

Oracle® E-Business Suite

Installation Guide: Using Rapid Install

Release 12.2 (12.2.0)

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Oracle E-Business Suite Installation Guide: Using Rapid Install, Release 12.2 (12.2.0)

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Preface

Intended Audience

Welcome to Release 12.2 (12.2.0) of the *Oracle E-Business Suite Installation Guide: Using Rapid Install*.

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 x for more Oracle E-Business Suite product information.

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Structure

1 Getting Started

This chapter contains basic information about using Rapid Install to install or upgrade an Oracle E-Business Suite system, a general description of the Rapid Wizard interface, and a description of the setup steps you must complete before you begin an installation or upgrade.

2 Performing an Installation

Rapid Install offers two options for a new installation:

- **Standard installation**, which creates a new system using configuration parameter values specified by the user to meet the site's specific requirements.
- **Express installation**, which also creates a new system but uses default values for many parameters, requiring only a few to be supplied by the user.

After you have run the Rapid Install wizard for either the standard installation or express installation, you can also optionally rerun Rapid Install in silent mode, which uses the previously entered parameters stored in a configuration file as well as default values, without requiring further responses from the user.

3 Updating the Technology Stack

This chapter describes how to use the specialized Rapid Install option to update the technology stack.

4 Finishing Tasks

Certain tasks are necessary to finish all installations for Oracle E-Business Suite. There are also other tasks that are required only for systems with specific functionality. You must complete all tasks marked as required. You should also complete any tasks marked as conditional that apply for your instance, or that are necessary to meet your site or product-specific requirements.

A Configuration Details

This appendix contains details of the fields in the various screens of the Rapid Install wizard. It pays special attention to the configuration values that are not visible in the sample screen shots, and also discusses additional system requirements.

Related Information Sources

This book is included in the Oracle E-Business Suite Documentation Library. If this guide refers you to other Oracle E-Business Suite documentation, use only the latest Release 12.2 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.
- **Oracle E-Business Suite Documentation Library** - This library, which is included in the Oracle E-Business Suite software distribution, provides PDF documentation as of the time of each release.

- **Oracle E-Business Suite Documentation Web Library** - This library, available on the Oracle Help Center (https://docs.oracle.com/cd/E26401_01/index.htm), provides the latest updates to Oracle E-Business Suite Release 12.2 documentation. Most documents are available in PDF and HTML formats.
- **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 as an application in Oracle E-Business Suite.

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 Alert User's Guide

This guide explains how to define periodic and event alerts to monitor the status of your Oracle E-Business Suite data.

Oracle Application Framework Developer's Guide

This guide contains the coding standards followed by Oracle E-Business Suite Development to create applications with Oracle Application Framework. This guide is available in PDF format on My Oracle Support and as online documentation in JDeveloper 10g with Oracle Application Extension.

Oracle Application Framework Personalization Guide

This guide covers the design-time and run-time aspects of personalizing applications built with Oracle Application Framework.

Oracle Application Management Pack for Oracle E-Business Suite Guide

This book is intended for database administrators and system administrators who are responsible for performing the tasks associated with maintaining an Oracle E-Business Suite system using the Oracle Application Management Pack for Oracle E-Business Suite.

Oracle Application Management Pack for Oracle E-Business Suite Metric Reference Manual

This book lists the target metrics for Oracle E-Business Suite that Oracle Enterprise Manager monitors.

Oracle Cloud Using the Oracle E-Business Suite Adapter with Oracle Integration 3

This guide describes how to set up and use Oracle E-Business Suite Adapter connections in Oracle Integration to access supported Oracle E-Business Suite interfaces and REST services as inbound or outbound integrations from Oracle E-Business Suite.

Note that this book is the latest generation of Oracle Integration, Oracle Integration 3. Its prior generation, Oracle Integration Generation 2 is called *Oracle Cloud Using the Oracle E-Business Suite Adapter with Oracle Integration*. Both books are part of the integration documentation in Oracle Cloud Platform as a Service (PaaS) and are available in the Oracle Cloud Library on the Oracle Help Center.

Oracle Diagnostics Framework User's Guide

This manual contains information on implementing and administering diagnostics tests for Oracle E-Business Suite using the Oracle Diagnostics Framework.

Oracle E-Business Suite Cloud Manager Guide

This guide describes how to manage Oracle E-Business Suite environments on Oracle Cloud Infrastructure (OCI) using the automated tooling in Oracle E-Business Suite Cloud Manager.

Oracle E-Business Suite Concepts

This book is intended for all those planning to deploy Oracle E-Business Suite Release 12.2, 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 any installation and configuration choices that are available.

Oracle E-Business Suite CRM System Administrator's Guide

This manual describes how to implement the CRM Technology Foundation (JTT) and use its System Administrator Console.

Oracle E-Business Suite Desktop Integration Framework Developer's Guide

Oracle E-Business Suite Desktop Integration Framework is a development tool that lets you define custom integrators for use with Oracle Web Applications Desktop Integrator. This guide describes how to define and manage integrators and all associated supporting objects, as well as how to download and upload integrator definitions.

Oracle E-Business Suite Developer's Guide

This guide contains the coding standards followed by Oracle E-Business Suite Development. It describes the Oracle Application Object Library components needed to implement the Oracle E-Business Suite user interface described in the *Oracle E-Business Suite User Interface Standards for Forms-Based Products*. It provides information to help you build your custom Oracle Forms Developer forms so that they integrate with Oracle E-Business Suite. In addition, this guide has information for customizations in features such as concurrent programs, flexfields, messages, and logging.

Oracle E-Business Suite Electronic Technical Reference Manual User's Guide

This guide describes how to set up and navigate Oracle E-Business Suite Electronic

Technical Reference Manual (eTRM) user interface in Oracle E-Business Suite. It also explains how to browse and search the Oracle eTRM repository to locate desired FND and database metadata and objects, and how to view object details, reports, and diagrams.

Oracle E-Business Suite Flexfields Guide

This guide provides flexfields planning, setup, and reference information for the Oracle E-Business Suite implementation team, as well as for users responsible for the ongoing maintenance of Oracle E-Business Suite product data. This guide also provides information on creating custom reports on flexfields data.

Oracle E-Business Suite Integrated SOA Gateway User's Guide

This guide describes the high level service enablement process, explaining how users can browse and view the integration interface definitions and services residing in Oracle Integration Repository.

Oracle E-Business Suite Integrated SOA Gateway Implementation Guide

This guide explains how integration administrators can manage and administer the web service activities for integration interfaces including native packaged integration interfaces, composite services (BPEL type), and custom integration interfaces. It also describes how to set up and implement Service Invocation Framework to invoke SOAP and REST services from Oracle E-Business Suite, and how to manage web service security, configure logs, and monitor both inbound service invocations using Service Monitor and outbound service invocations through Service Invocation Framework using Service Invocation Monitor.

Oracle E-Business Suite Integrated SOA Gateway Developer's Guide

This guide describes how integration developers can perform end-to-end service integration activities. These include orchestrating discrete web services into meaningful end-to-end business processes using business process execution language (BPEL), and deploying BPEL processes at runtime.

This guide also explains how to invoke web services using the Service Invocation Framework. This includes defining web service invocation metadata, invoking web services, and testing web service invocation.

Oracle E-Business Suite Maintenance Guide

This guide explains how to patch an Oracle E-Business Suite system, describing the adop patching utility and providing guidelines and tips for performing typical patching operations. It also describes maintenance strategies and tools designed to help keep a system running smoothly.

Oracle E-Business Suite Mobile Apps Administrator's Guide, Release 12.1 and 12.2

This guide includes the latest mobile release with new underlying technologies, as well as the earlier mobile releases built with Oracle Mobile Application Framework (MAF). It explains how to set up an Oracle E-Business Suite instance to support connections from Oracle E-Business Suite mobile apps. It also describes common administrative

tasks for configuring Oracle E-Business Suite mobile apps. Logging and troubleshooting information is also included in this book.

Oracle E-Business Suite Mobile Apps Developer's Guide, Release 12.1 and 12.2

This guide includes information for the latest mobile release with new underlying technologies, as well as the earlier mobile releases built with Oracle Mobile Application Framework (MAF). For mobile releases built with MAF, this guide describes how to develop enterprise-distributed mobile apps by using mobile application archive (MAA) files and how to implement corporate branding. It also explains required tasks on implementing push notifications for supported mobile apps. In addition, it includes how to implement Oracle E-Business Suite REST services to develop custom mobile apps by using the Login component from Oracle E-Business Suite Mobile Foundation or using any mobile app development framework if desired.

Oracle E-Business Suite Multiple Organizations Implementation Guide

This guide describes the multiple organizations feature in Oracle E-Business Suite. It describes in detail how to set up and work effectively with multiple organizations in Oracle E-Business Suite.

Oracle E-Business Suite Security Guide

This guide contains information on a comprehensive range of security-related topics, including access control, user management, function security, data security, secure configuration, and auditing. It also describes how Oracle E-Business Suite can be integrated into a single sign-on environment.

Oracle E-Business Suite Setup Guide

This guide contains information on system configuration tasks that are carried out either after installation or whenever there is a significant change to the system. The activities described include defining concurrent programs and managers, enabling Oracle Applications Manager features, and setting up printers and online help.

Oracle E-Business Suite User's Guide

This guide explains how to navigate products, enter and query data, and run concurrent requests by means of the user interfaces (UI) of Oracle E-Business Suite. It includes basic information on setting preferences and customizing the UI. An introduction to Oracle Enterprise Command Centers is also included. Lastly, this guide describes accessibility features and keyboard shortcuts for Oracle E-Business Suite.

Oracle E-Business Suite User Interface Standards for Forms-Based Products

This guide contains the user interface (UI) standards followed by Oracle E-Business Suite Development. It describes the UI for Oracle E-Business Suite products based on Oracle Forms, and how to apply this UI to the design of such applications.

Oracle e-Commerce Gateway User's Guide

This guide describes the functionality of Oracle e-Commerce Gateway and the necessary setup steps in order for Oracle E-Business Suite to conduct business with trading partners through Electronic Data Interchange (EDI). It also describes how to run

extract programs for outbound transactions, import programs for inbound transactions, and the relevant reports.

Oracle e-Commerce Gateway Implementation Guide

This guide describes implementation details, highlighting additional setup steps needed for trading partners, code conversion, and Oracle E-Business Suite. It also provides architecture guidelines for transaction interface files, troubleshooting information, and a description of how to customize EDI transactions.

Oracle Fusion Middleware Oracle E-Business Suite Adapter User's Guide

This book covers the use of Oracle E-Business Suite Adapter (formerly known as Adapter for Oracle Applications in Oracle Fusion Middleware 11g releases) in developing integrations between Oracle E-Business Suite and trading partners.

This book is available in the Oracle Fusion Middleware 12c Documentation Library and Oracle Fusion Middleware 11g Documentation Library.

Oracle iSetup Developer's Guide

This manual describes how to build, test, and deploy Oracle iSetup Framework interfaces.

Oracle iSetup User's Guide

This guide describes how to use Oracle iSetup to migrate data between different instances of the Oracle E-Business Suite and generate reports. It also includes information on configuration, instance mapping, and seeded templates used for data migration.

Oracle Report Manager User's Guide

Oracle Report Manager is an online report distribution system that provides a secure and centralized location to produce and manage point-in-time reports. Oracle Report Manager users can be either report producers or report consumers. Use this guide for information on setting up and using Oracle Report Manager.

Oracle Web Applications Desktop Integrator Implementation and Administration Guide

Oracle Web Applications Desktop Integrator brings Oracle E-Business Suite functionality to a spreadsheet, where familiar data entry and modeling techniques can be used to complete Oracle E-Business Suite tasks. You can create formatted spreadsheets on your desktop that allow you to download, view, edit, and create Oracle E-Business Suite data, which you can then upload. This guide describes how to implement Oracle Web Applications Desktop Integrator and how to define mappings, layouts, style sheets, and other setup options.

Oracle Workflow Administrator's Guide

This guide explains how to complete the setup steps necessary for any product that includes workflow-enabled processes. It also describes how to manage workflow processes and business events using Oracle Applications Manager, how to monitor the progress of runtime workflow processes, and how to administer notifications sent to

workflow users.

Oracle Workflow Developer's Guide

This guide explains how to define new workflow business processes and customize existing Oracle E-Business Suite-embedded workflow processes. It also describes how to configure message metadata for Oracle Mobile Approvals for Oracle E-Business Suite and how to define and customize business events and event subscriptions.

Oracle Workflow User's Guide

This guide describes how users can view and respond to workflow notifications and monitor the progress of their workflow processes.

Oracle Workflow API Reference

This guide describes the APIs provided for developers and administrators to access Oracle Workflow.

Oracle Workflow Client Installation Guide

This guide describes how to install the Oracle Workflow Builder and Oracle XML Gateway Message Designer client components for Oracle E-Business Suite.

Oracle XML Gateway User's Guide

This guide describes Oracle XML Gateway functionality and each component of the Oracle XML Gateway architecture, including Message Designer, Oracle XML Gateway Setup, Execution Engine, Message Queues, and Oracle Transport Agent. It also explains how to use Collaboration History that records all business transactions and messages exchanged with trading partners.

The integrations with Oracle Workflow Business Event System, and the Business-to-Business transactions are also addressed in this guide.

Oracle XML Publisher Report Designer's Guide

Oracle XML Publisher is a template-based reporting solution that merges XML data with templates in RTF or PDF format to produce a variety of outputs to meet a variety of business needs. Using Microsoft Word or Adobe Acrobat as the design tool, you can create pixel-perfect reports from the Oracle E-Business Suite. Use this guide to design your report layouts.

This guide is available through the Oracle E-Business Suite online help. For more information, see *Notes for Using Oracle Business Intelligence Publisher 10g in Oracle E-Business Suite Release 12.2*, My Oracle Support Knowledge Document 1640073.1.

Oracle XML Publisher Administration and Developer's Guide

Oracle XML Publisher is a template-based reporting solution that merges XML data with templates in RTF or PDF format to produce a variety of outputs to meet a variety of business needs. Outputs include: PDF, HTML, Excel, RTF, and eText (for EDI and EFT transactions). Oracle XML Publisher can be used to generate reports based on existing Oracle E-Business Suite report data, or you can use Oracle XML Publisher's data extraction engine to build your own queries. Oracle XML Publisher also provides a

robust set of APIs to manage delivery of your reports via e-mail, fax, secure FTP, printer, WebDav, and more. This guide describes how to set up and administer Oracle XML Publisher as well as how to use the Application Programming Interface to build custom solutions.

This guide is available through the Oracle E-Business Suite online help. For more information, see *Notes for Using Oracle Business Intelligence Publisher 10g in Oracle E-Business Suite Release 12.2*, My Oracle Support Knowledge Document 1640073.1.

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.

Getting Started

This chapter contains basic information about using Rapid Install to install or upgrade an Oracle E-Business Suite system, a general description of the Rapid Wizard interface, and a description of the setup steps you must complete before you begin an installation or upgrade.

This chapter covers the following topics:

- How Rapid Install Works
- Installed Components and System Requirements
- Before You Install
- Starting Rapid Install
- What To Do Next

How Rapid Install Works

With Rapid Install, you can perform the following tasks:

- Install a baseline on-premises Release 12.2.0 Oracle E-Business Suite instance, including the applications files, technology stack, and technology patches.

Note: Do not use Rapid Install to create a new Oracle E-Business Suite instance on Oracle Cloud Infrastructure. Instead, use Oracle E-Business Suite Cloud Manager to provision a new Oracle E-Business Suite instance. See *Provisioning Oracle E-Business Suite, Getting Started with Oracle E-Business Suite on Oracle Cloud Infrastructure*, My Oracle Support Knowledge Document 2517025.1.

- Complete some steps in the process to upgrade an existing Oracle E-Business Suite instance to Release 12.2.0, including laying down the file system prior to the upgrade and configuring server processes for the upgraded system after the upgrade.

Note: When upgrading an existing Oracle E-Business Suite instance, use Rapid Install to lay down the Oracle E-Business Suite Release 12.2 file system for both on-premises environments and environments on Oracle Cloud Infrastructure.

- Replace selected technology stack executables in an existing instance, for example where executable files have been lost or become corrupted.

Following your installation or upgrade, you must apply an Oracle E-Business Suite 12.2.x release update pack before you begin using your Oracle E-Business Suite Release 12.2 instance. Release 12.2.3 or later is required for patching support; see My Oracle Support Knowledge Document 1195034.1, *Oracle E-Business Suite Error Correction Support Policy*.

For a new installation, Rapid Install deploys Oracle Database 12c Release 1 (12.1.0.2). We strongly recommend that you upgrade to Oracle Database 19c following your installation. Similarly, if you are upgrading Oracle E-Business Suite instance and you have not already upgraded your database to Oracle Database 19c, we strongly recommend that you perform the database upgrade after your Oracle E-Business Suite upgrade. To upgrade your database, follow the process documented in My Oracle Support Knowledge Document 2552181.1, *Interoperability Notes: Oracle E-Business Suite Release 12.2 with Oracle Database 19c*.

For instructions about actions you need to take after running Rapid Install to perform an installation or upgrade, see *Finishing Tasks*, page 4-2, *Performing Post-Upgrade Tasks*, *Oracle E-Business Suite Upgrade Guide: Release 11i to 12.2*, or *Performing Post-Upgrade Tasks*, *Oracle E-Business Suite Upgrade Guide: Release 12.0 and 12.1 to 12.2*.

Rapid Install employs a wizard that guides you to enter configuration values for your system. Most of the configuration values are saved in the Oracle E-Business Suite database for later use.

A text file stores the supplied configuration values. The name of this configuration file includes the database SID, to give a file name of `conf_<SID>.txt` (for example, `conf_PROD.txt`). This file stores the information collected by Rapid Install for all database and application tier nodes.

Rapid Install stores copies of the `conf_<SID>.txt` file in three separate locations:

- **Database \$ORACLE_HOME/appsutil:** This copy is used on database nodes. It is stored permanently, and not deleted.
- **\$INST_TOP:** This copy is used on application tier nodes in multinode installs, and in upgrades. It is permanently stored and not deleted.
- **/tmp/<time stamp>:** This copy is used by Rapid Install during the installation. It is deleted when the installation is completed.

Release 12.2 utilizes the `conf_<SID>.txt` file in certain situations, for example where the database has not yet been created. The configuration file is also employed in

multinode (distributed) installs, where you only need to enter the install information once, on one machine, and can then copy the configuration file to other machines as required.

If you are installing in an environment where different machines are used to support the database and application tiers (as is typically the case), you would run Rapid Install on each machine in turn, starting with the database machine. You cannot run Rapid Install on more than one node in an Oracle E-Business Suite system at the same time.

The main configuration engine used by Rapid Install is called *AutoConfig*. Rapid Install supplies the configuration information to *AutoConfig*, which stores the configuration for each node in a node-specific configuration file called a *context file*.

AutoConfig simplifies and standardizes the management of your system configuration: after the initial installation, you can use the *Configuration Editor* in Oracle Applications Manager to update the values of some parameters for selected Oracle E-Business Suite components.

Additional Information: To learn more about *AutoConfig* and other management tools, see *Technical Configuration, Oracle E-Business Suite Concepts*.

Installing New Systems

Rapid Install automatically supplies values for most of the many parameters your Oracle E-Business Suite system will need. You do, however, have a initial choice to make: you can either supply a number of your own parameters and carry out a *Standard install*, or you can opt for an *Express install* and let Rapid Install supply default values for nearly all the parameters.

A Standard install gives you more flexibility to configure your system to meet particular requirements for your site, while an Express install is useful if you know that the default settings will suffice, or you wish to set up a test system where the settings do not matter.

Both types offer the option of installing either a *fresh database* (one that is fully configured but contains no transaction data), or a *Vision Demo database* (one that contains example transaction data for a fictitious company, to use for training or demonstration purposes).

Installation Strategies and Terminology

The installation process for Oracle E-Business Suite has been designed to provide as much flexibility as possible, enabling you to install a basic system and subsequently add machines in order to meet specific deployment requirements or simply the need for growth.

The following terms are used when installing Oracle E-Business Suite:

A *server* is the traditional term for a process that provides a particular functionality. This term, in the sense of denoting a single process, is less appropriate for some components of the Release 12 architecture. Where applicable, the replacement term of *service* is used.

A *node*, in the context of Oracle E-Business Suite, is a logical set of processes running on one hardware machine. Multiple nodes can be created on one machine, or nodes can be allocated their own dedicated machines. In the latter case the term *node* is sometimes also used to refer to the machine on which a particular node is installed. An *application tier node* is a combination of a specific configuration, node file system, and instance file system, which together support the services needed for it to act as an application tier node. This book will also refer to the *primary application tier node* (which may be the only application tier node), and the *database node*, which supports the Oracle database server. In an Oracle Real Application Clusters (Oracle RAC) environment, the Oracle E-Business Suite instance can include multiple database nodes.

A *tier* is a logical grouping of services, potentially spread across more than one physical machine. The three-tier architecture that comprises an Oracle E-Business Suite installation is made up of the *database tier*, which supports and manages the Oracle database; the *application tier*, which supports and manages the various Oracle E-Business Suite components, and is sometimes known as the middle tier; and the *desktop tier*, which provides the user interface via an add-on component to a standard web browser.

Deploying multiple nodes on multiple machines can help increase fault tolerance and lower the cost of ownership, particularly for the application tier.

New Installation (Standard)

In a new Standard installation, you define many aspects of the configuration. You will need to choose where to install the required nodes (database node and primary application tier node).

For simpler installations, the database node and the application tier node can be installed on the same machine. This type of installation is generally used for small systems or for demonstration purposes. More commonly, the database node is installed on one machine, and the application tier node on another machine. This provides improved manageability, scalability, and performance.

Application tier processing can be distributed across multiple application tier nodes. You can also specify additional application tier nodes if you wish to scale up the application tier. Typically, the additional nodes will be located on their own machines, to help increase availability and flexibility of your system, or within additional VMs in an instance caged or static virtual machine configuration.

Oracle E-Business Suite Release 12.2.0 only supports a unified APPL_TOP, i.e. the APPL_TOP is no longer separated into different parts (Concurrent Processing, Forms, Web). However, although all application tier nodes use a unified APPL_TOP, different sets of services can be specified on different nodes. This allows you to create specialized nodes, for example to support Concurrent Processing or Web serving.

Additional Information: See Architecture, *Oracle E-Business Suite Concepts* and File System Structure, *Oracle E-Business Suite Concepts*.

New Installation (Express)

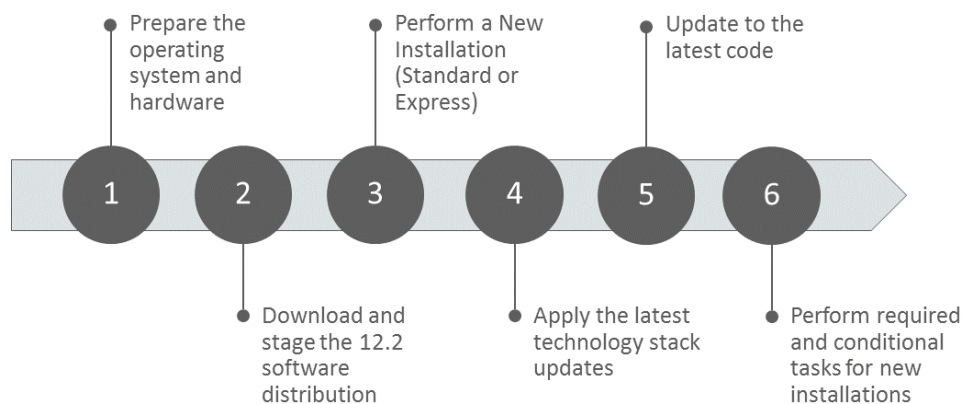
In an Express installation, you set up a fully configured, single-user/single-machine system using a few basic configuration parameters, such as database type and name, top-level installation directory, and port pools choice. The remaining directory specifications and mount points are supplied by Rapid Install using default values. An Express installation includes a set of core products and uses the US7ASCII character set.

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

The steps required to install Oracle E-Business Suite Release 12.2 can be grouped into the following high-level categories:

Overview: Installing Oracle E-Business Suite Release 12.2

Overview: Installing Oracle E-Business Suite Release 12.2



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

1. Prepare the operating system and hardware.
 - Apply the minimum required operating system versions and updates.
 - Size the hardware to meet transactional requirements.
 - Create the required operating system users and groups.
 - Prepare the Oracle Grid infrastructure (conditional).
2. Download and stage the Release 12.2 software distribution.

3. Perform a new installation (Standard or Express) using Rapid Install.
4. Apply the latest technology stack updates.
5. Update to the latest Oracle E-Business Suite code.
 - Apply the Consolidated Seed Table Upgrade Patch.
 - Apply the latest AD-TXK Release Update Pack (RUP).
 - Apply the latest Oracle E-Business Suite Release 12.2 RUP.

Note: For production use, you must apply at least the 12.2.3 RUP to your existing Release 12.2 system. We recommend applying the latest available RUP.

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

You can keep current on the latest release information, as well as new RUP announcements and other updates that may affect your installation, by reviewing the latest version of My Oracle Support Knowledge Document 1320300.1, *Oracle E-Business Suite Release Notes Release 12.2*.

- Apply the latest security patches.
 - Apply all recommended patches.
6. Perform required and conditional tasks for new installations, such as the following. For a full list, see *Finishing Tasks*, page 4-2.
 - Deploy customizations, external integrations, and third-party integrations.
 - Perform advanced configurations.
 - Scaling up and scaling out, such as adding additional managed servers, adding application tier nodes, or adding Oracle RAC nodes
 - Secure configuration
 - DMZ configuration
 - Disaster recovery setup

- Reporting environment setup

Upgrading an Existing Oracle E-Business Suite System to Release 12.2

There are two major paths for upgrading an existing Oracle E-Business Suite system, depending on the Oracle E-Business Suite release from which you are upgrading:

- Release 11i (11.5.10) to Release 12.2
- Release 12.0 or 12.1 to Release 12.2

These paths are described in detail in the upgrade guides.

Additional Information: See *Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2* or *Oracle E-Business Suite Upgrade Guide: Release 12.0 and 12.1 to 12.2*.

Installed Components and System Requirements

This section lists the certified components installed with Rapid Install, and the system requirements for an Oracle E-Business Suite Release 12.2 installation.

Technology Stack Components

Rapid Install automatically installs and configures the required technology stack components for both the database node and the application tier node.

The database tier technology stack for a new Oracle E-Business Suite Release 12.2 installation consists of an Oracle Database 12c Release 1 (12.1.0.2) Oracle home. We strongly recommend that you upgrade to Oracle Database 19c after the installation, following the process documented in My Oracle Support Knowledge Document 2552181.1, *Interoperability Notes: Oracle E-Business Suite Release 12.2 with Oracle Database 19c*.

Note: For a database remaining at Oracle Database 12c Release 1 (12.1.0.2), you should ensure that you have a Market Driven Support contract to continue receiving patches for your database.

Important: For databases running on-premises or on Oracle Cloud Infrastructure, Oracle E-Business Suite requires Oracle Database Enterprise Edition. No other Oracle Database editions are certified for use with Oracle E-Business Suite environments on-premises or on Oracle Cloud Infrastructure.

The application tier node technology stack includes, among other components:

- Oracle Application Server 10g (10.1.2.3), which includes:
 - Oracle Forms
 - Oracle Reports
- Oracle Fusion Middleware 11g, which includes:
 - Oracle WebLogic Server

Note: In Release 12.2, the required Java Development Kit (JDK) is automatically installed by Rapid Install. You do not need to install the JDK separately.

Note: Oracle E-Business Suite requires Oracle homes to be writable, not read-only.

Product-specific documents on My Oracle Support [<https://support.oracle.com>] describe use of these components with Oracle E-Business Suite.

You can also check product certifications from My Oracle Support by clicking the *Certifications* tab (which may be under the *More* tab).

Note: If you are performing an Oracle E-Business Suite upgrade to Release 12.2 on Oracle Cloud Infrastructure, it is strongly recommended that you follow the standards listed in Sections 3 and 4 of My Oracle Support Knowledge Document 2656874.1, *Standards Used by the Oracle E-Business Suite Cloud Manager for Provisioning Oracle E-Business Suite on Oracle Cloud Infrastructure*.

Important: Do not deploy custom applications into the Oracle E-Business Suite technology stack. The Oracle E-Business Suite database Oracle home must be used exclusively for that database, and not shared either with other Oracle E-Business Suite databases or with other applications. Similarly, the Oracle E-Business Suite application tier Oracle homes should be used exclusively to run Oracle E-Business Suite services.

Sharing a database Oracle home between multiple Oracle E-Business Suite instances is not recommended because Oracle E-Business Suite tools are designed to work with a single database associated with a single Oracle E-Business Suite instance. Running these tools in an environment where multiple Oracle E-Business Suite instances are

associated with the same database Oracle home can have unpredictable results.

Combining custom applications into the Oracle E-Business Suite technology stack is not recommended for the following reasons:

- Difficulty in isolating and debugging performance or stability issues
- Increased security risk if either a custom application or Oracle E-Business Suite is compromised
- Complexity in maintaining the technology stack if either a custom application or Oracle E-Business Suite has dependencies on older component versions
- Complexity in obtaining support for issues on nonstandard environments

Instead, it is recommended that you deploy a custom application and its required technology stack prerequisites on a separate server.

System Software, Patch Level, and Networking Requirements

This section describes system software requirements, patch level requirements in multinode installations, and essential networking requirements.

Operating System

Oracle E-Business Suite Release 12.2 requires a 64-bit operating system. If you have not already done so, then you must plan for and upgrade the operating system of your Oracle E-Business Suite application and database tiers to a 64-bit operating system.

Action: Follow the instructions in the Oracle E-Business Suite Installation and Upgrade document for your platform to ensure that you meet all operating system requirements:

- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for Linux x86-64* (My Oracle Support Knowledge Document 1330701.1)
- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for Oracle Solaris on SPARC (64-bit)* (My Oracle Support Knowledge Document 1330702.1)
- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2)*

for IBM AIX on Power Systems (64-bit) (My Oracle Support Knowledge Document 1330703.1)

- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for HP-UX Itanium* (My Oracle Support Knowledge Document 1330704.1)
- *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for Microsoft Windows x64 (64-bit)* (My Oracle Support Knowledge Document 1330706.1)

Tip: In addition to the platform-specific maintenance tools listed in the *Installation and Upgrade Notes*, the following utilities are required on all UNIX-based operating systems: `unzip`, `df`, `ps`, and `wall`.

Note: In this guide, the term "UNIX" refers to all variants of that operating system, including Linux.

Conditional Action: If you are installing on Exadata or Exalogic, follow the instructions in *Oracle E-Business Suite Installation and Upgrade Notes Release 12 (12.2) for Linux x86-64* (My Oracle Support Knowledge Document 1330701.1) above, taking note of the exceptions listed for packages that are already contained in Exadata systems.

Operating System Requirements in a Multinode Installation

In a multinode installation, all application tier nodes are required to be on the same platform and operating system. This is a requirement for adding nodes by cloning in a multinode deployment.

Additional Information: Refer to My Oracle Support Knowledge Document 1383621.1, *Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone*.

For all the nodes of a particular tier, either application tier nodes or database RAC nodes, Oracle recommends that you use the same operating system kernel parameter settings when using identical machines, or adjust the settings based on the machines' load. Using the same operating system kernel parameter settings simplifies management and maintenance.

Note: When you run Rapid Install as part of an upgrade, the upgrade

process is performed with only one application tier and one database tier. You must complete the upgrade to the latest Oracle E-Business Suite code before you can perform optional advanced configurations, such as scaling your environment by adding application tier nodes and database RAC nodes, as a post-upgrade step. However, if you plan to use a multinode deployment after the upgrade, it is recommended that you prepare the hardware infrastructure in advance as part of the preparation for the upgrade.

Networking

The key networking requirement is for the `hosts` file to include an entry for the installation machine, formatted as follows:

```
<IP address> <host name>.<domain name> <host name>
```

Note: If you are performing an Oracle E-Business Suite upgrade to Release 12.2 on Oracle Cloud Infrastructure, it is strongly recommended that you follow the standards listed in Section 2 of My Oracle Support Knowledge Document 2656874.1, *Standards Used by the Oracle E-Business Suite Cloud Manager for Provisioning Oracle E-Business Suite on Oracle Cloud Infrastructure*.

Shared Memory Permissions

On applicable UNIX platforms, ensure that the `/dev/shm` directory has neither the 'noexec' nor 'nosuid' permissions set. If it has, you may encounter the following Oracle JVM JIT runtime error:

```
ORA-29516: Aurora assertion failure: Assertion failure at joes.c:  
Bulk load of method java/lang/Object.<init> failed; insufficient shm-  
object space
```

CPU, Memory, and Disk Space Requirements

Because there are different product combinations, different user profiles, and different configurations, there is no one sizing answer for all hardware platforms. Some hardware vendors have sizing worksheets that model the CPU and memory requirements of Oracle E-Business Suite on their hardware.

The most reliable strategy to ensure that the hardware is sized appropriately is to install a test environment, and then conduct a benchmark test with a configuration, product mix, and user load that simulates your own current and expected workloads. These conditions can help verify performance before you install your production-ready environment. An alternative is to ask Oracle Consulting Services or your hardware vendor to find another Oracle E-Business Suite system running a product mix, throughput, and user profile similar to yours.

CPU Requirements

Note: Unless explicitly noted otherwise, Oracle E-Business Suite documentation uses the term "CPU" to mean an actual CPU core rather than a logical core.

