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

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

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Preface

Intended Audience


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.

Documentation Accessibility

For information about Oracle’s commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

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Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

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: a standard installation, which involves creating a new system using system-specific configuration parameters, and an Express installation, where Rapid Install supplies default values for many parameters, requiring only a few to be supplied by the user carrying out the install.

3 Maintaining the Technology Stack

Rapid Install offers a specialized option that allows you to replace selected technology stack executables in an existing instance, for example in a case where 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 the 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 ORACLE_HOME.

4 Performing an Upgrade

Rapid Install is used in both the pre-upgrade and post-upgrade processing during an upgrade to Oracle E-Business Suite Release 12.2.0. This chapter gives an overview of the upgrade process, and then describes in detail the upgrade steps that rely on Rapid Install.

5 Finishing Tasks

Certain tasks are necessary to finish a new installation, an upgrade, or a technology stack installation for Oracle E-Business Suite Release 12. There are also other tasks that may be required only for systems with specific functionality. This chapter discusses required and conditional tasks.

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.


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.


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 the Oracle E-Business Suite development staff to produce applications built 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.

This guide 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 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 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 the installation and configuration choices that may be available.


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


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 the Oracle E-Business Suite development staff. 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 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 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 that can help keep a system running smoothly.


This guide describes 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, as well as the setup tasks for working with Mobile Application Archives (MAA) to enable enterprise-distributed apps.

**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, 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.


This guide explains how to navigate, enter and query data, and run concurrent requests using the user interface (UI) of Oracle E-Business Suite. This guide also includes information on setting user profiles and customizing the UI.

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

This guide contains the user interface (UI) standards followed by the Oracle E-Business Suite development staff. It describes the UI for the Oracle E-Business Suite products and how to apply this UI to the design of an application built by using Oracle Forms.


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 invoke Web services from Oracle E-Business Suite by employing the Oracle Workflow Business Event System, and how to manage Web service security, configure logs, and monitor SOAP messages.


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 run time.

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 the Web service invocation.

**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 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 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
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.
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
• Gathering Configuration Information
• What To Do Next

How Rapid Install Works

With Rapid Install, you can perform the following tasks:

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

• Lay down the file system and configure server processes for an upgraded system.

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. 12.2.3 or higher is required for patching support - see My Oracle Support Knowledge Document 1195034.1, Oracle E-Business Suite Error Correction Support Policy. Refer to the "Performing an Installation: What To Do Next” and "Performing an Upgrade: What To Do Next” sections of this book for information about actions you need to take after running Rapid Install to perform an installation or upgrade.

Rapid Install employs a wizard that guides you through the screens used to carry out
the selected task. On the wizard screens, you enter configuration values for your system; these will typically be saved in the Oracle E-Business Suite database for later use.

A text file, `config.txt`, 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 Applications 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 Applications nodes in multi-node installs, and in upgrades. It is permanently stored and not deleted.

- **/tmp/<time stamp>**: This copy is used by Rapid Install during the installation run. 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 multi-node (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**.

**Important**: AutoConfig is delivered with, and required by, a new installation of Oracle E-Business Suite Release 12.2.

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.

**Note**: For further details of AutoConfig and other management tools, see the Technical Configuration chapter of *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 a 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 is a logical grouping of servers, and therefore fundamentally a software concept rather than a hardware concept, although it is often also used to refer to the machine on which a particular node is installed. For example, an Applications 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 Applications node. This book will also refer to the primary Applications node (which may be the only Applications node), and the database node, which supports the Oracle database server.

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 Applications 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.
**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 Applications node).

For simpler installations, the database node and the Applications 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 Applications node on another machine. This provides improved manageability, scalability, and performance.

Applications tier processing can be distributed across multiple Applications nodes. You can also specify additional Applications nodes if you wish to scale up the Applications tier; typically, the additional nodes will be located on their own machines, to help increase availability and flexibility of your system.

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 Applications 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.

**Note:** See *Oracle E-Business Suite Concepts* for more information about the Oracle E-Business Suite architecture and file system.

**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.

**Upgrading an Existing System to Release 12.2**

There are two distinct paths for upgrading an existing system, depending on the release being upgraded from:

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

Installed Components and System Requirements

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

Technology Stack Components

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

The database tier technology stack for a new Oracle E-Business Suite Release 12.2 installation consists of an Oracle 11g Release 2 Oracle Home for both new installations and upgrades.


The Applications 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.


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

System Software, Patch Level, and Networking Requirements

This section describes the system software needed on different platforms, patch level requirements in multi-node installations, and essential networking requirements.
System Software

The following maintenance tools must be installed on all machines, and their locations specified both in the $PATH of the account that runs the wizard, and in the $PATH of the accounts that will own the database tier and Applications tier file systems.


Platform-Specific Software Requirements

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Required Maintenance Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Solaris SPARC (64-bit)</td>
<td>ar, ld, make, X Display Server</td>
</tr>
<tr>
<td>Linux x86-64</td>
<td>ar, gcc, g++, ld, ksh, make, X Display Server</td>
</tr>
<tr>
<td>IBM AIX on Power Systems (64-bit)</td>
<td>ar, cc, ld, linkxIC, make, X Display Server</td>
</tr>
<tr>
<td>HP-UX Itanium</td>
<td>ar, cc, aCC, make, X Display Server</td>
</tr>
<tr>
<td>Microsoft Windows (64-bit)</td>
<td>Microsoft C++, MKS Toolkit*, GNU make</td>
</tr>
</tbody>
</table>

* Windows users can employ software from Cygwin [http://www.cygwin.com] as an alternative to MKS Toolkit. However, Oracle recommends using MKS Toolkit for all critical systems. For more information, see My Oracle Support Knowledge Document 414992.1, Using Cygwin to Maintain Oracle E-Business Suite Release 12 on Windows.

Additionally, the following utilities are required on all UNIX-based operating systems: unzip, df, ps, and wall.

Operating System Patch Levels

In a multi-node installation:

- All database tier nodes must be at the same operating system patch level.

- All application tier nodes must be at the same operating system patch level. This is a requirement for adding nodes by cloning in a multi-node deployment. Refer to My Oracle Support Knowledge Document 1383621.1, Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone.

In addition, Oracle recommends that operating system kernel parameter settings should match on all nodes of a particular tier (either application or database). While this is not
essential, it simplifies management and maintenance by allowing the machines to be regarded as in effect identical.

**Networking**

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

```
<IP address> <hostname>.<domainname> <hostname>
```

**Shared Memory Permissions**

On applicable UNIX and Linux 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 joez.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 and user profile similar to yours.

**CPU Requirements**

CPU requirements for running Oracle E-Business Suite depend on, in no particular order:

- Number of concurrent users and their usage profiles
- Number of concurrent manager processes and the types of jobs that they are running
- Load for activities other than Oracle E-Business Suite
- Size of the database
- Desired response time
Memory Requirements

The Oracle E-Business Suite Database requires adequate memory to support the specific needs of a given installation. To determine the total memory requirements on the machine where the 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)

You should aim to allow for any expected growth in usage over the planned lifetime of the Oracle E-Business Suite system. It is, however, relatively straightforward to scale up a system later to meet additional requirements, either by adding nodes to the application tier or employing Oracle Real Application Clusters (Oracle RAC) on the database tier.

**Important:** 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.*

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 an application tier machine. This kind of configuration would typically support 10 or fewer users in addition to online patching activity.

**Important:** For detailed guidance and recommendations on this subject, refer to the section, "Database and Application Tier Sizing."

Single-user single-host 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.
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**

<table>
<thead>
<tr>
<th>Node</th>
<th>Space Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database node file system (Fresh install)</td>
<td>90 GB (includes database files and 11gR2 database Oracle Home).</td>
</tr>
<tr>
<td>Database node file system (Vision Demo database)</td>
<td>200 GB (includes database files and 11gR2 database Oracle Home).</td>
</tr>
<tr>
<td>Applications node file system (OracleAS 10.1.2 Oracle Home, Oracle FMW Oracle Home, COMMON_TOP, APPL_TOP, and INST_TOP)</td>
<td>64 GB (for dual file system). Also, see Note below for language (NLS) considerations.</td>
</tr>
</tbody>
</table>

**Note:** 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. 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 Set Up the Stage Area, page 1-17

**Important:** As the size of the staging area mainly depends on the database size, care should be taken to size it according to the enterprise needs and database footprint.
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. Determine a strategy for archiving and purging these files after the installation, 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.

Updates and patches

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

Note: For further information, refer to 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
Database and Application Tier Sizing Guidelines

This section contains database and application tier sizing information based on a test upgrade from Oracle E-Business Suite Release 12.1.3 to Release 12.2. The Release 12.1.3 database was 456 GB in size.

General Sizing Guidelines

Below are some general sizing guidelines for Oracle E-Business Suite Release 12.2.

In addition to the memory needed based on the sizing guidelines below, 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 various transactions depend on the transaction type (such as Oracle Application Framework, Forms, or batch programs), and the transaction workload (light, medium, or heavy). Some transactions may require more memory (such as those for Oracle Configurator).

Note: You should always size your systems based on tests using representative data and workloads for your own environment.

Oracle Application Framework Transactions

The following table shows the memory used for OAF-type transactions with light to medium workload characteristics:

<table>
<thead>
<tr>
<th>Number of Concurrent Users</th>
<th>Database Machine Memory</th>
<th>Number of Database Machine CPUs</th>
<th>Application Tier Machine Memory</th>
<th>Number of Application Tier Machine CPUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>4 GB</td>
<td>2</td>
<td>6 GB</td>
<td>2</td>
</tr>
<tr>
<td>100-200</td>
<td>8 GB</td>
<td>2</td>
<td>8 GB</td>
<td>2</td>
</tr>
<tr>
<td>200-400</td>
<td>12 GB</td>
<td>4</td>
<td>10 GB</td>
<td>4</td>
</tr>
<tr>
<td>400-800</td>
<td>20 GB</td>
<td>8</td>
<td>14 GB</td>
<td>8</td>
</tr>
</tbody>
</table>

You should plan your resources according to these figures.

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

Each Oracle Forms process requires 40 MB of memory on the application tier. So the memory required is given by the formula:

\[(\text{Number of concurrent Oracle Forms users}) \times 40 \text{ MB}\]

The following table lists the additional memory for the given number of users:

<table>
<thead>
<tr>
<th>Number of Users</th>
<th>Required Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>4 GB</td>
</tr>
<tr>
<td>200</td>
<td>8 GB</td>
</tr>
<tr>
<td>400</td>
<td>16 GB</td>
</tr>
<tr>
<td>800</td>
<td>32 GB</td>
</tr>
</tbody>
</table>

On the database tier, there is one database session per open form, with a minimum of two database sessions per Oracle Forms user (one session for the Navigator form, and one for the active form). Each Oracle Forms session requires approximately 30 MB of PGA memory on the database.

