML filename.

To display information about files changed by patches

Run the adfhrept.sql script (located in <AD_TOP>/patch/115/sql) to produce an XML report named adfilerep.xml. Use the following parameters:

```
<filename> <latest file version only? (Y/N) \
<start_date (mm/dd/rr or ALL)> <end_date (mm/dd/yyyy or ALL)> \
<patchtype/ALL> <language/ALL> \
<applttop/ALL> <limit to forms server? (Y/N)> \
<limit to web server? (Y/N)> \
<only patches that change DB? (Y/N)>
```

At the command prompt, enter the report command and enter values for the parameters and prompts. For example, to see the complete file version history for admorgb.pls considering only patches applied in January 2008, enter the following, using mm/dd/yyyy format:

UNIX:

```
$ cd $AD_TOP/patch/115/sql
$ sqlplus <APPS username>/<APPS password> \
@adfhrept.sql admorgb.pls N 01/01/2008 01/31/2008 \
ALL ALL ALL N N N N N
```

Windows:

```
C:>\ cd %AD_TOP%\patch\115\sql
C:>\ sqlplus <APPS username>/<APPS password> @adfhrept.sql admorgb.pls
N 01/01/2008 01/31/2008 ALL ALL ALL N N N N N
```

The <AD_TOP>/html directory contains the adfilerep.xsl style sheet for displaying the XML output file in HTML format. To view the XML file as HTML, copy both the adfilerep.xsl style sheet and XML output report to a directory accessible by a browser. Open the directory in your browser and click on the XML filename.

To see a list of all patches in a given date range

The adpchlst.sql report (located in <AD_TOP>/patch/115/sql) produces a list (adpchlst.lst) of all patches in a date range, without patch detail. It differs from adphrept.sql in two ways: it lists a patch only once regardless of how many times it was applied, and it lists individual patches included within a merged patch. For example, if you combine patches 123, 124, and 125 in a merged patch called merged1, the report lists patches 123, 124, and 125, but not merged1.

At the command prompt, enter the report command and enter the date parameters in mm/dd/yyyy format. For example, to see a list of patches applied in October 2008, enter the following:

UNIX:

```
$ cd $AD_TOP/patch/115/sql
$ sqlplus <APPS username>/<APPS password> \
@adpchlst.sql 10/01/2008 10/31/2008
```

Windows:

```
C:>\ cd %AD_TOP%\patch\115\sql
C:>\ sqlplus <APPS username>/<APPS password> @adpchlst.sql 10/01/2008
10/31/2008
```

Monitoring Patches in Progress:

Requirement: Can I monitor the progress of a patch while it is being applied?

Depending on the size and complexity of a patch, it may take from several minutes to several hours to completely apply it to your system. It is useful to know what a patch is currently doing and how long individual steps are taking.

When applying patches, the Oracle E-Business Suite system is in Maintenance mode and the application tier services, including the Web server, are shut down. This prevents access to Oracle E-Business Suite and Oracle Applications Manager. In order to access the Timing Reports to track an in-progress patching session, the Web server must be started in restricted mode and OAM accessed through a restricted mode URL.

When using Timing Reports to track an in-progress patching session, the timing report displays the most recently performed tasks. Use the Refresh icon to get the latest running tasks.

To monitor patches in progress

1. Set up the ad_monitor user account. Use the ad_monitor user account to log in to OAM in restricted mode.
 - Log in to SQL*Plus as SYSTEM.
 - Unlock the ad_monitor user.

```
SQL> alter user ad_monitor account unlock;
```
 - Log in to SQL*Plus as the ad_monitor user and reset the password. The default password is 'lizard'.
2. Shut down all application tier services.
3. Enable Maintenance mode.
4. Start the Web server in restricted mode. The script to start and stop this service is in the \$COMMON_TOP/admin/scripts/<CONTEXT_NAME> directory.

UNIX:

```
$ adaprstctl.sh start
```

Windows:

```
C:\>adaprstctl.cmd start
```

5. Run AutoPatch to start the patch session.
6. Access OAM through the restricted mode URL:

```
<host>:<port>/servlets/weboamLocal/oam/oamLogin
```

7. Log in to OAM as the ad_monitor user.
8. Navigate to the Timing Reports (Navigation: Sitemap > Maintenance > Patching and Utilities > Timing Reports).

See: Timing Reports, page 4-15.

9. When the patching session is complete, shut down the restricted mode Web server.

UNIX:

```
$ adaprstctl.sh stop
```

Windows:

```
C:\> adaprstctl.cmd stop
```

10. Disable Maintenance mode.
11. Restart all services.

You can also monitor the progress of the patching process by reviewing:

- AutoPatch messages

As AutoPatch runs, it displays messages on the screen about the status and progress of the patching process.