CPU requirements for running Oracle E-Business Suite for the database and application tiers depend on the following factors, which are listed in no particular order:

- Required response times of the business
- Number of concurrent users and their usage profiles
- Number of concurrent manager processes and the types of jobs that they are running
- Load of activities other than Oracle E-Business Suite
- Size of the database
- The chosen deployment topology

The number of CPUs and cores needed to support Oracle E-Business Suite depends on the specific platform implementation, and whether or not hyperthreading is in use.

Two useful formulae are:

- $\text{Actual Cores Count} = \text{Processor Count} * \text{CoresCountPerProcessor}$
- $\text{Logical Processor Count} = \text{Actual CoresCount} * \text{ThreadCount}$

You should also consult your platform vendor as required.

Memory Requirements

Memory requirements for Oracle E-Business Suite depend on both the application and database tiers.

Minimum Memory for an Oracle E-Business Suite Installation

The minimum amount of memory needed to run Oracle E-Business Suite is about 6 GB for the database tier machine, and 10 GB for a single application tier machine. This configuration would typically support no more than ten users.

Tip: For additional guidance, see Database and Application Tier Sizing Guidelines, page 1-19.

Single-User Single-Machine Non-Production System

For the special case of a system that will only be employed by a single user to develop or test patches, the minimum memory requirement is 8 GB.

Important: This figure represents the minimum amount of memory that can be employed, and may rise either to meet the needs of new releases or the deployment of components such as additional managed servers.

Application Machine Memory Requirements

The total RAM memory for the application tier is the sum of:

- Technology Stack Memory
- JVM Memory
- Forms Memory
- Concurrent Manager Memory
- Other Running Processes
- Resident Memory
- OS Kernel Memory

Aside from the stack, the two main contributors to the application tier memory are the JVM memory and Forms memory (the frmweb process). For every 150 to 180 self-service users, you should allow 2 GB of JVM heap and 2 CPUs. The Forms Processes memory is equal to the (Number of Forms users) * 40 MB.

Important: These figures represent average usage. Your instance may use more or less memory depending on the applications you use.

The memory required per machine also depends on the number of application machines in your deployment. For general usage, it is not recommended that you allocate very large heap sizes. Instead, add more managed instances in the cluster to scale up to the target concurrency levels.

Note: Some transactions, such as those for Oracle Configurator, may require more memory.

Database Machine Memory Requirements

To determine the total memory requirements on the machine where the Oracle E-Business Suite database is installed, you must take the following into account:

- Oracle Database overhead
- Size of System Global Area (SGA)
- Number of concurrent users
- Any non-Oracle software that has to run on the machine (this is not recommended)

When sizing the environment in which you will install Oracle E-Business Suite, you should aim to allow for any expected growth in usage over the planned lifetime of your system. It is, however, possible to scale up a system later to meet additional requirements subsequent to installation, either by adding nodes (machines) to the application tier or employing Oracle Real Application Clusters (Oracle RAC) on the database tier.

Action: To help determine your memory requirements for the various Oracle E-Business Suite database components, refer to My Oracle Support Knowledge Document 396009.1, *Database Initialization Parameters for Oracle E-Business Suite Release 12*.

Disk Space Requirements

Rapid Install installs the file system and database files for all products, regardless of their licensed status. The approximate file system disk space requirements for a standard installation are:

File System Space Requirements for Standard Installation

Node	Space Required
Database node file system (Fresh install)	90 GB (includes database files and 12cR1 database Oracle home).
Database node file system (Vision Demo database)	200 GB (includes database files and 12cR1 database Oracle home).
Application tier node file system (OracleAS 10.1.2 Oracle home, Oracle Fusion Middleware Oracle home, COMMON_TOP, APPL_TOP, and INST_TOP)	64 GB (for dual file system). Also, see note for language (NLS) considerations.

Tip: The minimum recommended space required for each active language is 16 GB in the file system for both APPL_TOPs, and 3 GB in

the database.

Additional Information: For more information, refer to My Oracle Support Knowledge Document 1314621.1, *Oracle E-Business Suite NLS Release Notes, Release 12.2*.

Warning: At present, Rapid Install does not support installing Oracle E-Business Suite into a directory that has more than 2 TB of free space. This is because of address space restrictions.

Stage Area

For a production database installation, running Rapid Install from a stage area requires at least 48 GB to accommodate the file system and database files in the stage area. See *Setting Up the Stage Area*, page 1-35.

Oracle E-Business Suite Log and Output Files

Many Oracle E-Business Suite products generate log and output files during runtime. The disk space needed varies with the number of users and transactions, and depends on how frequently you purge these files.

Tip: Log and output files are not automatically purged. The size of these files can increase quickly, which can impact the performance of your system. Determine a strategy for archiving and purging these files after the installation, particularly for files in the trace directories, and monitor the disk space they consume to determine how much space you may need in the future.

Temporary Disk Space Requirements

You should ensure that the \$TMPDIR environment variable points to /tmp, and that this directory has at least 5 GB of free space for use by Rapid Install. The equivalent variables on Windows are %TEMP% and %TMP%.

At runtime, Oracle E-Business Suite requires temporary disk space. For example, each concurrent manager writes temporary parameter files, Oracle Reports writes temporary format files, and Oracle Forms writes temporary buffer records. Rapid Install sets the temporary directory based on the value you supply on node-specific settings screens. The directory defined by the TMPDIR variable is also used for some temporary files, such as certain patches.

The amount of temporary space will depend on the number of forms and concurrent manager sessions writing on the temporary file system. It is recommended that you use separate disk partitions for operating system and user data (that is, separate partitions

for /home, /tmp, /var/tmp, /oracle, and so on). This strategy can prevent a "file system full" issue from impacting operations. Establishing disk quotas can also prevent a user from accidentally or intentionally filling up a file system.

Updates and Patches

You will need adequate disk space for applying updates, patches, maintenance packs, family packs, and minipacks, as well as for any backup files that may be created.

Additional Information: For more information about the amount of disk space needed for the various types of patching operation, see *Patching Utilities, Oracle E-Business Suite Maintenance Guide* and *Patching Procedures, Oracle E-Business Suite Maintenance Guide*. Also see *Applications DBA System Maintenance Tasks and Tools, Oracle E-Business Suite Maintenance Guide*.

Other Files

The total disk space estimate must account for the requirements of files other than those directly related to Oracle E-Business Suite. For example:

- Operating system software
- Online backups
- Custom applications development files
- Files for any other software that you use

Input/Output (I/O) Subsystem

Performance during an upgrade depends heavily on the speed of the Oracle database system input/output (I/O) subsystem. Oracle recommends an average disk response time (average service time) below 10-15 milliseconds for better performance.

Additional Information: Detailed information, including input/output operations per second (IOPs) calculations, is available in My Oracle Support Knowledge Document 1597531.1, *Oracle E-Business Suite Release 12.2: Upgrade Sizing and Best Practices* and My Oracle Support Knowledge Document 2115481.1, *Oracle E-Business Suite Release 12.2.5 Upgrade Sizing and Best Practices*.

To monitor the I/O performance, you should use OS tools like *iostat* or *sar* (Unix) during your test upgrade. Use similar tools for other operating systems, for example Performance Monitor for Windows. You can also monitor I/O performance on your production system during peak load to get an idea about your I/O subsystem performance before the upgrade. However, you should note that the I/O load and,

therefore, the average service time on existing applications, is different from that of an upgrade.

While you are monitoring the I/O performance, you should focus on the *average service time* (the average of elapsed time in milliseconds that the disk drive takes to complete an I/O request) and the *average wait* (the average amount of time requests are left outstanding). Higher averages for these two indicators signal an I/O bottleneck. An average service time longer than 50 milliseconds is reason for concern if it lasts too long or it is continuously at a high level. Small intervals of high average service time should not be of concern.

Additional Information: See the *Oracle Database Performance Tuning Guide* for your Oracle Database version.

Database Size

Database sizing is dependent on the following main factors:

- Current user distribution along with transaction rates
- Project workload and user increase
- Retention policies for historical data

You should ensure that proper planning is in place for database footprint management, in conjunction with appropriate purge and archive policies defined as part of your instance management strategy.

To estimate the increase in required disk space for upgrading, consider the products, the number of languages being installed, and changes in the data model. For example, in a test upgrade of the largest Oracle production system (oraprod), the database increased 10-20 percent. In a test upgrade, the Vision database increased 5 percent.

Additional Information: For guidelines based on an upgrade of the Oracle production system, see My Oracle Support Knowledge Document 1597531.1, *Oracle E-Business Suite Release 12.2: Upgrade Sizing and Best Practices* and My Oracle Support Knowledge Document 2115481.1, *Oracle E-Business Suite Release 12.2.5 Upgrade Sizing and Best Practices*.

Tablespace Sizing

Make sure you allocate sufficient tablespace.

Additional Information: For guidelines based on an upgrade of the Oracle production system, see My Oracle Support Knowledge Document 1597531.1, *Oracle E-Business Suite Release 12.2: Upgrade Sizing*

and Best Practices and My Oracle Support Knowledge Document 2115481.1, Oracle E-Business Suite Release 12.2.5 Upgrade Sizing and Best Practices.

Block Size

This release requires a database block size of 8K. In addition to providing significant performance improvement, this setting accommodates the Oracle E-Business Suite indexes that require this block size.

Configure and Use /dev/urandom on the Application Tier (applicable for UNIX platforms)

In Oracle Database releases 11.2.x and later, JDBC connection establishment uses a new connection mechanism called o5logon that requires the use of random numbers. These numbers are typically generated by a special device, /dev/random. However, this random number generator relies on entropy in order to generate sufficiently random numbers. Unlike /dev/random, /dev/urandom is an unlimited, non-blocking random source.

Before you begin an Oracle E-Business Suite installation using Rapid Install, you must configure /dev/urandom and use it for the duration of the installation. If you do not set this configuration, you may encounter issues with Oracle WebLogic Server domain deployment and Oracle HTTP Server instance setup if the entropy on your system is low. To avoid these issues, prior to running Rapid Install on the application tier, you must configure /dev/urandom and use it for the duration of the installation. After Rapid Install has completed, you can revert to your previous configuration.

If /dev/urandom is configured on your machine, you can temporarily replace /dev/random with /dev/urandom by using a symbolic link. The following sample commands show an example of how to set up the symbolic link:

```
mv /dev/random /dev/random_orig
ln -sf /dev/urandom /dev/random
```

Note: This configuration must be in place while you are running Rapid Install to perform the following actions as part of an upgrade to Oracle E-Business Suite Release 12.2.0:

- Create Upgrade File System
- Configure Upgraded Release 12.2.0 Instance

For information on keeping this setup for the remainder of the upgrade process when running Rapid Install as part of an upgrade, review the recommendations in My Oracle Support Knowledge Document 1581549.1, *Best Practices for Minimizing Oracle E-Business Suite Release 12.2.n Upgrade Downtime*.

If the `/dev/urandom` file is not available and configured, refer to My Oracle Support Knowledge Document 1065393.1, *Upgrade From 11.5.10.2 Is Very Slow as XDOLoader Task Hangs*, which is referenced from My Oracle Support Knowledge Document 1581549.1, *Best Practices for Minimizing Oracle E-Business Suite Release 12.2.n Upgrade Downtime*.

Note: You should check the use of `/dev/urandom` with the relevant security team in your organization, as the keys produced by `/dev/urandom` are pseudo-random. However, provided that the entropy pool has started using genuine randomness (from entropy), `/dev/urandom` is not predictable or less secure, even though it uses a reduced number of bits. Only the most sensitive uses of random numbers need the entropy guarantee that `/dev/random` provides.

Database and Application Tier Sizing Guidelines

This section includes the following:

- General sizing guidelines
- JVM parameter settings for Java on WLS Web Tier
- Database and application tier sizing information, based on a test upgrade from Oracle E-Business Suite Release 12.1.3 (with a 146 GB database) to Release 12.2.5

General Sizing Guidelines for the Database and Application Tier

Below are some general sizing guidelines for Oracle E-Business Suite.

Be aware of the following important points:

- These guidelines were derived using Oracle's hardware and networking infrastructure, and should only be used as a starting guide.
- You should always size your systems based on tests using representative data and workloads for your own environments. The most reliable strategy to ensure that the hardware is sized appropriately is to install a test environment, and then conduct a benchmark test with a configuration, product mix, and user load that simulates your own current and expected workloads. These conditions can help verify performance before you install your production-ready environment.
- In addition to the memory needed based on the sizing guidelines given, you should allow an extra 2 GB of free memory for the database tier machine, and an extra 3 GB of free memory for the application tier machine (for Online Patching).
- The sizing of transactions depends on the transaction type (such as Oracle Application Framework, Forms, or batch programs), and the expected transaction

workload (light, medium, or heavy). Some transactions may require more memory (such as those for Oracle Configurator). The transactional workload is a function of user concurrency levels, user transaction frequency, and user adeptness. For instance, less adept users may increase the load on the system by performing less exact searches that would cause a full table scan instead of performing an index lookup.

Oracle Application Framework Transactions

The following table shows the machine memory used for Oracle Application Framework-type transactions with light to medium workload characteristics:

Note: The figures in this table do not take into account any Online Patching requirements.

Machine Memory for Oracle Application Framework Transactions

Number of Concurrent Users	Database Machine Memory	Number of Database Machine CPUs	Application Tier Machine Memory	Number of Application Tier Machine CPUs
0-10	4 GB	2	6 GB	2
100-200	8 GB	2	8 GB	2
200-400	12 GB	4	10 GB	4
400-800	20 GB	8	14 GB	8

You should plan your resources using these figures as guidelines.

Important: Figures of this kind represent a *minimum* amount of memory, and your specific requirements may need more.

Oracle Forms Transactions

On the application tier, each Oracle Forms process requires approximately 40 MB of memory. So the total memory required, using the average, is given by the formula:

$$(\text{Number of concurrent Oracle Forms users}) * 40 \text{ MB}$$

The following table lists the additional machine memory needed for different numbers of users:

Machine Memory for Oracle Forms Users

Number of Users	Required Machine Memory
100	4 GB
200	8 GB
400	16 GB
800	32 GB

On the database tier, there is one Oracle Forms session per open form, and each of these sessions requires approximately 30 MB of PGA memory.

The following table lists the memory required for different numbers of sessions:

Machine Memory for Oracle Forms Sessions

Number of Oracle Forms Sessions	Required Machine Memory
100	3 GB
200	6 GB
400	12 GB
800	24 GB

JVM Parameter Settings for Java on WLS Web Tier

If you are running Oracle E-Business Suite on 64-bit Java, bear in mind the following points:

- For both Oracle Application Framework and Oracle Forms applications, you can support 150-180 users per 2 GB of JVM heap. The initial heap size (Xms) and maximum allocated heap (Xmx) should both be set to at least 2GB per 150-180 users.
- Only the value of Xmx has an effect on response time. Changing the value of Xms does not have an effect.
- Usually, one JVM is allocated for every 2 CPUs.

- For best results, use multiple managed instances. For example, two managed instances with a 4 GB heap size for each will provide better response times than one JVM with a total heap size of 8 GB.

Note: These guidelines are provided here to aid in your resource planning prior to installation. By default, Xms and Xmx are both set to 1024 MB during installation. You can configure the JVM parameters to alter these settings as part of performance tuning after the installation.

Suggested Reading: For more information, see Customizing the number of instances of a particular service type, Technical Configuration, *Oracle E-Business Suite Setup Guide* and *Oracle E-Business Suite Performance Best Practices*, My Oracle Support Knowledge Document 2528000.1.

If you need to accommodate more users, we recommend doing so by adding managed instances to the cluster. The maximum heap size should be no more than 4 GB. The JVM heap size is dependent on the number of CPUs available for the JVM to support incremental and full garbage collection cycles, in addition to the actual concurrency workload. There are two benefits from scaling by using additional managed instances:

- Garbage collection (GC) activity is more easily balanced (automatically) with multiple managed instances.
- Each instance will be able to utilize a separate connection pool. In essence, you need to maintain a balance between the allocated JVM heap size per instance and the available connection pool for that instance.

Careful sizing is needed for the concurrent manager components, especially Java concurrent programs. If you will be processing relatively large volumes of data, you may need to increase the Xms/Xmx settings for the Java concurrent programs. This is normally done via the options field of the define concurrent program screen. Note that when you increase the number of workers, the memory requirements may increase significantly: this is because each Java concurrent worker will require at least an amount of memory specified by the value of Xms.

Example Upgrade

This section provides sample figures for an upgrade from Oracle E-Business Suite Release 12.1.3 to Release 12.2.5. The figures were derived using Oracle's hardware and networking infrastructure, and are provided for general guidance only.

Automatic Workload Repository Advisory sections from test runs should be used to size relevant database memory components for the actual upgrade.

Tip: To minimize unforeseen contingencies, prior to the actual upgrade it is essential to perform pre-production testing and validation on a comparable system to the production system.

Example Upgrade - Environment Details

The environment details for this upgrade were as follows:

- Operating system: Oracle Linux Release 5.8
- Server memory: 141 GB
- Number of CPUs: 24
- Oracle Database Release: 12.1.0.2
- Oracle E-Business Suite Release: 12.1.3

Note: The database tier and application tier are on the same machine in this example.

Database configuration was as follows:

- SGA: 10 GB
- Shared pool: 1 GB
- PGA: 10 GB
- Log buffer: 30 MB
- job_queue_processes: 24

Note: During the upgrade of the Admin Tier, the batchsize and number of workers used were 1000 and 24 respectively.

Example Upgrade - Database Size

The following table shows the data for the example upgrade from Release 12.1.3 to Release 12.2.5:

Database Size Data for Example Upgrade

Before Upgrade Database Size (GB)	After Upgrade Database Size (GB)	Delta (GB)	% Growth
146	121	-25	-17.12

The reduction in database size is a result of obsolete schemas and objects being removed from the upgraded system. See Schemas Not Used by Oracle E-Business Suite Release 12.2, *Oracle E-Business Suite Upgrade Guide*.

Example Upgrade - Application Tier Size

Oracle E-Business Suite Release 12.2 is installed with three file systems, to accommodate the Online Patching feature.

- fs1 (production file system) - Used by the current users of the system.
- fs2 (copy of production file system) - Used by the patching tools.
- fs_ne (non-editioned file system) - Used to store data that is kept in the file system (such as data import and export files, reports, and output and log files).

In addition, the pre-upgrade file system has a requirement for an INST_TOP.

All three file systems in the Release 12.2 installation serve a single database. The file system in use by the running application is never patched. All patches are applied to the secondary file system.

The following table shows the data for the example upgrade from Release 12.1.3 to Release 12.2.5:

Application Tier Size Data for Example Upgrade

Component	Size Before Upgrade	Size After Upgrade
ORACLE_HOME	9 GB	9.3 GB
APPL_TOP	51 GB	N/A
INST_TOP	27 MB	N/A
fs1 (APPL_TOP+ INST_TOP)	N/A	41 GB

Component	Size Before Upgrade	Size After Upgrade
fs2 (APPL_TOP+ INST_TOP)	N/A	34 GB
fs_ne	N/A	1 GB

Suggested Reading: For further examples, see *Oracle E-Business Suite Release 12.2: Upgrade Sizing and Best Practices*, My Oracle Support Knowledge Document 1597531.1, and *Oracle E-Business Suite Release 12.2.5 Upgrade Sizing and Best Practices*, My Oracle Support Knowledge Document 2115481.1.

Before You Install

You must follow all the relevant steps in this section before you begin the installation.

Performing Mandatory Preparatory Tasks

Before running Rapid Install, you must follow the applicable instructions in several critical documents. If you do not do so, your installation or upgrade may fail.

Action: Follow the instructions in My Oracle Support Knowledge Document 1320300.1, *Oracle E-Business Suite Release Notes, Release 12.2* to prepare your environment for running Rapid Install. As described in Document 1320300.1, you must meet all operating system and software requirements before you install or upgrade to Oracle E-Business Suite Release 12.2. Ensure that you follow the instructions in the relevant Oracle E-Business Suite platform-specific Installation and Upgrade document as listed in the operating system requirements, page 1-9 and in Document 1320300.1.

Conditional Action: Deploying a role-separated Oracle Grid Infrastructure on Oracle E-Business Suite requires additional patches. See My Oracle Support Knowledge Document 1320300.1, *Oracle E-Business Suite Release Notes, Release 12.2* and *Additional Bug Fixes Needed When Installing Oracle E-Business Suite Release 12.2 For Use With Oracle Grid*, My Oracle Support Knowledge Document 1594274.1, *Oracle E-Business Suite Release 12.2: Consolidated List of Patches and Technology Bug Fixes*.

Conditional Action: This note applies only if you are upgrading from Oracle E-Business Suite Release 12.0 or 12.1. If you are planning to use a logical hostname for the application tier, then you must refer to Section 5.4: Upgrading to Oracle E-Business Suite Release 12.2 Using Physical and Logical Host Names on the Application Tier, and perform the steps in Section 5.4.1: Verifying Logical Host Name Configurations Prior to Upgrade to Oracle E-Business Suite Release 12.2, My Oracle Support Knowledge Document 1968231.1, *Configuring Oracle E-Business Suite Release 12.x Using Logical Host Name*.

In addition to meeting the prerequisites described in this book and in the platform-specific notes, you should also ensure you understand the licensing agreement for your organization.

Additional Information: For general Oracle E-Business Suite installation troubleshooting hints and tips, see My Oracle Support Knowledge Document 1378579.1, *Troubleshooting Rapid Install for E-Business Suite Release 12.2*.

Creating Operating System Accounts

Before running Rapid Install, you must create the operating system accounts that will be used in the installation of the database node and application tier node file systems. The details of creating these accounts depend on whether you are using a UNIX system or Windows system. Consult the appropriate operating system documentation as required.

For UNIX users

The operating system user that owns the database file system and starts the database services is called the *oracle* user. This user must be created with a primary group of 'dba'. The operating system user that owns the Oracle E-Business Suite file system and starts the application tier services is called the *applmgr* user.

The names of both these accounts must be the same on all nodes in an Oracle E-Business Suite system. Additionally, the account ID, group name, and group ID must also all match on all nodes.

Single-user UNIX installations

In order to prepare for a single-user installation, you must first create an *oracle* user account and log in as the *oracle* user to run Rapid Install. The account should be created with a default shell that is compatible with the Bourne shell.

Note: If using the Korn Shell (ksh), ensure that the \$ENV environment

variable is *not* set before starting the installation, as it can alter variables that are set by the Oracle installation scripts. The command `unset ENV` can be used to unset the variable if necessary.

Multi-user UNIX installations

In order to prepare for a multi-user installation, you must first create an *oracle* user account and an *applmgr* user account. Both should be created with a default shell that is compatible with the Bourne shell. Log in as *root* to run Rapid Install. Then specify the *oracle* user as the Oracle OS user, and the *applmgr* user as the Apps OS user.

Important: Ensure that the Xauthority file named `.Xauthority` (with correct entries) exists under the respective home directories of both the *oracle* user and the *applmgr* user.

The *oracle* user is the account that owns the database node technology stack (database Oracle home) and the database files. The default name for the *oracle* user is `ora<SID>`. For example, for a production (PROD) environment, the default Oracle OS username is *oraprod*.

The *applmgr* user is the account that owns the application tier node technology stack (APPL_TOP, COMMON_TOP, OracleAS 10.1.2 Oracle home, and Oracle Fusion Middleware Oracle home). The default name is `appl<SID>`. For example, for a Vision Demo (VIS) environment, the default Apps OS username is *applvis*.

On systems consisting of multiple nodes, you can assign one user account to be the owner of the database node file system, and another to be the owner of the application tier node file system. For this type of install, Rapid Install can install both nodes in one run if the install is started by the root user. If you are installing on a machine with only one node to install, or with all nodes sharing the same user, you can run the install as either the root user or the specific user for those nodes.

Creating Job Role Separation Operating System Privileges, Groups, Users, and Directories

If you plan to install Oracle E-Business Suite in an Oracle RAC environment, and you plan to use job role separation to manage operating system permissions for Oracle Automatic Storage Management, Oracle Grid Infrastructure, and Oracle software installations, then follow these instructions to create the appropriate operating system users and groups with which to install the Oracle software to use this feature. This configuration divides the administration privileges at the operating system level. In these instructions, the `grid` user is the owner of the Oracle Grid Infrastructure software and Oracle Automatic Storage Management binaries, and the `oracle` user is the owner of the Oracle RAC software binaries. Both users must have an Oracle Inventory group such as `oinstall` as their primary group.

Additional Information: See the Oracle Grid Infrastructure installation

documentation for your release:

- Oracle ASM Groups for Job Role Separation, *Oracle Grid Infrastructure Installation Guide 12c Release 1 (12.1) for Linux*
- Oracle Installations with Standard and Job Role Separation Groups and Users, *Oracle Grid Infrastructure Installation and Upgrade Guide 12c Release 2 (12.2) for Linux*

You can create several operating system groups in order to separate the various administration privileges. The following table shows the recommended operating system groups that provide a high degree of separation while meeting the permission requirements for running Rapid Install.

Recommended Operating System Groups

Description	Operating System Group Name	Operating System Users Assigned to This Group	Oracle Privilege	Oracle Group Name
Oracle Inventory and Software Owner	oinstall	grid, oracle	(none)	(none)
Oracle Automatic Storage Management Group	asmadmin	grid	SYSASM	OSASM
ASM Database Administrator Group	asmdba	grid, oracle	SYSDBA for ASM	OSDBA for ASM
ASM Operator Group	asmoper	grid	SYSOPER for ASM	OSOPER for ASM
Database Administrator	dba	oracle	SYSDBA	OSDBA
Database Operator	oper	oracle	SYSOPER	OSOPER

Creating the groups and user for the Oracle Grid software

Create the `oinstall`, `asmadmin`, `asmdba`, and `asmoper` groups using the following commands. You must run these commands with root privileges.

```
$ groupadd -g 9999 oinstall
$ groupadd -g 8888 asmadmin
$ groupadd -g 7777 asmdba
$ groupadd -g 6666 asmoper
```

Use the following command to create a user named `grid` and assign the necessary groups to that user. The `grid` user will own the Oracle Grid Infrastructure.

```
$ useradd -g oinstall -G asmadmin,asmdba,asmoper -d <Home Directory>
grid
```

At this point, set the `grid` user password.

Creating the groups and user for the Oracle software:

Create the `dba` and `oper` groups using the following commands. You must run these commands with root privileges.

```
$ groupadd -g 1010 dba
$ groupadd -g 1020 oper
```

Use the following command to create a user named `oracle` and assign the necessary groups to that user. The `oracle` user will own the Oracle RAC software. This user must have the `asmadmin` and `asmdba` groups assigned when you use different users for the Oracle Grid and Oracle software.

```
$ useradd -g oinstall -G dba,oper,asmdba -d <Home Directory> oracle
```

Ensure that you set the resource limits for the Oracle software installation users following the Oracle Grid Infrastructure documentation.

For Windows users

On Windows, the user who runs Rapid Install owns the file system for all components (both the database file system and the Oracle E-Business Suite file system). The Windows installation is therefore equivalent to the UNIX single-user installation.

Before you install Oracle E-Business Suite, make sure the user account for the installation has full local administrative privileges, and permission to print to either local or network printers. We recommend that you create a new domain-level account (for example, *oracle*) and make it a member of these groups:

- Administrators (local user)
- Domain Users (domain user)

This account does not need to be a member of any other group, and *cannot* be a member of the GUEST group. Refer to Windows Help for information on creating accounts and assigning accounts to groups.

Preparing to Install in an Oracle RAC Environment

If you plan to install Oracle E-Business Suite in an Oracle RAC environment, you must

ensure that the necessary Oracle Grid infrastructure is in place first.

Conditional Action: Depending on the Oracle Grid version, perform the prerequisite steps listed in the corresponding document:

- My Oracle Support Knowledge Document 1626606.1, *Using Oracle 12c Release 1 (12.1) Real Application Clusters with Oracle E-Business Suite Release R12.2*
- My Oracle Support Knowledge Document 2676282.1, *Installing and Upgrading Oracle Grid Infrastructure 19c for Oracle E-Business Suite Release 12.x Databases*

Gathering Configuration Information

The Rapid Install wizard provides input screens to gather system-specific values for configuring a new or upgraded system. If you collect the necessary information before you begin, the installation or upgrade will be completed more rapidly.

Important: You should be familiar with system requirements, resources, and product licensing agreements before you run Rapid Install. You should also have an adequate understanding of Oracle DBA and system administrator responsibilities.

Note: When you are entering values for Rapid Install, ensure that you specify the actual locations for the directories involved, so that AD utilities can properly identify the directories afterward. Do not specify the directory locations as symbolic links.

Top-Level Directories and Mount Points

Rapid Install needs to be told the locations of the top-level directories and mount points on the database node, and the application tier node or nodes. It derives subdirectories from these top-level directories.

Important: Only the values for the base directories can be specified. The derived values for other directories must be left at the default values that are calculated by Rapid Install.

Products and Country-Specific Functionalities

Licensed products are those specified in your licensing agreement with Oracle. During the installation, Rapid Install automatically installs all products, country-specific

functionalities (localized products), and required shared products in the database and in the file system, regardless of license status. However, you must indicate on the Rapid Install wizard screens which products and country-specific functionalities you have licensed. Rapid Install then registers them as active in your system.

Setting the license status for Oracle E-Business Suite products correctly is critical as this status is referenced during patching and other system-wide maintenance. You can use the License Manager utility to activate additional products after installation. However, unlicensing a product is not supported, and there are only limited options for correcting the status of a product that was inadvertently marked as licensed.

Additional Information: See License Manager, *Oracle E-Business Suite Maintenance Guide*.

NLS Settings

Oracle E-Business Suite Release 12.2.0 provides multilingual support for text parts of Oracle E-Business Suite, and for product data. Because it offers support for the Unicode AL32UTF8 character set, you can, if required, run a number of languages in a single instance. You choose the character set for both the database and application products when you run Rapid Install.

Important: The choice of character sets should be made carefully. It is possible to convert from some character sets to others at a later stage, but there are restrictions. For example, you can convert from US7ASCII to AL32UTF8, but not from AL32UTF8 to US7ASCII.

The profile options for language and territory are configured at the site level when you run Rapid Install. The language you choose as the base language is used for the language profile. The default settings for date and number formats are derived from the territory profile setting.

Additional Information: For an introduction to NLS and related subjects, see Globalization Support in *Oracle E-Business Suite Concepts*. For an in-depth discussion of globalization issues, see My Oracle Support Knowledge Document 393861.1, *Globalization Guide for Oracle Applications Release 12*.

Port Pool

The various features and components of Oracle E-Business Suite require the availability of a large number of ports on your system. To simplify deployment and management of the various ports, Oracle E-Business Suite includes the concept of a *port pool*. The port pool concept includes a mechanism for determining a default base value for each type of port; formatted values, which often contain multiple ports; and a mechanism for

determining a unique value for each pool. The net result of this is that there are 100 different port pools (sets), which are guaranteed to contain non-overlapping values. You simply specify the pool you want to use, and a consistent set of port values are chosen for all the required ports.

Important: The introduction of online patching in Oracle E-Business Suite Release 12.2 means that a separate port pool is needed for each of the two file systems (run and patch) that online patching requires. However, the Oracle HTTP Server port, Active web port, Java Object Cache (JOC) port, and Database port must be the same for both file systems.

Ports Used By Oracle E-Business Suite

Port Name	Description and Comments
Node Manager Port	Port used by Node Manager.
WLS Admin Server Port	Port used by WLS Admin Server.
WLS OACORE Application Port	Port used by WLS OACORE Applications.
WLS Forms Application Port	Port used by WLS Forms Applications.
WLS OAFM Application Port	Port used by WLS OAFM Applications.
WLS Forms-C4WS Application Port	Port used by WLS Forms-C4WS Applications.
WLS Portlet Application Port	Port used by WLS Portlet Applications.
OHS Administration Proxy Port	Proxy port used by OHS. Oracle HTTP Server uses this port for internal communication with Oracle Fusion Middleware Control.
Database Port	Port on the database server used by the Oracle Net listener.
RPC Port	RPC port on the concurrent processing server that receives incoming Report Review Agent requests.
Web SSL Port	Port used by Web SSL (Secure Sockets Layer).

Port Name	Description and Comments
ONS Local Port	Oracle Notification Server Local Port.
ONS Remote Port	Oracle Notification Server Remote Port.
ONS Request Port	Oracle Notification Server Request Port.
Web Listener Port	Port on the Web server used by the Web listener.
Active Web Port	Defaults to the value of web port. When a load balancer is used, the value of this port should be changed to the port on which the load balancer is listening for http requests.
Forms Port	Port on the Forms server used by the Forms Listener.
Metrics Server Data Port	Port on the Primary Web Node used by the Primary Forms Metrics Server Process to collect server load data. The data can be used to distribute Forms clients among Forms server nodes.
Metrics Server Request Port	Port on the Forms server used by the Metrics Server as a request port.
JTF Fulfillment Server Port	JTF Fulfillment Server Port Number.
MSCA Server Port	MSCA Server Port Number.
MSCA Telnet Server Port	MSCA Telnet Server Port Number.
MSCA Dispatcher Port	MSCA Dispatcher Port Number.
Java Object Cache Port	Port used by the Java Object Caching infrastructure. Must be same on all application tier nodes. If there are firewalls separating the application tier nodes, this port must be opened on all firewalls.
OC4J JMS Port Range for OACORE	Java JMS Port Range for the OACORE Oracle Container.