For Oracle Forms processes on the database, an additional 30 MB per session for the PGA allocation is needed. The following table lists the memory required for the number of sessions:

<table>
<thead>
<tr>
<th>Number of Forms Sessions</th>
<th>Required Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>3 GB</td>
</tr>
<tr>
<td>200</td>
<td>6 GB</td>
</tr>
<tr>
<td>400</td>
<td>12 GB</td>
</tr>
<tr>
<td>800</td>
<td>24 GB</td>
</tr>
</tbody>
</table>

Database Size for Example Upgrade

The data in the following table was determined from the upgrade from Release 12.1.3 to Release 12.2.
<table>
<thead>
<tr>
<th>Before Upgrade Database Size (GB)</th>
<th>After Upgrade Database Size (GB)</th>
<th>Delta (GB)</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>456</td>
<td>481</td>
<td>25</td>
<td>5.5</td>
</tr>
</tbody>
</table>

**Environment Details for Example Upgrade**

The environment details for this upgrade are as follows:

- Operating system: Oracle Linux Enterprise Edition Server Release 5.8
- Server memory: 34 GB
- Number of CPUs: 32
- Oracle Database Release: 11.2.0.3
- 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 is as follows:

- SGA: 5 GB
- Shared pool: 1 GB
- PGA: 3 GB
- Log buffer: 30 MB
- job_queue_processes: 32


**Note:** During the upgrade of the "Admin Tier", batchsize and number of workers used were 1000 and 32 respectively.

**Application Tier Size for Example Upgrade**

Oracle E-Business Suite Release 12.2 is installed with three file systems, to accommodate the new Online Patching feature.
 Sql (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 lists the data for the example upgrade scenario from Release 12.1.3:

<table>
<thead>
<tr>
<th>Component</th>
<th>Before Upgrade Size</th>
<th>After Upgrade Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORACLE_HOME</td>
<td>3.6 GB</td>
<td>3.6 GB</td>
</tr>
<tr>
<td>APPL_TOP</td>
<td>28 GB</td>
<td>N/A</td>
</tr>
<tr>
<td>INST_TOP</td>
<td>20 MB</td>
<td>N/A</td>
</tr>
<tr>
<td>fs1 (APPL_TOP+ INST_TOP)</td>
<td>N/A</td>
<td>30 GB</td>
</tr>
<tr>
<td>fs2 (APPL_TOP+ INST_TOP)</td>
<td>N/A</td>
<td>29 GB</td>
</tr>
<tr>
<td>fs_ne</td>
<td>N/A</td>
<td>660 KB</td>
</tr>
</tbody>
</table>

**JVM Parameter Settings for 64-bit Java on WLS Web Tier**

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

1. You can support 150-180 users per 1 GB of JVM heap size.
   Usually, one JVM is allocated per 2 CPUs.

2. Only the maximum allocated heap (Xmx) has an impact on response time.
   Changing the initial heap size (Xms) does not have an impact on response time.

3. For best results, use multiple managed instances. For example, two managed instances with a total of 4 GB heap size for each instance will provide a much better response times than one JVM with a total heap size of 8 GB.
Note: For more information, refer to the section "Customizing the number of instances of a particular service type" in Chapter 3, Technical Configuration, of Oracle E-Business Suite Setup Guide.

4. Further to the previous point, use JVMs with a maximum of 4 GB, and scale for more users by using additional managed instances. There are two benefits from doing this:
   - 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.

**Before You Install**

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

Rapid Install handles the details of the installation or upgrade actions based on the information you enter on the Rapid Install screens. If you collect the necessary information before you begin, the installation or upgrade will be completed more rapidly.

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.

**Review Associated Documentation**


In addition, you should carefully read the relevant Oracle E-Business Suite platform-specific Installation and Upgrade document. These are listed in My Oracle Support Knowledge Document 1583131.1, Oracle E-Business Suite Release 12.2 Information Center - Install.

For troubleshooting hints and tips, refer to My Oracle Support Knowledge Document
Create 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 Applications node file systems. Details of this process 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 node file system and starts the database node services is called the oracle user. This user must be created with a primary group of 'dba'. The operating system user that owns the Applications node file system and starts the Applications node 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.

Note: The term "UNIX" refers to all variants of that operating system, including Linux.

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.

The oracle user is the account that owns the database node technology stack (11gR2 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 might be oraprod.

The applmgr user is the account that owns the Applications 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 might be applvis.

On machines containing 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 Applications 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.

**Important:** If you are going to install Oracle E-Business Suite installation in an Oracle RAC environment, you must ensure that the necessary Oracle Grid infrastructure is in place. For instructions on how to do this, refer to My Oracle Support Knowledge Document 1453213.1, *Using Oracle 11g Release 2 Real Application Clusters and Automatic storage management with Oracle E-Business Suite Release 12.2.*

### 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 must not be a member of the GUEST group. Refer to Windows Help for information on creating accounts and assigning accounts to groups.

### Set 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.

**Note:** Network-attached storage devices (such as NFS-mounted disk volumes) can be used for the stage area. For the required mount options, refer to My Oracle Support Knowledge Document 359515.1, *Mount Options for Oracle Files When Used With NAS Devices.*
Obtain Installation Software

The Oracle E-Business Suite Release 12.2 software distribution includes Oracle E-Business Suite, Oracle Database 11gR2, and Oracle Fusion Middleware. It is obtainable in Zip format from the Oracle Software Delivery Cloud [http://edelivery.oracle.com].

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

Oracle E-Business Suite as a whole is not listed as a product option in the Oracle Software Delivery Cloud. Instead, you must search for and specify an individual Oracle E-Business Suite product you will be using. For example, you might choose Oracle Financials. Then specify your platform, such as Linux-86-64. Verify the selected product and platform, and continue to the next screen. The Oracle Software Delivery Cloud displays the Oracle E-Business Suite software distribution that includes the product you specified. Verify the selected release, and continue to the next screen. After you accept the license agreements, the Oracle Software Delivery Cloud displays the appropriate Zip files for you to download.

**Important:** You only need to specify one Oracle E-Business Suite product, even if you are going to use more than one. The Oracle Software Delivery Cloud will automatically display the entire Oracle E-Business Suite software distribution for you to download.

Each Zip file is identified as "<Part Number>_<NoM". For the complete set of files for a given Part Number, you need all the Zip files from 1 to M. For example, if Oracle Part Number "V10000-01" is divided into three parts, you must download the three Zip files V10000-01_1of3.zip, V10000-01_2of3.zip, and V10000-01_3of3.zip.

**Download Example**

This step-by-step example shows how you can download 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. Read the terms and conditions, then click *Accept*.

3. Specify an Oracle E-Business Suite product you will use, such as Oracle Financials. Then click *Continue*. 
4. Specify a platform, then click **Continue**.
5. Review the software that will be downloaded for your chosen product, then click **Continue**.

6. Read and accept the license agreement, then click **Continue**.
7. Click **Download All** to start the download.

---

**Create the Stage Area**

You must first create a directory, called `StageR122`, into which you will download the installation software mentioned above. You then unzip the requisite files and build the stage area, in readiness for running Rapid Install. This section describes the steps to
follow.

**Create 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
```

**Download Software and Unzip Start Here Files**

After creating the stage area directory, download the following specific components of the Oracle E-Business Suite Release 12.2 software distribution into it:

- Oracle E-Business Suite Release 12.2.0 Rapid Install Start Here
- Oracle E-Business Suite Release 12.2.0 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 11gR1 (10.3.6) Generic and Coherence
- Oracle Fusion Middleware Web Tier Utilities 11g Patch Set 6 (11.1.1.7.0) for <Platform>

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

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

**Tip:** You must use a utility that can unzip files larger than 2 GB.

**Run 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 new patches to current stage area.
3. Display existing files in stage TechPatches.
4. Exit menu
```

Enter your choice [4]:

These options are used as follows.

**Main Menu - Option 1**

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 12.2.0.50, 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.

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

Please enter the directory containing the zipped installation media:

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

Main Menu - Option 2

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

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
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.

Main Menu - Option 3

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
|--Stage Area Structure

The stage area you have built consists of a top-level directory, with subdirectories startCD, EBSInstallMedia, TechInstallMedia, and TechPatches.

Stage Area Directories

```
  stage
   ├── startCD
   │    └── Disk1
   │         ├── AppDB
   │         └── Apps
   │              ├── AS10.1.2
   │              └── database
   │                   └── ohs11117
   │                           └── wls1036_generic
   └── EBSInstallMedia
       └── TechInstallMedia
           └── TechPatches
                └── DB

```

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 (Oracle11gR2 ORACLE_HOME)
- ohs11117 (Oracle HTTP Server)
- wls1036_generic (Oracle WebLogic Server, part of Oracle Fusion Middleware)

The TechPatches directory contains the following subdirectories:
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.

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:

<table>
<thead>
<tr>
<th>Platform</th>
<th>orainst.loc Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Solaris SPARC (64-bit)</td>
<td><code>/var/opt/oracle</code></td>
</tr>
<tr>
<td>Linux x86-64</td>
<td><code>/etc</code></td>
</tr>
<tr>
<td>IBM AIX on Power Systems (64-bit)</td>
<td><code>/etc</code></td>
</tr>
<tr>
<td>HP-UX-Itanium</td>
<td><code>/var/opt/oracle</code></td>
</tr>
</tbody>
</table>

2. Confirm that the contents of `oraInst.loc` look like this:
   
   inventory_loc=/oracle/oraInventory

   where `/oracle/oraInventory` points to the directory where the central
inventory is located. This location must be writable by the user account that is to run Rapid Install.

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.

**Note:** If your system has separate installation user accounts for the database and the applications, both users must be in the same install group (inst_group) in oraInst.loc, which will need to contain a line such as inst_group=oracle.

If the **oraInst.loc** file does not exist, create it in the correct directory with contents as shown above.

**Run the rapidwiz Command**

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

**Note:** If the database and application tiers will be located on the same machine and owned by the same user, RapidWiz must be run by that user. If they will be located on the same machine but owned by different users, RapidWiz must be run by the root user.

**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

If required for diagnostic purposes, you can obtain the startCD build version (for example, 12.2.0.49_2), by running the command:

$ ./rapdiwiz -buildversion

Using an Alias For the Host Machine

If you want to use an alias (not the actual name of the host machine), use the -servername parameter when you start Rapid Install.

UNIX:

Example

$ rapidwiz -servername <myhost>

Windows:

Example

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

Gathering Configuration Information

The Rapid Install wizard provides input screens to gather system-specific values for configuring a new or upgraded system.

Important: You should be familiar with system requirements, resources, and product licensing agreements before you run Rapid Install. You should also have a 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 Applications node(s). 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

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. *Licensed products* are those specified in your licensing agreement with Oracle.