- Patch log files

AutoPatch creates log files in the current directory. Each log file contains information about completed patching actions. See: Log and Restart Files, *Oracle E-Business Suite Maintenance Utilities*.

- Worker status

For jobs run in parallel, use AD Controller to view the status of the concurrent manager and workers assigned to process jobs. See: Reviewing Worker Status, *Oracle E-Business Suite Maintenance Procedures* and AD Controller, *Oracle E-Business Suite Maintenance Utilities*.

Analyzing Patches Without an Internet Connection:

Requirement: How do I analyze specific patches if I do not have access to an Internet connection?

You can run Patch Wizard to analyze specific patches without access to an Internet connection, if necessary, by downloading the patches to a system which has Internet access. Once the download is complete, copy the patches to the Patch Wizard's staging directory. Then run Patch Wizard as you normally would based on the files you copied to the staging directory.

To analyze specific patches without using an Internet connection

1. Download the patch zip file(s) to a system which has Internet access.
2. Set up a staging directory on a system that does not have Internet access. Patch Wizard must be able to read from and write to this staging directory.
3. Copy the patch zip file(s) to the <staging directory>/ad directory, if the downloaded patch is an AD product patch. Otherwise, copy the patch zip file(s) to <staging directory>/nonad directory. The zip file(s) must be copied to a system that can access the Patch Wizard staging directory. If the staging directory is on a local disk, the zip file(s) must be copied to the system where you run Patch Wizard. If the staging directory is on a shared (network) disk, it can be copied to any system with access to the shared disk.
4. Run Analyze Specific Patches as you normally would from this point.

Backing Out Patches

Although you can back out patches that you have applied to your Oracle E-Business Suite system and restore it to its pre-patched state, Oracle recommends you use this course of action *only* if you have no other choice.

Note: There is no automated method of backing out patches.

Restoring from a Failed Copy Section of a Unified Driver:

Requirement: The copy portion of a unified driver failed during a patching procedure. I need to restore my system.

You should always test the application of a patch several times on a test system, particularly if the patch is a release update pack (RUP), product family RUP, or pre-upgrade patch. After the test application is successful, apply the patch on the production system.

Before applying a large number of patches, a release update pack (RUP), product family RUP, or a pre-upgrade patch, back up the Oracle E-Business Suite file system and database.

To restore from a failed copy section of a unified driver

1. Determine the cause of the failure.

In many cases, the issue can be resolved and the patching process restarted at the point of failure.

2. Determine the actions of the copy portion of a unified driver.

If there is no feasible method of resolving the issue, review the log files and the copy portion of a unified driver to determine the files copied by the patch and the update actions performed.

3. Restore files.

If a file in the patch top directory is a more recent version than the product's current file, AutoPatch backs up the current file into a subdirectory of the patch top directory. If <patches> is the patch top directory, <system_name> is the Applications system name, <APPL_TOP_name> is the APPL_TOP name, and <prod> is the name of the product being patched, AutoPatch backs up:

```
<PROD>_TOP/<subdir(s)>/<old_file_name>
```

to

```
<patches>/backup/<system_name>/<appl_top_name>/<prod>/<subdir(s)>/<old_file_name>
```

Note: The Oracle E-Business Suite system name and the APPL_TOP name are determined when you run Rapid Install.

Use these backup files to restore the files on the Oracle E-Business Suite system. If the patch is large and you copied many files, restore the entire file system with the backup you created before you applied the patch. If you restore the entire file system you do not have to perform Steps 4 through to 7.

4. Relink files.

If the copy portion of the unified driver includes actions to relink files, determine the files affected and relink them using AD Administration or, for AD programs, use AD Relink. See: *Oracle E-Business Suite Maintenance Utilities*.

5. Restore Java files.

If the patch included Java updates, restore the Oracle E-Business Suite Java files by running the following command from the <patches>/backup/<system_name>/<appl_top_name> directory.

```
$ adjava -mx256m oracle.apps.ad.jri.adjcopy @undoScript.cmd
```

6. Generate JAR files.

If Java files are included in the patch, generate JAR files using AD Administration. See: AD Administration, *Oracle E-Business Suite Maintenance Utilities*.

7. Generate other files.

If there are forms, reports, graphics, or message files included in the patch, generate these files using AD Administration. See: Managing Files, *Oracle E-Business Suite Maintenance Procedures*.

Restoring from a Failed Database Portion of a Unified Driver:

Requirement: Can I restore my system after a failed database portion of a unified driver?

There is no general method of backing out changes a patch makes to the Oracle E-Business Suite database. To avoid the need to restore a database, you should always test the application of a patch several times on a test system, particularly if the patch is a release update pack, product family release update pack, or pre-upgrade patch. After the test application is successful, apply the patch on the production system.

For more information, see: Changing Maintenance Mode, *Oracle E-Business Suite Maintenance Utilities*.

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