Port Name	Description and Comments
OC4J JMS Port Range for Forms	Java JMS Port Range for the Forms Oracle Container.
OC4J JMS Port Range for Home	Java JMS Port Range for the Home Oracle Container.
OC4J JMS Port Range for OAFM	Java JMS Port Range for the OAFM Oracle Container.
OC4J JMS Port Range for Forms-C4WS	Java JMS Port Range for the Forms-C4WS Oracle Container.
OC4J AJP Port Range for OACORE	Java AJP Port Range for the OACORE Oracle Container.
OC4J AJP Port Range for Forms	Java AJP Port Range for the Forms Oracle Container.
OC4J AJP Port Range for Home	Java AJP Port Range for the Home Oracle Container.
OC4J AJP Port Range for Oafm	Java AJP Port Range for the OAFM Oracle Container.
OC4J AJP Port Range for Forms-C4WS	Java AJP Port Range for the Forms-C4WS Oracle Container.
OC4J RMI Port Range for OACORE	Java RMI Port Range for the OACORE Oracle Container.
OC4J RMI Port Range for Forms	Java RMI Port Range for the Forms Oracle Container.
OC4J RMI Port Range for Home	Java RMI Port Range for the Home Oracle Container.
OC4J RMI Port Range for OAFM	Java RMI Port Range for the OAFM Oracle Container.
OC4J RMI Port Range for Forms-C4WS	Java RMI Port Range for the Forms-C4WS Oracle Container.

Port Name	Description and Comments
DB ONS Local Port	Database Oracle Notification Server Local Port. The recommended value is between 6300 and 6399.
DB ONS Remote Port	Database Oracle Notification Server Remote Port. The recommended value is between 6400 and 6499.
Oracle Connection Manager Port	Port on Oracle Connection Manager server used by Oracle Connection Manager listener.

Setting Up the Stage Area

This section describes the tasks you need to perform to download the Release 12.2 installation software and create the *stage area* where the software will reside in readiness for installation.

Caution: Network-attached storage devices (such as NFS-mounted disk volumes) can be used for the stage area. However, you must use the correct mount options to avoid possible installation failure or performance issues. Refer to My Oracle Support Knowledge Document 359515.1, *Mount Options for Oracle Files When Used With NAS Devices*, and Document 1375769.1, *Sharing The Application Tier File System in Oracle E-Business Suite Release 12.2*.

Creating the Stage Area

Creating a new stage area is a multiple-step process. You must first create a directory, called `Stager122`, into which you will download the installation software mentioned above. Next you unzip the requisite files and run the build script. Then you patch the stage area with the latest consolidated fixes. After this, you are ready to run Rapid Install. This section describes the steps to follow.

Important: Do not attempt to reuse an existing stage area that was created with `startCD 12.2.0.50` or earlier, as it will contain Oracle Fusion Middleware 11g PS6 (11.1.1.7.0) or earlier, while `startCD 12.2.0.51` (Patch 22066363, RAPID INSTALL STARTCD 12.2.0.51) requires Oracle Fusion Middleware 11g PS7 (11.1.1.9.0) as well as Oracle Database 12cR1 (12.1.0.2) and the latest Oracle E-Business Suite Release 12.2 software distribution.

Tip: Ensure that the directory has sufficient space for the downloaded installation files and for the content that will be extracted from those files. See Stage Area, page 1-15.

Creating the Stage Area Directory

Issue the appropriate command for your operating system in the desired location on the file system.

For UNIX Users

In the following example, the stage area directory is created under a mount point called /u01:

```
$ cd /u01
$ mkdir Stage122
```

For Windows Users

In the following example, the stage area directory is created on the F: Drive:

```
C:\>F:
F:\>mkdir Stage122
```

Downloading Software and Unzipping Start Here Files

After creating the stage area directory, you must download into that directory the components of the latest Oracle E-Business Suite Release 12.2 software distribution (also known as a media pack) that are used by Rapid Install. The Oracle E-Business Suite Release 12.2 software distribution includes Oracle E-Business Suite, Oracle Database, and Oracle Fusion Middleware. It is obtainable in zip format from the Oracle Software Delivery Cloud [<https://edelivery.oracle.com>].

Suggested Reading: Before you download the files, read the Release Notes for the specific release you are installing.

To download the required components of the Oracle E-Business Suite Release 12.2 software distribution:

1. Sign in to the Oracle Software Delivery Cloud with your My Oracle Support credentials.
2. Select **Download Package** as the search category, enter **Oracle E-Business Suite** as the search term, and choose **Search**.
3. In the search results, select the latest Oracle E-Business Suite package for Release 12.2, such as **Oracle E-Business Suite 12.2.13.0.0**.
4. Choose **Continue**.
5. Select only the following releases:
 - Oracle E-Business Suite 12.2.0 Current

- Oracle WebLogic Server 10.3.6.0.0
- Oracle Web Tier 11.1.1.9.0
- Oracle Database 12.1.0.2.0

Ensure that all other releases in the list are deselected.

6. Select the platform for each of the selected releases, and choose **Continue**.
7. Read and accept the license agreement, and choose **Continue**.
8. By default, all available files are selected. Update the file list to select only the required files. You must download the following specific components of the Oracle E-Business Suite Release 12.2 software distribution:
 - Oracle E-Business Suite Release 12.2.0 Rapid Install Start Here (all parts)
 - Oracle E-Business Suite Release 12.2.0 for <Platform> Rapid Install (all disks and parts)
 - Oracle E-Business Suite Release 12.2.0 for <Platform> Rapid Install Technology one-off Patches
 - Oracle WebLogic Server 10.3.6 (11gR1) Generic with Coherence 3.7.1
 - Oracle Web Tier 11.1.1.9.0 Utilities (11g Patch Set 7) - Oracle Fusion Middleware for <Platform>
 - Oracle Database 12.1.0.2.0 for <Platform>

Important: If your Oracle E-Business Suite installation is on Oracle Solaris on SPARC, HP-UX Itanium, or IBM AIX on POWER Systems, and if you have previously downloaded the "Oracle Database 12c Release 1 (12.1.0.2.0) EXAMPLES" component from the Oracle Software Delivery Cloud, then you must ensure that you download the latest components before proceeding further.

9. If you are performing an on-premises installation or upgrade, choose **Download** to start the download into your stage directory.
10. If you are performing an Oracle E-Business Suite upgrade from Release 12.1 to Release 12.2 on Oracle Cloud Infrastructure, you can download software to your Oracle Cloud Infrastructure Compute VM over an internet connection. For further instructions on downloading software or patches onto Oracle Cloud Infrastructure, see Section 6.4.6: Downloading Software and Patches, *Getting Started with Oracle E-*

Note: Do not run Rapid Install to perform a fresh installation of Oracle E-Business Suite on Oracle Cloud Infrastructure. Follow the instructions in this step only for upgrading an existing Oracle E-Business Suite instance on Oracle Cloud Infrastructure.

11. Verify that you have downloaded all the required files, and only those files, into your stage directory. Each zip file is identified as "<Part Number>_NofM". For the complete set of files for a given Part Number, you need all the zip files from 1 to M. For example, Oracle Part Number "V100060-01 " has been divided into three parts, so you must download the three zip files V100060-01_1of3.zip, V100060-01_2of3.zip, and V100060-01_3of3.zip.

Warning: Do not download any other software components into the stage area, or the installation process may fail.

12. After you have downloaded the components listed above, unzip only the "Oracle E-Business Suite Release 12.2.0 Rapid Install StartHere" files, and proceed to run the buildStage script as described in the next section.

Important: If your Oracle E-Business Suite installation is on Oracle Solaris on SPARC, HP-UX Itanium, or IBM AIX on POWER Systems, then before you run the buildStage script, you must apply startCD 12.2.0.51 one-off Patch 35304997, following the instructions in the patch readme.

Running the buildStage Script

This script has several functions, which are selected from a series of menus. A key function is to unzip the rest of the installation software for subsequent use by Rapid Install. In the process, various subdirectories are created under the stage area.

Important: Running the buildStage script is a *mandatory* pre-installation step. The buildStage options you should choose depend on whether you have an existing stage area or not.

The buildStage script is run as follows on UNIX and Windows.

UNIX

```
$ cd /u01/StageR122/startCD/Disk1/rapidwiz/bin
$ buildStage.sh
```


Windows

```
C:\>F:  
F:\>cd Stager122\startCD\Disk1\rapidwiz\bin  
F:\>buildStage.cmd
```

The buildStage menus are shown below.

Main Menu

```
Build Stage Menu  
-----  
1. Create new stage area  
2. Copy patches to existing stage area  
3. List files in TechPatches directory  
4. Exit menu  
Enter your choice [4]:
```

These options are used as follows.

Main Menu - Option 1. Create new stage area

Use this option if you want to create a *new* stage area, for example if you are performing an installation from scratch. It will unzip the downloaded software and apply the one-off patches.

Note: When using startCD 12.2.0.51, you must choose option 1 to create a new stage area. This startCD version delivers a later patch set of the Oracle Fusion Middleware Web Tier Utilities than the patch set delivered by earlier startCD versions. Consequently, you must not use any existing stage area created with an earlier startCD version. Instead, create a new stage area to obtain the currently required Oracle Fusion Middleware Web Tier Utilities patch set.

On platforms other than Windows, choosing this option will display a submenu that shows the available platforms:

```
Rapid Install Platform Menu  
-----  
1. Oracle Solaris SPARC (64-bit)  
2. Linux x86 (64-bit)  
3. IBM AIX on Power Systems (64-bit)  
4. HP-UX Itanium  
5. Exit Menu  
Enter your choice [5]:
```

Specify the platform on which you want to install Oracle E-Business Suite.

Note: For a stage area on Oracle Cloud Infrastructure, the only platform you can choose is option 2, Linux x86-64.

You will then be prompted for the location of the installation software you downloaded:

Please enter the directory containing the zipped installation media:

On Windows, the platform submenu does not appear; instead, the script proceeds directly to this prompt.

Enter the full path to the directory. The stage area will then be built for you.

Main Menu - Option 2. Copy new patches to current stage area

This option updates the technology one-off patches for an *existing* stage area.

On platforms other than Windows, choosing option 2 will display the submenu that shows the available platforms:

```
Rapid Install Platform Menu
-----
1. Oracle Solaris SPARC (64-bit)
2. Linux x86 (64-bit)
3. IBM AIX on Power Systems (64-bit)
4. HP-UX Itanium
5. Exit Menu
```

Enter your choice [5]:

Specify the applicable platform, and the buildStage script will stage the technology one-off patches packaged with the startCD into the stage/TechPatches directory.

Note: For a stage area on Oracle Cloud Infrastructure, the only platform you can choose is option 2, Linux x86-64.

On Windows, the platform submenu does not appear; instead, the script proceeds directly to staging the patches.

Main Menu - Option 3. Display existing files in stage TechPatches

This option displays (in a tree format) the files in your stage/TechPatches directory:

```

Enter your choice [4]: 3
Directory /s0/oracle/XB45/startCD/Disk1/rapidwiz/bin/../../../../
/TechPatches
|--DB
|
|--11071989
|   |--p11071989_112030_Linux-x86-64.zip
|--11820674
|   |--p11820674_R12_LINUX.zip
--12949905
|   |--p12949905_112030_Linux-x86-64.zip
--12951696
|   |--p12951696_112030_Generic.zip
--12955701
|   |--p12955701_112030_Linux-x86-64.zip
--13040331
|   |--p13040331_112030_Linux-x86-64.zip
|--13388104

```

Patching the Stage Area

After running the buildStage script, you should patch the stage area with the latest consolidated fixes since the release of the current StartCD. For StartCD 12.2.0.51, the consolidated fixes are delivered in Patch 32947483 [RAPID INSTALL CONSOLIDATED BUNDLE PATCH ON TOP OF STARTCD 51 (OCTOBER 2021)].

1. Download Patch 32947483 from My Oracle Support.
2. Unzip this patch using the following command:
3. Change to the 32947483 directory.
4. Patch the stage area using the following commands:

UNIX:

```
sh patchRISStage.sh
```

Windows:

```
patchRISStage.cmd
```

When prompted for the location of the Rapid Install stage, enter the path to the stage area you created for StartCD 12.2.0.51.

Tip: Run the script as the same user that you used to run the buildStage script when creating the stage area.

5. Re-run the buildStage.sh or buildStage.cmd script with the option Copy patches to existing stage area.

Important: Re-running the buildStage script with the option Copy patches to existing stage area is a mandatory pre-installation step.

UNIX:

```
$ cd /u01/StageR122/startCD/Disk1/rapidwiz/bin
$ buildStage.sh
```

Windows:

```
C:\>F:
F:\>cd StageR122\startCD\Disk1\rapidwiz\bin
F:\>buildStage.cmd
```

From the following buildStage menu, choose option 2, Copy patches to existing stage area.

Build Stage Menu

- ```

1. Create new stage area
2. Copy patches to existing stage area
3. List files in TechPatches directory
4. Exit menu
```

Enter your choice [4]: 2

On platforms other than Windows, choosing this option will display a submenu that shows the available platforms. Specify the platform on which you want to install Oracle E-Business Suite.

Rapid Install Platform Menu

- ```
-----
1. Oracle Solaris SPARC (64-bit)
2. Linux x86 (64-bit)
3. IBM AIX on Power Systems (64-bit)
4. HP-UX Itanium
5. Exit Menu
```

Enter your choice [5]:

Review the script output and press **Enter** to continue when prompted.

```
Directory /u01/StageR122/TechPatches
Stage Builder will now stage the one-off patches for <Platform>...
```

Press Enter to continue...

Copying latest one-off patches to stage area...

```
...
Press Enter to continue...
```

Finished copying additional patches.

```
...
Press Enter to continue...
```

Finally, from the main menu, choose option 4 to exit.

Build Stage Menu

1. Create new stage area
2. Copy patches to existing stage area
3. List files in TechPatches directory
4. Exit menu

Enter your choice [4]: 4

Stage Builder exiting...

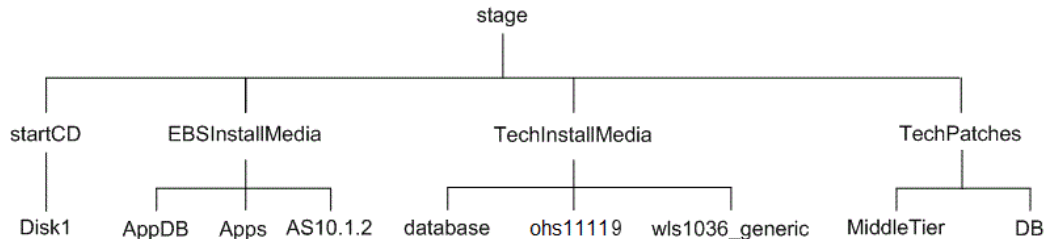
Applying Additional StartCD 12.2.0.51 One-off Patches

Required Action: Refer to Section 1.2.2 "Additional StartCD 12.2.0.51 One-Off Patches" in the *Oracle E-Business Suite Release Notes, Release 12.2*, My Oracle Support Knowledge Document 1320300.1, to check for any additional critical one-off patches on top of startCD 12.2.0.51. For any patches listed in that section, you must follow the instructions in the patch's readme file to patch the Rapid Install stage area before you proceed with the next steps in your installation.

Stage Area Structure

As shown in the following diagram, the stage area you have built consists of a top-level stage directory, with subdirectories *startCD*, *EBSInstallMedia*, *TechInstallMedia*, and *TechPatches*.

Stage Area Directory Structure



The startCD directory contains Rapid Install itself (in a subdirectory called Disk1), plus supporting files and documentation.

The EBSInstallMedia directory contains the following subdirectories:

- AppDB (Oracle E-Business Suite database)
- Apps (Oracle E-Business Suite products)
- AS10.1.2 (Oracle Application Server 10.1.2)

The TechInstallMedia directory contains the following subdirectories:

- database (Oracle12cR1 Oracle home)
- ohs11119 (Oracle HTTP Server)
- wls1036_generic (Oracle WebLogic Server, part of Oracle Fusion Middleware)

The TechPatches directory contains the following subdirectories:

- MiddleTier (application tier patches)
- DB (database tier patches)

Starting Rapid Install

Now that the stage directory has been created and the downloaded Oracle E-Business Suite software unzipped, the next task is to ensure your system provides a suitable global inventory location.

Global Inventory Requirements

- A global (central) inventory is required for all Oracle E-Business Suite Release 12.2 application tier nodes.
- The central inventory location must be identified by the `/oracle/oraInventory.loc` file.
- On a shared file system, the global inventory location must be shared and used by all participating nodes.
- The use of a local inventory per Oracle E-Business Suite installation is not currently supported.

If you are using a UNIX platform, you should now verify the existence and contents of the `oraInst.loc` file, which specifies the location of the `oraInventory.loc` file global inventory file.

1. Check that `oraInst.loc` exists in the correct directory for your platform:

Location for oraInst.loc by Platform

Platform	oraInst.loc Location
Oracle Solaris SPARC (64-bit)	<code>/var/opt/oracle</code>

Platform	oraInst.loc Location
Linux x86-64	/etc
IBM AIX on Power Systems (64-bit)	/etc
HP-UX-Itanium	/var/opt/oracle

2. Check that the `oraInst.loc` exists, and includes lines with this format:

```
inventory_loc=<central inventory location>
inst_group=<install group name>
```

where `<central inventory location>` is the directory where your central inventory resides, and `install group name` is your OS-level install group.

For example:

```
inventory_loc=/oracle/oraInventory
inst_group=dba
```

Note: If your system has separate installation user accounts for the database and the applications, both accounts must be in the same install group (dba in this example).

If the `oraInst.loc` file does not exist, create it with suitable contents in a location (`/oracle/oraInventory` in this example) writable by the user account that will be used to run Rapid Install.

Note: Incorrect permissions on `oraInventory` may cause issues not only with installing, but also when cloning a system with Rapid Clone or running the `fs_clone` phase in online patching.

Run the rapidwiz Command

You are now ready to start Rapid Install as shown in the examples below. The exact path depends on the disk location you specified for your staging area.

The user who should run the Rapid Install wizard (`rapidwiz`) command depends on the configuration of the database tier and application tier.

- For instances with the database tier and application tier on the same system:
 - If the database tier and application tier are on the same system and owned by the same user, then you must run `rapidwiz` as that user.

- In a multi-user installation, where the database tier and application tier are on the same system but owned by different users, you must run `rapidwiz` as the root user.
- For instances using a split tier configuration, with the database tier and application tier on different systems:
 - If you are running Rapid Install as part of an upgrade, and you plan to choose the 'Use Existing Oracle Home (No new Database Home install)' option, then you must run `rapidwiz` only from the application tier as the application tier operating system user.
 - Otherwise, you must first run `rapidwiz` from the database tier as the database tier operating system use, and then run `rapidwiz` again from the application tier as the application tier operating system user.

Important: With Patch 32947483 [RAPID INSTALL CONSOLIDATED BUNDLE PATCH ON TOP OF STARTCD 51 (OCTOBER 2021)], Rapid Install creates the complete run file system (fs1) but only the context file and a few mandatory directories in the patch file system (fs2). This restricted patch file system setup is only a transitional setup to reduce the file system installation time. The complete patch file system will be created subsequently as part of an `fs_clone` action after the instance has been upgraded to a 12.2 Release Update Pack. Before running any lifecycle management actions, you must upgrade your instance to a 12.2 Release Update Pack and then run `fs_clone` to complete the file system setup.

UNIX

Example

```
$ cd <Your stage directory path>/startCD/Disk1/rapidwiz
$ ./rapidwiz
```

Windows

Example

```
C:\>F:
F:\>cd <Your stage directory path>\startCD\Disk1\rapidwiz
F:\><Your stage directory path>\startCD\Disk1\rapidwiz>rapidwiz.cmd
```

Special Startup Options

If required, you can add parameters to the Rapid Install startup command to change its behavior.

Finding the Rapid Install Version

You can identify the version of Rapid Install (for example, 12.2.0.49) with either of the following commands:

```
$ /rapidwiz -version
```

or:

```
$ ./RapidwizVersion
```

Using an Alias For the Host System

If you want to use an alias rather than the actual name of the host system, use the `-servername` parameter when you start Rapid Install.

Note: When providing the value for the `-servername` parameter, ensure that you specify the host name (`<myhost>`) in lower case. Using upper case or mixed case for the host name is not supported.

UNIX:

Example

```
$ rapidwiz -servername <myhost>
```

Windows:

Example

```
D:\RAPIDWIZ> Rapidwiz.cmd -servername <myhost>
```

What To Do Next

Start Rapid Install and begin the installation process by choosing one of the following paths:

- If you want to create a new Oracle E-Business Suite Release 12.2 system on a single machine or a group of machines, follow the steps in *Standard Installations*, page 2-1. Then follow the applicable instructions in *Finishing Tasks*, page 4-2 to finish the installation.
- If you want to upgrade an Oracle E-Business Suite system from Release 11i, Release 12.0, or Release 12.1, follow the steps in the *Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2* or the *Oracle E-Business Suite Upgrade Guide: Release 12.0 and 12.1 to 12.2*.
- If you want to use the specialized Rapid Install option that allows you to replace selected technology stack executables in an existing instance, follow the steps in *Maintaining the Technology Stack*, page 3-1.

Performing an Installation

Rapid Install offers two options for a new installation:

- **Standard installation**, which creates a new system using configuration parameter values specified by the user to meet the site's specific requirements.
- **Express installation**, which also creates a new system but uses default values for many parameters, requiring only a few to be supplied by the user.

After you have run the Rapid Install wizard for either the standard installation or express installation, you can also optionally rerun Rapid Install in silent mode, which uses the previously entered parameters stored in a configuration file as well as default values, without requiring further responses from the user.

This chapter covers the following topics:

- Standard Installation
- Express Installation
- Installation in Silent Mode
- What To Do Next

Standard Installation

This section describes the setup steps for a standard installation, where the user supplies various system-specific parameters. An Express installation is described in [Setting Up an Express Installation](#), page 2-37.

Required Action: Before you perform the steps described in this section, you must have created a stage area using the `buildStage` script, as described in [Setting Up the Stage Area](#), page 1-35.

Follow the instructions in the section [Before You Install](#), page 1-25. Then complete the following tasks, which are grouped into logical sections.

Important: You do not carry out the installation steps on every node that will be part of your Oracle E-Business Suite system. You carry them out on the database node and primary application tier node, apply the latest release update packs, then use standard cloning commands to scale up to the required number of application tier nodes. The applicable cloning procedures are also mentioned in the relevant sections of this book.

Describe System Configuration:

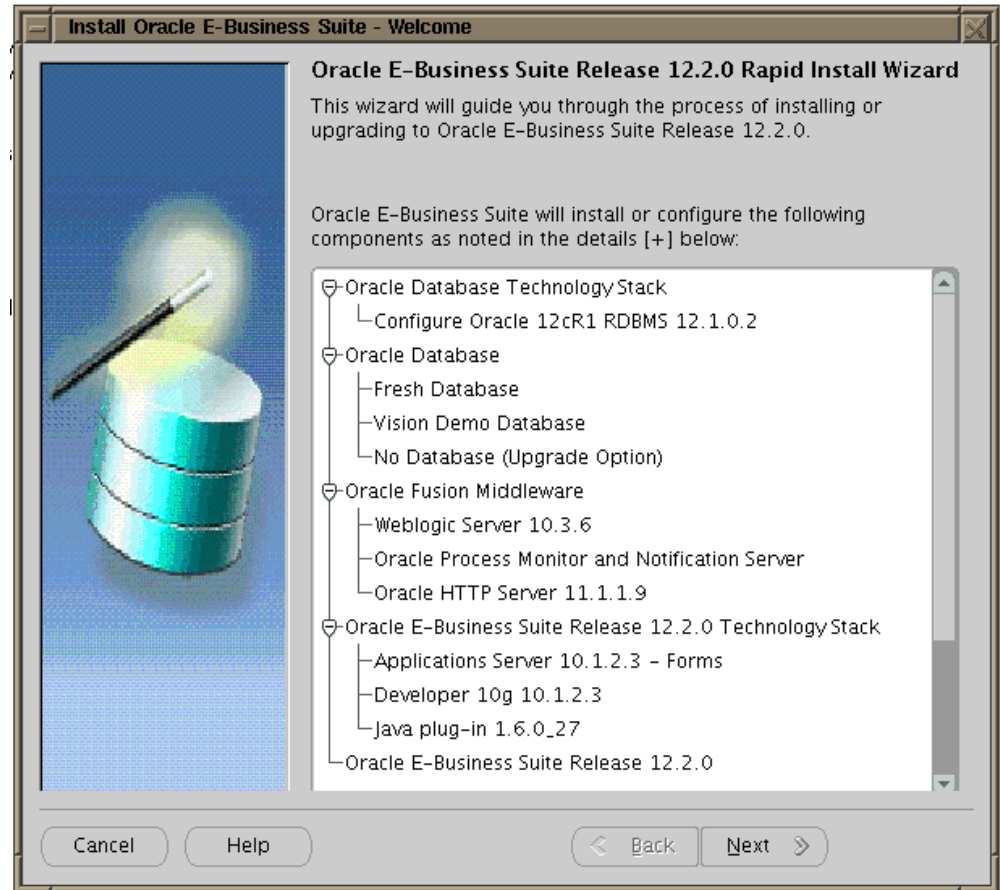
1. Start the Rapid Install wizard

Start the wizard from the command line by entering `rapidwiz` at the prompt. The Welcome screen lists the database and the technology stack components that are installed with Oracle E-Business Suite.

This screen lists the components that are included in, or otherwise supported by, this release of Oracle E-Business Suite. For example, a new installation includes a fresh Oracle 12c Release 1 (12.1.0.2) database.

You can expand the component lists, using the scroll bar to bring all the components into view.

Welcome screen

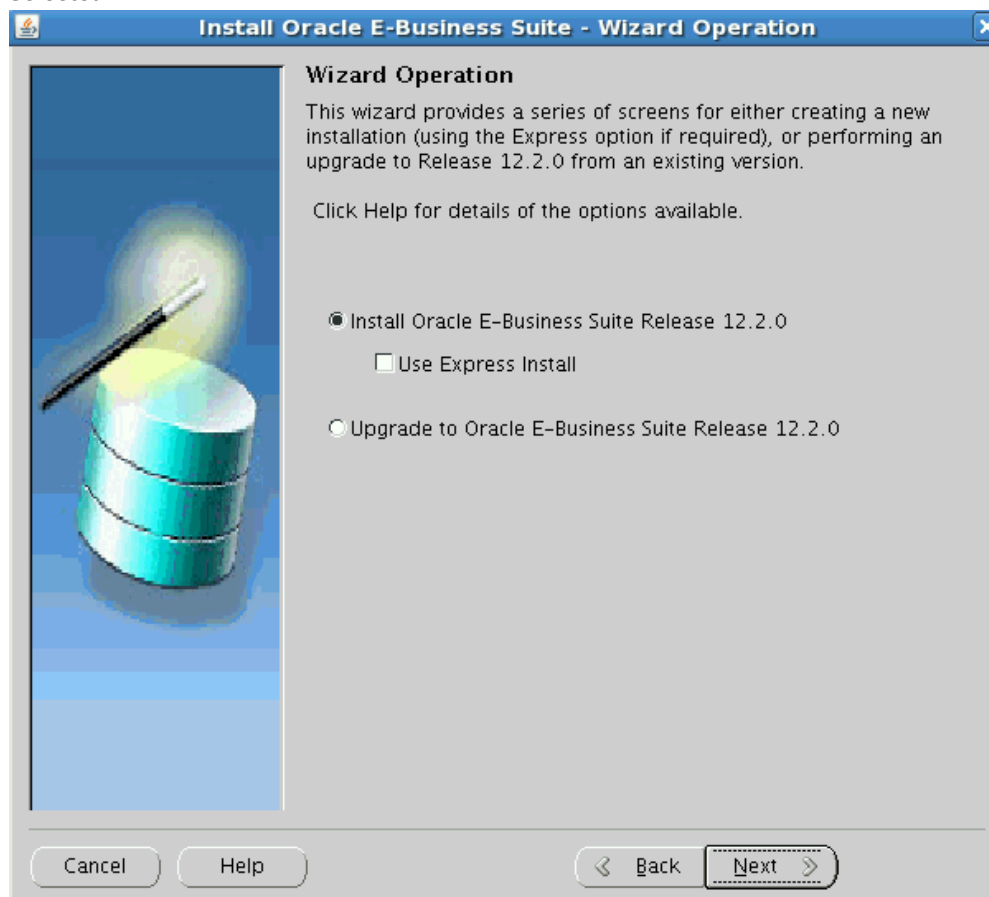


This screen is for information only. No decisions need to be made. When you have reviewed the information, click *Next* to continue.

2. Select a wizard operation

Use the Select Wizard Operation screen to indicate the action you want Rapid Install to perform. You begin both new installations and upgrades from this screen. Based on the action you choose, the Rapid Install wizard continues with the appropriate screen flow.

Wizard Operation screen with "Install Oracle E-Business Suite Release 12.2.0" option selected



The available actions are as follows:

- **Install Oracle E-Business Suite Release 12.2.0**
This action sets up a new, fully configured system, with either a fresh database or a Vision Demo database. The configuration is derived from the system-specific configuration parameters you will enter in the Rapid Install wizard and save in the Oracle E-Business Suite database (conf_<SID>.txt file initially, until the database has been created).
- **Express Configuration**
This install option sets up a fully configured, single-user system with either a fresh database or Vision Demo database. You supply a few basic parameters, such as database type and name, top-level install directory, and choice of port pools. The remaining directories and mount points are supplied by Rapid Install using default values.

Note: The steps in Setting Up an Express Installation, page 2-37 in this chapter describe this option.

- Upgrade to Oracle E-Business Suite Release 12.2.0

Choose this option to indicate that you are upgrading your Oracle E-Business Suite products to the current version of Oracle E-Business Suite. The wizard screen flow presents two paths: one that lays down the file system and installs the new technology stack, and one that configures servers and starts services.

Additional Information: See *Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2* or *Oracle E-Business Suite Upgrade Guide: Release 12.0 and 12.1 to 12.2*.

Using the following steps, you will set up a new installation. Choose Install Oracle E-Business Suite Release 12.2.0 and then click *Next* to continue.

3. Enter your email address. Optionally select the checkbox to indicate that you wish to receive security updates through My Oracle Support, and enter your My Oracle Support password.

Data collected is sent via HTTPS (secure HTTP) to Oracle Support, facilitating proactive problem avoidance and helping to reduce the time needed for resolution of support issues.

Screen to enter email details for security updates

Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details.](#)

Email:

Easier for you if you use your My Oracle Support email address/username

I wish to receive security updates via My Oracle Support

My Oracle Support Password:

Cancel Help < Back Next >

If submission of your details fails because no connection can be made, a pop-up screen appears prompting for proxy server information:

Specify Proxy Server Information screen

Specify proxy server information

Proxy Server

Proxy Port

Proxy Username

Proxy Password

I want to remain uninformed of critical security issues in my configuration

OK Cancel

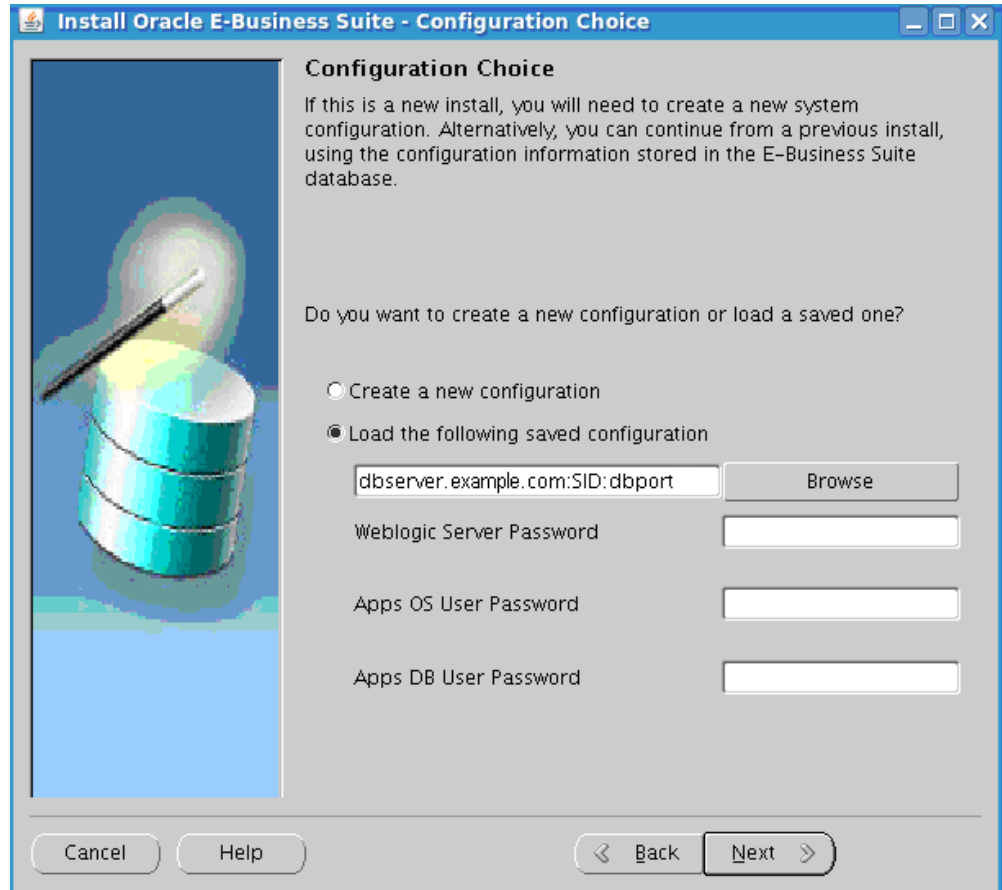
If this screen appears, enter the proxy server, proxy port, proxy username, and proxy password. You can optionally select the "I want to remain uninformed of critical security issues in my configuration" checkbox. Then click *OK*.

4. Identify configuration file

On the Configuration Choice screen, you indicate whether you will be using

previously saved configuration details.