However, you must indicate on the Rapid Install wizard screens which products and country-specific functionalities you have licensed to register them as being active in your system. This active flag is important during any patching and other system-wide maintenance tasks that are performed after the initial installation or upgrade.

### 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.

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.

<table>
<thead>
<tr>
<th>Port Name</th>
<th>Description and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node Manager Port</td>
<td>Port used by Node Manager.</td>
</tr>
<tr>
<td>WLS Admin Server Port</td>
<td>Port used by WLS Admin Server.</td>
</tr>
<tr>
<td>WLS OACORE Application Port</td>
<td>Port used by WLS OACORE Applications.</td>
</tr>
<tr>
<td>WLS Forms Application Port</td>
<td>Port used by WLSForms Applications.</td>
</tr>
<tr>
<td>WLS OAFM Application Port</td>
<td>Port used by WLS OAFM Applications.</td>
</tr>
<tr>
<td>WLS Forms-C4WS Application Port</td>
<td>Port used by WLS Forms-C4WS Applications.</td>
</tr>
<tr>
<td>WLS Portlet Application Port</td>
<td>Port used by WLS Portlet Applications.</td>
</tr>
<tr>
<td>OHS Administration Proxy Port</td>
<td>Proxy port used by OHS. Oracle HTTP Server uses this port for internal communication with Oracle Fusion Middleware Control.</td>
</tr>
<tr>
<td>Port Name</td>
<td>Description and Comments</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Database Port</td>
<td>Port on the database server used by the Oracle Net listener.</td>
</tr>
<tr>
<td>RPC Port</td>
<td>RPC port on the concurrent processing server that receives incoming Report Review Agent requests.</td>
</tr>
<tr>
<td>Web SSL Port</td>
<td>Port used by Web SSL (Secure Sockets Layer).</td>
</tr>
<tr>
<td>ONS Local Port</td>
<td>Oracle Notification Server Local Port.</td>
</tr>
<tr>
<td>ONS Remote Port</td>
<td>Oracle Notification Server Remote Port.</td>
</tr>
<tr>
<td>ONS Request Port</td>
<td>Oracle Notification Server Request Port.</td>
</tr>
<tr>
<td>Web Listener Port</td>
<td>Port on the Web server used by the Web listener.</td>
</tr>
<tr>
<td>Active Web Port</td>
<td>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.</td>
</tr>
<tr>
<td>Forms Port</td>
<td>Port on the Forms server used by the Forms Listener.</td>
</tr>
<tr>
<td>Metrics Server Data Port</td>
<td>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.</td>
</tr>
<tr>
<td>Metrics Server Request Port</td>
<td>Port on the Forms server used by the Metrics Server as a request port.</td>
</tr>
<tr>
<td>JTF Fulfillment Server Port</td>
<td>JTF Fulfillment Server Port Number.</td>
</tr>
<tr>
<td>MSCA Server Port</td>
<td>MSCA Server Port Number.</td>
</tr>
<tr>
<td>MSCA Telnet Server Port</td>
<td>MSCA Telnet Server Port Number.</td>
</tr>
<tr>
<td>MSCA Dispatcher Port</td>
<td>MSCA Dispatcher Port Number.</td>
</tr>
<tr>
<td>Port Name</td>
<td>Description and Comments</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Java Object Cache Port</td>
<td>Port used by the Java Object Caching infrastructure. Must be same on all application</td>
</tr>
<tr>
<td></td>
<td>tier nodes. If there are firewalls separating the application tier nodes, this port must</td>
</tr>
<tr>
<td></td>
<td>be opened on all firewalls.</td>
</tr>
<tr>
<td>OC4J JMS Port Range for OACORE</td>
<td>Java JMS Port Range for the OACORE Oracle Container.</td>
</tr>
<tr>
<td>OC4J JMS Port Range for Forms</td>
<td>Java JMS Port Range for the Forms Oracle Container.</td>
</tr>
<tr>
<td>OC4J JMS Port Range for Home</td>
<td>Java JMS Port Range for the Home Oracle Container.</td>
</tr>
<tr>
<td>OC4J JMS Port Range for OAFM</td>
<td>Java JMS Port Range for the OAFM Oracle Container.</td>
</tr>
<tr>
<td>OC4J JMS Port Range for Forms-C4WS</td>
<td>Java JMS Port Range for the Forms-C4WS Oracle Container.</td>
</tr>
<tr>
<td>OC4J AJP Port Range for OACORE</td>
<td>Java AJP Port Range for the OACORE Oracle Container.</td>
</tr>
<tr>
<td>OC4J AJP Port Range for Forms</td>
<td>Java AJP Port Range for the Forms Oracle Container.</td>
</tr>
<tr>
<td>OC4J AJP Port Range for Home</td>
<td>Java AJP Port Range for the Home Oracle Container.</td>
</tr>
<tr>
<td>OC4J AJP Port Range for Oafm</td>
<td>Java AJP Port Range for the OAFM Oracle Container.</td>
</tr>
<tr>
<td>OC4J AJP Port Range for Forms-C4WS</td>
<td>Java AJP Port Range for the Forms-C4WS Oracle Container.</td>
</tr>
<tr>
<td>OC4J RMI Port Range for OACORE</td>
<td>Java RMI Port Range for the OACORE Oracle Container.</td>
</tr>
<tr>
<td>OC4J RMI Port Range for Forms</td>
<td>Java RMI Port Range for the Forms Oracle Container.</td>
</tr>
<tr>
<td>Port Name</td>
<td>Description and Comments</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------------</td>
</tr>
<tr>
<td>OC4J RMI Port Range for Home</td>
<td>Java RMI Port Range for the Home Oracle Container.</td>
</tr>
<tr>
<td>OC4J RMI Port Range for OAFM</td>
<td>Java RMI Port Range for the OAFM Oracle Container.</td>
</tr>
<tr>
<td>OC4J RMI Port Range for Forms-C4WS</td>
<td>Java RMI Port Range for the Forms-C4WS Oracle Container.</td>
</tr>
<tr>
<td>DB ONS Local Port</td>
<td>Database Oracle Notification Server Local Port. The recommended value is between 6300 and 6399.</td>
</tr>
<tr>
<td>DB ONS Remote Port</td>
<td>Database Oracle Notification Server Remote Port. The recommended value is between 6400 and 6499.</td>
</tr>
<tr>
<td>Oracle Connection Manager Port</td>
<td>Port on Oracle Connection Manager server used by Oracle Connection Manager listener.</td>
</tr>
</tbody>
</table>

**Navigating in the Wizard**

The Rapid Install input screens are in the form of a wizard, which prompts you for the information needed to install a new Oracle E-Business Suite system or upgrade an existing one.

The following conventions apply to navigating in the wizard.

**Input Fields and Drop-down Lists**

- Complete or accept the default in input fields (provided they are not grayed out).

- Type information directly into input boxes, or select information from the list of valid options in fields that have a drop-down menu.

- *Drop-down lists* present all the valid options for an input field. Click an option to select it.

- *Combo boxes* also present valid options in the form of a drop-down list. They also allow you to replace an option on the list by typing in a valid option. When this type of input is allowed, it is noted in the text.
Buttons and Keys

- You can select from mutually exclusive options by clicking the appropriate radio button.

- On each screen, you can click the Tab key or press the Up or Down Arrow keys to move between options.

- There are buttons at the bottom of each screen that allow you to Cancel the Rapid Install process or move either Back to the previous screen or forward to the Next screen.

- Vertical and horizontal scroll bars make it possible to move hidden fields into view.

Help

Most screens offer mouse-over help for individual fields: a description of the information that goes in the field appears in a small text box when you move the mouse over the field.

In addition, most screens display a Help button. Click it to see screen-level help — a general description of the screen, and a summary of the input fields that it displays. Once you have reviewed the information on a help screen, clicking OK returns you to the wizard screen from where you requested the help.

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.

- 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 Performing an Upgrade, page 4-1.

When you have completed the steps in the chapter that applies to your system, read and follow the applicable instructions in Finishing Tasks, page 5-1 to finish the installation or upgrade.
Performing an Installation

Rapid Install offers two options for a new installation: a standard installation, which involves creating a new system using system-specific configuration parameters, and an Express installation, where Rapid Install supplies default values for many parameters, requiring only a few to be supplied by the user carrying out the install.

This chapter covers the following topics:

- Standard Installation
- Express Installation
- 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 2-33.

Important: Before you perform the steps described in this section, you must have created a stage area using the buildStage script, as described in the Set up the Stage Area section of Chapter 1.

Follow the instructions in the section Before You Begin, page 1-15 in Getting Started, page 1-1. 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 Applications 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 supported by, this release of Oracle E-Business Suite. You can expand the component lists, using the scroll bar to bring all the components into view.

A new installation includes a fresh Oracle 11g Release 2 (11gR2) database. In an upgrade, Rapid Install can optionally create an Oracle 11gR2 database Oracle Home without a database. You can use this Oracle Home to upgrade or migrate your existing database to Oracle 11gR2. Alternatively, you can choose to use a suitable existing Oracle Home.

**Note:** See *Oracle E-Business Suite Upgrade Guide: Release 12.0 and 12.1 to Release 12.2.0.*

**Welcome Screen**

![Welcome Screen Screenshot](image-url)
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.

**Select Wizard Operation - Install Oracle E-Business Suite Release 12.2.0**

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 2-33 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 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.

**Note:** See Performing an Upgrade, page 4-1 to learn how Rapid Install works during a system upgrade.

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. Supply email details for security updates

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

If I wish to receive security updates via My Oracle Support

My Oracle Support Password:

Specify Proxy Server [Shown After Failed Connection Attempt]

Specify proxy server information

Proxy Server: 

Proxy Port: 

Proxy Username: 

Proxy Password: 

If this screen appears, respond appropriately and then click OK.

4. Identify configuration file

On the Configuration Choice screen, you indicate whether you will be using previously saved configuration details.
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 `<hostname>:<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 multi-node install.
Note: 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 or click Advanced 
Edit to see the Port Values screen.
Global System Settings

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 the chosen Port Pool (and therefore individual ports) by clicking Next. This will suffice for many installations.

Otherwise, you can add an extra level of sophistication by specifying individual port values to meet particular site-specific requirements, over and above the basic use of the Port Pool mechanism described above. For example, you might wish to avoid using a particular port for some reason, perhaps because it will be needed by some other software. Clicking on the Edit Ports button will open a screen that allows you to specify the values of any ports you wish.
Port Values

<table>
<thead>
<tr>
<th>Port Values</th>
<th>File System 1</th>
<th>File System 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node Manager Port</td>
<td>5556</td>
<td>5557</td>
</tr>
<tr>
<td>WLS Admin Server Port</td>
<td>7001</td>
<td>7002</td>
</tr>
<tr>
<td>WLS CACORE Application Port</td>
<td>7201</td>
<td>7202</td>
</tr>
<tr>
<td>WLS FORMS Application Port</td>
<td>7401</td>
<td>7402</td>
</tr>
<tr>
<td>WLS OAPM Application Port</td>
<td>7601</td>
<td>7602</td>
</tr>
<tr>
<td>WLS FORMS-C4WS Application Port</td>
<td>7801</td>
<td>7802</td>
</tr>
<tr>
<td>WLS Portlet Application Port</td>
<td>8899</td>
<td>8890</td>
</tr>
<tr>
<td>OHS Administration Proxy Port</td>
<td>9999</td>
<td>10000</td>
</tr>
<tr>
<td>Database Port</td>
<td>1521</td>
<td></td>
</tr>
<tr>
<td>RPC Port</td>
<td>1626</td>
<td>1627</td>
</tr>
<tr>
<td>WLS SSL Port</td>
<td>4443</td>
<td></td>
</tr>
<tr>
<td>ONS Local Port</td>
<td>6100</td>
<td>6101</td>
</tr>
</tbody>
</table>

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.
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.

Accept the default database name or type in another name (alphanumeric, not to exceed 8 characters in length, with no spaces) for the local instance. This name is often referred to as the database SID.
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.

Choose Directory

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.

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 Section 5: "Use Rapid Install to Install a RAC Configured Oracle E-Business Suite Release 12.2 system" of My Oracle Support Knowledge Document 1453213.1, Using Oracle 11g Release 2 Real Application Clusters and Automatic storage management with Oracle E-Business Suite Release 12.2. 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 hostname 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 hostname TESTSYS being in upper case.

**Important:** The setting of the compatible database initialization parameter must be the same for both the Oracle E-Business Suite database and the ASM instance and ASM disk groups. The Oracle E-Business Suite database parameter is set to 11.2.0 for all platforms except Exadata, where it is set to 11.2.0.2.

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

Oracle E-Business Suite can be licensed using either of the following models: Suite Licensing (which allows wide access to product functionality), or Component Licensing (in which E-Business Suite products are licensed individually).

- Suite Licensing
- Component Licensing

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

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 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

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.

**Note:** To register additional products after the initial installation, use the License Manager component of Oracle Applications Manager. For more details, see License Manager in *Oracle E-Business Suite Maintenance Guide*.

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.

Select 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.
Select 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.

Note: For further details, refer to Oracle E-Business Suite Maintenance Guide.
Select Internationalization Settings

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.

**Note:** See Globalization Support in *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 is complete, refer to *Oracle E-Business Suite*.
Performing an Installation

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.

Note: 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 5-11 in Finishing Tasks, page 5-1 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 Rapid Install 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 Applications 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 Applications nodes.

**Special Considerations for Multi-Node Installs**

Multiple application tier node installation is no longer performed from Rapid Install. Instead, you install a single application tier node, apply the requisite AD and TXK patches to bring the application tier node to the latest codeline, and finally use standard cloning procedures to add further nodes as required. This strategy avoids the need to apply the patches to multiple Applications nodes, and also enables hybrid and DMZ-type architectures.

This is described in Step 10, *Enter Primary Applications Node Information*, of the Standard Installations instructions in Chapter 2. When you have done this, you will need to run the `$INST_TOP/admin/scripts/adstrtall.sh` script on the new Applications nodes to start the services.

**Note:** The same platform must be used for all Applications nodes.

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

After you have created the required number of additional Applications 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.
Performing an Installation

Primary Applications Node Configuration - UNIX

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 Applications 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 Applications nodes. You can accept the defaults or enter new values.

**Important:** You must accept the system-supplied defaults for the derived mount points.

A particular application tier node’s role is not defined by the files installed: all the APPL_TOPs on a multi-node 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 sso 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**

<table>
<thead>
<tr>
<th>This Service Group</th>
<th>Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root Service</td>
<td>• Node Manager</td>
</tr>
<tr>
<td>Web Administration</td>
<td>• WebLogic Admin Server</td>
</tr>
<tr>
<td>Web Entry Point Services</td>
<td>• Oracle HTTP Server</td>
</tr>
<tr>
<td></td>
<td>• Oracle Process Manager</td>
</tr>
<tr>
<td>Web Application Services</td>
<td>• OACORE</td>
</tr>
<tr>
<td></td>
<td>• OAEA</td>
</tr>
<tr>
<td></td>
<td>• OAFM</td>
</tr>
<tr>
<td></td>
<td>• Forms</td>
</tr>
<tr>
<td></td>
<td>• Forms-C4WS</td>
</tr>
<tr>
<td>Batch Processing Services</td>
<td>• Oracle TNS Listener</td>
</tr>
<tr>
<td></td>
<td>• Concurrent Manager</td>
</tr>
<tr>
<td></td>
<td>• Fulfillment Server</td>
</tr>
<tr>
<td></td>
<td>• Oracle ICSM</td>
</tr>
</tbody>
</table>
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 installing on the 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.

**Important**: 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.

**Specifying Web Entry Points (Conditional)**

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

**Note**: Only customers with configurations of the types listed below will need to perform these steps.
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

<table>
<thead>
<tr>
<th>This variable:</th>
<th>Specifies the:</th>
</tr>
</thead>
<tbody>
<tr>
<td>s_webentryurlprotocol</td>
<td>Web Entry URL Protocol</td>
</tr>
<tr>
<td>s_webentryhost</td>
<td>Web Entry Host</td>
</tr>
<tr>
<td>s_webentrydomain</td>
<td>Web Entry Domain</td>
</tr>
<tr>
<td>s_active_webport</td>
<td>Active Web Port</td>
</tr>
</tbody>
</table>

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 hostname.

**Note:** For further details of specifying context variables, see Chapter 3, Technical Configuration, in *Oracle E-Business Suite Setup Guide*.

11. Supply Application User Information
Supply Application User Information

Various user accounts and passwords can be specified on this screen:

- The **WLS Admin User** is the account used for setting up and managing Oracle WebLogic Server.

- The **Apps OS User** is the operating system account used for setting up Secure Shell (ssh) on the application tier nodes, and must be the same on all these nodes. This password is also used for the applsys and apps_ne users.

- The **Apps DB User** is the principal Oracle E-Business Suite database account. The password specified here will also be used for the related applsys and apps_ne accounts.

- The **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.

- The **Products DB Users** are the Oracle E-Business Suite product-specific accounts.
• The 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. For security, Oracle recommends accepting this, and changing the default passwords accordingly. The new passwords must only contain alphanumeric characters.

If you wish to retain the default passwords, uncheck the box. The defaults are:

• 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)

For more information about managing passwords, refer to My Oracle Support Knowledge Document 1336479.1, R12: How to change passwords to include special characters using FNDCPASS.

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 can no longer be passed on the command line in silent mode.

12. Review Database and Application Tier Node Information
At this stage, you have specified details for the database node and the primary application tier node. Instead of creating additional Applications nodes using Rapid Install, you complete the Rapid Install run, apply the latest AD and TXK patches, and then clone the primary application tier node to create as many additional ones as you need. This avoids the need to apply the patches to multiple nodes, saving time and effort and reducing the risk of error.


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**

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

**Pre-Install Tests and Parameters**

<table>
<thead>
<tr>
<th>This test:</th>
<th>Checks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Availability</td>
<td>The ports you selected are available for use.</td>
</tr>
<tr>
<td>Database Pre-install Checks</td>
<td>The Oracle E-Business Suite Database meets the necessary requirements.</td>
</tr>
<tr>
<td>Port Uniqueness</td>
<td>There are no duplicate defined ports for server processes.</td>
</tr>
</tbody>
</table>
This test: Checks:

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, a pop-up window will appear:
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 (Bug 20083150). 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.
Review Components

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

Begin Installation

The Rapid Install Wizard is ready to install Oracle E-Business Suite on this machine. Do you want to begin the installation now?

Monitor Installation Progress:
1. Check progress bars

Performing an Installation 2-31
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.

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

---

**Installation Progress**

![Installation Progress Bar](image)

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

Rapid Install informs you of the components that it installed on the Finish screen. If you wish to review the Post-install Checks screen, click Back. If you want to log on to Oracle E-Business Suite now, click Connect to Oracle Applications Release 12.2.0 to access the Oracle E-Business Suite Login page. Otherwise, click Finish to complete the Rapid Install session.

Note: See Log On to Oracle E-Business Suite, page 5-1 in Finishing Tasks, page 5-1 for more information.

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. It 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. You can easily register additional products (according to your Oracle licensing agreement) after the installation is complete, by using License Manager. However, converting the character set may be time-consuming, and is best avoided if possible.

Note: For more details, see License Manager in Oracle E-Business Suite Maintenance Guide.

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 Configuration.

   Select Wizard Operation - Install Oracle E-Business Suite Release 12.2.0, Use Express Install

   ![Select Wizard Operation - Install Oracle E-Business Suite Release 12.2.0, Use Express Install](image)

   Click Next to continue.

2. Supply email details for security updates
Data collected is sent via HTTPS (secure HTTP) to Oracle Support, facilitating pro-active problem avoidance and helping to reduce the time needed for resolution of support issues.

**Supply Email Details for Security Updates**

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

<table>
<thead>
<tr>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easier for you if you use your My Oracle Support email address/username</td>
</tr>
</tbody>
</table>

- [ ] I wish to receive security updates via My Oracle Support

<table>
<thead>
<tr>
<th>My Oracle Support Password</th>
</tr>
</thead>
</table>

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

**Specify Proxy Server [Shown After Failed Connection Attempt]**

**Specify proxy server information**

<table>
<thead>
<tr>
<th>Proxy Server</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Proxy Port</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Proxy Username</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Proxy Password</th>
</tr>
</thead>
</table>

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

[OK] [Cancel]

If this screen appears, respond appropriately and 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**

In the Database Type field, use the drop-down list to choose either a Vision Demo database or a fresh database, and then either accept VIS or enter another name in the Database SID field. 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. For example, a host name of `apps1` and domain name of `example.com` make up an FQDN of `apps1.example.com`.

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 Applications 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.

**Note:** The fields on this screen are fully described in Node-specific Configuration Information, page A-3 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**

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 such as this:
Error Example - Insufficient File System Free Space

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 the following warning when you click Next.

Configuration Alert

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.
Performing an Installation

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5. Continue Installation

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

What To Do Next

After you finish running Rapid Install, you must perform various additional tasks before you can use your Oracle E-Business Suite system.

1. Carry Out Finishing Tasks

Once the Rapid Install run is complete, some additional finishing tasks are required for all users, and others are required for specific types of installation. For example, all systems must have the client software configured, but some may also need to set up NLS support.

Go to Finishing Tasks, page 5-1, and perform all the tasks that are applicable to your requirements.