Configuration Choice screen



If you choose *Create a new configuration*, Rapid Install saves the configuration parameters you enter on the wizard screens in the Oracle E-Business Suite database, and in a configuration file (conf_<SID>.txt), which is stored in your system temporary directory until the installation is completed.

If you choose *Load the following saved configuration*, the database connect string field becomes active. For a configuration stored in the database, this field is made up of <host name>:<SID>:<database port>, for example server1.example.com:VIS:1521.

Important: The host name must include the domain.

Enter the appropriate database connect string (or conf_<SID>.txt file location, if applicable) to point Rapid Install to a stored configuration whose parameters you wish to use. Typically, you would choose this option when performing a multinode install.

Conditional Action: If Rapid Install is being run on the database tier using the *Load the following saved configuration* option, you must enter the default password for the apps database user.

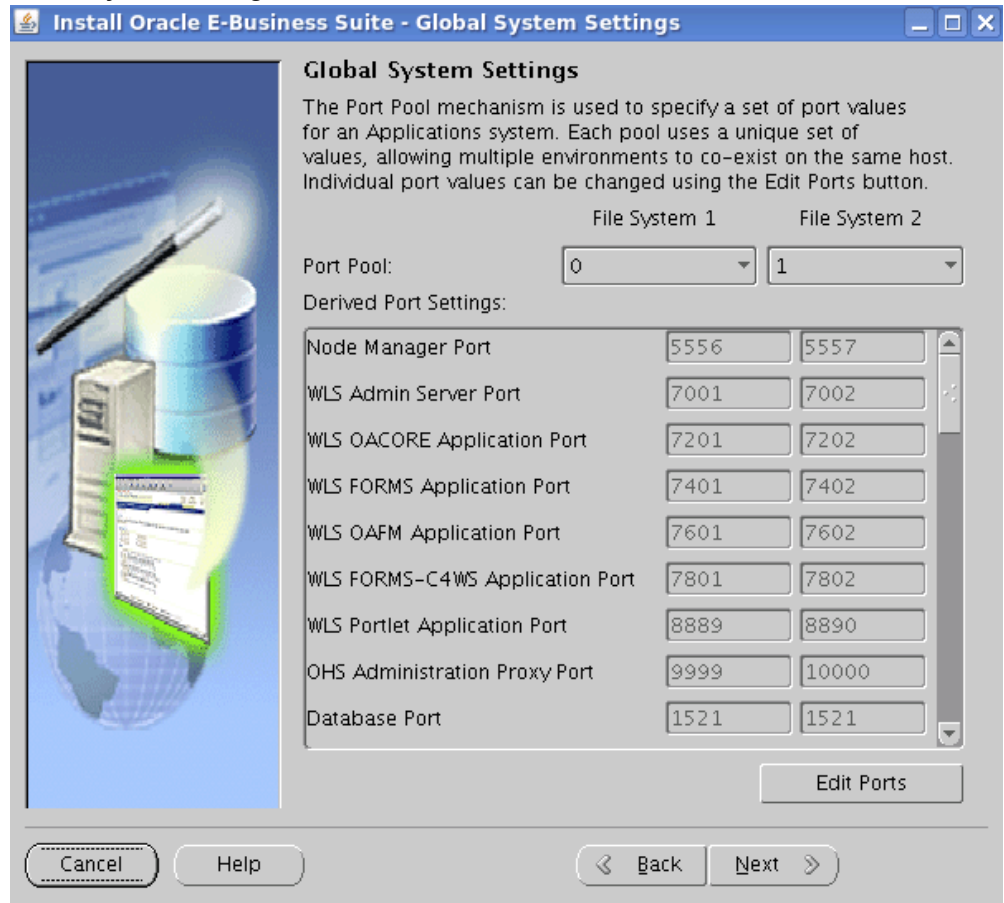
After completing this step, click *Next* to continue.

5. Specify Global System Settings

On the Global System Settings screen, you indicate whether you want to accept the default port values. You can specify a *Port Pool* setting to enable multiple Oracle E-Business Suite environments to co-exist on the same machine.

For example, if you select an increment of 3 from the Port Pool list, the values in the Derived Port Settings will reflect this choice. Use the scroll bar to review the port settings, or click *Edit Ports* to navigate to the Port Values screen.

Global System Settings screen



The default value of the Port Pool set is zero, but you can customize it by selecting another value from the drop-down list in the Port Pool field. There are 100 port pool selections: if you select an increment of 3, the default values are increased by that value. The Database Port (1521) becomes 1524, the RPC Port (1626) becomes 1629, and so on.

At this point, you can simply accept the values for your chosen Port Pool (and therefore individual ports) by clicking *Next*. This will suffice for many installations.

Optional Action: If desired, you can specify individual port values to meet particular site-specific requirements. Clicking on the *Edit Ports* button will open a screen that allows you to set the values of any ports you wish.

Port Values screen

The screenshot shows a window titled "Port Values" with a table of port configurations. The table has three columns: "Port Values", "File System 1", and "File System 2". The rows list various ports and their corresponding values for each file system. At the bottom of the window are "OK" and "Cancel" buttons.

Port Values	File System 1	File System 2
Node Manager Port	5556	5557
WLS Admin Server Port	7001	7002
WLS OACORE Application Port	7201	7202
WLS FORMS Application Port	7401	7402
WLS OAFM Application Port	7601	7602
WLS FORMS-C4WS Application Port	7801	7802
WLS Portlet Application Port	8889	8890
OHS Administration Proxy Port	9999	10000
Database Port	1521	
RPC Port	1626	1627
Web SSL Port	4443	
ONS Local Port	6100	6101

When finished on this screen, click *OK* to return to the Global System Settings screen, and click *Next* on that screen.

6. Define Database Node Configuration

On the Database Node Configuration screen, indicate the kind of database you want to install in the new system, the name you will use to identify it, the machine on which it will run, and that machine's domain name. You then need to confirm the operating system shown on the drop-down list is correct, specify the Oracle user's operating system account name and group, and finally specify the base directory under which the installation is to take place.

Database Node Configuration screen

Database Node Configuration

Database Type: Vision Demo Database

Database SID: VIS

Database Host Name: dbserver1

DNS Domain Name: example.com

Database Operating System: Linux x86-64 (64-bit)

Database OS User: oracle

Database OS Group: dba

Database Base Dir: /d01/oracle/VIS

Database Home Dir: /d01/oracle/VIS/12.1.0

Datafiles Dir: /d01/oracle/VIS/data

Storage Type: File System

RAC Shared OracleHome

Instance Prefix: VIS

Important: The host name for the database tier node must be no longer than 30 characters.

The Rapid Install wizard displays a warning message if the fully qualified domain name (FQDN) exceeds 30 characters. If the host name for the database tier node is no longer than 30 characters, then you can ignore the warning and proceed with the installation. Otherwise you must update the host name before you proceed.

Additionally, the host name must begin with an alphabetic character. The host name cannot include an underscore (_) character.

You can install either a fresh database or a Vision Demo database.

- A *fresh database* is fully configured and ready to be used for a new implementation. This type of database is suitable for any type of system that requires a fresh database, such as a production system or test system. The

default name for a production database is PROD. If you are installing a database for another use, for example as a test system or a backup system, choose the Fresh Database option and enter a database name that reflects its purpose, for example TEST.

- A *Vision Demo* database is used for demonstration or training purposes. It contains a fully configured Oracle E-Business Suite system that has been implemented and populated with a set of transactions for a fictitious company. The Vision Demo database is set up for multiple-organization use. It is installed with the AL32UTF8 character set to maximize the support for character sets in this release. The default database name is VIS.

In the Database SID field, enter the database name, or service name, for the local instance. You can either accept the default database name or enter another name, which must be alphanumeric, must not exceed eight characters in length, must not start with a number, and must not include any spaces.

Important: The database name specified in this field is used to determine the database SID. The database SID may vary depending on your environment.

- In an environment that does not use Oracle RAC, the database SID is the same as the database name.
- In an Oracle RAC environment, the instance number is appended to the database name to form the database SID for each Oracle RAC node.

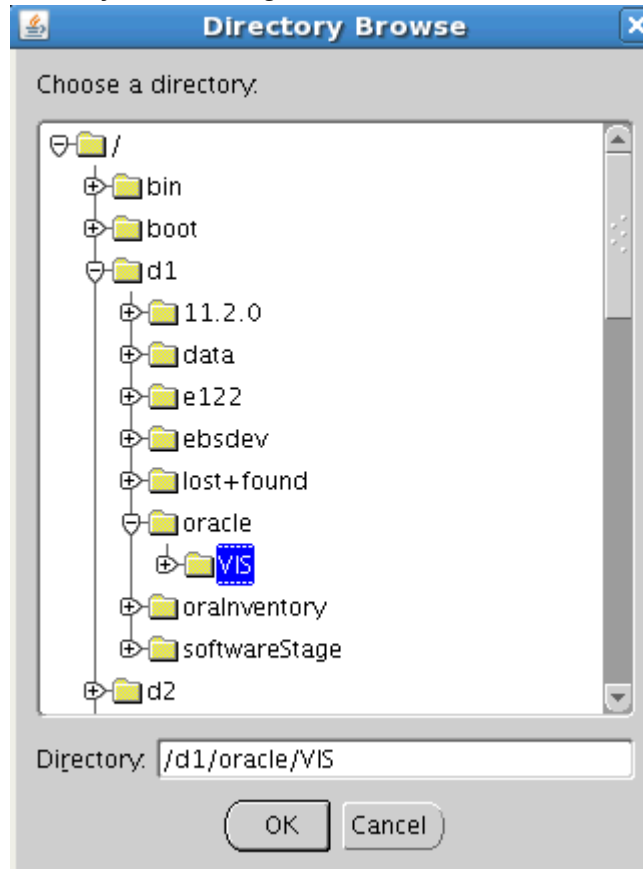
The Database Install Information screen prompts you for information Rapid Install needs to set up and install the database.

The Database OS User is the account that will own the database technology stack and file system. Enter the name of the Database OS Group. The Database OS User may belong to other groups, but it *must* belong to this group.

If you wish to browse the file system for suitable base directories, click the applicable *Browse* button to open a navigation window.

The *Database Base Dir* field defaults to a sample directory name, using the operating system syntax for the machine where you started the Rapid Install wizard. This directory is the top-level directory that Rapid Install uses to derive the mount points associated with the database.

Directory Browse navigation window



On this screen, click on a suitable folder, or type a path in the Directory field. Click *OK* to confirm your choice and return to the Database Node Configuration screen, or click *Cancel* to return without making a selection.

As well as letting you specify the type of storage where the database files will reside, the Database Node Configuration screen enables you to specify whether this database node will be part of an *Oracle Real Application Clusters* (Oracle RAC) system.

Conditional Action: Before you perform an Oracle E-Business Suite installation on Oracle RAC, you must ensure that the necessary Oracle Grid infrastructure is in place. For instructions on how to do this, refer to the document corresponding to your Oracle Grid version:

- My Oracle Support Knowledge Document 1626606.1, *Using Oracle 12c Release 1 (12.1) Real Application Clusters with Oracle E-Business Suite Release R12.2*

- My Oracle Support Knowledge Document 2676282.1, *Installing and Upgrading Oracle Grid Infrastructure 19c for Oracle E-Business Suite Release 12.x Databases*

Failure to follow these instructions will result in problems during Oracle E-Business Suite installation in your Oracle RAC environment.

Important: When installing the Grid Infrastructure, you must specify the host name in lower case. Otherwise, Rapid Install will fail with an error like this:

```
oracle.sysman.assistants.rconfig.engine.  
InvalidConfigurationException:  
Node that has single instance database running should  
be specified in the NodeList.  
Please specify node TESTSYS as part of NodeList at  
oracle.sysman.assistants.rconfig.engine.ClusterStep.  
checkNodeList(ClusterStep.java:203)
```

In this example, the issue was caused by the host name TESTSYS being in upper case.

Important: On all platforms, the compatible database initialization parameter must be set to 12.1.0 for the Oracle E-Business Suite database and for the ASM instance and ASM disk groups.

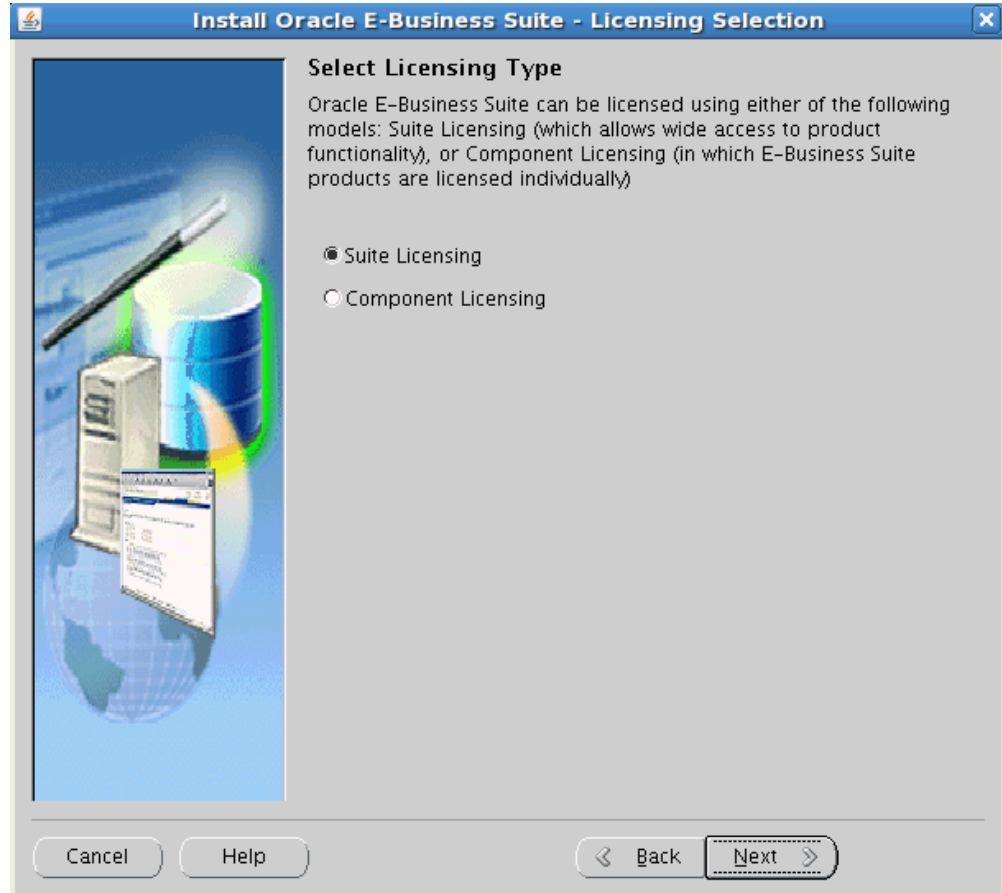
After completing this screen, click *Next* to continue.

7. Select product license type (Fresh Database installation only)

When installing a fresh database (not a Vision demo database), the wizard prompts you to indicate the type of licensing agreement you have purchased from Oracle. It then presents the appropriate licensing screen.

Completing a licensing screen does not constitute a license agreement. It simply registers your products as active. The only way to set up a license agreement is to purchase Oracle E-Business Suite products through the Oracle Store or an Oracle sales representative. You should have complete information about your product license before you complete the licensing screens.

Select Licensing Type screen



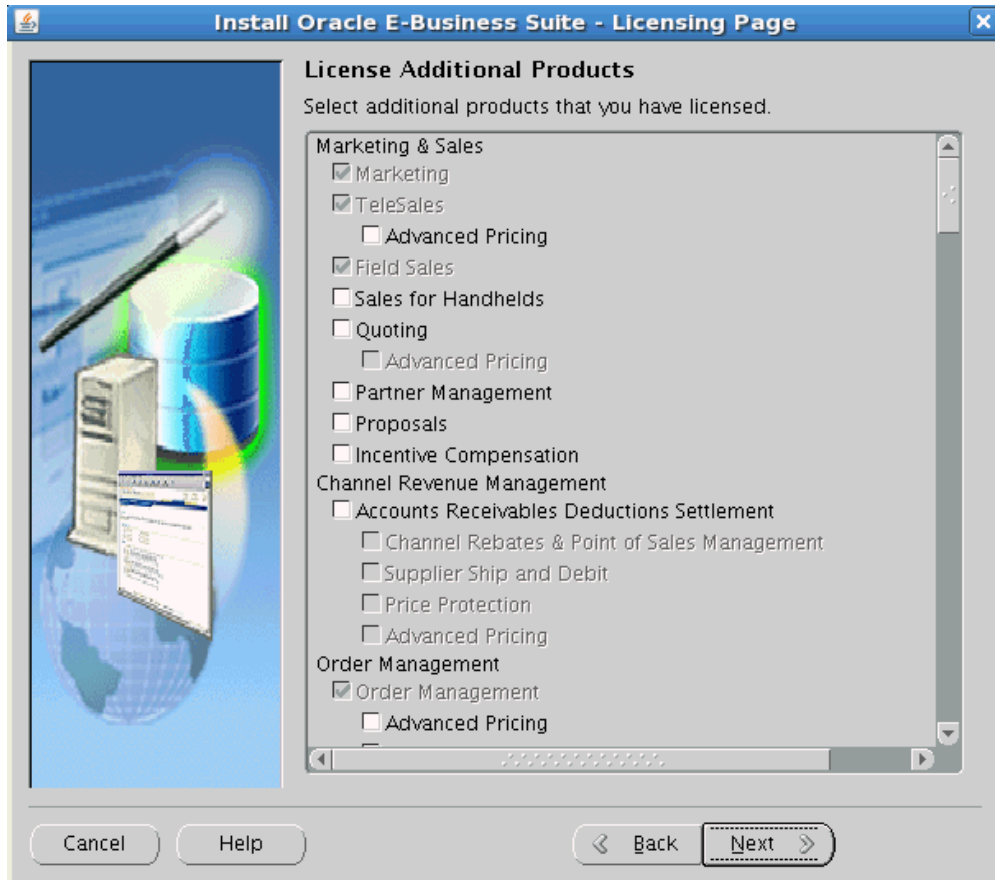
Rapid Install installs all products regardless of their licensed status. However, you must register products you have licensed so that they are flagged in the system as active. An active flag marks products for inclusion in patching and other tasks that you will perform to update and maintain your system after the initial installation.

Note: Rapid Install automatically installs and registers shared and dependent products for you.

You can register products using either the *Suite license model* or the *Component license model*. Complete only one of these licensing screens, to match your licensing agreement.

If you clicked the Suite licensing option on the Suite Selection screen, the Licensing Page for that option appears.

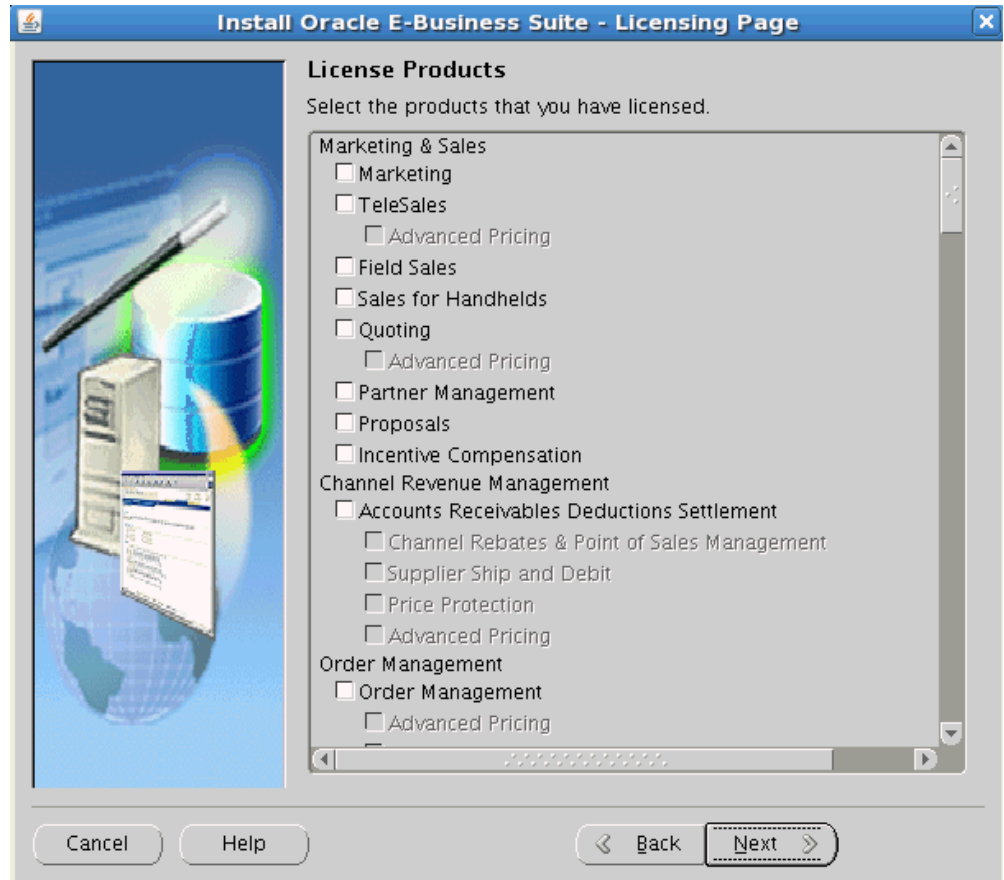
License Additional Products screen



This licensing model allows wide access to Oracle E-Business Suite functionality. By choosing it, you tell Rapid Install to automatically register *all* products included in the Oracle E-Business Suite price bundle. The products that are checked and grayed are licensed automatically as a part of the suite. The ones that are not must be registered separately as additional products; they are not part of the Oracle E-Business Suite price bundle. Place a check mark next to any additional products you have licensed and want to register.

If you clicked the Component licensing option on the Suite Selection screen, the Licensing Page for that option appears.

License Products screen



Choose this option if your licensing agreement is for individual Oracle E-Business Suite component products. These products are licensed based on the number of authorized users or on the number of business transactions processed. All individual products are listed on this screen. Products that are grayed out cannot be selected unless the "parent" component is selected.

Optional Action: You can register additional products after the initial installation is complete. See *License Manager, Oracle E-Business Suite Maintenance Guide*. Note that once a product is licensed, it cannot be "unlicensed".

Complete the appropriate licensing screen and click *Next* to continue.

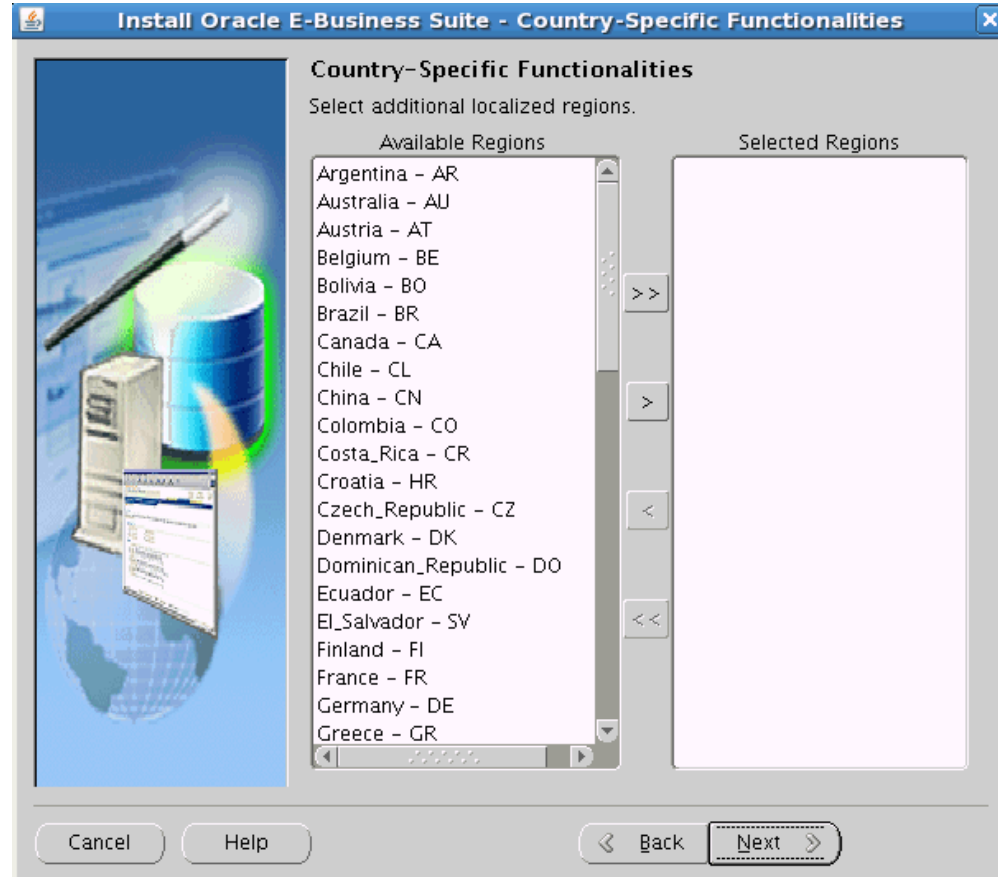
8. Select Country-Specific Functionality (Fresh Database installation only)

Some systems require the country-specific functionality of a localized Oracle E-Business Suite product. For example, if your company is based in the United States but also operates in another country, products such as Human Resources require

additional features to accommodate the labor laws and codes that differ from those in the United States. You register the name of the region associated with the localized product on the Select Country-specific Functionalities screen.

If your company operates only in the United States, you can bypass this screen. If you begin doing business in another country at a later date, you can use License Manager to register the associated region at any time after the original installation or upgrade.

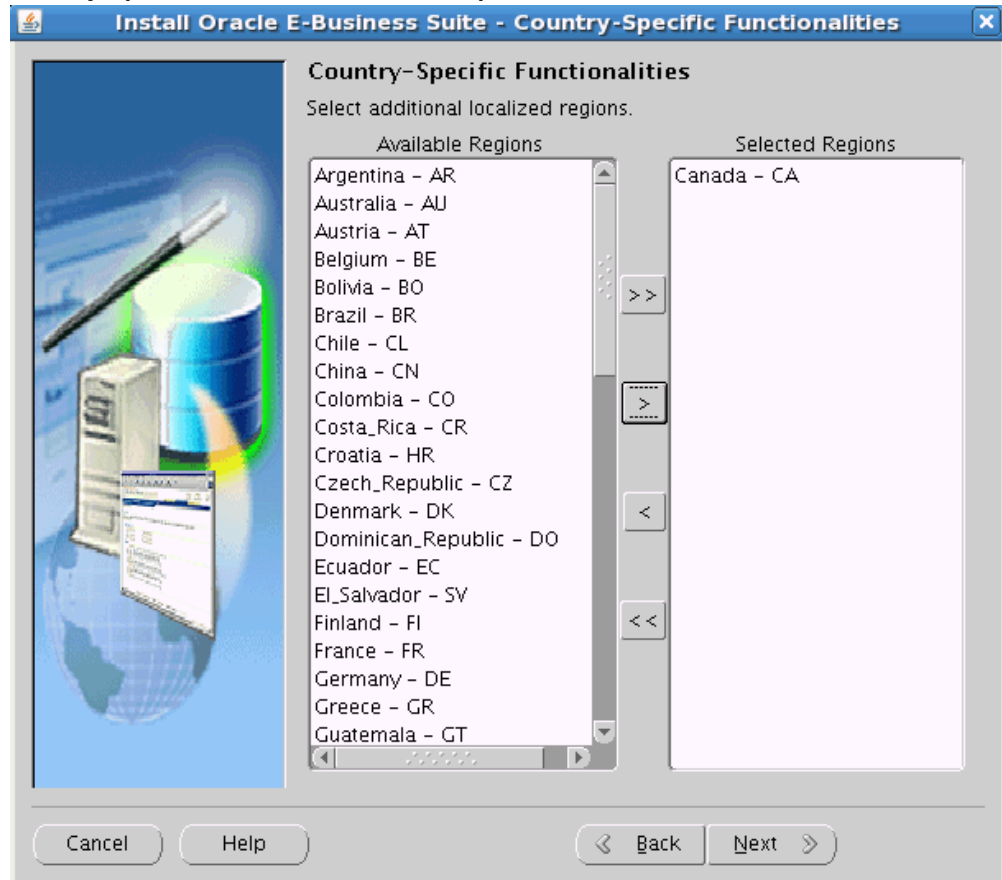
Country-Specific Functionalities - Initial Screen



All the country-specific functionalities that Oracle supports are listed on this screen, arranged alphabetically. Double-click a region in the Available Regions box to move it into the Selected Regions box or highlight it and click the right arrow (>). To deselect a region, highlight it and double-click or click the left arrow (<) to remove it from the Selected Regions box.

For example, if you select Canada, the screen would look like this.

Country-Specific Functionalities - Subsequent Screen



To select or deselect *all* the regions and move them between boxes in a single action, use the relevant double arrows, >> or <<.

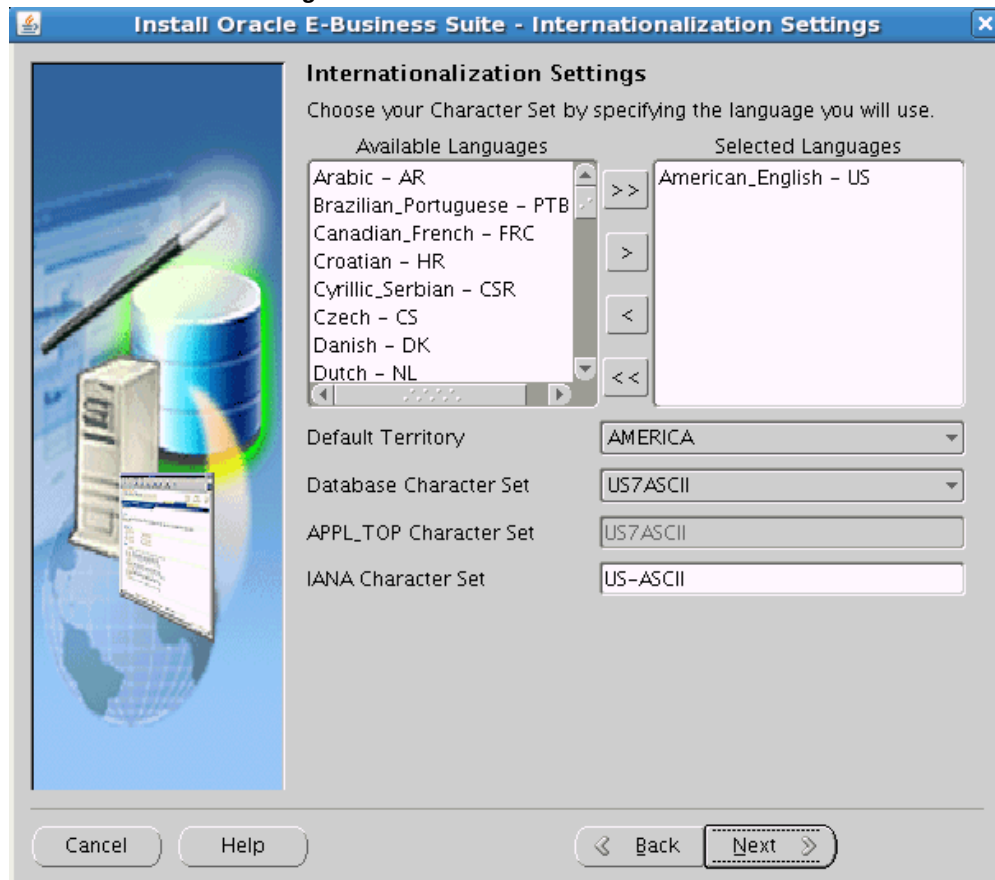
After making your selection, click *Next* to continue.

9. Select Internationalization Settings (Fresh Database installation only)

American English is the only language installed in your system by default. However, Oracle E-Business Suite supports numerous other languages. These can be activated using License Manager (part of Oracle Applications Manager), and installed after the initial Release 12.2.0 installation is complete.

Additional Information: See License Manager, *Oracle E-Business Suite Maintenance Guide*.

Internationalization Settings screen



The languages you select help determine the available options for the other NLS-related configuration parameters (such as territory and character set) that your system requires and can support.

Additional Information: See Globalization Support, *Oracle E-Business Suite Concepts*.

Double-click a language in the Available Languages box to move it into the Selected Languages box or highlight it and click the right arrow (>). Highlight a language in the Selected Languages box and click the left arrow (<) to remove it. To select or deselect all languages in a single action, use the double arrows, >> or <<.

Note: You cannot remove American English from the Selected Languages box.

Languages are no longer licensed using Rapid Install; instead, use License Manager (part of Oracle Applications Manager) to license languages. To install new

languages after Rapid Install has been run, see License Manager, *Oracle E-Business Suite Maintenance Guide*.

Click *Next* to continue.

The NLS language and territory settings are stored as profile options in the database. They are configured at the site level when you run Rapid Install. The base language is used for the default language setting and the default territory is used for the territory profile option. Users inherit these values the first time they log in via the Oracle E-Business Suite Home Page.

The base language defaults to American English. If you choose additional languages on the Select Additional Languages screen, they appear in the Selected Languages box.

Rapid Install does not set database date and numeric formats during installation. It uses default formats based on the territory profile setting (as derived from NLS_LANG). The Default Territory is AMERICA at the site level. Enter a new value, as needed, based on your user requirements.

The "Database character set" and the "APPL_TOP character set" drop-down menus initially show US7ASCII as the default character set. Other compatible character sets are listed as well.