2. Perform Online Patching Tasks


3. Apply Suite-Wide Release Update Pack

You must now apply an Oracle E-Business Suite 12.2.x release update pack. At least 12.2.3 is required for patching support: see My Oracle Support Knowledge Document 1195034.1, Oracle E-Business Suite Error Correction Support Policy.


Note: We strongly recommend installing the latest release update pack.
pack, to take advantage of new features and fixes. Therefore, 12.2.5 is recommended over 12.2.3 or 12.2.4.

4. Apply AD-TXK Release Update Packs

As well as applying the latest Suite-wide release update pack, you should also bring your system to the most recent AD-TXK codelevel by following the relevant instructions in My Oracle Support Knowledge Document 1617461.1, Applying the Latest AD and TXK Release Update Packs to Oracle E-Business Suite Release 12.2.

5. Scale Up Applications Nodes

After all requisite release update packs have been applied, you should (as also noted in the relevant sections of this book) use standard cloning commands to create additional Applications nodes and thereby scale up to your desired system. Refer to My Oracle Support Knowledge Document 1383621.1, Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone for instructions.
Maintaining the Technology Stack

Rapid Install offers a specialized option that allows you to replace selected technology stack executables in an existing instance, for example in a case where 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 the 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 ORACLE_HOME.

This chapter covers the following topics:

- 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

### Replacing the Oracle E-Business Suite Database Technology Stack

**Steps:**

1. Remove the RapidWiz install stage area under the database Oracle Home:
   
   ```bash
   $ rm -rf $ORACLE_HOME/temp/*
   ```
   
   For example:
   
   ```bash
   $ rm -rf /d01/oracle/RW/PROD/11.2.0/temp/*
   ```

2. Source the environment on the database tier:
   
   ```bash
   $ . $ORACLE_HOME/<CONTEXT_NAME>.env
   ```

3. Detach the Oracle Database 11gR2 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. Remove the database Oracle Home
   $ rm -rf $ORACLE_HOME

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

7. Select "Database Technology Stack (11gR2 RDBMS)" and then click Next.
8. Fill in the required information in the "RDBMS Inputs Page" and then click Next.
9. Click Yes to start the installation.
10. After the installation has completed successfully, copy your context file to the $ORACLE_HOME/appsutil directory.

11. 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.

12. Set the environment, and start up the database.

13. 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:
2. Detach the OracleAS 10.1.2 AS (Tools) Oracle Home from the inventory:

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

   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:
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.
7. The next screen is to confirm that this is the correct location of the OracleAS 10.1.2 Oracle Home. Click Next.
8. Click Yes to start the install.
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 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
   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
   Windows:
   C:\> %ORACLE_HOME%\oui\bin\detachHome.bat
   Do this for both fs1 and fs2.

5. Detach Oracle_EBS-app1 from the inventory. Do this for both fs1 and fs2.

6. 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 + 11.1.1.7 OHS)" and click Next.
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.
13. The next screen is to confirm that these are the correct locations for the Oracle Fusion Middleware Oracle Homes. Click Next.
14. Click Yes to start the install.

16. After the installation has completed successfully, run AutoConfig and then start the application tier services on the run edition file system.
Performing an Upgrade

Rapid Install is used in both the pre-upgrade and post-upgrade processing during an upgrade to Oracle E-Business Suite Release 12.2.0. This chapter gives an overview of the upgrade process, and then describes in detail the upgrade steps that rely on Rapid Install.

This chapter covers the following topics:
- How an Upgrade Works
- Creating the Upgrade File System
- Configuring Application Tier Services
- What To Do Next

How an Upgrade Works

This section explains the options you have when upgrading, and outlines the steps involved.

Upgrade Strategies

As part of an Oracle E-Business Suite upgrade, you enter configuration parameters in the Rapid Install wizard and run Rapid Install as one of the pre-upgrade tasks. Rapid Install uses the parameters to lay down the file systems and install the new technology stack. If applicable, you must also migrate or upgrade your existing database to Oracle 11g Release 2 (11gR2) as another pre-upgrade task.

After you complete all the pre-upgrade tasks, you run the adop online patching utility to apply the upgrade driver that updates the database to the most current release level. After you have completed the database upgrade, you run Rapid Install a second time, to configure the services.

After configuration of the database and primary Applications node is complete, bring up the services on the primary Applications node using the adstrtal.sh script. (The only essential services at this point are the database listener on the RDBMS Oracle...
Home, and the Admin Server on both file systems of the primary Applications node.)

**Note:** In an upgrade, you have to start the services manually. This is in contrast to a fresh install, where they are started automatically.

After the upgrade is complete, you can use standard cloning commands to create additional Applications nodes and thereby scale up to your desired system. Refer to the following My Oracle Support knowledge documents as applicable:

- 1383621.1, *Cloning Oracle E-Business Suite Release 12.2 with Rapid Clone* (for basic instructions on adding a node)
- 1375670.1, *Oracle E-Business Suite Release 12.2 Configuration in a DMZ* (if using a DMZ)

**Summary of Upgrade Steps**

Depending on the release you are upgrading from, you will refer either to *Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2.0* or *Oracle E-Business Suite Upgrade Guide: Release 12.0 and 12.1 to 12.2*.

In general, you must perform the following tasks as described in the documentation mentioned with each task.


4. When instructed to do so by the Upgrade Guide, run Rapid Install using the Create Upgrade File System option as described in this chapter. Rapid Install creates the new Oracle E-Business Suite file system, the new Oracle Home for the RDBMS, and installs the other technology stack components.
5. After you complete the pre-upgrade tasks in the *Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2.0* or *Oracle E-Business Suite Upgrade Guide Release 12.0 and 12.1 to 12.2*, continue with the instructions to apply any required pre-upgrade patches, and then run the upgrade driver to upgrade your products.

6. Continue with the post-upgrade instructions in the *Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2.0* or *Oracle E-Business Suite Upgrade Guide Release 12.0 and 12.1 to 12.2*. When instructed to do so, return to this chapter for instructions on running Rapid Install a second time to configure and start the server processes.


### Upgrading Oracle RAC systems

If you are using an Oracle RAC environment, you should only run the Release 12.2 upgrade on a single Oracle RAC node.

This is because most of the elapsed time in the upgrade will be taken by jobs running DML (INSERT, UPDATE, DELETE). These jobs use multiple workers and parallel servers, which will typically attempt to access the same objects and blocks at the same time. The consequent additional communication between cluster nodes (and associated cluster waits) will significantly outweigh any gains from using the additional CPUs to increase throughput.

### Creating the Upgrade File System

The database can be running when you lay down an upgrade file system with an existing ORACLE_HOME. However, if it is running on the same host where upgrade file system creation is taking place, the associated database updates could result in Oracle E-Business Suite becoming unavailable to users. To avoid this happening, shut down the database before creating the upgrade file system on the same host.

**Important:** If you are creating an upgrade file system with an existing Oracle Home that is RAC-enabled, an incorrect value will be set for the context variable `s_apps_jdbc_connect_descriptor`. This results in an incorrect value for `APPS_JDBC_URL` in the `$FND_SECURE/<SID>.dbc` file.

A workaround for installations performed with the startCD is to run AutoConfig on the application tier after upgrade file system creation is completed and a database connection is available. AutoConfig must be executed on both the run file system and the patch file system. You can ignore any AutoConfig errors on the patch file system that result from editions not being enabled in the database.
For production environments, this step will have to wait till the database downtime starts. Then check that the value of context variable \texttt{s\_apps\_jdbc\_connect\_descriptor} in the \texttt{<CONTEXT\_FILE>} is correct, and that the value of \texttt{APPS\_JDBC\_URL} is both correct and matches the value in the \texttt{<CONTEXT\_FILE>}.

Before running Rapid Install to create the upgrade file system, you should make a note of the database language and character set value from the existing Release 11i or Release 12.1 database that will be upgraded. These values should be specified in the appropriate Rapid Install screen, as shown in Step 8 (Internationalization Settings) of this section.

When the instructions in \textit{Oracle E-Business Suite Upgrade Guide: Release 11i to Release 12.2.0} direct you to do so, run Rapid Install as described below.

\textbf{Set Up the Configuration:}

As described in the previous section, Rapid Install performs two functions during an upgrade. This section describes the first of these functions, specifying the configuration values that Rapid Install needs to lay down a new file system and install the new technology stack.


Follow the instructions in the Before You Begin, page 1-15 section in Getting Started, page 1-1. Then complete the following tasks.

1. Start the Rapid Install wizard
   
   Start the wizard by entering the command \texttt{rapidwiz} at the command prompt. The Welcome screen appears.
**Welcome Screen**

This screen lists the components that are included in, or supported by, this release of Oracle E-Business Suite. Use the scroll bar to bring all the components into view.

For an upgrade, Rapid Install creates an Oracle 11gR2 Database Oracle Home without a database. You can use this Oracle Home to upgrade or migrate your existing database to Oracle 11gR2. If you already have a suitable 11gR2 Oracle Home, you may use it instead of using the one created by Rapid Install.

This screen is for information only. No action is required. Click Next to continue.

2. Select a wizard operation

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

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 enter in the Rapid Install wizard and save in the configuration file (conf_<SID>.txt).

  **Note:** The steps in Standard Installations, page 2-1 describe a new installation.

- Express Configuration

  This action sets up a fully configured, single-user, single machine 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 increments for port settings. The remaining directories and mount points are supplied by Rapid Install using default values.
Note: The steps in Setting Up an Express Installation, page 2-33 in Standard Installations, page 2-1 describe this option.

• Upgrade to 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.

In subsequent steps, you will enter information in the wizard for upgrading a system. Select Upgrade to E-Business Suite Release 12. Then click Next to continue.

3. Supply Oracle Configuration Manager details

Oracle Configuration Manager (OCM) is a component that is designed to facilitate support for your Oracle products. Use of Oracle Configuration Manager is optional, but recommended.

A lightweight agent that consumes minimal CPU resources, OCM supports automatic discovery of installed components and configuration information, and provides continuous tracking of key Oracle and system statistics of the machine it is running on.

Data collected is sent via HTTPS (secure HTTP) to Oracle Support, who can thereby maintain an up-to-date view of your Oracle installation, facilitating pro-active problem avoidance and helping to reduce the time needed for resolution of support issues.

Note: For further details of OCM, click the View details link on the OCM screen.
Specify Oracle Configuration Manager Details

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

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

Oracle Configuration Manager Proxy Server [Shown After Failed Connection Attempt]

Specify proxy server information

Proxy Server

Proxy Port

Proxy Username

Proxy Password

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

OK  Cancel

If this screen appears, respond appropriately and then click OK.