Conditional Action: AL32UTF8 is the default character set for the Vision Demo database and the APPL_TOP. You cannot convert either of these character sets. Additional setup steps may be required for systems with fresh install databases that will use AL32UTF8. See Set Up Unicode Character Sets, page 4-18 in Finishing Tasks, page 4-2 for details.

If you selected an additional language, the character set choices will change to include only those that are compatible with both American English and the additional languages selected.

If you want to change the character set in either the database or the APPL_TOP, select a new value from the drop-down list.

Caution: Any languages you plan to install after the Rapid Install run is complete must be compatible with the character set of your Oracle E-Business Suite system.

The IANA (Internet Assigned Numbers Authority) character set is the Internet-assigned standard character set name used by the Web server. See <http://www.iana.org/assignments/character-sets> for more information.

You can change this value, as needed. Complete the appropriate fields on this screen, and click *Next* to continue.

10. Enter Primary Application Tier Node Information

You have already specified the top-level directory for the database. Now you must specify top-level directory and subdirectories associated with the application tier nodes.

Additional Considerations for Multinode Installs

If you have an environment that uses multiple application tier nodes, you must use the same platform for them all.

Multiple application tier node installation is no longer performed from Rapid Install. Instead, Rapid Install performs a single application tier node installation. You then apply the requisite AD and TXK patches to bring the application tier node to the latest codeline.

Additional Information: For more information, see My Oracle Support Knowledge Document 1617461.1, *Applying the Latest AD and TXK Release Update Packs to Oracle E-Business Suite Release 12.2*.

After completing this task, you can add a suitable number of further nodes to the environment using standard cloning procedures. This strategy of creating more nodes after the installation is complete avoids the need to patch multiple application tier nodes to the latest codeline.

Additional Information: For cloning instructions, see Section 5.3 of My Oracle Support Knowledge Document 1383621.1, *Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone*.

You can also use the cloning procedures in creating hybrid or DMZ architectures. To learn more about this, refer to My Oracle Support Knowledge Document 1375670.1, *Oracle E-Business Suite Release 12.2 Configuration in a DMZ*.

When you have completed all these tasks, you must run the `$INST_TOP/admin/scripts/adstrtall.sh` script on the new application tier nodes to start the services.

Important: The following additional step is required on *Windows only*.

After you have created the required number of additional application tier nodes by cloning, you must go back to the primary application tier node and run the following command:

```
$ perl %AD_TOP%\bin\adRegisterWLSListeners.pl -  
contextfile=<context file>
```

This only needs to be done on File System 1 (fs1). There is no need to restart any services after running this command.

Primary Applications Node Configuration screen - UNIX

Primary Host Name	<input type="text" value="appserv1"/>
DNS Domain Name	<input type="text" value="example.com"/>
Operating System	<input type="text" value="Linux x86-64 (64-bit)"/>
Apps OS User	<input type="text" value="oracle"/>
Apps OS Group	<input type="text" value="dba"/>
Apps Base Dir	<input type="text" value="/d01/oracle/VIS"/> <input type="button" value="Browse"/>
Apps Instance Dir	<input type="text" value="/d01/oracle/VIS"/> <input type="button" value="Browse"/>
File System 1 Base Dir	<input type="text" value="/d01/oracle/VIS/fs1"/>
File System 2 Base Dir	<input type="text" value="/d01/oracle/VIS/fs2"/>
File System 1 Instance Dir	<input type="text" value="/d01/oracle/VIS/fs1/inst"/>
File System 2 Instance Dir	<input type="text" value="/d01/oracle/VIS/fs2/inst"/>
Non-Editted File System	<input type="text" value="/d01/oracle/VIS/fs_ne"/>
APPLCSF Dir	<input type="text" value="/d01/oracle/VIS/fs_ne/inst/VIS"/>
AppsLog Distribution	<input type="text" value="Single"/>

Cancel Help < Back Next >

Important: The node name returned by the operating system 'hostname' command for the application tier node must be no longer than 30 characters. If you configure your system to return only the host name for the node, without the domain name, then the host name must be no longer than 30 characters. If you configure your system to return the fully qualified domain name (FQDN), then the FQDN must be no longer than 30 characters, including the host name, domain name, and periods (.) used as separators.

The Rapid Install wizard displays a warning message if the FQDN exceeds 30 characters. If your system returns only the host name as the node name, and the host name is no longer than 30 characters, then you can ignore the warning and proceed with the installation. Otherwise you must update your configuration before you proceed.

Additionally, the host name must begin with an alphabetic character. The host name cannot include an underscore (_) character.

The default sample directories use the syntax of the operating system where you started Rapid Install. In addition, some of the fields are specific to the operating system in use.

The above example shows this screen for a Linux system, where you need to complete the information for the apps OS user (the account that owns the application tier file system and technology stack) and apps OS group (the group to which the apps OS user belongs). Accept the defaults, or enter new values.

On all these Primary Applications Node Configuration screens, the *Base Directory* is the top-level directory that Rapid Install will use to derive the mount points for the application tier nodes. You can accept the defaults or enter new values.

Required Action: You must accept the system-supplied defaults for the derived mount points.

The AppsLog Distribution field lets you choose where concurrent processing log and out files are stored.

- Single - The concurrent processing log files for all products will be stored in a single common log file directory under the APPLCSF directory. Likewise, the concurrent processing out files for all products will be stored in a single common out file directory under the APPLCSF directory. This is the default value.
- Product - A directory will be created for each product under the APPLCSF directory, and the concurrent processing log files and out files for each product will be stored in corresponding directories under that product's directory. Additionally, a directory named *system* will be created under the APPLCSF directory, and the log files and out files for the Internal Concurrent Manager will be stored in corresponding directories under the *system* directory.

A particular application tier node's role is not defined by the files installed: all the APPL_TOPs on a multinode system contain the same files. Instead, the role is determined by the services that you set as enabled. These services specify the set of processes that will be started on each application tier node, and consequently the functions the node will perform. In other words, there is no concept of a "Forms node", "Web node", and so on, as there is no direct association between installed files and the services that can be run on that machine. This model enforces the three-tier architecture and simplifies tasks such as patching and upgrading.

However, the Web Administration service group is an important exception, which can *only* be enabled on a single application tier node (and *must* be enabled on one

node). This Web Administration node is where the WLS Admin Server will reside. The services provide the following functionality:

Application Tier Node Services Summary

This Service Group:	Supports:
Root Service	<ul style="list-style-type: none"> • Node Manager
Web Administration	<ul style="list-style-type: none"> • WebLogic Admin Server
Web Entry Point Services	<ul style="list-style-type: none"> • Oracle HTTP Server • Oracle Process Manager
Web Application Services	<ul style="list-style-type: none"> • OACORE • OAEA • OAFM • Forms • Forms-C4WS
Batch Processing Services	<ul style="list-style-type: none"> • Oracle TNS Listener • Concurrent Manager • Fulfillment Server • Oracle ICSM
Other Services	<ul style="list-style-type: none"> • Oracle Forms Services • Oracle MWA Service

Currently, the following additional instructions apply to installing and activating application tier services:

1. Perform the installation on the node that has been chosen to have the Web

Administration (WLS Server Administration) and Web Entry (Oracle HTTP Server) service groups enabled, and then run AutoConfig on this node.

2. Be aware that when subsequently creating secondary (managed) nodes, Rapid Install will not run `adstrtall.sh`, so services will not be running and the installer will display a message to this effect at the end of the install. This failure of the post-install checks is expected.

Application tier nodes have all services enabled by default, but you can customize the services enabled on a particular node. For example:

- *To support Web and Forms services:* Root Service, Web Entry Point Services, Web Application Services
- *To support Concurrent Processing services:* Batch Processing Services

Important: Rapid Install will prompt you to enter the WLS Admin and apps OS user passwords. If you run Rapid Install in silent mode, the WLS Admin password will be set to the default.

Required Action: After scaling up your system as needed by cloning to create additional application tier nodes, you will need to start the services by running the command `$INST_TOP/admin/scripts/adstrtall.sh` script on the new application tier nodes.

Specify Web Entry Points

In some specialized configurations, described below, you may need to set certain context variables according to your node deployment.

Conditional Action: You will only need to perform these steps if your configuration falls into one of the categories mentioned.

With the unified file system supported in Oracle E-Business Suite Release 12.2, some scripts should only be run on nodes that update URL parameters. For example, in a two-node install, with the database and concurrent processing server running on Node A and Web and Forms services running on Node B, AutoConfig should not update the URL-related parameters when run on Node A, because Node B is the web entry point.

For example, installations that have multiple concurrent processing nodes or simply multiple web entry points may need to have the web entry point variables set to different values. Similarly, when adding a new node to a group of existing nodes, the new node may need to use the existing web entry point or a new web entry point (for example, in a DMZ configuration, when using load balancing; or when

using a reverse proxy). In such cases, the web entry point variables must be set in each application context file to point to the correct web entry point, which will typically be the URL used to access the application.

In such circumstances, the following context variables need to be set on the applicable nodes, and AutoConfig run to update the relevant configuration files:

Web-Related Context Variables

This variable:	Specifies the:
s_webentryurlprotocol	Web Entry URL Protocol
s_webentryhost	Web Entry Host
s_webentrydomain	Web Entry Domain
s_active_webport	Active Web Port

Another situation where you currently need to update the value of s_webentryhost is if you are using a load balancer to distribute processing across all the application tier nodes. In such a case, each of those nodes should have the value of the s_webentryhost variable to be that of the load balancer's host name.

Additional Resources: To learn more about how you can specify the values of context variables, refer to Chapter 3, Technical Configuration, in *Oracle E-Business Suite Setup Guide*.

11. Specify Application User Information

Application User Information screen

Application User Information

WLS Admin User	weblogic
WLS Admin Password	
Confirm WLS Admin Password	
Apps OS User	oracle
Apps OS User Password	
Confirm Apps OS User Password	
<input checked="" type="checkbox"/> Change Default Passwords	
Apps DB User Password	
Confirm Apps DB User Password	
SYSTEM DB User Password	
Confirm SYSTEM DB User Password	
Products DB Users Password	
Confirm Products DB Users Password	
SYSADMIN User Password	
Confirm SYSADMIN User Password	

Cancel Help < Back Next >

On this screen, you can specify the names and passwords for various user accounts:

- *WLS Admin User* is the account you use for setting up and managing Oracle WebLogic Server.
- *Apps OS User* the operating system account you use for setting up Secure Shell (ssh) on the application tier nodes (the same account must be used on all the nodes).
- *Apps DB User* is the principal Oracle E-Business Suite database account. The password specified here will also be used for the related *applsyst* and *appls_ne* accounts.
- *SYSTEM DB User* is the principal Oracle E-Business Suite database administrative account. The password specified here will also be used for the *sys* account.
- *Products DB Users* is the password for Oracle E-Business Suite product-specific accounts.

- *SYSADMIN User* is a Oracle E-Business Suite administrative account used in initial setup.

The checkbox to change the default passwords for these accounts is *automatically* checked when this screen appears.

Action: For improved security of your new system, Oracle recommends accepting this setting and changing the default passwords (the new passwords must contain alphanumeric characters only).

If you wish to retain the default passwords and not change them as recommended, you will need to uncheck the box.

The default passwords are shown after the account names:

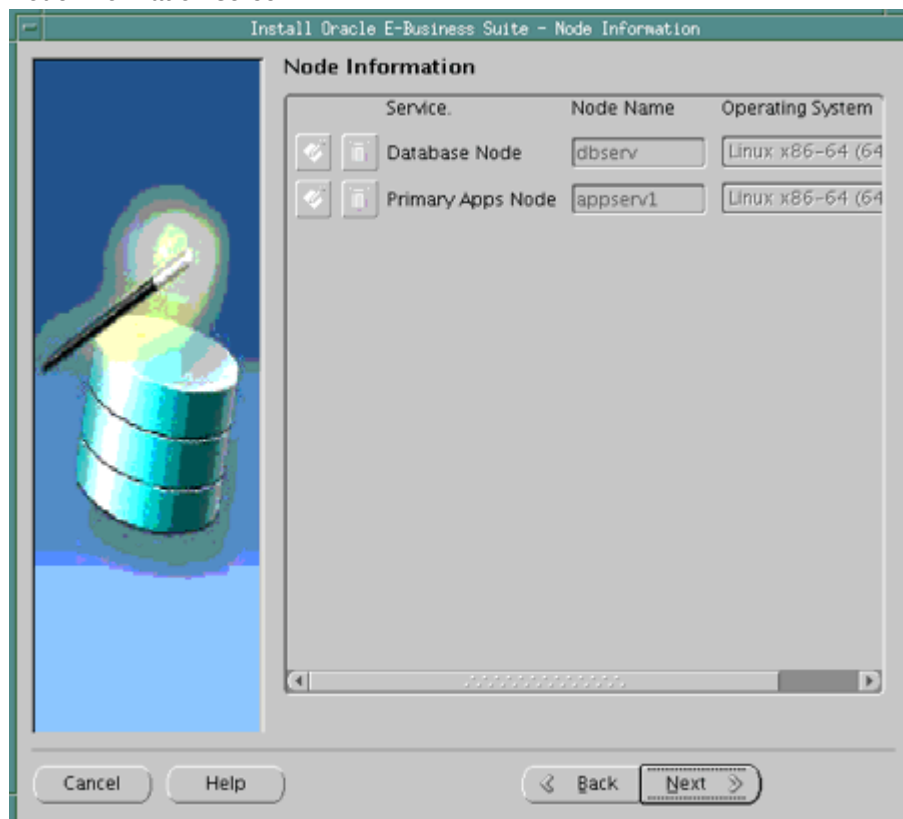
- weblogic/welcome1
- apps/apps
- applsys/apps
- apps_ne/apps
- system/manager
- sys/change_on_install
- sysadmin/sysadmin
- abm/abm, ahl/ahl ... zsa/zsa, zx/zx (and all products in between)

Additional Resources: To learn more about managing passwords, refer to section Oracle E-Business Suite Password Management in Chapter 6, Basic DBA Tasks, of *Oracle E-Business Suite Maintenance Guide*.

Conditional Action: If you wish to run Rapid Install in silent mode, for example to avoid having to provide user responses during an upgrade, you must retain the default passwords (including the WLS Admin password). This is because passwords cannot be passed on the command line in silent mode.

12. Review database node and primary application tier node information.

Node Information screen



At this stage, you have specified details for the database node and the primary application tier node. Rapid Install is no longer used to create multiple Application nodes. Waiting until after installation to add application tier nodes is a time-saving measure for the installation and patching process. After you complete the Rapid Install run you will:

1. Apply the latest AD and TXK patches.
2. Add application tier nodes by cloning or creating a shared application tier file system.

Additional Resources: When following this strategy of adding application tier nodes by cloning the primary application tier node, refer to My Oracle Support Knowledge Documents 1383621.1, *Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone*; 1375769.1, *Sharing The Application Tier File System in Oracle E-Business Suite Release 12.2*; and 1375670.1, *Oracle E-Business Suite Release 12.2 Configuration in a DMZ*.

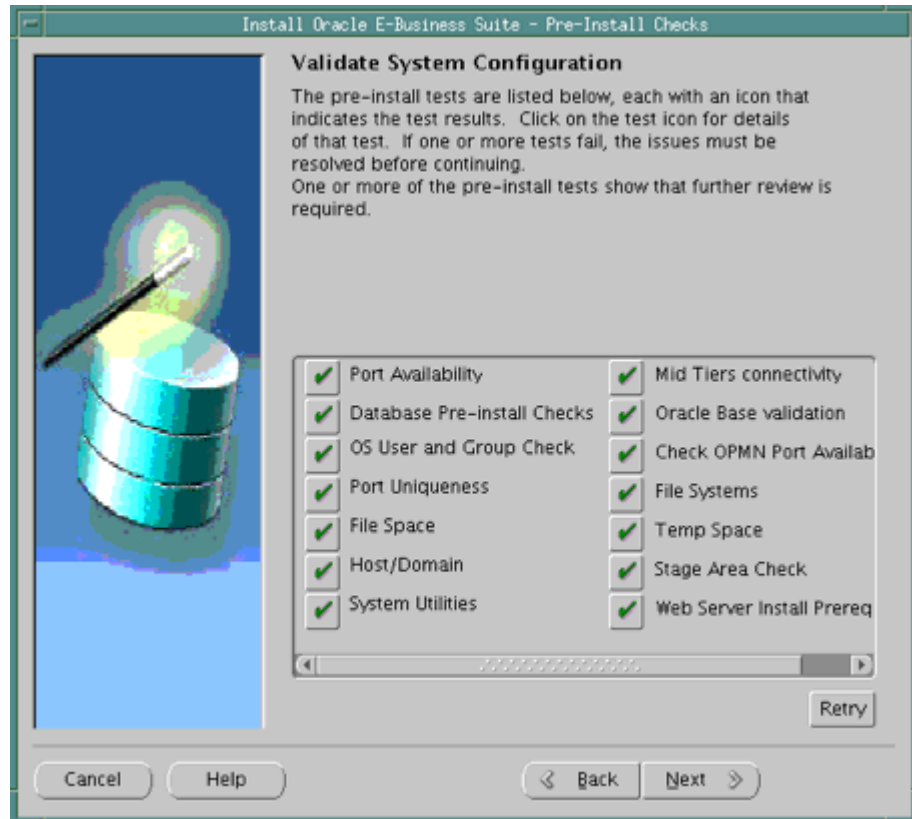
You may also refer to Chapter 5, *Finishing Tasks*, for additional recommendations.

13. Review Pre-Install Checks

Rapid Install performs a series of system tests to validate the configuration specified. The System Check Status screen checks port availability.

The Validate System Configuration screen appears, to indicate whether various pre-install requirements for the installation have been met. The pre-install check screen then appears:

Pre-Install Checks screen



The parameters that Rapid Install validates and reports on this screen include:

Pre-Install Tests and Parameters

This test:	Checks:
Port Availability	The ports you selected are available for use.

This test:	Checks:
Database Pre-install Checks	The Oracle E-Business Suite Database meets the necessary requirements.
Port Uniqueness	There are no duplicate defined ports for server processes.
File Space	The specified file systems have sufficient space.
Stage Area Check	The stage area is valid.
Web Server Install Prerequisites	Oracle HTTP (Web) Server requirements have been met.
Mid Tiers Connectivity	Application tier connectivity is working.
OS User and Group Check	The OS user account and group exist, and the user account is a member of the group.
File Systems	The specified file systems exist and have correct privileges.
Host/Domain	The host and domain names are valid.
System Utilities	The required system utilities are available.

The results of each test are labeled with icons. There are three result types:

- Tick (check mark)
The test succeeded. Click the tick to see details of the test performed.
- Exclamation mark (!)
The configuration requires review. Click the ! to get information about the system test review. Click *Yes* to continue, or *No* if you are going to resolve the issues. Rapid Install displays an alert if you continue without resolving the issues.
- An *x* mark
All issues marked *x* must be resolved before you continue with the installation. Click the *x* to see the errors. If you can resolve an issue by altering the values provided on one of the wizard screens, click Back until you reach the

appropriate screen, and re-enter the values. Some tests must be resolved in the operating system. In that case, you may have to restart the Rapid Install wizard after the problem has been fixed.

If problems are identified, Rapid Install displays a warning in the Oracle E-Business Suite Rapid Install Wizard Alert dialog box when you click *Next*.

Oracle E-Business Suite Rapid Install Wizard Alert dialog box



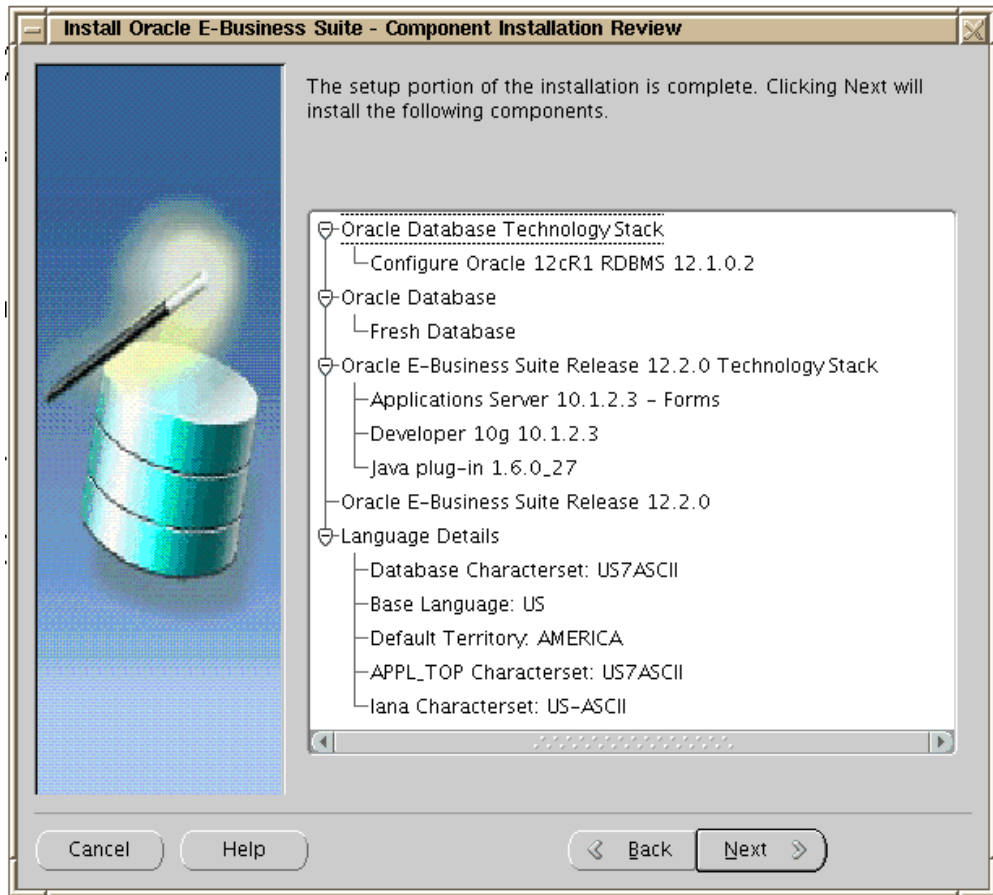
Click *No* to review the issues. When you have resolved any issues, click *Next* on the Validate System Configuration screen to continue with the installation.

Important: For an upgrade with an existing Oracle home, when the database is down the following pre-checks will show a warning as they cannot be tested automatically. You should manually ensure that the check results are correct.

14. Begin the Installation

On the Component Installation Review screen, Rapid Install lists the components it will install, based on the system parameters you entered in the wizard.

Component Installation Review screen



Click *Next*. Rapid Install now displays another alert dialog box asking you to verify that you are ready to begin the installation. Click *Yes*.

Oracle E-Business Suite Rapid Install Wizard Alert dialog box



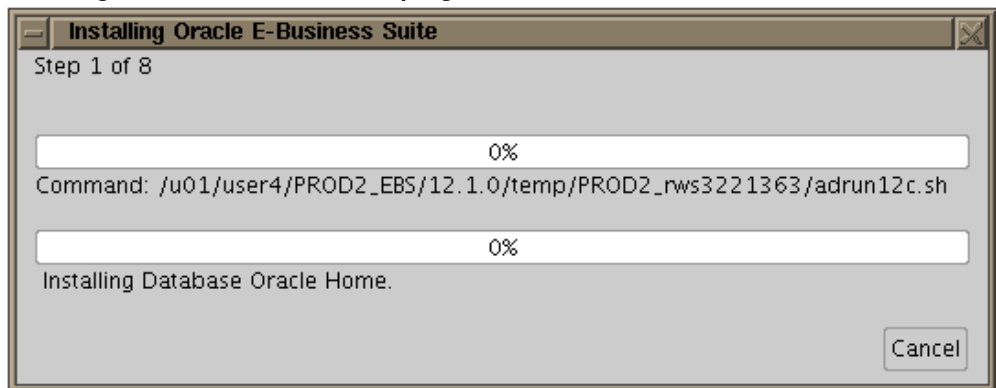
Monitor Installation Progress:

1. Check progress bars

During an installation, Rapid Install displays a main progress bar and an individual progress bar. The main progress bar reports on the completion percentage of the installation as a whole. The individual progress bar reports on the progress of each individual step.

Note: The installation is not complete until all the progress bars disappear from your screen.

Installing Oracle E-Business Suite progress screen



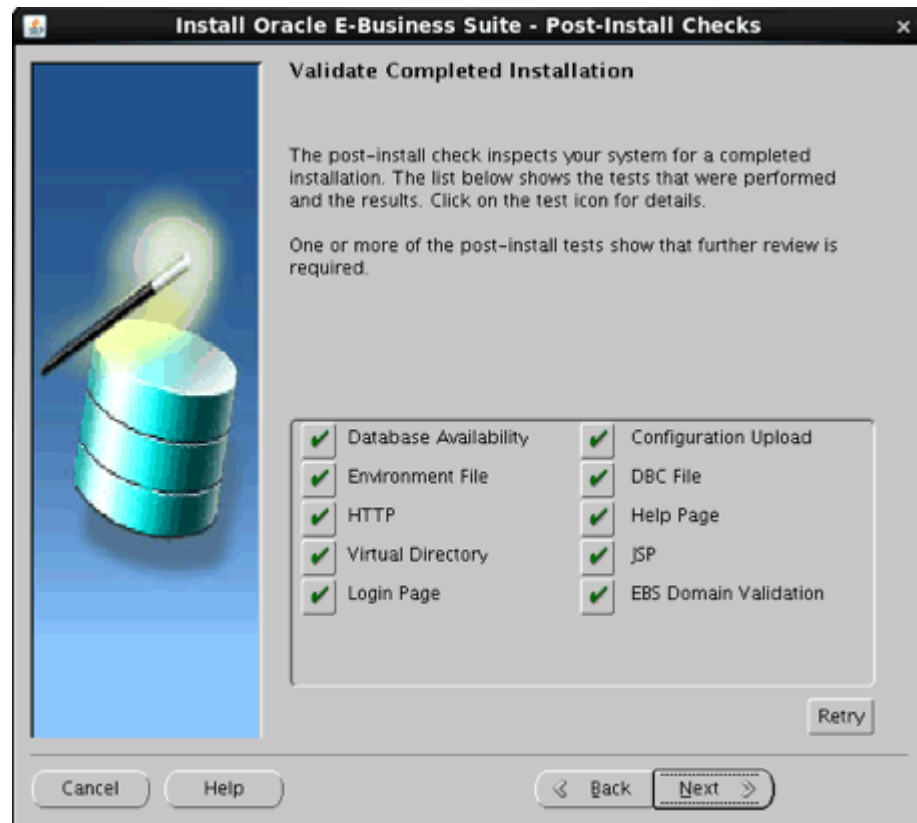
Post-Install Review:

After the installation is complete, Rapid Install automatically validates the installed Oracle E-Business Suite environment. Tests include database availability, correctly-configured environment files, and functioning listeners.

1. Review the information from the tests Rapid Install has completed

If there is an *!* or *x* icon, click it to see the details. If any of the checks fail, refer to the Rapid Install log files to determine the reason, and resolve each problem before continuing. When the errors are fixed, click Retry to perform the post-install validation again.

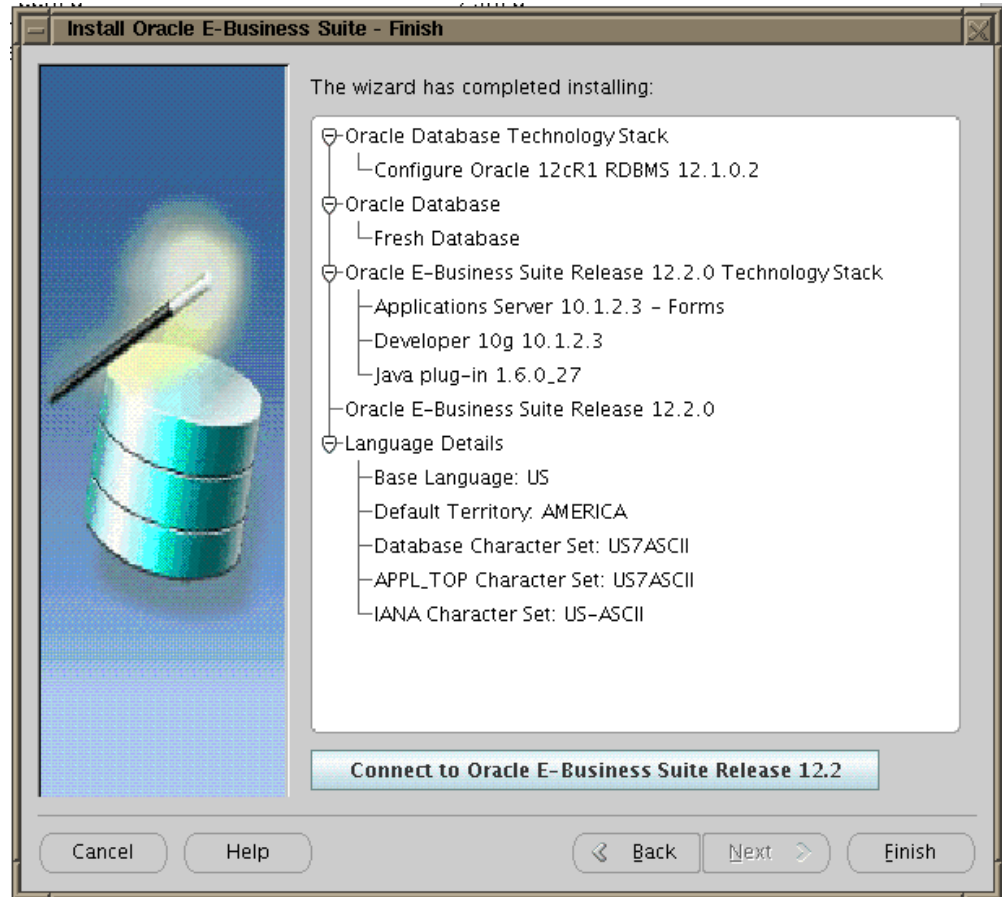
Post-Install Checks screen



2. Click *Next* if there are no errors.

Rapid Install informs you of the components that it installed on the Finish screen.

Finish screen



To review the Post-install Checks screen, click *Back*. We do not recommend choosing to log in to Oracle E-Business Suite now (by clicking on *Connect to E-Business Suite Release 12.2*). Instead, wait to log in until after you have applied the Release 12.2.6 RUP.

Express Installation

An *Express installation* sets up a fully configured single-user/single-machine system with either a fresh database or Vision Demo database. You specify basic configuration parameters, such as database type and name, top-level installation directory, and port increments. The remaining directories and mount points are supplied by Rapid Install using default values.

This type of installation contains (by default) a set of core Oracle E-Business Suite products. You can easily register additional products (according to your Oracle licensing agreement) after the installation is complete, by using License Manager.

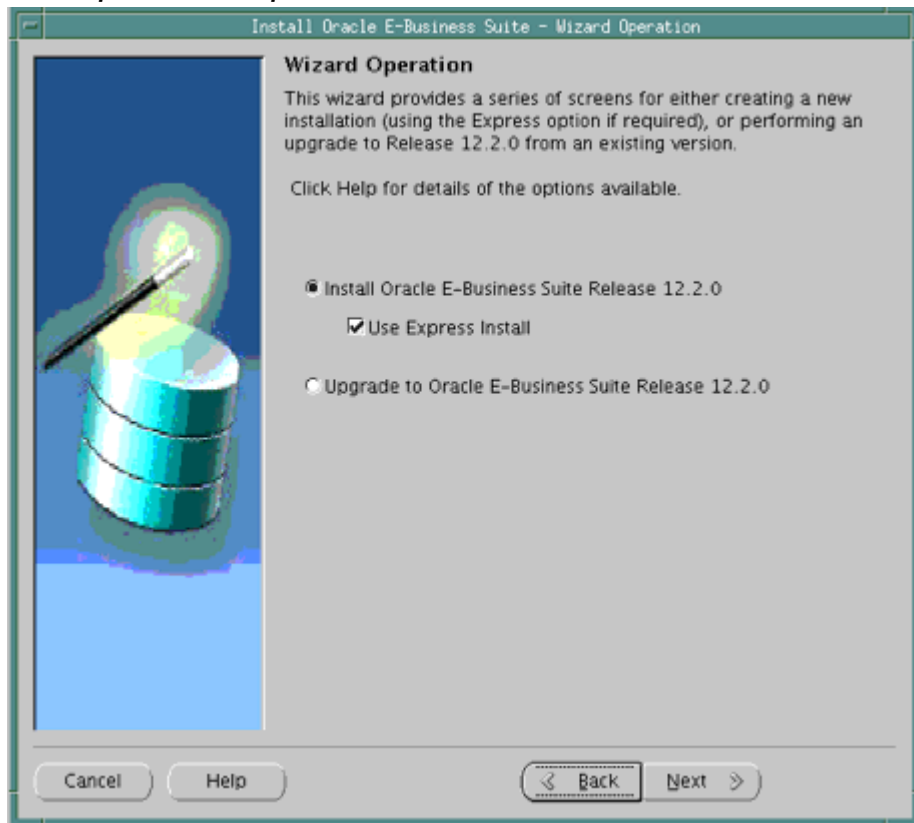
Additional Information: For more details on how to license additional products or components, refer to Chapter 16, License Manager, in *Oracle E-Business Suite Maintenance Guide*.

The installation also contains the US7ASCII character set (for a fresh install) and the AL32UTF8 character set (for a Vision Demo install), in both the database and the APPL_TOP. Converting the character set may be time-consuming, and is best avoided if possible. Consider your character set requirements when using Express Installation.

1. Start Rapid Install

On the Select Wizard Operation screen, select *Install Oracle E-Business Suite Release 12.2.0* and then check *Use Express Install*.