4. Choose upgrade option

On the Select Upgrade Action screen, you can choose to create an upgrade file system for your upgraded system, or configure the upgraded instance.
Select Upgrade Action

The actions associated with an upgrade are performed in separate Rapid Install sessions, as follows:

- **Create Upgrade File System**
  You choose this option when prompted to run Rapid Install as a pre-upgrade step in the *Oracle E-Business Suite Upgrade Guide*. In the screen flow associated with this option, the wizard collects configuration parameters for your system and stores them in the Oracle E-Business Suite database. When you run Rapid Install, AutoConfig uses these values to lay down the file system structure and technology stack components for your configuration. When it runs, it also creates a context file (<CONTEXT_NAME>.xml) that contains all the parameters that describe your system. This context file is created and managed by AutoConfig.

- **Configure Upgraded Release 12.2.0 Instance**
  You choose this option when prompted to run Rapid Install as a post-upgrade task in the *Oracle E-Business Suite Upgrade Guide*. In the associated screen flow,
you specify the name of the context file (<CONTEXT_NAME>.xml) that AutoConfig created when you initially ran Rapid Install. This time, AutoConfig uses the values in the context file to configure the servers and start the services.

Choose Create Upgrade File System and click Next

5. Specify Global System Settings
On the Global System Settings screen, you indicate required port usage for your system, selecting the port pool and (if required) individual port values.

![Global System Settings](image)

Global System Settings

The Port Pool mechanism is used to specify a set of port values for an Applications system. Each pool uses a unique set of values, allowing multiple environments to co-exist on the same host. Individual port values can be changed using the Edit Ports button.

<table>
<thead>
<tr>
<th>Port Pool</th>
<th>File System 1</th>
<th>File System 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Node Manager Port</td>
<td>5556</td>
<td>5557</td>
</tr>
<tr>
<td>WLS Admin Server Port</td>
<td>7001</td>
<td>7002</td>
</tr>
<tr>
<td>WLS OACORE Application Port</td>
<td>7201</td>
<td>7202</td>
</tr>
<tr>
<td>WLS FORMS Application Port</td>
<td>7401</td>
<td>7402</td>
</tr>
<tr>
<td>WLS OAFM Application Port</td>
<td>7800</td>
<td>7802</td>
</tr>
<tr>
<td>WLS FORMS-C4MWS Application Port</td>
<td>7801</td>
<td>7802</td>
</tr>
<tr>
<td>WLS Portal Application Port</td>
<td>8889</td>
<td>8890</td>
</tr>
<tr>
<td>OHS Administration Proxy Port</td>
<td>9999</td>
<td>10000</td>
</tr>
<tr>
<td>Database Port</td>
<td>1521</td>
<td>1521</td>
</tr>
</tbody>
</table>

After making your selections, click Next to continue.

6. Specify Database Node Configuration
On the Database Node Configuration screen, describe your existing database.
In the Database SID field, enter the service name (not the SID) that you want Rapid Install to use to identify your existing database. The service name must be alphanumeric, not exceed eight characters in length, not start with a number, and contain no spaces. Rapid Install records this name in the Net Services configuration and in the init<SID>.ora file.

If you want to use an existing ORACLE_HOME for the upgrade, tick the "Use Existing Oracle Home" checkbox.

**Important:** The existing database should be open, and the ORACLE_HOME init.ora parameter service_names must have an entry called ebs_patch.

**Important:** An upgrade file system can be laid down with an existing ORACLE_HOME while the database is open and in use. However, if the database is running on the same host where upgrade file system creation is being performed, the database will be updated. This could result in an Oracle E-Business Suite...
environment that cannot be accessed by users who are logged in. To avoid this issue, you should shut down such a database before creating the upgrade file system.

You must also enter a valid domain name on this screen. This value, when combined with a host (machine) name, must produce a fully qualified domain name (FQDN). For example, a hostname of apps1 and domain name of example.com make up an FQDN of apps1.example.com. You enter your Oracle RAC nodes as a comma-delimited list, in the form <node1>,<node2>. After completing all required details, click Next to continue.

7. Review Application User Information

The Review Application User Information screen lists usernames and the default passwords assigned by the wizard for the Application user.

**Important:** Record the actual passwords for your existing system before you continue.
As shown on the screenshot, the usernames and their respective default passwords are: APPS Username (APPS), APPS password (APPS), GWYUID username (APPLSYS PUB), GWYUID Password (PUB), Guest username (GUEST), and Guest password (ORACLE).

Complete the text fields to change all the passwords on this screen to match those in your existing system. The wizard stores this information in the configuration file.

**Warning:** Failing to record this information accurately could compromise the upgrade.

Click Next to continue.

8. **Internationalization Settings (conditional)**

The Internationalization Settings screen displays options for systems that require NLS functionality.

**Important:** As noted at the beginning of this section, the database
The languages you select determine the available options for the other NLS-related configuration parameters (such as base language, territory, and character set) that your system requires.

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

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

You may need to perform additional tasks to finish the language installation. See Oracle E-Business Suite NLS Release Notes for details. You can register additional languages any time after the initial installation or upgrade. See Registering Languages in Oracle E-Business Suite Setup Guide.
This screen displays Rapid Install defaults, as described in the following paragraphs.

**Selected Languages:** If you have other active languages in your existing system, you can change the default, and add languages to reflect the existing database character set.

**Default Territory:** This field is set to AMERICA, and should remain so during the upgrade. Your system administrator can change this value after the upgrade, if necessary.

**Database character set and APPL_TOP character set:** Defaults to a common character set that is compatible with the active languages indicated on the Select Additional Languages screen. If they are not the character sets in your existing system, select the correct ones from the drop-down list.

   **Important:** If a database connection can be established, the current database character set is automatically used and the character set selection screen not displayed. If a connection cannot be established, you must specify the current database character set (and no other) in the selection screen that is then displayed.

**IANA character set:** The Internet Assigned Numbers Authority character set is the Internet-assigned standard used by the Web server. For more information, see http://www.iana.org/assignments/character-sets.

If necessary, change this value to indicate the one used in your existing system. Click Next to continue.

9. **Enter Primary Applications Node information**

   You have already specified the top-level directory and the mount points for the RDBMS. Now you must specify top-level directory and subdirectories associated with the primary Applications node.
Primary Applications Node Configuration

The default directories use the syntax of the operating system on which you are running Rapid Install. You can either accept the defaults, or enter new values.

Some of the fields are operating system dependent: for example, the UNIX Toolkit directory and Visual Studio directory are specific to Windows. If using a Windows platform, enter the location of the MKS (or Cygwin) tools in the UNIX Toolkit directory field, and the location of the Visual C/C++ executables and DLLs in the Visual Studio directory field. If using a UNIX system, complete the information for the Apps OS User (the account that owns the Applications node file system and technology stack) and Apps OS Group (the group to which the Apps OS User belongs).

The Base directory is the top-level directory that Rapid Install will use to derive the mount points for the Applications node. You can accept the default or enter a new value. Click Browse to navigate to a new path, and double-click the required directory to select it.

The Instance directory (new in Release 12) stores instance-specific files, including runtime generated files, log files, and configuration files. It can be a local directory...
Performing an Upgrade

4-17

(for better access speed). It does not have to be in a shared location.

**Note:** Rapid Install is no longer used to create additional Applications nodes. Instead, you will use it to create a single Applications node, allow the Rapid Install session to complete, apply the latest AD and TXK patches to bring the node to the current codelevel, and then run the requisite cloning commands to create as many additional Applications nodes as required. This strategy avoids the need to apply the patches to multiple nodes, thus saving time and effort and reducing the risk of error.


10. Supply Application User Information

**Supply Application User Information**

![Application User Information Screen](image)
11. Review Global Settings

Rapid Install uses the values specified on the Global Settings screen to identify a qualified domain name and to derive port settings that your system will use to connect services and listeners.

12. Review Pre-Install Checks

Rapid Install begins to validate the configuration described by your configuration file. It lists the tests performed on the Pre-Install Checks screen and marks each one with an indication of whether it succeeded or failed.
Pre-Install Checks

The results of each test are labeled using an icon. There are three types:

- **Check (tick) mark**
  The test succeeded. Click the mark to obtain details of the test performed.

- **Exclamation mark (!)**
  The configuration requires review. Click the ! to obtain information from the system test review. Rapid Install alerts you if you continue without resolving the issues.

- **An x mark**
  All issues marked x must be resolved before you continue with the installation. Click the x to see the errors. If you can resolve an issue by fixing the values provided on the settings screen(s), click Back until you reach the appropriate screen, and re-enter the values. Some tests must be resolved in the operating system. In that case, you may have to restart the Rapid Install wizard after the problem has been fixed.
**Important:** The following pre-installation checks are expected to fail if the database is down during creation of the upgrade file system:

- Technology Codelevel
- Database Version
- Database Name Validation
- Database Service Name

You should therefore verify the results of all these tests manually.

When there are no further issues to resolve, click **Next** to continue.

13. **Run Rapid Install**

    Rapid Install lists the actions it will take during the installation process. The content of the list varies, depending on your installation choices.
**Review Components**

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

Rapid Install creates new file systems for the Applications tier, and the 11gR2 Oracle Home for the database.

**Monitor Installation Progress:**

1. **Check progress bars**

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

   **Important:** The installation is not complete until all progress bars have disappeared from your screen.
**Installation Progress**

![Installation Progress Image]

Step 1 of 3

0%

Command: /d1/oracle/FPROD/11.2.0/emp/FPROD_testserver/acsrun11g.sh

0%

Installing Database Oracle Home.

---

2. **Review Post-Install Checks**

When the processing is complete, Rapid Install displays the Post-install Checks screen.

**Post-Install Checks**

![Post-Install Checks Image]

The post-install check inspects your system for a completed installation. The list below shows the tests that were performed and the results. Click on the test icon for details.

This instance passed all of the post-install tests.

- **Upgrade File**

If the test does not succeed, review the errors listed on the screen. Click the Back button.
button to return to the appropriate screens and make corrections as needed. Then click the Retry button.

If there are no errors, click Next. Rapid Install displays a Finish screen that lists the components that it has installed, and describes any steps you need to perform to complete the upgrade. Review the information on this screen, and click Finish to exit Rapid Install.

Continue the Upgrade Tasks:
Return to the Oracle E-Business Suite Upgrade Guide and complete any remaining pre-upgrade, upgrade, and post-upgrade tasks for each machine in your system. When instructed to run Rapid Install to configure and start the server processes, follow the instructions in the next section.

Configuring Application Tier Services
You will now run Rapid Install to configure the application tier services.
Configure an Existing Instance:

When you ran Rapid Install previously, it created and stored an instance-specific context by replacing system variables you entered on the wizard screens with the specific values you saved in the configuration file (config.txt). In this section, you point Rapid Install to the Applications context file, so that it can use the values there to complete the process of configuring your system.

First, ensure that the database and Net Services listeners are started. Then start Rapid Install as instructed in Start the Rapid Install wizard, page 4-4.