Wizard Operation screen with "Install Oracle E-Business Suite Release 12.2.0" and "Use Express Install" options selected

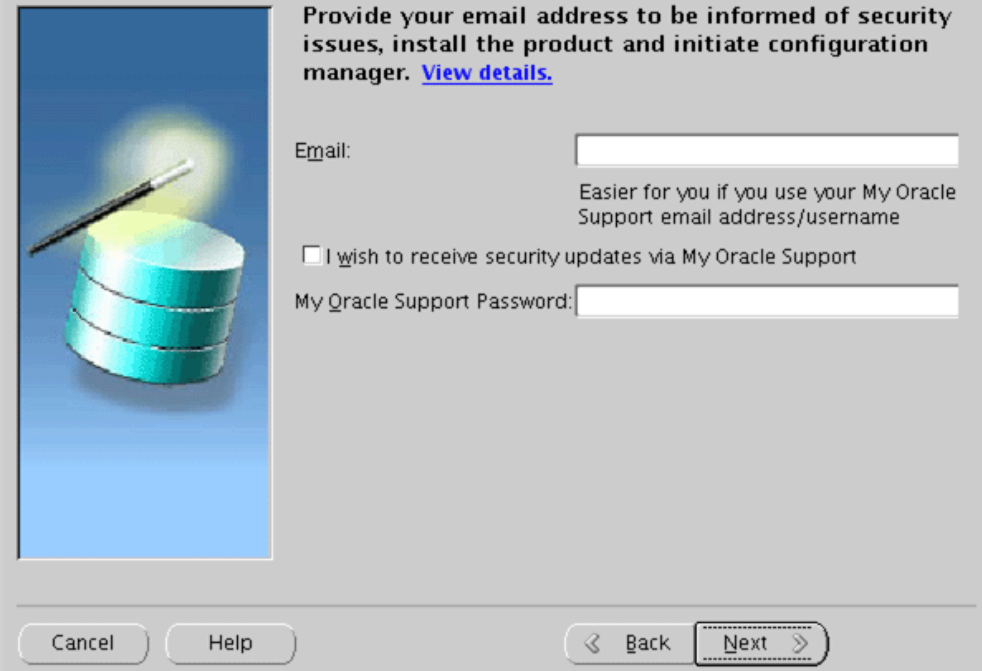


Click *Next* to continue.

2. Enter your email address. Optionally select the checkbox to indicate that you wish to receive security updates through My Oracle Support, and enter your My Oracle Support password.

Data collected is sent via HTTPS (secure HTTP) to Oracle Support, facilitating proactive problem avoidance and helping to reduce the time needed for resolution of support issues.

Screen to enter email details for security updates



Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details.](#)

Email:

Easier for you if you use your My Oracle Support email address/username

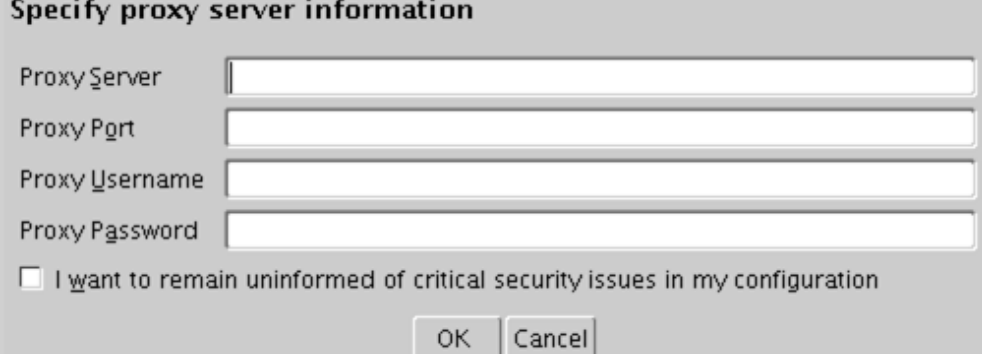
I wish to receive security updates via My Oracle Support

My Oracle Support Password:

Cancel Help < Back Next >

If submission of your details fails because no connection can be made, a pop-up screen appears prompting for proxy server information:

Specify Proxy Server Information screen



Specify proxy server information

Proxy Server

Proxy Port

Proxy Username

Proxy Password

I want to remain uninformed of critical security issues in my configuration

OK Cancel

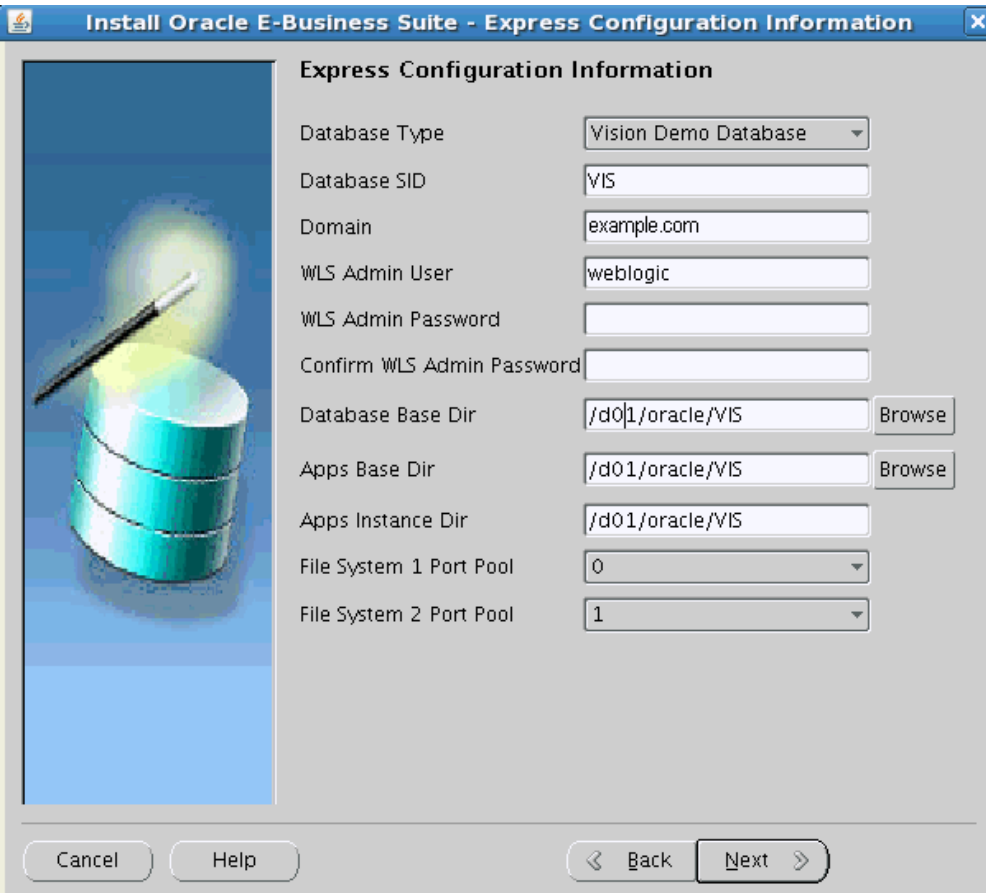
If this screen appears, enter the proxy server, proxy port, proxy username, and proxy password. You can optionally select the "I want to remain uninformed of critical security issues in my configuration" checkbox. Then click *OK*.

3. Enter Configuration Values

The Express Configuration Information screen prompts for minimal configuration values. Default values are provided for all fields except Domain.

This example screen is for UNIX:

Express Configuration Information screen



Database Type	Vision Demo Database	
Database SID	VIS	
Domain	example.com	
WLS Admin User	weblogic	
WLS Admin Password		
Confirm WLS Admin Password		
Database Base Dir	/d01/oracle/VIS	Browse
Apps Base Dir	/d01/oracle/VIS	Browse
Apps Instance Dir	/d01/oracle/VIS	
File System 1 Port Pool	0	
File System 2 Port Pool	1	

In the Database Type field, use the drop-down list to choose either a Vision Demo database or a fresh database.

In the Database SID field, enter the database name, or service name, for the local instance. You can either accept the default database name or enter another name, which must be alphanumeric, must not exceed eight characters in length, must not start with a number, and must not include any spaces.

Important: The database name specified in this field is used to determine the database SID. The database SID may vary depending on your environment.

- In an environment that does not use Oracle RAC, the database SID is the same as the database name.
- In an Oracle RAC environment, the instance number is appended to the database name to form the database SID for each Oracle RAC node.

On Windows (as shown in the example above), enter the path to the UNIX Toolkit directory and Visual Studio directory, or click *Browse* and navigate to the desired path for each of these. On UNIX systems, the DISPLAY environment variable must be set to an active and authorized display.

In the Domain field, enter a value that produces a fully qualified domain name (FQDN) when combined with a host (machine) name.

Important: The host name for the database tier node must be no longer than 30 characters.

The Rapid Install wizard displays a warning message if the fully qualified domain name (FQDN) exceeds 30 characters. If the host name for the database tier node is no longer than 30 characters, then you can ignore the warning and proceed with the installation. Otherwise you must update your configuration before you proceed.

Additionally, the host name must begin with an alphabetic character. The host name cannot include an underscore (_) character.

In the Base Directory field, enter the top-level directory path you want Rapid Install to use to create the derived mount points for the database node and all application tier nodes. Alternatively, click *Browse* and navigate to the desired path.

The default value of the Port Pool set is zero, but you can customize it by selecting another value from the drop-down list in the Port Pool field. There are 100 port pool selections: if you select an increment of 3, the default values are increased by that value. The Database Port (1521) becomes 1524, the RPC Port (1626) becomes 1629, and so on.

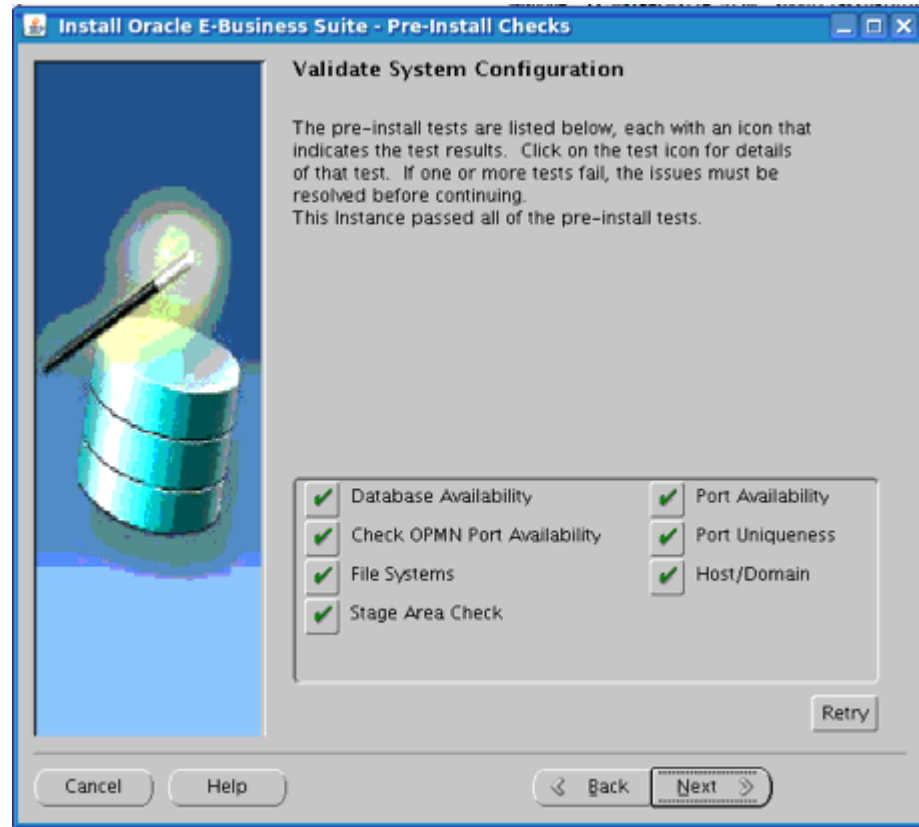
Additional Information: The fields on this screen are fully described in Node-specific Configuration Information, page A-2 in Configuration Details, page A-1.

Click *Next* to continue.

4. Start Installation Process

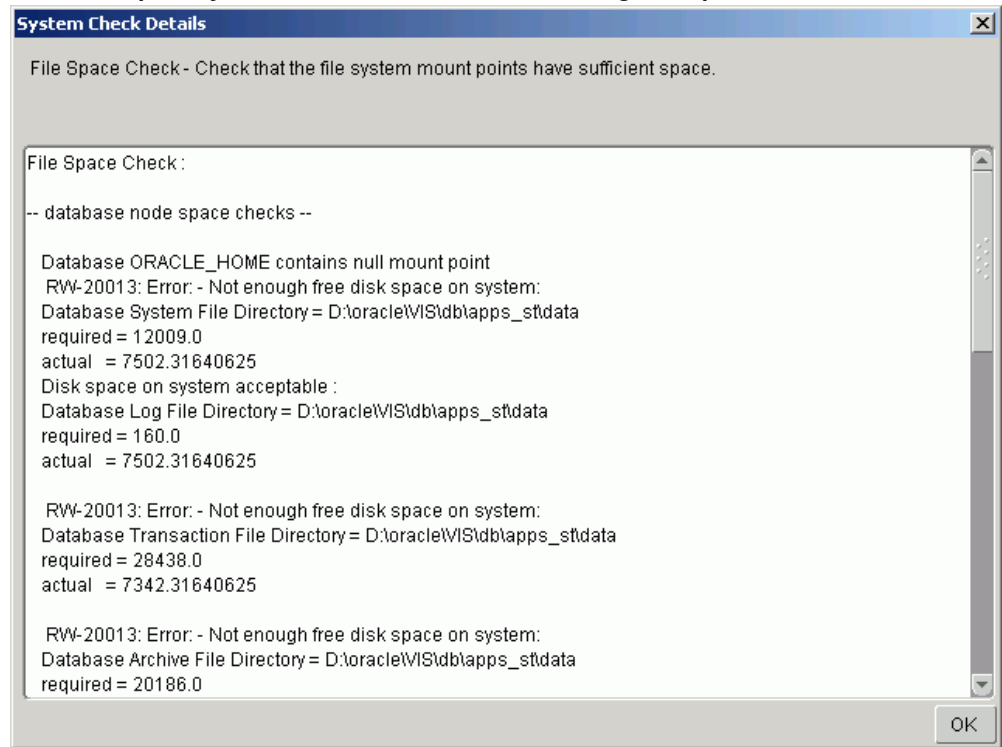
Rapid Install displays the pre-install tests as it performs them. When it is complete, the Pre-Install Checks screen appears.

Pre-Install Checks screen



If there is an exclamation mark (!) or x icon shown, click on it to see the details stored during the check process. For example, if you see an exclamation mark beside File Space Check, clicking on it may display a screen showing an error due to insufficient file system free space.

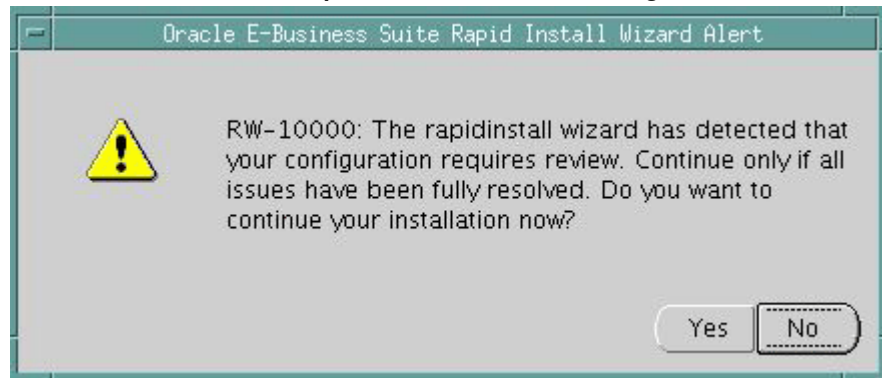
Error Example - System Check Details screen showing File Space Check error



Resolve any issues you need to fix, and then click *OK* to return to the Pre-install Checks screen.

If you decide to continue the installation without fixing the flagged issues, Rapid Install displays a warning in the Oracle E-Business Suite Rapid Install Wizard Alert dialog box when you click *Next*.

Oracle E-Business Suite Rapid Install Wizard Alert dialog box



Click *Yes* to continue or *No* to stop the installation. If you click *No*, you must go back to the appropriate screen and re-enter the incorrect or incompatible parameter.

Click *Back* to return to a previous screen.

5. Continue Installation

The remaining screens in the Rapid Install flow for an Express installation are the same as for a standard installation.

Installation in Silent Mode

When you perform an installation using the Rapid Install wizard user interface, Rapid Install generates a configuration file that contains the details of the system-specific configuration parameters you entered in the wizard. If you need to rerun Rapid Install, you can optionally use this configuration file to run Rapid Install in silent mode. In this mode you do not need to enter responses while Rapid Install is running. Instead, Rapid Install uses the previously entered parameters stored in the configuration file to complete the installation. Additionally, in silent mode Rapid Install sets all passwords, including the database account passwords and Oracle WebLogic Server admin password, to the default values.

Additional Information: For the list of default passwords, see Specify Application User Information, page 2-29.

The configuration file is generated in the following location:
`<DATABASE_ORACLE_HOME>/appsutil/conf_<SID>.txt`

To run Rapid Install in silent mode, use the following command:

```
rapidwiz -silent -config <configuration_file>
```

Note: You cannot use silent mode the first time you run Rapid Install. You must enter the configuration parameters in the Rapid Install wizard to generate the configuration file that you can then use to run Rapid Install again in silent mode.

What To Do Next

After the Rapid Install run is complete, some additional finishing tasks are required for all users, and others are required for specific types of installation. Go to Finishing Tasks, page 4-2, and perform all the tasks that are applicable to your requirements.

Updating the Technology Stack

This chapter describes how to use the specialized Rapid Install option to update the technology stack.

This chapter covers the following topics:

- Updating the Technology Stack
- Replacing the Oracle E-Business Suite Database Technology Stack
- Replacing the OracleAS 10.1.2 (Tools) Technology Stack
- Replacing the Oracle Fusion Middleware Technology Stack

Updating the Technology Stack

Rapid Install offers a specialized option that allows you to replace selected technology stack executables in an existing instance, for example where executable files have been lost or become corrupted. The option can be used to replace executables belonging to the Oracle E-Business Suite Database, OracleAS 10.1.2, or Oracle Fusion Middleware.

Important: Before undertaking any of the procedures in this chapter, you should ensure you have a list of any patches that have been applied to the Oracle home in question. After running the procedure, you should apply any missing patches to the newly created replacement Oracle home.

Replacing the Oracle E-Business Suite Database Technology Stack

Steps:

1. Remove the RapidWiz install stage area under the database Oracle home:

```
$ rm -rf $ORACLE_HOME/temp/*
```

For example:

```
$ rm -rf /d01/oracle/RW/PROD/12.1.0/temp/*
```

2. Source the environment on the database tier:

```
$ . $ORACLE_HOME/<CONTEXT_NAME>.env
```

3. Detach the Oracle Database 12cR1 Oracle home from the inventory:

UNIX:

```
$ $ORACLE_HOME/oui/bin/detachHome.sh
```

Windows:

```
C:\>%ORACLE_HOME%\oui\bin\detachHome.bat
```

4. Take a copy of the context file.

5. On Windows only, perform the following steps:

- Shut down the database and database listener.
- Delete the database service using the following command:

```
C:\>%ORACLE_HOME%\bin\oradim -DELETE -SID [SID]
```

6. Remove the database Oracle home

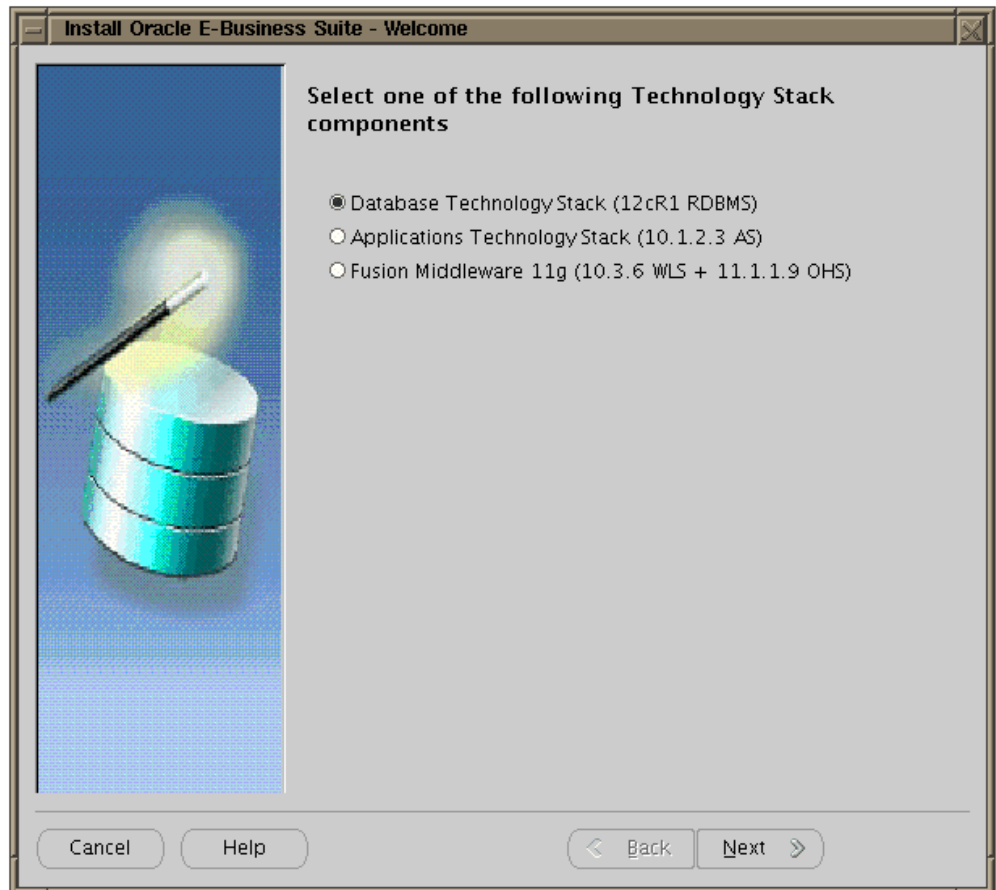
```
$ rm -rf $ORACLE_HOME
```

7. As the operating system user that owns the technology stack you are replacing, run the Rapid Install wizard with the `-techstack` option:

```
$ rapidwiz -techstack
```

8. Select "Database Technology Stack (12cR1 RDBMS)" and then click *Next*.

Welcome screen with "Database Technology Stack (12cR1 RDBMS)" option selected



9. Fill in the required information in the Database Node screen and then click *Next*.

Database Node screen

RDBMS Inputs Page
Provide all the details used for the installation of the RDBMS.

Database Host	<input type="text" value="testsys"/>
Database Port	<input type="text" value="1521"/>
Database SID	<input type="text" value="PROD"/>
Domain Name	<input type="text" value="example.com"/>
Base Directory	<input type="text" value="/d01/oracle/PROD"/> <input type="button" value="Browse"/>
Database OS User	<input type="text" value="oracle"/>
Database OS Group	<input type="text" value="dba"/>
Database Character Set	<input type="text" value="US7ASCII"/>

Cancel Help < Back Next >

Important: The host name for the database tier node must be no longer than 30 characters.

The Rapid Install wizard displays a warning message if the fully qualified domain name (FQDN) exceeds 30 characters. If the host name for the database tier node is no longer than 30 characters, then you can ignore the warning and proceed with the installation. Otherwise you must update the host name before you proceed.

Additionally, the host name must begin with an alphabetic character. The host name cannot include an underscore (_) character.

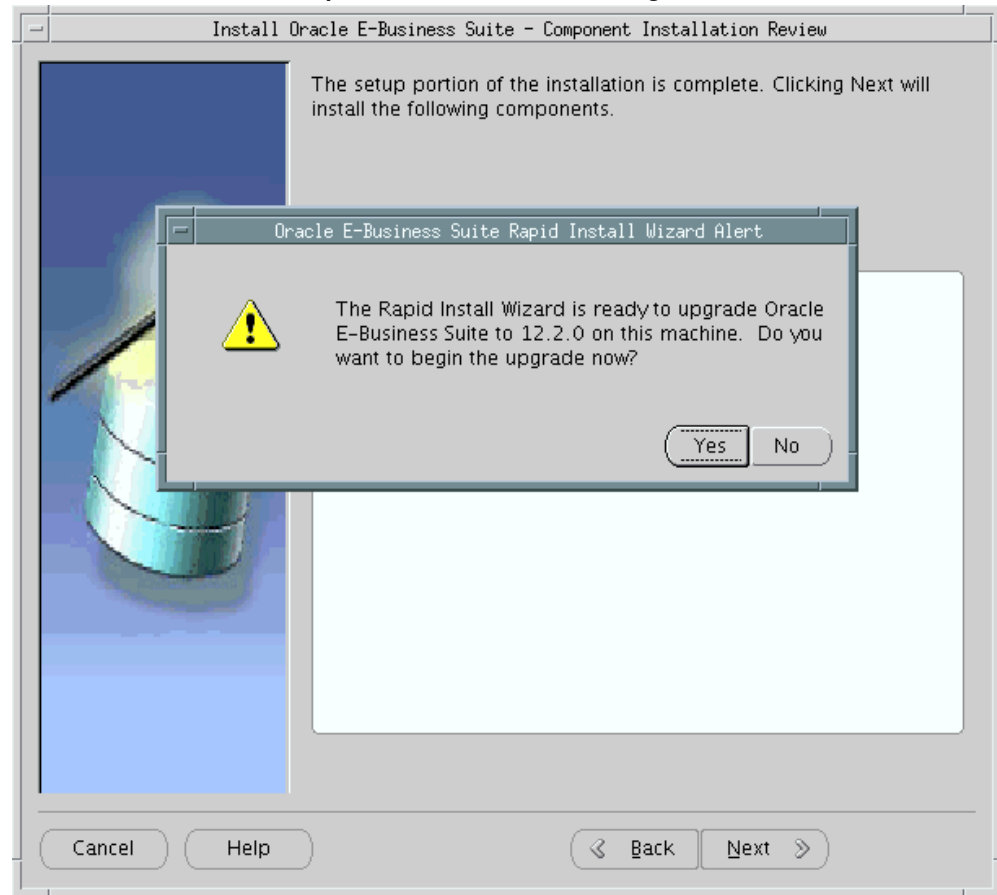
In the Database SID field, enter the database name, or service name, for the local instance. The database name must be alphanumeric, must not exceed eight characters in length, must not start with a number, and must not include any spaces.

Important: The database name specified in this field is used to determine the database SID. The database SID may vary depending on your environment.

- In an environment that does not use Oracle RAC, the database SID is the same as the database name.
- In an Oracle RAC environment, the instance number is appended to the database name to form the database SID for each Oracle RAC node.

10. Click *Yes* in the Oracle E-Business Suite Rapid Install Wizard Alert dialog box to start the installation.

Oracle E-Business Suite Rapid Install Wizard Alert dialog box



11. After the installation has completed successfully, copy your context file to the `$ORACLE_HOME/appsutil` directory.
12. Run AutoConfig with this context file. Although this first run will fail (because it needs a database up and running to succeed), it will generate the basic metadata that the database needs to start up.
13. Set the environment, and start up the database.
14. Run AutoConfig a second time. This time it should succeed.

Replacing the OracleAS 10.1.2 (Tools) Technology Stack

Steps:

1. Remove the RapidWiz install stage area on both application tier file systems, fs1

and fs2:

```
$ rm -rf <s_base>/fs1/inst/apps/<context>/temp/*  
$ rm -rf <s_base>/fs2/inst/apps/<context>/temp/*
```

2. Detach the OracleAS 10.1.2 AS (Tools) Oracle home from the inventory:

UNIX:

```
$ runInstaller -removeHome ORACLE_HOME=$ORACLE_HOME  
ORACLE_HOME_NAME=<OraInventory name>
```

Windows:

```
C:\>setup.exe -noconsole -waitforcompletion -removeHome  
ORACLE_HOME=%ORACLE_HOME%
```

Do this for both fs1 and fs2.

3. Remove the OracleAS 10.1.2 Oracle home on both file systems:

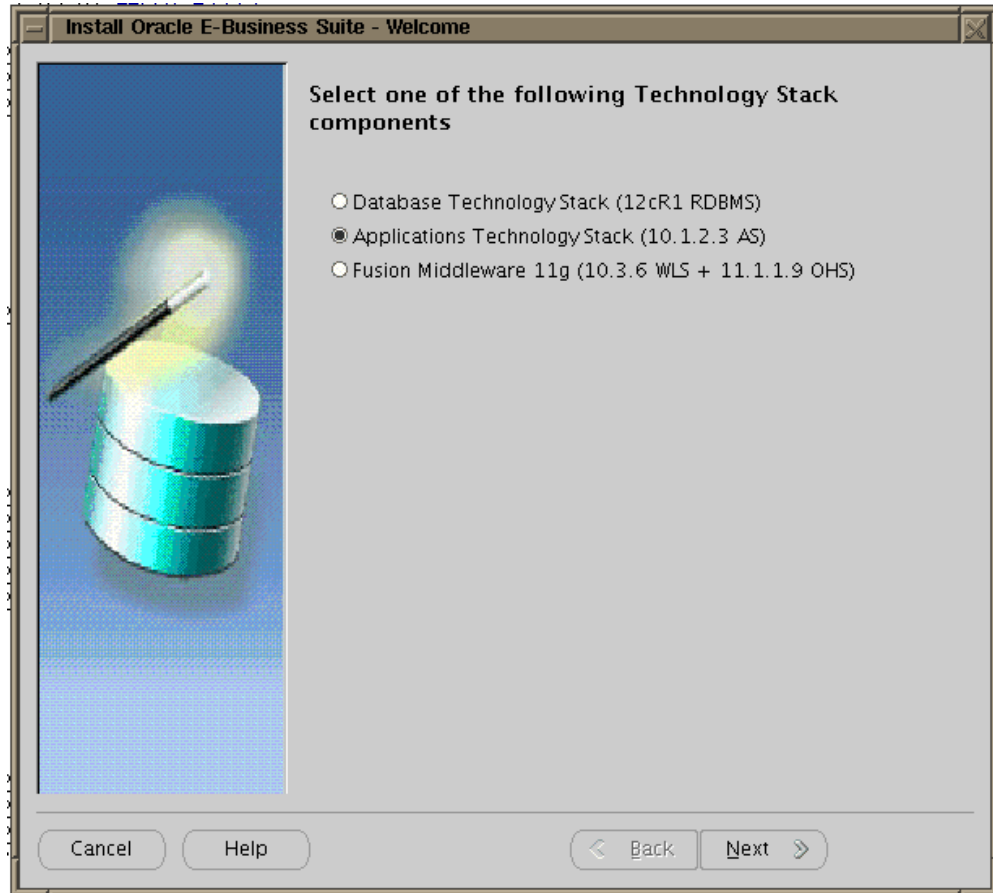
```
$ rm -rf <s_base>/fs1/EBSapps/10.1.2  
$ rm -rf <s_base>/fs2/EBSapps/10.1.2
```

4. As the operating system user that owns the technology stack you are replacing, run the Rapid Install wizard with the `-techstack` option:

```
$ rapidwiz -techstack
```

5. Select "Applications Technology Stack (10.1.2.3 AS)" and click *Next*:

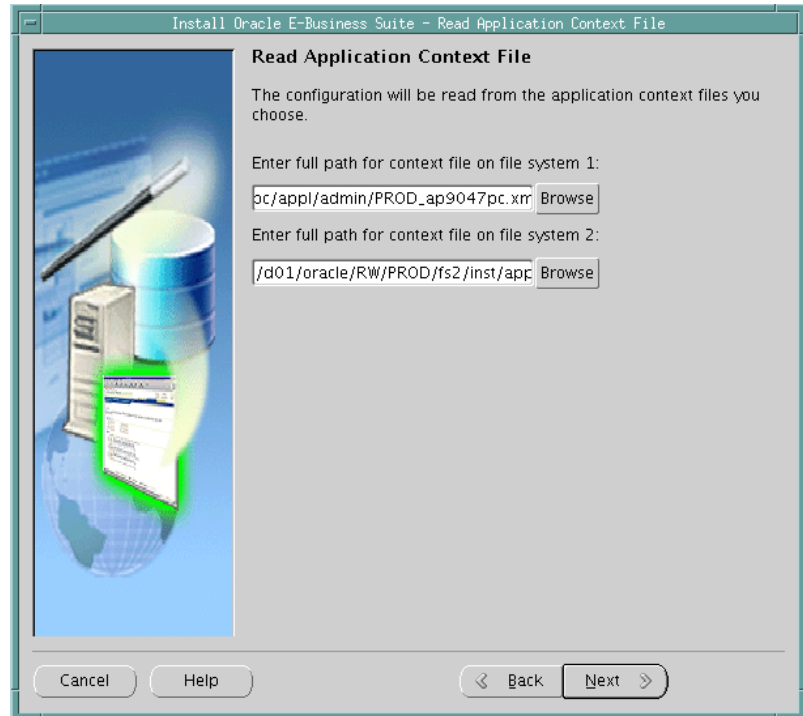
Welcome screen with "Applications Technology Stack (10.1.2.3 AS)" option selected



6. In the "Read Application Context File" field, enter the context file (generated with `adclonectx` if required) that matches the parameters of your OracleAS 10.1.2 installation, then click *Next*.

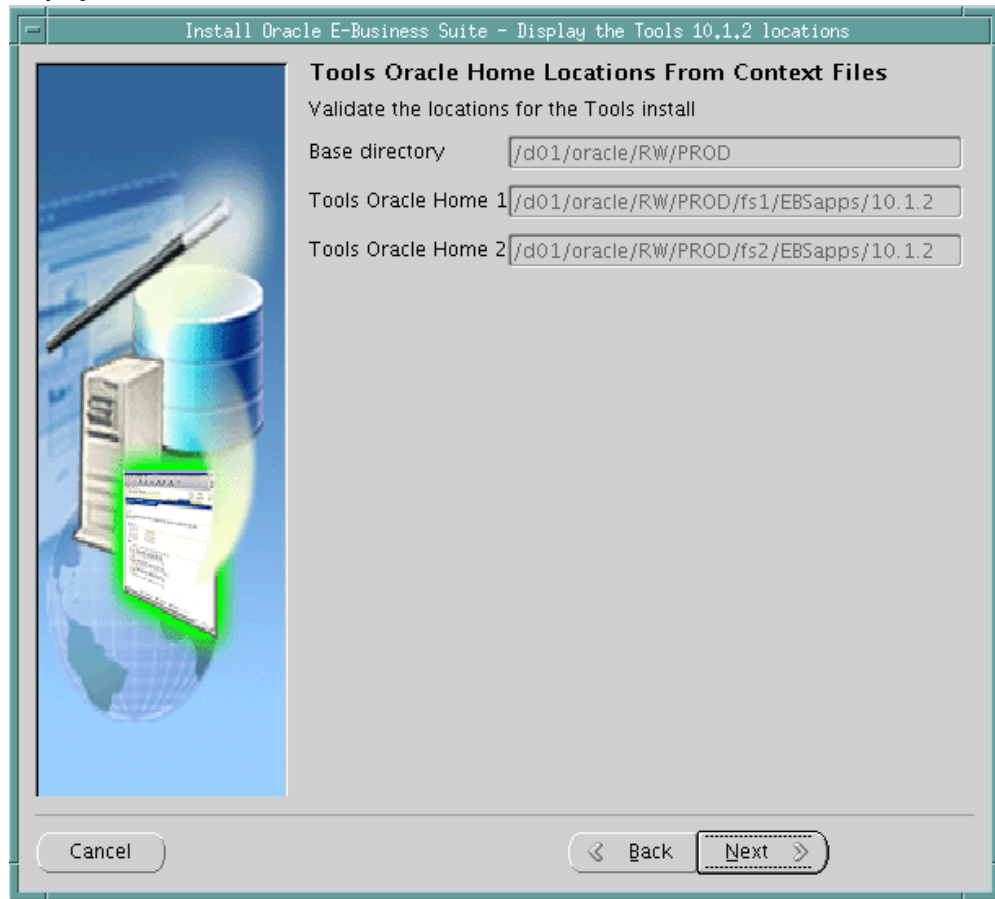
Note: You only have to enter the context file for `fs1`. The context file for `fs2` is automatically filled in as you enter the `fs1` path and file.

Read Application Context File screen



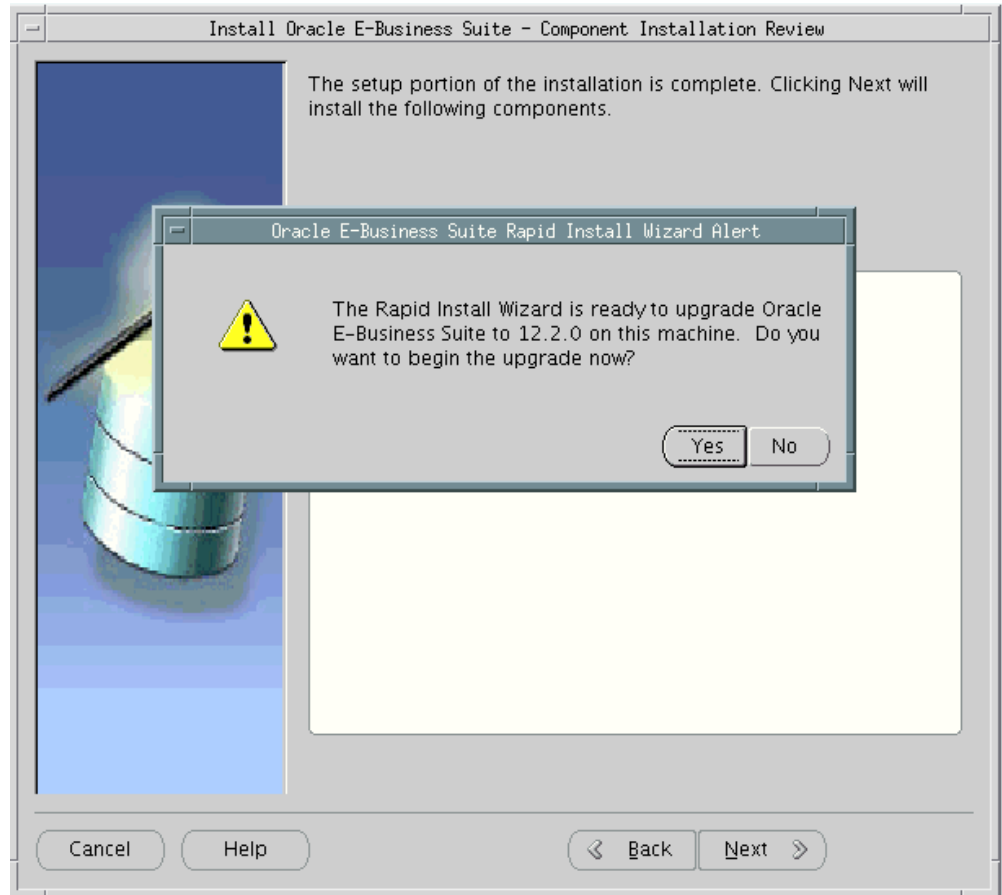
7. The next screen is to confirm that this is the correct location of the OracleAS 10.1.2 Oracle home. Click *Next*.

Display the Tools 10.1.2 Locations screen



8. Click *Yes* in the Oracle E-Business Suite Rapid Install Wizard Alert dialog box to start the install.

Oracle E-Business Suite Rapid Install Wizard Alert dialog box



9. After a installation has completed successfully, run AutoConfig and then start the application tier services.

Replacing the Oracle Fusion Middleware Technology Stack

Steps:

1. Uninstall Oracle Fusion Middleware:

UNIX:

```
$ <s_base>/fs1/FMW_Home/utils/uninstall/uninstall.sh  
$ <s_base>/fs2/FMW_Home/utils/uninstall/uninstall.sh
```

Windows:

```
C:\><s_base>\fs1\FMW_Home\utils\uninstall\uninstall.cmd  
C:\><s_base>\fs2\FMW_Home\utils\uninstall\uninstall.cmd
```

2. Remove the RapidWiz install stage area on both application tier file systems, fs1 and fs2:

```
$ rm -rf <s_base>/fs1/inst/apps/<context>/temp/*
$ rm -rf <s_base>/fs2/inst/apps/<context>/temp/*
```

3. Detach the Web tier Oracle home from the inventory:

- UNIX:

```
$ $ORACLE_HOME/oui/bin/detachHome.sh [-invPtrLoc <s_invPtrLoc>]
```

Specify the `-invPtrLoc` argument only if you are using the EBS Installation Central Inventory. When specifying this argument, replace `<s_invPtrLoc>` with the context variable that stores the inventory pointer location.

Additional Information: For more information about the EBS Installation Central Inventory, see: Before You Start, *Oracle E-Business Suite Maintenance Guide*.

- Windows:

```
C:\>%ORACLE_HOME%\oui\bin\detachHome.bat
```

Do this for both fs1 and fs2.

4. Detach Oracle Common from the inventory:

- UNIX:

```
$ $ORACLE_HOME/oui/bin/detachHome.sh [-invPtrLoc <s_invPtrLoc>]
```

Specify the `-invPtrLoc` argument only if you are using the EBS Installation Central Inventory. When specifying this argument, replace `<s_invPtrLoc>` with the context variable that stores the inventory pointer location.

Additional Information: For more information about the EBS Installation Central Inventory, see: Before You Start, *Oracle E-Business Suite Maintenance Guide*.

- Windows:

```
C:\>%ORACLE_HOME%\oui\bin\detachHome.bat
```

Do this for both fs1 and fs2.

5. Detach Oracle_EBS-app1 from the inventory:

- UNIX:

```
$ $ORACLE_HOME/oui/bin/detachHome.sh [-invPtrLoc <s_invPtrLoc>]
```

Specify the `-invPtrLoc` argument only if you are using the EBS Installation

Central Inventory. When specifying this argument, replace `<s_invPtrLoc>` with the context variable that stores the inventory pointer location.

Additional Information: For more information about the EBS Installation Central Inventory, see: Before You Start, *Oracle E-Business Suite Maintenance Guide*.

- Windows:

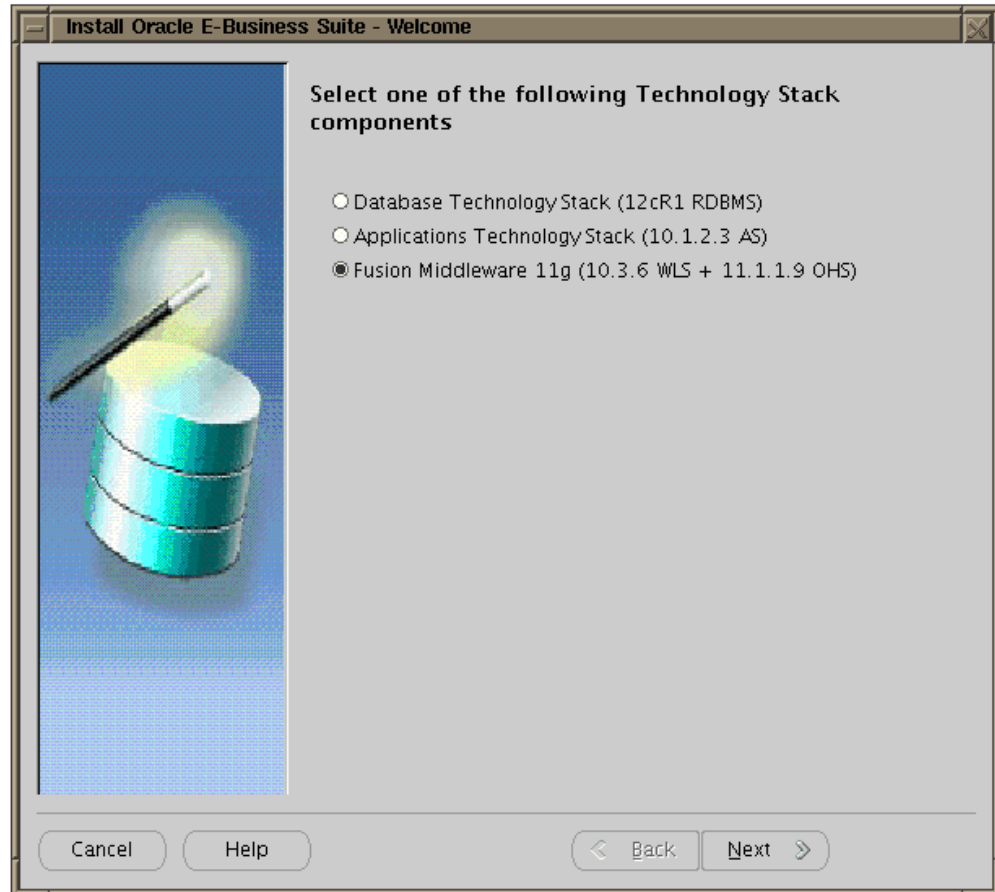
```
C:\>%ORACLE_HOME%\oui\bin\detachHome.bat
```

Do this for both fs1 and fs2.

6. This step is platform-dependent. On UNIX, remove Oracle_EBS-app1/jdk. Do this for both fs1 and fs2.
7. Remove the `<FMW_HOME>/oracle_common` directory. Do this for both fs1 and fs2.
8. Remove the contents of the `<FMW_HOME>/webtier` directory, except the 'instances' directory. Do this for both fs1 and fs2.
9. This step is platform-dependent.
 - UNIX: Remove `s_fmw_jdktop`. Do this for both fs1 and fs2.
 - Windows: Remove `s_jdktop` and `s_fmw_jdktop`. Do this for both fs1 and fs2.
10. As the operating system user that owns the technology stack you are replacing, run the Rapid Install wizard with the `-techstack` option:

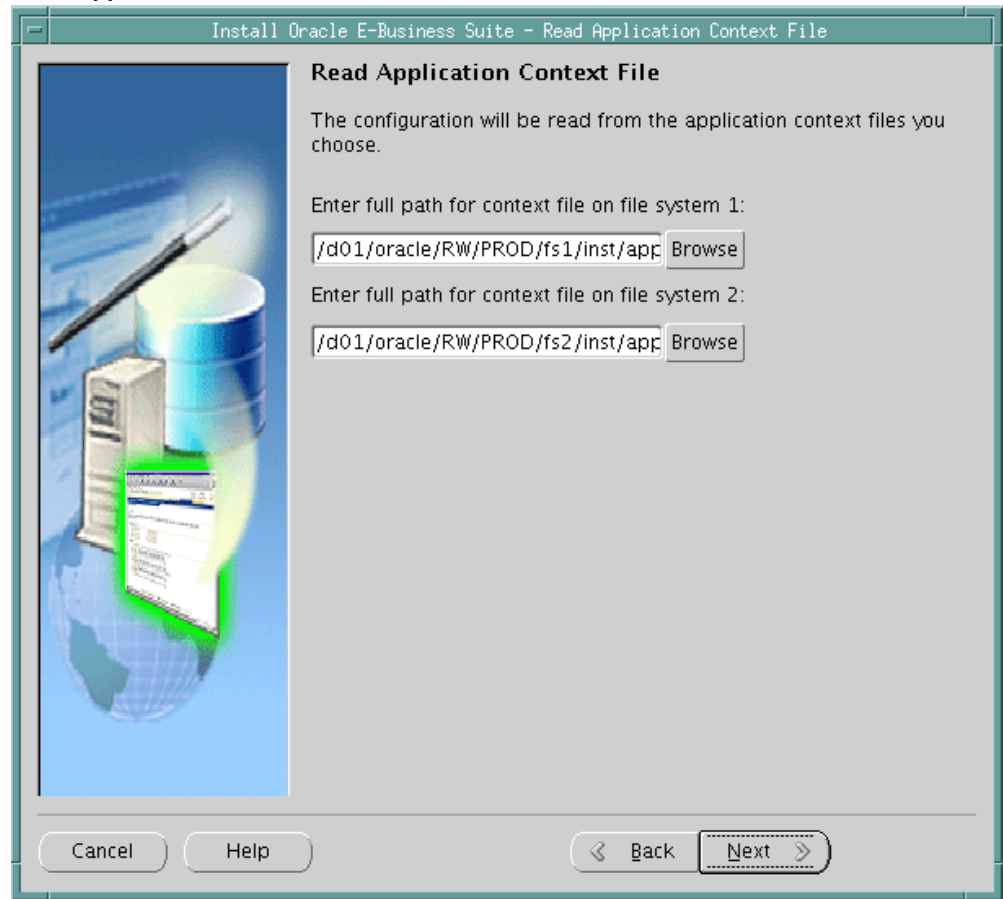
```
$ rapidwiz -techstack
```
11. Select "Fusion Middleware 11g (10.3.6 WLS + 11.1.1.9 OHS)" and click *Next*.

Welcome screen with "Fusion Middleware 11g (10.3.6 WLS + 11.1.1.9 OHS)" option selected



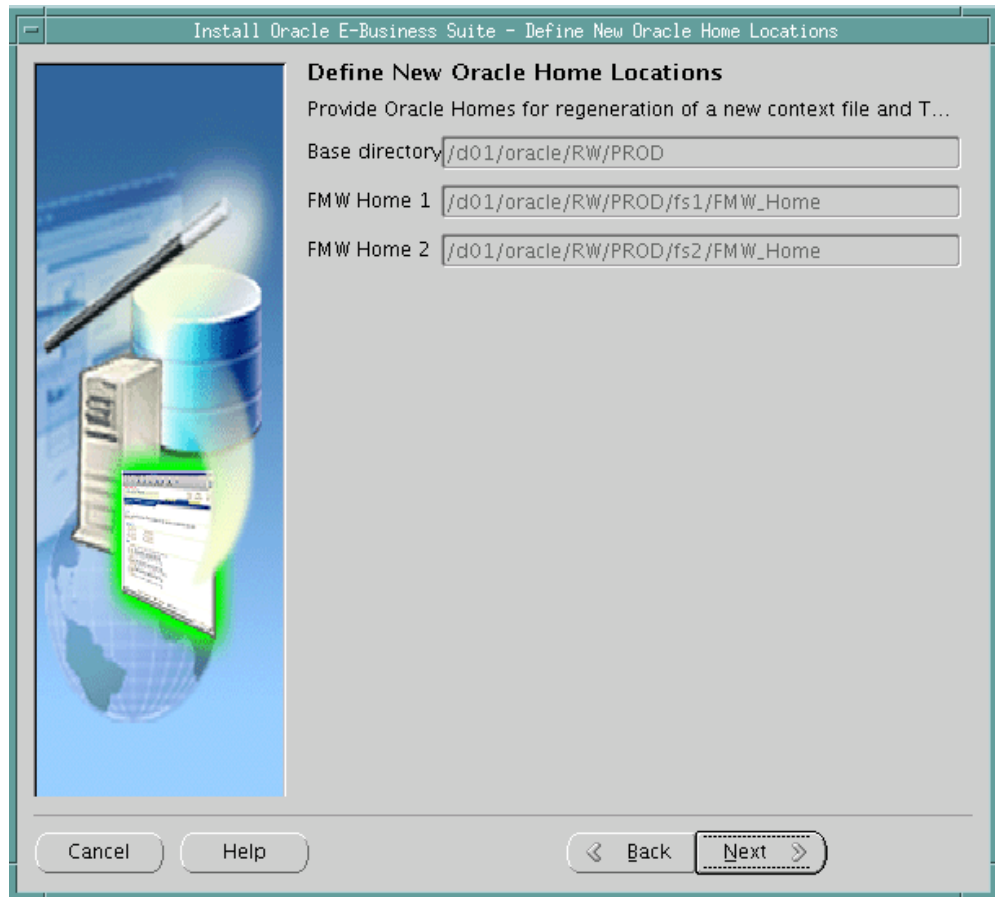
12. In the "Read Application Context File" field, enter the context file (generated with adclonectx if required) that matches the parameters of your Oracle Fusion Middleware installation, then click *Next*.

Read Application Context File screen



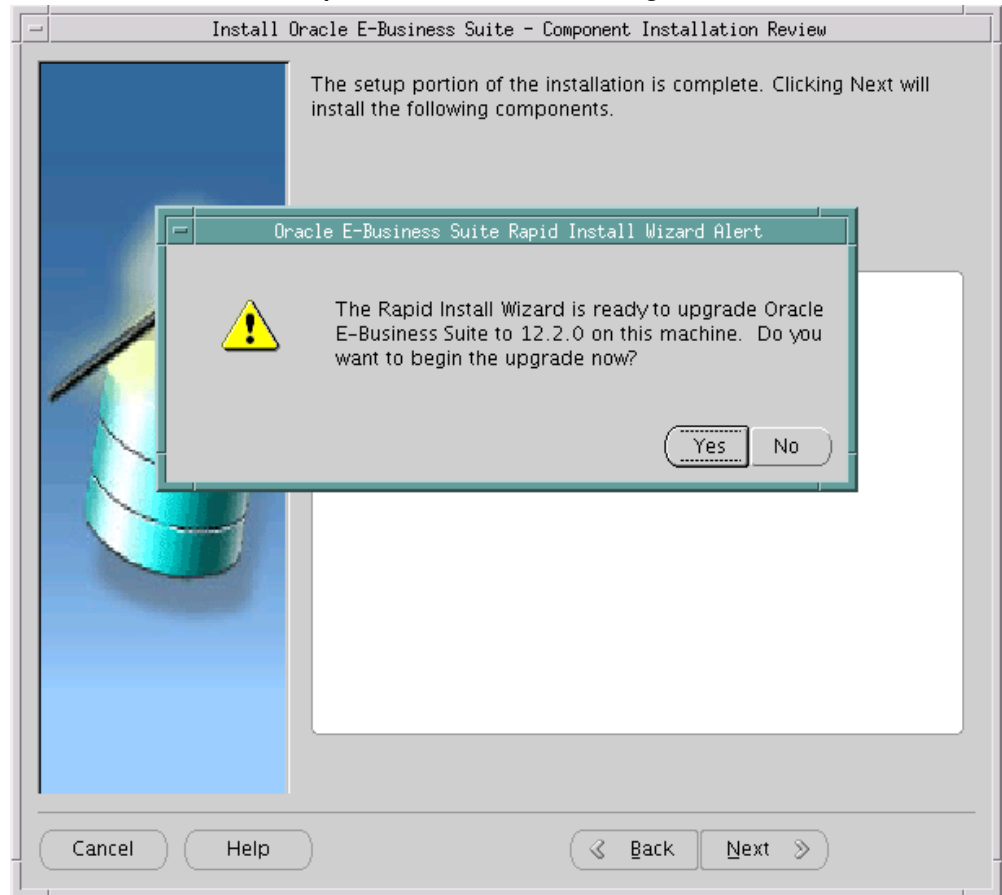
13. The next screen is to confirm that these are the correct locations for the Oracle Fusion Middleware Oracle homes. Click *Next*.

Define New Oracle Home Locations screen



14. Click *Yes* in the Oracle E-Business Suite Rapid Install Wizard Alert dialog box to start the install.

Oracle E-Business Suite Rapid Install Wizard Alert dialog box



15. (Conditional) If you are running the Oracle HTTP Server on a privileged port, refer to Step 3.3: Running Oracle HTTP Server on a Privileged Port of My Oracle Support Knowledge Document 1905593.1, *Managing Configuration of Oracle HTTP Server and Web Application Services in Oracle E-Business Suite Release 12.2*.
16. After the installation has completed successfully, run AutoConfig and then start the application tier services on the run edition file system.

Finishing Tasks

Certain tasks are necessary to finish all installations for Oracle E-Business Suite. There are also other tasks that are required only for systems with specific functionality. You must complete all tasks marked as required. You should also complete any tasks marked as conditional that apply for your instance, or that are necessary to meet your site or product-specific requirements.

This chapter covers the following topics:

- Updating the Technology Stack
- Updating to the Latest Oracle E-Business Suite Code
- Logging in to Oracle E-Business Suite (required)
- Changing Default Passwords (required)
- Checking the Value of the Context Variable `s_adminservertimeout` (required)
- Checking Database Tier Context Variables (required)
- Running AutoConfig (required)
- Creating Your Own JAR File Signature (required)
- Configuring Database Initialization Parameters (required)
- Updating the PL/SQL Log and Out Directory (required)
- Implementing Product and Country-Specific Functionality (conditional)
- Checking Client Tier Software For Use With Forms-based Products (required)
- Setting Up Printers (required)
- Understanding System Administration and Maintenance Tasks (required)
- Applying Application Tier Customizations (conditional)
- Performing Optional Advanced Configurations
- Validating and Deploying Custom and Third-Party Products (conditional)
- Resizing the Database (conditional)

- Configuring Parallel Concurrent Processing (conditional)
- Configuring Forms Socket Mode (conditional)
- Setting Up National Language Support (conditional)
- Setting Up Unicode Character Sets (conditional)
- Completing Workflow Notification Mailer Configuration (conditional)
- Setting Up and Implementing Discoverer End User Layer (conditional)
- Converting to a Public Sector, Education, or Not-for-Profit System (conditional)
- Setting Up Multiple Organizations (conditional)
- Optimizing Performance Tuning (conditional)
- Backing Up Oracle E-Business Suite (recommended)
- Performing Secure Configuration

Updating the Technology Stack

Applying the Latest Application Tier Technology Patches to the Run File System (required)

Immediately after the successful installation of the 12.2.0 file system using the latest StartCD, you must apply the latest application tier technology patches to the run file system. After the release of the startCD, new required patches may have been discovered, so it is important to perform this step.

Required Action: Follow the instructions in Section 1.5, Apply latest application tier technology patches to run file system, *Oracle E-Business Suite Release Notes, Release 12*. (Doc ID: 1320300.1).

EBS Tech Patch Automation Tool - Application Tier (ETPAT-AT)

You can use the EBS Tech Patch Automation Tool - Application Tier (ETPAT-AT) to apply missing technology one-off patches to the Oracle E-Business Suite (EBS) Release 12.2.0 application tier.

ETPAT-AT automates patching of technology one-offs for the following components of the Oracle E-Business Suite Release 12.2.0 application tier:

- FMW WebTier 11.1.1.9
- Oracle WebLogic Server 10.3.6 Smart Update Patch
- Oracle WebLogic Server 10.3.6.0

- FMW oracle_common 11.1.1.9
- Forms and Reports 10.1.2.3

Optional Action: For instructions, refer to *Using the EBS Technology Patch Automation Tool for Application Tier (ETPAT-AT)* (Doc ID: 2749774.1).

Upgrading Database Version

For a new installation, Rapid Install deploys Oracle Database 12c Release 1 (12.1.0.2). We strongly recommend that you upgrade to Oracle Database 19c following your installation. Similarly, if you are upgrading Oracle E-Business Suite instance and you have not already upgraded your database to Oracle Database 19c, we strongly recommend that you perform the database upgrade after your Oracle E-Business Suite upgrade. To upgrade your database, follow the process documented in My Oracle Support Knowledge Document 2552181.1, *Interoperability Notes: Oracle E-Business Suite Release 12.2 with Oracle Database 19c*.

Note: For a database remaining at Oracle Database 11g Release 2 (11.2.0.4) or Oracle Database 12c Release 1 (12.1.0.2), you should ensure that you have a Market Driven Support contract to continue receiving patches for your database.

Applying Required Database Patches (required)

Ensure that the required database patches for Oracle E-Business Release 12.2 have been applied.

Required Action: Follow the instructions in the *Oracle E-Business Suite Release 12.2: Consolidated List of Patches and Technology Bug Fixes* (Doc ID: 1594274.1) to do the following:

- Check for missing database patches by running the Oracle E-Business Suite Technology Codelevel Checker (ETCC) checkDBPatch.sh script.
- Apply the latest database patches identified in the report as missing.
- Confirm successful application of the required database patches by rerunning the Oracle E-Business Suite Technology Codelevel Checker (ETCC) checkDBPatch.sh script.

Updating to the Latest Oracle E-Business Suite Code

Applying the Consolidated Seed Table Upgrade Patch (required)

After the 12.2.0 installation is complete, you must apply the latest consolidated seed table upgrade patch.

Required Action: Follow the instructions in Section 2.2, *Apply Consolidated Seed Table Upgrade Patch, Oracle E-Business Suite Release Notes, Release 12.2* (Doc ID: 1320300.1).

Applying the Latest AD and TXK Patchsets (required)

Important: None of the application tier services should be up until you upgrade to the latest Oracle E-Business Suite Release Update Pack for Release 12.2 as described in the following section. Only the WebLogic AdminServer services can be brought up as part of applying the latest AD and TXK Release Update Packs, as mentioned in their readme documents. The AdminServer in turn brings up NodeManager.

Required Action: Follow the instructions in *Oracle E-Business Suite Release 12.2: Suite-Wide Release Update Pack and AD/TXK Delta Information* (Doc ID: 1583092.1) to apply the latest AD and TXK patchsets.

Applying the Latest Oracle E-Business Suite Release Update Pack for Release 12.2 (required)

The 12.2 Release Update Pack (RUP) is a thoroughly tested release pack that combines patches created across the Oracle E-Business Suite after the initial release of Oracle E-Business Suite Release 12.2.

Required Action: You must apply the latest Oracle E-Business Suite Release Update Pack. Follow the instructions in *E-Business Suite RUP, AD and TXK RUP Information, Release 12.2* (Doc ID: 1583092.1).

Ensure that you complete the post-upgrade steps described in the Oracle E-Business Suite Release Update Pack Readme specific to the Oracle E-Business Suite Release Update Pack (RUP) that you applied.

Required Action: For example, if you upgrade to Oracle E-Business Suite Release 12.2.7, then you must complete all post-upgrade steps described in *Oracle E-Business Suite Release 12.2.7 Readme* (Doc ID: 2230783.1).

Applying Recommended Security Patches (recommended)

The recommended security patches include the following:

1. Oracle highly recommends that you apply the latest critical patch update to your Oracle E-Business Suite environment.

Required Action: Go to the *Critical Patch Updates, Security Alerts and Third Party Bulletin* web page located at: <https://www.oracle.com/security-alerts/>

From this page, go to the latest Critical Patch Update page and select the link to Oracle E-Business Suite. From this page, select the link to the Oracle E-Business Suite MOS Note for the current CPU. Review and apply the CPU patches according to the referenced MOS note.

2. Oracle highly recommends that you enable TLS. You must apply the prerequisite patch requirements to enable TLS.

Required Action: Review the prerequisite patch requirements in *Enabling TLS in Oracle E-Business Suite Release 12.2* (Doc ID: 1367293.1), Section 5.1 for TLS 1.2 with Backward Compatibility, and Section 6.1 for TLS 1.2 Only. Apply all required patches and prerequisites to enable TLS.

Note: You will perform the TLS configuration in the Performing Secure Configuration section later in this chapter.

Applying Recommended Patches (recommended)

Use Patch Wizard to generate a list of recommended patches for your environment and apply the list of recommended patches to your environment.

Suggested Reading: Additional information regarding the use of Patch Wizard is available in *Oracle E-Business Suite Releases 11i and 12.x: Required Updates for Patch Wizard* (Doc ID: 1267768.1).

Logging in to Oracle E-Business Suite (required)

You log in to Oracle E-Business Suite by specifying the Oracle E-Business Suite Login page URL in a web browser and supplying the appropriate credentials.

Oracle E-Business Suite Login page

From the Oracle E-Business Suite Login page, you can access the Oracle E-Business Suite Home Page, which provides a single point of access to HTML-based applications, forms-based applications, and Business Intelligence applications. You access the Oracle E-Business Suite Login page from the following URL:

Example

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

For example:

Example

```
http://apps1.example.com:8000/OA_HTML/AppsLogin
```

Once the connection has been made, the Oracle E-Business Suite Login page appears. Enter a suitable username and password. For example, SYSADMIN is a privileged account that has System Administrator responsibility. You were required to specify your choice of password for this account on the Application User Information screen in Rapid Install.

After entering the account name and password, click *Login*.

Oracle E-Business Suite Login Page

ORACLE

User Name

Password

Log In Cancel

[Login Assistance](#)

[Register Here](#)

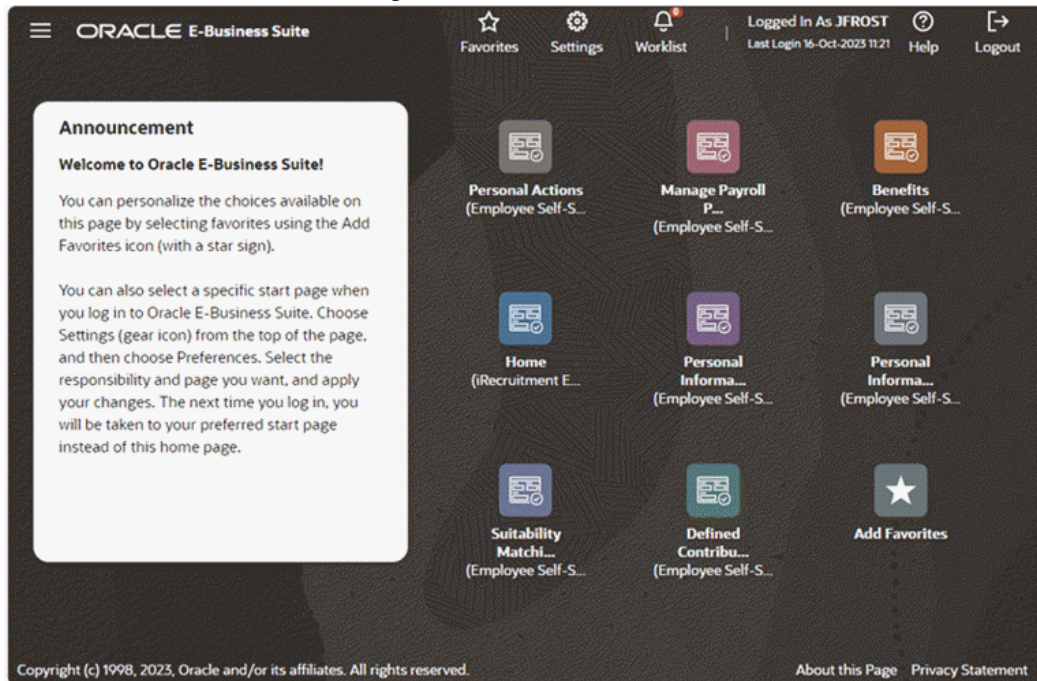
Accessibility
None ▼

Language
English ▼

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After your credentials have been validated, the Oracle E-Business Suite Home Page Oracle appears. From this page you can access responsibilities for any of the individual Oracle E-Business Suite products your organization has licensed.

Oracle E-Business Suite Home Page



The system administrator should log in using the SYSADMIN account mentioned above, and use the System Administrator responsibility to launch an Oracle E-Business Suite Forms session and perform further implementation steps.

Additional Information: See *Oracle E-Business Suite Security Guide* for details.

Changing Default Passwords (required)

Oracle recommends changing the default passwords for the accounts shown on the Application User Information screen. If you did not do so during the installation, you can still change the passwords once installation is complete.