1. Configure services

   On the Select Wizard Operation screen, choose the Upgrade to Oracle Applications 12.2.0 option to indicate you are performing an upgrade. This displays the Select Upgrade Action screen.
Select Upgrade Action

On this screen, select **Configure Upgraded Release 12.2.0 Instance** to indicate that you want to configure the services for the upgraded database.

2. Indicate name and location of context file

When you ran Rapid Install previously, it configured your system by replacing system variables you entered on the wizard screens with the specific values you saved in the configuration file (config.txt). It stored this information as an Applications context file called `<CONTEXT_NAME>.xml`. Complete the directory path to point Rapid Install to the File System 1 Applications context file, `$INST_TOP>/appl/admin/<CONTEXT_NAME>.xml`. For example, `/u01/R122_EBS/fs1/inst/apps/<CONTEXT_NAME>/appl/admin/<CONTEXT_NAME>.xml`. You may either enter the path directly in the box, or click **Browse** and select the path.

**Note:** See the Technical Configuration chapter in *Oracle E-Business Suite Concepts*. 
Click Next to continue.

3. Run pre-install checks

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

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

![Validate System Configuration screen](image)

4. Begin the configuration process

For security reasons, the APPS password is not saved in the context file, so you will be prompted to re-enter it on the Review Application User Information screen. See Enter passwords, page 4-12 for details. Click Next.

Rapid Install notifies you of the components and processes it will configure. Click Next to continue. At the prompt about beginning the installation now, click Yes.

When the process is complete, Rapid Install displays a screen that shows you the steps that were performed:
Performing an Upgrade

Click Finish to exit Rapid Install. This phase of the upgrade is now complete.

What To Do Next

You now need to carry out required post-upgrade tasks.

1. After you have completed the steps in this chapter, return to 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 Release 12.2 and complete the remaining applicable steps.


For more information on obtaining and applying the latest release update pack, refer to My Oracle Knowledge Support Document 1320300.1, Oracle E-Business Suite Release Notes, Release 12.2. You may also refer to Document 1583092.1, Oracle E-Business Suite Release 12.2: Suite-Wide Rollup and AD/TXK Delta Information. For instructions on applying the release update pack, refer to the corresponding Oracle

**Note:** We strongly recommend installing the latest Oracle E-Business Suite release update pack, to take advantage of new features and fixes. Therefore, 12.2.4 is recommended over 12.2.3, and 12.2.5 is recommended over 12.2.4.

3. As well as applying the latest Oracle E-Business Suite release update pack, you should bring your system to the latest AD-TXK codelevel by following the relevant instructions in My Oracle Support Knowledge Document 1617461.1, Applying the Latest AD and TXK Release Update Packs to Oracle E-Business Suite Release 12.2.

4. After the upgrade is complete and all requisite release update packs have been installed, you can use standard cloning commands to create additional Applications nodes and thereby scale up to your desired system. Refer to the My Oracle Support knowledge documents listed in the 'Upgrade Strategies' section at the start of this chapter.

5. Refer to the Finishing Tasks, page 5-1 chapter of this book and carry out the actions that apply to your upgraded system.
Certain tasks are necessary to finish a new installation, an upgrade, or a technology stack installation for Oracle E-Business Suite Release 12. There are also other tasks that may be required only for systems with specific functionality. This chapter discusses required and conditional tasks.

This chapter covers the following topics:

- Required Tasks for All New Installations
- Conditional Tasks for New Installations
- Back Up Oracle E-Business Suite

**Required Tasks for All New Installations**

The tasks in this section are required to complete the installation process that was started by running Rapid Install. You must complete every task in this section.

**Log in to Oracle E-Business Suite**

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 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 E-Business Suite Login Page](image)

After your credentials have been validated, the Oracle E-Business Suite Home Page appears. From this page you can access responsibilities for any of the individual Oracle E-Business Suite products your organization has licensed.
The system administrator should log in using the SYSADMIN account mentioned above, and use the System Administrator responsibility to launch an Applications Forms session and perform further implementation steps.

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

### Change Default Passwords

As described in Chapter 2, Oracle recommends changing the default passwords for the accounts shown on the Application User Information screen. If you did not do so, 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`.

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

**Check Value of Context Variable s_adminservertimeout**

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 executed.

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.

### Run AutoConfig

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.

### Create Your Own JAR File Signature

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.

Related bugs: 16077170, 15993738.

### Configure Database Initialization Parameters

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 Applications Release 12*. Refer to this document when planning to update parameter
settings to meet the specific requirements of your system.

**Update PL/SQL Log and Out Directory**

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 specified in the `utl_file_dir` parameter of the database initialization file, 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.

Enter your choice of directory as the new value for `utl_file_dir` in the database initialization parameter file. Then use the edit AutoConfig parameters feature of Oracle Applications Manager to update the `APPLPTMP` variable in the Applications context file with the new `utl_file_dir` directory location. Finally, run AutoConfig to recreate the environment files.

**Implement Product and Country-Specific Functionality**

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, user's guides, or My Oracle Support for details.

**Check Client Software For Use With Forms Applet**

The connection between the client and the E-Business Suite forms is provided through an applet in the client Web browser.

*Note:* 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 Applications 12*.

Instead of using the browser's own JVM, Oracle E-Business Suite Release 12 uses the Sun *Java Runtime Engine* (JRE). This component is invoked when a user accesses a function 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. JRE replaces Oracle JInitiator, which was used in Release 11i.

*Note:* For further details of using JRE with Oracle E-Business Suite, see My Oracle Support Knowledge Document 393931.1, *Upgrading JRE Plugin with Oracle Applications R12*. 


Set Up Printers

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 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.

Note: For more information about setting up printers, see Oracle E-Business Suite Setup Guide.

Understand System Administration and Maintenance Tasks

You should be familiar with the content of Oracle E-Business Suite Setup Guide and Oracle E-Business Suite Maintenance Guide. These books contain important information about system administration and maintenance tasks. They also describe the associated tools and utilities.
Conditional Tasks for New Installations

You may need to carry out some of the tasks in this section to meet site or product-specific requirements. Perform all that apply to your newly installed Oracle E-Business Suite system.

Resize the Database

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.

Configure Parallel Concurrent Processing

Parallel Concurrent Processing allows you to distribute concurrent managers across multiple nodes. If you chose to enable load balancing for Concurrent Processing servers during the Rapid Install process, you must complete additional setup steps. For more information, see Managing Parallel Concurrent Processing in Oracle E-Business Suite Setup Guide.

Configure Forms Socket Mode

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.

Set Up National Language Support (NLS)

In Oracle E-Business Suite Release 12.2.0, Rapid install only installs American English. If you plan to use languages other than American English in your installation, read the information in the Oracle E-Business Suite NLS Release Notes, and complete the necessary steps for installing the translated software.


To use additional languages, you must first activate the additional languages via the License Manager utility (within Oracle Applications Manager), and, if required, change the base language.

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.

**Note:** For details of running the AD Administration utility, see *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.

**Note:** For further details of using additional languages, see My Oracle Support Knowledge Document 393320.1, *Internationalization Update Notes for Release 12*. For details of translation scope, see My Oracle Support Knowledge Document 405992.1, *Oracle Applications Release 12 Translation Scope and Availability*.

Oracle E-Business Suite Release 12.2.0 software is translated to the following languages and associated language codes:

**Supported Languages and Language Codes**

<table>
<thead>
<tr>
<th>Language</th>
<th>Language Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>AR</td>
</tr>
<tr>
<td>Brazilian Portuguese</td>
<td>PTB</td>
</tr>
<tr>
<td>Canadian French</td>
<td>FRC</td>
</tr>
<tr>
<td>Croatian</td>
<td>HR</td>
</tr>
<tr>
<td>Cyrillic Serbian</td>
<td>CSR</td>
</tr>
<tr>
<td>Czech</td>
<td>CS</td>
</tr>
<tr>
<td>Danish</td>
<td>DK</td>
</tr>
<tr>
<td>Dutch</td>
<td>NL</td>
</tr>
<tr>
<td>Finnish</td>
<td>SF</td>
</tr>
<tr>
<td>Language</td>
<td>Language Code</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>French</td>
<td>F</td>
</tr>
<tr>
<td>German</td>
<td>D</td>
</tr>
<tr>
<td>Greek</td>
<td>EL</td>
</tr>
<tr>
<td>Hebrew</td>
<td>IW</td>
</tr>
<tr>
<td>Hungarian</td>
<td>HU</td>
</tr>
<tr>
<td>Indonesian</td>
<td>IN</td>
</tr>
<tr>
<td>Italian</td>
<td>I</td>
</tr>
<tr>
<td>Japanese</td>
<td>JA</td>
</tr>
<tr>
<td>Korean</td>
<td>KO</td>
</tr>
<tr>
<td>Latin American Spanish</td>
<td>ESA</td>
</tr>
<tr>
<td>Latin Serbian</td>
<td>LSR</td>
</tr>
<tr>
<td>Lithuanian</td>
<td>LT</td>
</tr>
<tr>
<td>Norwegian</td>
<td>N</td>
</tr>
<tr>
<td>Polish</td>
<td>PL</td>
</tr>
<tr>
<td>Portuguese</td>
<td>PT</td>
</tr>
<tr>
<td>Romanian</td>
<td>RO</td>
</tr>
<tr>
<td>Russian</td>
<td>RU</td>
</tr>
<tr>
<td>Simplified Chinese</td>
<td>ZHS</td>
</tr>
<tr>
<td>Slovak</td>
<td>SK</td>
</tr>
<tr>
<td>Slovenian</td>
<td>SL</td>
</tr>
<tr>
<td>Language</td>
<td>Language Code</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Spanish</td>
<td>E</td>
</tr>
<tr>
<td>Swedish</td>
<td>S</td>
</tr>
<tr>
<td>Thai</td>
<td>TH</td>
</tr>
<tr>
<td>Traditional Chinese</td>
<td>ZHT</td>
</tr>
<tr>
<td>Turkish</td>
<td>TR</td>
</tr>
<tr>
<td>Ukrainian</td>
<td>UK</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>VN</td>
</tr>
</tbody>
</table>

**Set Up Unicode Character Sets**

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.


**Complete Workflow Notification Mailer Configuration**

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.

   **Note:** For more information, see: Notification Mailers in Oracle Workflow Administrator’s Guide.

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**Set Up and Implement Discoverer End User Layer (EUL)**


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**Convert to a Public Sector, Education, or Not-for-Profit System**

Rapid Install sets up products for commercial or for-profit use.

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 *Oracle E-Business Suite Maintenance Guide* for information on registering products.

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**Convert Database to Multiple Organizations**

The Rapid Install Vision Demo database is enabled for Multiple Organizations. However, the production and test databases are not. If you want the Multiple Organizations architecture in the production or test environments, refer to the instructions for converting to Multiple Organizations in *Oracle E-Business Suite Maintenance Guide*. 
Note: For more information, see Multiple Organization Architecture in Oracle E-Business Suite Concepts.