Oracle E-Business Suite Default Passwords

The default passwords for the SYSTEM and SYS accounts for the Oracle E-Business Suite database are *manager* and *change_on_install*, respectively. To maintain database security and restrict access to these accounts, you should change these passwords, ensuring that your choices meet your organization's security requirements. The password for both SYS and SYSTEM in the Vision Demo is *manager*.

The Oracle E-Business Suite Applications DBA and Technology Stack release update packs R12.AD.C.Delta.13 and R12.TXK.C.Delta.13 (AD-TXK Delta 13) introduce a set of

structural changes that modernize the Oracle E-Business Suite database architecture, including a new schema named EBS_SYSTEM. If you have applied AD-TXK Delta 13 or later as part of Updating to the Latest Oracle E-Business Suite Code, page 4-4, then password handling for the SYSTEM and EBS_SYSTEM schemas depends on your codelevel.

- If your instance is on AD-TXK Delta 13 or later and you have not applied the EBS System Schema Migration Completion patch, then the passwords for EBS_SYSTEM and SYSTEM must match. You can use the utility `adValidateEbssystemSchema.pl` to check if the SYSTEM and EBS_SYSTEM passwords match.
- If your instance is on AD-TXK Delta 13 or later and you have applied the EBS System Schema Migration Completion patch, then the EBS_SYSTEM and SYSTEM passwords should be unique.
- If you are on an earlier AD-TXK RUP, then your instance does not have the EBS_SYSTEM account.

You should also change the default passwords for the Oracle E-Business Suite product accounts in your production and test databases.

Additional Information: See Overview of Oracle E-Business Suite DBA Duties, *Oracle E-Business Suite Maintenance Guide* and Database Schemas Found in Oracle E-Business Suite, *Oracle E-Business Suite Security Guide*.

Logged in as the SYSADMIN user, you should change the passwords for the following application user accounts:

- AME_INVALID_APPROVER
- ASGADM
- ASGUEST
- AUTOINSTALL
- IEXADMIN
- IRC_EMP_GUEST
- IRC_EXT_GUEST
- MOBILEADM
- OP_CUST_CARE_ADMIN
- OP_SYSADMIN

- PORTAL30
- PORTAL30_SSO
- XML_USER

The GUEST user will still have the default password, which can be changed if needed.

Checking the Value of the Context Variable `s_adminservertimeout` (required)

When configuring an Oracle E-Business Suite domain in Oracle WebLogic Server, you may after some minutes encounter a timeout when the `txkEBSDomainConfig.pl` deployment script is being run either automatically by Rapid Install or manually by a user:

```
NMProcess: INFO: Plain socket listener started on port 5556, host
myhost.example.com
ERROR: Unable to startup the Admin Server. Cannot proceed with the
deployment of EBS.
Creation and deployment of E-Business Suite domain completed.
EBS deployment failed!
Error code=1.
```

If such a timeout occurs, you can resolve it by changing the value of the `s_adminservertimeout` context variable as described in the steps listed below. This variable has a default value of 1000 seconds. The new value needed will depend on the performance of the machine where the script is being run.

1. Check for available memory and clear the cached memory.
2. Using Oracle Applications Manager, change the value of `s_adminservertimeout` from 1000 to 3000.

Note: Do *not* run AutoConfig.

3. Stop all application tier services.
4. Delete the WLS domain that was not successfully created.
5. Run the deployment scripts again.
6. If the error recurs, repeat steps 2-5, this time specifying a value of 6000 for `s_adminservertimeout`.

Checking Database Tier Context Variables (required)

In the database tier context file, check that the values of the context variables

`s_dbhome1`, `s_dbhome2`, `s_dbhome3`, `s_dbhome4`, and `s_archive_dest` are each set to the appropriate directory where the database files are located. Also, check that the context variable `s_base` is set to the appropriate location. If necessary, update the database tier context file to set these variables correctly.

Running AutoConfig (required)

AutoConfig is a tool that simplifies and standardizes configuration management tasks in an Oracle E-Business Suite environment. A fresh install of Release 12.2 includes AutoConfig as a standard and required configuration management tool.

Refer to the Technical Configuration chapter of *Oracle E-Business Suite Setup Guide* for more information about running AutoConfig.

Creating Your Own JAR File Signature (required)

Multiple signatures in JAR files may result in security warnings, for example when launching forms. If you are performing a new installation, you must create your own signature, and then use the `adadmin` utility to force regeneration of all JAR files.

Configuring Database Initialization Parameters (required)

The current `init<SID>.ora` default settings allow for a maximum of 100 connections. However, after the standard setup is complete, only a few users can be connected because of the connections used by the concurrent managers, AQ workers, and job queues.

The relevant database initialization parameters are listed in My Oracle Support Knowledge Document Note 396009.1, *Database Initialization Parameters for Oracle E-Business Suite Release 12*. Refer to this document when planning to update parameter settings to meet the specific requirements of your system.

Updating the PL/SQL Log and Out Directory (required)

The temporary directory on your database server for log and output files from PL/SQL concurrent programs is set to `/usr/tmp` (UNIX) or `C:\TEMP` (Windows) by default. This value is defined as a database directory for PL/SQL file I/O, and assigned to the `APPLPTMP` environment variable. As the temporary files placed in this directory may contain sensitive information, it should have suitably restricted access, such as read and write access for the account that owns the database.

Define the directory you want to use as a database directory for PL/SQL file I/O. See My Oracle Support Knowledge Document 2525754.1, *Using UTL_FILE_DIR or Database Directories for PL/SQL File I/O in Oracle E-Business Suite Releases 12.1 and 12.2*.

Then use the `edit AutoConfig parameters` feature of Oracle Applications Manager to

update the APPLPTMP variable in the application tier context file with the database directory location. Finally, run AutoConfig to recreate the environment files.

Implementing Product and Country-Specific Functionality (conditional)

Depending on which products or country-specific functionality you plan to use in your installation, you may need to perform additional tasks or apply additional patches. Refer to the individual product or country-specific implementation manuals or user's guides for details.

Checking Client Tier Software For Use With Forms-based Products (required)

A Java Runtime Environment (JRE) is required on the client to run Oracle Forms-based content from the web browser with Oracle E-Business Suite.

Additional Information: For a list of web browsers supported for use with Oracle E-Business Suite Release 12, see My Oracle Support Knowledge Document 389422.1, *Recommended Browsers for Oracle E-Business Suite Releases 12.2 and 12.1*. For more information on using Java with Oracle E-Business Suite, see My Oracle Support Knowledge Document 2510500.1, *FAQ: Essentials of Java Usage in Oracle E-Business Suite*.

By default, Oracle E-Business Suite uses the JRE Plug-in to run Oracle Forms-based content from the browser. The JRE Plug-in runs within the browser and uses the Netscape Plug-in Application Programming Interface (NPAPI). The JRE Plug-in is invoked when a user performs an operation that requires it, such as running a form. If the JRE Plug-in has not already been installed, the browser prompts the user to download the required installation executable.

Additional Information: For more information on using the JRE Plug-in with Oracle E-Business Suite, see My Oracle Support Knowledge Document 393931.1, *Deploying JRE (Native Plug-in) for Windows Clients in Oracle E-Business Suite Release 12*.

A successor to this JRE Plug-in technology is Java Web Start (JWS), which runs Java content through a Java Network Launch Protocol (JNLP) file outside the browser. Thereby, it does not require NPAPI support by the web browser. JWS is part of the JRE, and Oracle strongly recommends that Oracle E-Business Suite Release 12 users migrate to JWS to run Java content on clients.

Additional Information: For more information on using JWS with

Oracle E-Business Suite, see My Oracle Support Knowledge Document 2188898.1, *Using Java Web Start with Oracle E-Business Suite*.

Setting Up Printers (required)

To register printers in the Printers form of Oracle E-Business Suite, the system administrator must know each printer's operating system name. To determine the names, do the following:

UNIX:

At the command prompt, enter:

Example

```
$ lpstat -p
```

Windows:

Click on *Printers and Faxes* in the Start menu.

Enabling Printers on Windows Systems

The concurrent manager starts by default under the internal Windows SYSTEM account. This account does not have access to network printing devices. To run reports using the concurrent manager, complete the following steps:

1. Log in to a user account that has administrative privileges.
2. From the Services menu, highlight the Oracle Concurrent Manager service (OracleConcMgr<SID>, where <SID> is the database SID), and click Startup. In the *Log in As* section, select *This Account*, and enter the username and password used to start the concurrent manager. Then click OK.
3. Repeat the actions in Step 2 for the Oracle TNS Listener service.
4. Using the *Add Printer* option, define a printer for the account that was used in Steps 2 and 3.
5. Reboot the system to allow the changes to take effect.

Additional Information: For more information about setting up printers, see Chapter 6, *Setting Up Printers*, in *Oracle E-Business Suite Setup Guide*.

Understanding System Administration and Maintenance Tasks (required)

Refer to the *Oracle E-Business Suite Setup Guide* and *Oracle E-Business Suite Maintenance Guide* for information about system administration and maintenance tasks, as well as the associated tools and utilities.

Applying Application Tier Customizations (conditional)

If your system requires customized forms, reports, programs, libraries, or other application files, then you can now apply all changes that you need for this release

Required Action: Deploy your customizations following the instructions in *Developing and Deploying Customizations in Oracle E-Business Suite Release 12.2* (Doc ID: 1577661.1), Section 1.5, *Deploying Custom Application Tier Objects*.

Performing Optional Advanced Configurations

Scaling the Environment (conditional)

Installing Oracle E-Business Suite Release 12.2 is performed with a single application tier node and a single database node even if you are using Oracle RAC. Scaling the environment is a post-install task. Now that the installation is complete, you can scale your environment according to production-level requirements by adding managed servers within an application tier node, adding application tier nodes, and adding database Oracle RAC nodes.

Adding Managed Servers

By default, every application tier node contains only a single instance of the oacore, oafm, forms and forms-c4ws services. If more instances of a particular service are required on an application tier node, you can create new managed servers.

Conditional Action: If you need to add additional managed servers in an application tier node, follow the instructions in section 4.4.1, *Adding a new managed server*, in *Managing Configuration of Oracle HTTP Server and Web Application Services in Oracle E-Business Suite Release 12.2* (Doc ID: 1905593.1).

Adding Application Tier Nodes

Conditional Action: If you need to add additional application tier nodes, then configure load balancing as described in *Using Load-Balancers with Oracle E-Business Suite Release 12.2* (Doc ID: 1375686.1).

When deploying multiple application tier nodes for an Oracle E-Business Suite environment, you can use a shared application tier file system or replicate the file system on every node in the environment.

Tip: Oracle highly recommends that you use a shared application tier file system.

When directed in *Using Load-Balancers with Oracle E-Business Suite Release 12.2* (Doc ID: 1375686.1), follow the steps in one of the following notes to create a new application tier node:

- To create the shared application tier file system and add new application tier nodes, follow the steps in *Sharing The Application Tier File System in Oracle E-Business Suite Release 12.2* (Doc ID: 1375769.1).
- If you are using a distributed file system, then follow the steps in *Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone* (Doc ID: 1375769.1) to add new application tier nodes.

Adding Database Tier Nodes to Oracle RAC

Conditional Action: If you are adding additional database tier nodes to Oracle Real Application Clusters (RAC) to meet scalability or high availability requirements, then follow the steps in *Oracle E-Business Suite Release 12.2: Adding or Deleting 11gR2 Oracle RAC Nodes* (Doc ID: 1570554.1).

Performing DMZ Configuration (conditional)

Conditional Action: If you need to configure Oracle E-Business Suite Release 12.2 for access from the internet, then review and follow the steps in *Oracle E-Business Suite Release 12.2 Configuration in a DMZ* (Doc ID: 1375670.1).

Creating a Disaster Recovery Site (conditional)

The steps to create a disaster recovery site for business continuity depend on your database version and whether you are using logical host names.

Conditional Action: If you need to create a disaster recovery site, then review and follow the steps in the appropriate document for your system:

- *Business Continuity for Oracle E-Business Suite Release 12.2 Using Oracle 12c (12.1.0.2) Physical Standby Database* (Doc ID: 1963472.1)
- *Business Continuity for Oracle E-Business Suite Release 12.2 Using Logical Host Names with an Oracle 12c Physical Standby Database* (Doc ID: 2246690.1)
- *Business Continuity for Oracle E-Business Suite Release 12.2 Using Oracle 11g (11gr2) Physical Standby Database* (Doc ID: 1491855.1)

Creating a Reporting Environment (conditional)

Conditional Action: If you need to create a reporting environment, then review and follow the steps in *Using Active Data Guard Reporting with Oracle E-Business Suite Release 12.2 and an Oracle 11g or 12c Database* (Doc ID: 1944539.1).

Validating and Deploying Custom and Third-Party Products (conditional)

The database and file system architecture of Oracle E-Business Suite Release 12.2 are designed to support Online Patching. Integrations with Oracle E-Business Suite must comply with Oracle E-Business Suite deployment and development standards in order to work correctly with Oracle E-Business Suite Release 12.2. Examples include custom and third-party integrations, as well as integrations with other Oracle products such as Oracle Application Express.

Additional Information: Refer to *Guidance for Integrating Custom and Third-Party Products With Oracle E-Business Suite Release 12.2* (Doc ID: 1916149.1).

If you plan to use external integrations that require updates to meet certification requirements with Oracle E-Business Suite Release 12.2 or require additional steps to deploy, then perform those actions now. Validate all external integrations once the necessary steps have been performed.

Resizing the Database (conditional)

You will need to increase the size of your database to meet the specific requirements of your system. The increase will in part depend on the products you have licensed and the additional features (such as multiple languages or multiple organizations) you configure in your installation.

Configuring Parallel Concurrent Processing (conditional)

Parallel concurrent processing allows you to distribute concurrent managers across multiple nodes.

Conditional Action: If you chose to enable load balancing for concurrent processing servers during the Rapid Install process, you must complete additional setup steps. See *Managing Parallel Concurrent Processing*, *Oracle E-Business Suite Setup Guide*.

Configuring Forms Socket Mode (conditional)

By default, Oracle E-Business Suite Release 12.2.0 supports Oracle Forms 10g in *servlet mode*, which facilitates use of firewalls, load balancing, proxies, and other networking options. The use of *socket mode* is also supported, however, and can be enabled by following the instructions in My Oracle Support Knowledge Document 384241.1, *Using Forms Socket Mode with Oracle E-Business Suite Release 12*.

Setting Up National Language Support (conditional)

In Oracle E-Business Suite Release 12.2.0, Rapid install only installs American English.

Conditional Action: If you plan to use languages other than American English, you must first complete the applicable steps for installing the translated software for National Language Support (NLS) as listed in My Oracle Support Knowledge Document 1314621.1, *Oracle E-Business Suite NLS Release Notes, Release 12.2*.

To use additional languages, you must first activate the additional languages via the License Manager utility, and then change the base language if required.

After this, the multilingual tables must be updated for the activated languages. Go to the AD Administration main menu, choose the 'Maintain Applications Database Entities' submenu, and run the 'Maintain Multi-lingual Tables' task.

Additional Information: For more information about using License Manager, see *License Manager, Oracle E-Business Suite Maintenance Guide*. For more information about the AD Administration utility, see *Applications DBA System Maintenance Tasks and Tools, Oracle E-Business Suite Maintenance Guide*.

You now need to install the relevant NLS software for all the active languages, to lay down the NLS translated files into the APPL_TOP.

After this, you should use the *Translation Synchronization Patch Utility* to synchronize the languages with the American English patch level. This step is needed in case any American English patches were applied after Rapid Install was run.

Setting Up Unicode Character Sets (conditional)

Regardless of the languages installed, you may need to complete additional steps if you use a supported Unicode character set, such as AL32UTF8, in the database tier. In addition, be aware that supplementary characters are not supported.

If you customize seed data, your changes may be overwritten during an upgrade. This also applies to any changes to translations of seed data made using the globe icon.

Additional Information: See *Oracle E-Business Suite Setup Guide* for language setup details, and My Oracle Support Knowledge Document 393861.1, *Globalization Guide for Oracle Applications Release 12*, for further details of languages and character sets.

Completing Workflow Notification Mailer Configuration (conditional)

Before you can send Oracle Workflow email notifications and Oracle Alert email alerts, you must complete the Workflow Notification Mailer configuration, using the Notification Mailer configuration wizard in Oracle Applications Manager.

1. From the Applications Dashboard of Oracle Applications Manager, select Workflow Manager from the "Navigate to" pull-down menu, and click on the *Go* button.
2. In the Workflow System region, click the Notification Mailers status icon to navigate to the Service Components page for notification mailers. At this point, the Notification Mailers status icon should be showing the status *Down*.
3. In the Service Components page, select the Workflow Notification Mailer service component and click the *Edit* button to navigate to the Notification Mailer configuration wizard.
4. In the Outbound Email Account (SMTP) region, enter the name of the outbound

SMTP mail server.

5. If you want to enable inbound email processing, select the Inbound Processing parameter in the Inbound Email Account (IMAP) region, and enter the name of the inbound IMAP mail server, the username and password of the email account that the Notification Mailer uses to receive email messages, and the reply-to address of the email account that receives incoming messages, to which notification responses should be sent.
6. Click *Apply*.
7. Return to the Service Components page, and verify that the status of the Workflow Notification Mailer service component is now Running.

Additional Information: For more information, see Notification Mailers, *Oracle Workflow Administrator's Guide*.

Setting Up and Implementing Discoverer End User Layer (conditional)

To set up and implement the Discoverer End User Layer (EUL), follow the instructions documented in My Oracle Support Knowledge Document 1380591.1, *Using Discoverer 11.1.1 with Oracle E-Business Suite Release 12.2*.

Additional Information: See also *Oracle E-Business Suite Support Implications for Discoverer 11gR1*, My Oracle Support Knowledge Document 2277369.1.

Converting to a Public Sector, Education, or Not-for-Profit System (conditional)

Rapid Install sets up products for commercial or for-profit use.

Optional Action: To convert your system to use public sector, education, or not-for-profit products after the installation is complete, use License Manager to register public sector or not-for-profit products. See License Manager, *Oracle E-Business Suite Maintenance Guide*.

Setting Up Multiple Organizations (conditional)

The Rapid Install Vision Demo database is set up for Multiple Organizations.

Optional Action: If you want to use the Multiple Organizations architecture in a production or test environment, follow the instructions in the *Oracle E-Business Suite Multiple Organizations Implementation Guide*.

Additional Information: For more information, see Multiple Organization Architecture, *Oracle E-Business Suite Concepts*.

Optimizing Performance Tuning (conditional)

Review performance tuning recommendations to optimize your configuration for the specific requirements of your instance.

Conditional Action: See *Oracle E-Business Suite Performance Best Practices*, My Oracle Support Knowledge Document 2528000.1.

Backing Up Oracle E-Business Suite (recommended)

After installation is complete, your operating system administrator should back up the Oracle E-Business Suite application tier product files, including the technology stack components. Your database administrator should back up the Oracle E-Business Suite database components.

Subsequently, you should establish a backup policy that meets your organization's needs, balancing the overhead of carrying out the chosen backup type and frequency against the need to be able to recover from a variety of types of system failure. The resulting backup and recovery procedures should be verified, then periodically tested to ensure continued applicability.

Performing Secure Configuration

This section applies to all users, regardless of which products are registered as active.

1. **Review and Deploy Security Guidelines (recommended for all Oracle E-Business Suite releases)**
 - **Follow the Secure Configuration Guidelines**

Tip: You must follow all recommended secure configuration guidelines as documented in the *Oracle E-Business Suite Security Guide*. At a minimum, Oracle recommends that you configure

the following:

1. Allowed JSPs feature
2. TLS for inbound, outbound, and loopback connections

Action: Review and deploy the recommended security guidelines documented in *Oracle E-Business Suite Security Guide, Release 12.2, Part 2: Secure Configuration*.

Action: Follow the instructions in *Enabling TLS in Oracle E-Business Suite Release 12.2* (Doc ID: 1367293.1) to encrypt inbound, outbound, and loopback connections.

Tip: If you have any computers requiring direct access to the database that are not registered nodes in AutoConfig, such as OAM clients, then you must explicitly grant access.

- **Run the Security Check Scripts**

Action: Regularly run the Security Check Scripts on your production instance to ensure that it is and continues to be in compliance with the recommendations in this document. For information on how to run the Security Check Scripts, see *Security Configuration and Auditing Scripts for Oracle E-Business Suite* (Doc ID: 2069190.1).

Tip: If you upgraded to Oracle E-Business Suite Release 12.2.6 or higher, then you can use the Secure Configuration Console on an ongoing basis to perform necessary checks on your environment.

2. **Perform the following if you have upgraded to Release Update Pack 12.2.6 or higher (conditional):**

Tip: After you apply Patch 24744399:R12.FND.C (a mandatory post requisite for R12.ATG_PF.C.Delta.6) or upgrade to Oracle E-Business Suite Release 12.2.7 Release Update Pack (which includes patch 24744399:R12.FND.C), your system will be locked down until

a local system administrator resolves or acknowledges the recommended security configurations in the Secure Configuration Console.

- **Log in to Oracle E-Business Suite**

Upon initial login as a local system administrator with the Functional Administrator responsibility, you are automatically directed to the Secure Configuration Console.

- **Resolve or acknowledge security configurations**

You must now either resolve or acknowledge the recommended security configurations in the Secure Configuration Console.

Suggested Reading: *Secure Configuration Console, Oracle E-Business Suite Security Guide, Release 12.2.*

- **Manually add custom redirects and resources to configuration files (conditional)**

The Allowed Redirects and Allowed Resources features are enabled by default after your upgrade to Oracle E-Business Suite Release Update Pack 12.2.6 or higher. Consequently, if you use custom redirects and resources, such as JSPs and servlets, in your environment, then you must manually add these to your configuration files for allowed redirects and allowed resources, respectively.

Additional Information: For more information, see *Allowed Redirects, Oracle E-Business Suite Security Guide*, and *Allowed Resources, Oracle E-Business Suite Security Guide*.

Configuration Details

This appendix contains details of the fields in the various screens of the Rapid Install wizard. It pays special attention to the configuration values that are not visible in the sample screen shots, and also discusses additional system requirements.

This appendix covers the following topics:

- Rapid Install Configuration Parameters
- Requirements for a New Production Database
- Vision Demonstration Database Requirements

Rapid Install Configuration Parameters

This section lists and defines configuration parameters on the Database Install Information screen, the node-specific configuration information screens, and the Global Settings screen in the Rapid Install wizard. Rapid Install uses these values during an installation or upgrade to set up and configure your system.

Additional Information: See *File System Structure, Oracle E-Business Suite Concepts* for more information about the directories and subdirectories discussed in this section.

Database Parameters

This section lists and describes the values you enter on the database install information screen in the Rapid Install wizard. Rapid Install uses this information to set up the top-level directory and the subdirectories on the database node.

Database Install Information

Input Field Name	Definition
Database OS User (UNIX)	The operating system user that owns the Oracle technology stack (including the database).
Database OS Group (UNIX)	The Oracle OS user must belong to this group.
Base Install directory	The top-level directory that Rapid Install uses to install the database. All subdirectories (mount points) associated with the database are derived from this directory.
Oracle home	The location of the 12cR1 database Oracle home, which contains files for running and maintaining the database.
Data Top (SYS)	Derived from the Base Install directory, this is the mount point for all database system files.
Data Top (LOG)	Derived from the Base Install directory, this is the mount point for all database log files.
Data Top (TXN)	Derived from the Base Install directory, this is the mount point for all transaction data and index files.
Data Top (ARCHIVE)	Derived from the Base Install directory, this is the mount point for all archive, media, advanced queue, summary, and undo files.

Additional Information: For more information, see Tablespace Management in *Oracle E-Business Suite Concepts*.

Application Tier Node Parameters

This section lists and describes the fields on the application tier node screens in the Rapid Install wizard. You enter configuration details for these nodes (one or more) on the Primary Applications Node Configuration screen.

Additional Information: For more information about required platform-specific maintenance tools, refer to the *Installation and Upgrade Notes* for your platform listed in Operating System, page 1-9.

Application Tier Node Install Information

Input Field Name	Definition
X Display (UNIX)	This display must always be accessible during runtime. Set it to an active and authorized X Windows display, pointing to a machine that is always available to the instance.
UNIX Toolkit Directory (Windows)	Location of MKS tools. Used for relinking executables and DLLs.
Visual Studio Directory (Windows)	Location of the Microsoft Visual C/C++ executables and DLLs. Used for linking executables or DLLs.
Apps OS User (UNIX)	The operating system user that owns the Oracle E-Business Suite file system and application tier node technology stack.
Apps OS Group (UNIX)	The group to which the Apps OS User belongs.
Base Install directory	The top-level directory that Rapid Install uses to install the application tier node technology stack . All subdirectory names are derived from this directory.
Instance directory	The top-level directory for an Oracle E-Business Suite instance. This directory is referred to as the Instance Home, and denoted by the environment variable \$INST_TOP.

Input Field Name	Definition
COMMON_TOP	<p>Holds directories for files used across products or in conjunction with third-party products, including:</p> <ul style="list-style-type: none"> • admin - Contains several subdirectories used for concurrent manager log and out directories, scripts used during installation, and scripts used for daily maintenance of the instance. • html - Contains files used by html-based products such as JSP files, java scripts, xml files, and style sheets. • java - Location of all JAR files. Also holds third-party Java files and other zip files. • temp - Used for caching by certain processes such as Oracle Reports.
Tools Oracle home	<p>The OracleAS 10.1.2.3 Oracle home directory, used for the Developer 10g products (Forms and Reports).</p>
Web Oracle home	<p>The Oracle Fusion Middleware Oracle home directory, used for the Oracle HTTP Server.</p>
Temp Directory	<p>Contains temporary files. This directory is not used during installation.</p>

Global System Settings

This section lists and describes the fields on the Global Settings screen in the Rapid Install wizard. Rapid Install uses them to identify the fully qualified domain name, and derive port settings that your system will use to connect all services and listeners.

- **Database tier node**

The host name for the database tier node must be no longer than 30 characters.

The Rapid Install wizard displays a warning message if the fully qualified domain name (FQDN) exceeds 30 characters. If the host

name for the database tier node is no longer than 30 characters, then you can ignore the warning and proceed with the installation. Otherwise you must update the host name before you proceed.

Additionally, the host name must begin with an alphabetic character. The host name cannot include an underscore (_) character.

- **Application tier node**

The node name returned by the operating system 'hostname' command for the application tier node must be no longer than 30 characters. If you configure your system to return only the host name for the node, without the domain name, then the host name must be no longer than 30 characters. If you configure your system to return the fully qualified domain name (FQDN), then the FQDN must be no longer than 30 characters, including the host name, domain name, and periods (.) used as separators.

The Rapid Install wizard displays a warning message if the FQDN exceeds 30 characters. If your system returns only the host name as the application tier node name, and the host name is no longer than 30 characters, then you can ignore the warning and proceed with the installation. Otherwise you must update your configuration before you proceed.

Additionally, the host name must begin with an alphabetic character. The host name cannot include an underscore (_) character.

Global Settings Information

Input Field Name	Definition
Domain Name	A valid domain name used when configuring Oracle E-Business Suite for the network. This value, when combined with a host (machine) name, must produce a fully qualified domain name (FQDN). For example, a host name of <code>apps1</code> and domain name of <code>example.com</code> make up an FQDN of <code>apps1.example.com</code>
Port Pool	A list of increment settings that you can choose to make the preset port numbers unique. For example, choosing 3 from the list changes port 1521 to 1524.

Input Field Name	Definition
Database Port	Net Services Listener port that receives requests from the various servers for processing in the Oracle Database.

Log Files

Rapid Install saves the log files associated with the installation or upgrade.

Named <timestamp>.log, they are located as follows.

- Database tier:
 - <APPS_BASE>/12.1.0/temp
 - <APPS_BASE>/12.1.0/appsutil/log/<CONTEXT_NAME>

For example:

- /u01/oracle/VIS/12.1.0/appsutil/log/<CONTEXT_NAME>

- Application tier:
 - <APPS_BASE>/fs1/inst/apps/<CONTEXT_NAME>/logs
 - <APPS_BASE>/fs2/inst/apps/<CONTEXT_NAME>/logs

For example:

- /u01/R122_EBS/fs1/inst/apps/<CONTEXT_NAME>/logs

Requirements for a New Production Database

In Oracle E-Business Suite Release 12.2.0, the fresh database installed by Rapid Install is Oracle 12cR1 (12.1.0.2). It can be used for any purpose, such as a production system or a test system. It is minimally sized, with 100% sizing factor. The default character set is US7ASCII, and the default database block size is 8192 bytes.

Important: Oracle E-Business Suite Release 12.2.0 requires a database block size of 8K. No other size may be used.

The initialization file for the database is located in the \$ORACLE_HOME/dbs directory, and is called init<SID>.ora.

In Oracle E-Business Suite Release 12.2.0, all base products are fully installed. However, only basic technology products are automatically registered as being licensed and

active. You register all the products in your Oracle licensing agreement using the Rapid Install wizard. During the process of entering initial configuration values on the wizard screens, you can change the character set, and Rapid Install will convert your database accordingly.

The database utilizes the Oracle Applications Tablespace Model (OATM). This streamlined model consists of locally managed tablespaces based on the objects' input/output characteristics. OATM also provides support for implementing Oracle Real Application Clusters on Linux.

Additional Information: For further details of OATM, see *Oracle E-Business Suite Setup Guide*.

The tablespace sizes shown below are approximate, and may vary from platform to platform.

Production Database Tablespace Sizes

Tablespace	Description	Size (MB)
APPS_TS_ARCHIVE	Tables that contain archived purge-related data	866
APPS_TS_INTERFACE	Interface and temporary data and indexes	1041
APPS_TS_MEDIA	Multimedia objects, such as text, video, sound, graphics, and spatial data	1702
APPS_TS_NOLOGGING	Materialized views not used for summary management and temporary objects	64
APPS_TS_QUEUES	Advanced Queuing and dependent tables and indexes	1000
APPS_TS_SEED	Reference and setup data and indexes	9179
APPS_TS_SUMMARY	Summary management objects, such as materialized views, fact tables, and other objects that record summary information	1146
APPS_TS_TOOLS	Tools tablespace	500

Tablespace	Description	Size (MB)
APPS_TS_TX_DATA	Tables that contain transactional data	6667
APPS_TS_TX_IDX	Indexes on transaction tables	9113
APPS_UNDOTS1	Automatic Undo Management (AUM) tablespace. UNDO segments are same as ROLLBACK segments when AUM is enabled	3000
CTXD	Oracle Multimedia	21
ODM	Oracle Data Mining	12
OLAP	OLAP	17
OWAPUB	Oracle Application Server	10
PORTAL	Oracle Portal	100
SYSAUX	Stores auxiliary database metadata related to Oracle options and features	200
SYSTEM	System tablespace used by the Oracle database	39528
TEMP1	Temporary tablespace	2100
TEMP2	Temporary tablespace	1024

Note: The above list of tablespaces is not exhaustive.

Vision Demonstration Database Requirements

The Vision Demo database provides a sample set of transaction data for a fictitious company (Vision Corporation). It uses most Oracle E-Business Suite products and is configured for multinode systems. It is installed with the AL32UTF8 (universal) character set to maximize the number of supported languages.

The database initialization file is located in the \$ORACLE_HOME/dbs directory, and is called init<SID>.ora.

Note: The sizes shown in the table are approximate, and may vary from platform to platform.

Vision Demo Database Tablespace Sizes

Tablespace	Description	Size (MB)
APPS_TS_ARCHIVE	Tables that contain archived purge-related data.	478
APPS_TS_INTERFACE	Interface and temporary data and indexes.	1641
APPS_TS_MEDIA	Multimedia objects, such as text, video, sound, graphics, and spatial data.	5124
APPS_TS_NOLOGGING	Materialized views not used for summary management and temporary objects.	725
APPS_TS_QUEUES	Advanced Queuing and dependent tables and indexes.	2200
APPS_TS_SEED	Reference and setup data and indexes.	8850
APPS_TS_SUMMARY	Summary management objects, such as materialized views, fact tables, and other objects that record summary information.	13324
APPS_TS_TX_DATA	Tables that contain transactional data.	53500
APPS_TS_TX_IDX	Indexes on transaction tables.	41024
APPS_UNDOTS1	Automatic Undo Management (AUM) tablespace. UNDO segments are identical to ROLLBACK segments when AUM is enabled.	5120

Tablespace	Description	Size (MB)
CTXSYS	Oracle Multimedia.	2
ODM_DATA	Oracle Data Mining.	30
SYSTEM	System tablespace used by the Oracle database.	39500
TEMP	Temporary tablespace.	5000
APPS_OMO	APPS_OMO	102
OWB	OWB	2325
DCM	DCM	199
DM_ARCHIVE	DM_ARCHIVE	9
MTR	MTR	3
XDB	XDB	2

The Vision Demo database uses the Multiple Organizations feature. The following table shows the operating units in the database. Responsibilities connect to one of these operating units.

Vision Demo Database Operating Units

Operating Unit	Username/Password
Vision Operations	APPS/APPS
Vision Corporation	APPS/APPS
Vision Industries	APPS/APPS
Vision Services	APPS/APPS
Vision Project Manufacturing	APPS/APPS

Operating Unit	Username/Password
Vision ADB	APPS/APPS

Note: There are several schemas in the Vision Demo database for other accounts, which are used to demonstrate Oracle E-Business Suite integration with other products. These schemas are not documented here.

Many Oracle E-Business Suite users are predefined in the Vision Demo database. The following username/password pairs have System Administrator responsibility:

- SYSADMIN/sysadmin
- MFG/welcome
- OPERATIONS/welcome
- SERVICES/welcome
- MRC/welcome
- HRMS/welcome

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