Back Up Oracle E-Business Suite

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.
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.

**Note:** See Applications File System in *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

<table>
<thead>
<tr>
<th>Input Field Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database OS User (UNIX)</td>
<td>The operating system user that owns the Oracle technology stack (including the database).</td>
</tr>
<tr>
<td>Database OS Group (UNIX)</td>
<td>The Oracle OS user must belong to this group.</td>
</tr>
<tr>
<td>Base Install directory</td>
<td>The top-level directory that Rapid Install uses to install the RDBMS. All subdirectories (mount points) associated with the RDBMS are derived from this directory.</td>
</tr>
<tr>
<td>Oracle Home</td>
<td>The location of the 11gR2 database Oracle Home, which contains files for running and maintaining the RDBMS.</td>
</tr>
<tr>
<td>Data Top (SYS)</td>
<td>Derived from the Base Install directory, this is the mount point for all database system files.</td>
</tr>
<tr>
<td>Data Top (LOG)</td>
<td>Derived from the Base Install directory, this is the mount point for all database log files.</td>
</tr>
<tr>
<td>Data Top (TXN)</td>
<td>Derived from the Base Install directory, this is the mount point for all transaction data and index files.</td>
</tr>
<tr>
<td>Data Top (ARCHIVE)</td>
<td>Derived from the Base Install directory, this is the mount point for all archive, media, advanced queue, summary, and undo files.</td>
</tr>
</tbody>
</table>

**Note:** For more information, see Tablespace Management in Oracle E-Business Suite Concepts.

### Applications Node Parameters

This section lists and describes the fields on the Applications node screens in the Rapid Install wizard. You enter configuration details for these nodes (one or more) on the Primary Applications Node Configuration screen.
### Applications Node Install Information

<table>
<thead>
<tr>
<th>Input Field Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Display (UNIX)</td>
<td>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.</td>
</tr>
<tr>
<td>UNIX Toolkit Directory (Windows)</td>
<td>Location of MKS tools. Used for relinking executables and DLLs.</td>
</tr>
<tr>
<td>Visual Studio Directory (Windows)</td>
<td>Location of the Microsoft Visual C/C++ executables and DLLs. Used for linking executables or DLLs.</td>
</tr>
<tr>
<td>Apps OS User (UNIX)</td>
<td>The operating system user that owns the Oracle E-Business Suite file system and Applications node technology stack.</td>
</tr>
<tr>
<td>Apps OS Group (UNIX)</td>
<td>The group to which the Apps OS User belongs.</td>
</tr>
<tr>
<td>Base Install directory</td>
<td>The top-level directory that Rapid Install uses to install the Applications node technology stack. All subdirectory names are derived from this directory.</td>
</tr>
<tr>
<td>Instance directory</td>
<td>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.</td>
</tr>
</tbody>
</table>
### Input Field Name Definition

<table>
<thead>
<tr>
<th>Input Field Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMON_TOP</td>
<td>Holds directories for files used across products or in conjunction with third-party products, including:</td>
</tr>
<tr>
<td></td>
<td>• 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.</td>
</tr>
<tr>
<td></td>
<td>• html - Contains files used by html-based products such as JSP files, java scripts, xml files, and style sheets.</td>
</tr>
<tr>
<td></td>
<td>• java - Location of all JAR files. Also holds third-party Java files and other zip files.</td>
</tr>
<tr>
<td></td>
<td>• temp - Used for caching by certain processes such as Oracle Reports.</td>
</tr>
<tr>
<td>Tools ORACLE_HOME</td>
<td>The OracleAS 10.1.2.3 ORACLE_HOME directory, used for the Developer 10g products (Forms and Reports).</td>
</tr>
<tr>
<td>Web ORACLE_HOME</td>
<td>The Oracle Fusion Middleware ORACLE_HOME directory, used for the Oracle HTTP Server.</td>
</tr>
<tr>
<td>Temp Directory</td>
<td>Contains temporary files. This directory is not used during installation.</td>
</tr>
</tbody>
</table>

### 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.
Global Settings Information

<table>
<thead>
<tr>
<th>Input Field Name</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain Name</td>
<td>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 apps1 and domain name of example.com make up an FQDN of apps1.example.com.</td>
</tr>
<tr>
<td>Port Pool</td>
<td>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.</td>
</tr>
<tr>
<td>Database Port</td>
<td>Net Services Listener port that receives requests from the various servers for processing in the Oracle Database.</td>
</tr>
</tbody>
</table>

Log Files

Rapid Install saves the log files associated with the installation or upgrade. Named <timestamp>.log, they are located as follows.

Database tier log files  
<APPS_BASE>/db/tech_st/11.2.0/appsutil/log/<CONTEXT_NAME>

Applications tier log files  
<APPS_BASE>/fs1/inst/apps/<CONTEXT_NAME>/logs. For example, /u01/R122_EBS/fs1/inst/apps/<CONTEXT_NAME>/appl/admin/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 11gR2 (11.2.0). 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.

**Note:** 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

<table>
<thead>
<tr>
<th>Tablespace</th>
<th>Description</th>
<th>Size (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPS_TS_ARCHIVE</td>
<td>Tables that contain archived purge-related data</td>
<td>866</td>
</tr>
<tr>
<td>APPS_TS_INTERFACE</td>
<td>Interface and temporary data and indexes</td>
<td>1041</td>
</tr>
<tr>
<td>APPS_TS_MEDIA</td>
<td>Multimedia objects, such as text, video, sound, graphics, and spatial data</td>
<td>1551</td>
</tr>
<tr>
<td>APPS_TS_NOLOGGING</td>
<td>Materialized views not used for summary management and temporary objects</td>
<td>64</td>
</tr>
<tr>
<td>APPS_TS_QUEUES</td>
<td>Advanced Queuing and dependent tables and indexes</td>
<td>1000</td>
</tr>
<tr>
<td>APPS_TS_SEED</td>
<td>Reference and setup data and indexes</td>
<td>3118</td>
</tr>
<tr>
<td>APPS_TS_SUMMARY</td>
<td>Summary management objects, such as materialized views, fact tables, and other objects that record summary information</td>
<td>1146</td>
</tr>
<tr>
<td>APPS_TSTOOLS</td>
<td>Tools tablespace</td>
<td>500</td>
</tr>
<tr>
<td>Tablespace</td>
<td>Description</td>
<td>Size (MB)</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>APPS_TS_TX_DATA</td>
<td>Tables that contain transactional data</td>
<td>6667</td>
</tr>
<tr>
<td>APPS_TS_TX_IDX</td>
<td>Indexes on transaction tables</td>
<td>9113</td>
</tr>
<tr>
<td>APPS_UNDOTS1</td>
<td>Automatic Undo Management (AUM) tablespace. UNDO segments are same as ROLLBACK segments when AUM is enabled</td>
<td>1752</td>
</tr>
<tr>
<td>CTXD</td>
<td>Oracle interMedia</td>
<td>21</td>
</tr>
<tr>
<td>ODM</td>
<td>Oracle Data Mining</td>
<td>12</td>
</tr>
<tr>
<td>OLAP</td>
<td>OLAP</td>
<td>17</td>
</tr>
<tr>
<td>OWAPUB</td>
<td>Oracle Application Server</td>
<td>10</td>
</tr>
<tr>
<td>PORTAL</td>
<td>Oracle Portal</td>
<td>100</td>
</tr>
<tr>
<td>SYSAUX</td>
<td>Stores auxiliary database metadata related to Oracle options and features</td>
<td>573</td>
</tr>
<tr>
<td>SYSTEM</td>
<td>System tablespace used by the Oracle database</td>
<td>13465</td>
</tr>
<tr>
<td>TEMP</td>
<td>Temporary tablespace</td>
<td>2124</td>
</tr>
</tbody>
</table>

**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 multi-node 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**

<table>
<thead>
<tr>
<th>Tablespace</th>
<th>Description</th>
<th>Size (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPS_TS_ARCHIVE</td>
<td>Tables that contain archived purge-related data</td>
<td>478</td>
</tr>
<tr>
<td>APPS_TS_INTERFACE</td>
<td>Interface and temporary data and indexes</td>
<td>1641</td>
</tr>
<tr>
<td>APPS_TS_MEDIA</td>
<td>Multimedia objects, such as text, video, sound, graphics, and spatial data</td>
<td>5124</td>
</tr>
<tr>
<td>APPS_TS_NOLOGGING</td>
<td>Materialized views not used for summary management and temporary objects</td>
<td>725</td>
</tr>
<tr>
<td>APPS_TS_QUEUES</td>
<td>Advanced Queuing and dependent tables and indexes</td>
<td>2200</td>
</tr>
<tr>
<td>APPS_TS_SEED</td>
<td>Reference and setup data and indexes</td>
<td>2850</td>
</tr>
<tr>
<td>APPS_TS_SUMMARY</td>
<td>Summary management objects, such as materialized views, fact tables, and other objects that record summary information</td>
<td>13324</td>
</tr>
<tr>
<td>APPS_TS_TX_DATA</td>
<td>Tables that contain transactional data</td>
<td>53500</td>
</tr>
<tr>
<td>APPS_TS_TX_IDX</td>
<td>Indexes on transaction tables</td>
<td>41024</td>
</tr>
<tr>
<td>APPS_UNDOTS1</td>
<td>Automatic Undo Management (AUM) tablespace. UNDO segments are identical to ROLLBACK segments when AUM is enabled</td>
<td>5188</td>
</tr>
<tr>
<td>CTXSYS</td>
<td>Oracle interMedia</td>
<td>2</td>
</tr>
<tr>
<td>ODM_DATA</td>
<td>Oracle Data Mining</td>
<td>30</td>
</tr>
</tbody>
</table>
### Tablespace Description

<table>
<thead>
<tr>
<th>Tablespace</th>
<th>Description</th>
<th>Size (MB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYSTEM</td>
<td>System tablespace used by the Oracle database</td>
<td>20500</td>
</tr>
<tr>
<td>TEMP</td>
<td>Temporary tablespace</td>
<td>2124</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Operating Unit</th>
<th>Username/Password</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision Operations</td>
<td>APPS/APPS</td>
</tr>
<tr>
<td>Vision Corporation</td>
<td>APPS/APPS</td>
</tr>
<tr>
<td>Vision Industries</td>
<td>APPS/APPS</td>
</tr>
<tr>
<td>Vision Services</td>
<td>APPS/APPS</td>
</tr>
<tr>
<td>Vision Project Manufacturing</td>
<td>APPS/APPS</td>
</tr>
<tr>
<td>Vision ADB</td>
<td>APPS/APPS</td>
</tr>
</tbody>
</table>

**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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