Oracle® Fusion Middleware

Installation Planning Guide 11*g* Release 1 (11.1.1) **B32474-08**

July 2010



Oracle Fusion Middleware Installation Planning Guide 11g Release 1 (11.1.1)

B32474-08

Copyright © 2010, Oracle and/or its affiliates. All rights reserved.

Primary Author: Kevin Hwang

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Preface	vi
Intended Audience	vi
Documentation Accessibility	vii
Related Documents	viii
Conventions	viii

1 Understanding Your Installation Starting Point

Starting as a New Oracle Fusion Middleware User	1-1
Create Database Schemas	1-2
Install Oracle WebLogic Server	1-2
Install Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Products	1-2
Update Your Products to 11g Release 1 (11.1.1.3.0)	1-3
Configure Your Products and Create the WebLogic Domains	1-4
Starting with Oracle Application Server 10g	1-4
Starting with Oracle Fusion Middleware 11g (11.1.1.10)	1-4
Update Oracle WebLogic Server	1-5
Install Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Products	1-5
Update Your Existing Software	1-6
Update Your Database Schemas	1-6
Starting with Oracle Fusion Middleware 11g (11.1.1.2.0)	1-6
Update WebLogic Server	1-6
Update Your Database Schemas	1-7
	Create Database Schemas Install Oracle WebLogic Server Install Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Products Update Your Products to 11g Release 1 (11.1.1.3.0) Configure Your Products and Create the WebLogic Domains Starting with Oracle Application Server 10g Starting with Oracle Fusion Middleware 11g (11.1.1.1.0) Update Oracle WebLogic Server Install Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Products Update Your Existing Software Update Your Existing Software Update Your Database Schemas

2 Oracle Fusion Middleware Concepts

2.1	Oracle Fusion Middleware Concepts	2-1
2.2	Oracle Fusion Middleware Directory Structure	2-1
2.2.1	Middleware Home and WebLogic Home Directories	2-1
2.2.2	Oracle Home and Oracle Common Home Directories	2-2
2.2.2.1	Creating the Product Oracle Home	2-2
2.2.2.2	Creating the Oracle Common Home	2-2
2.2.2.3	Checking Port Numbers Across Multiple Oracle Homes	2-2
2.2.3	WebLogic Domain	2-3
2.2.4	Multiple Products with Multiple WebLogic Domains	2-3
2.2.4.1	Notes for Creating Multiple Domains	2-4

2.2.4.2	Additional Information for Multiple Products and Multiple Domains	2-4
2.2.5	Extending an Existing Domain	2-4
2.2.6	Oracle Instance and WebLogic Domain	2-5

3 Common Installation Tasks

3.1	Before You Begin	3-1
3.1.1	Review System Requirements and Specifications	3-1
3.1.2	Review Certification Information	3-2
3.1.3	Read and Understand Oracle Fusion Middleware Concepts	3-2
3.1.4	Obtain the Oracle Fusion Middleware Software	3-2
3.1.5	Install Oracle WebLogic Server	3-2
3.1.6	Install and Configure a Database	3-3
3.1.7	Create Operating System Users for IBM DB2 Databases	3-3
3.2	Installing and Configuring Java Access Bridge (Windows Only)	3-4
3.3	Installing on DHCP Hosts	3-4
3.3.1	For Linux x86 Platforms	3-4
3.3.2	For Windows x86 Platforms	3-4
3.3.3	Installing a Loopback Adapter (Windows Only)	3-4
3.3.4	Removing a Loopback Adapter (Windows Only)	3-5
3.4	Installing on a Non-Networked Computer	3-6
3.5	Installing on a Multihomed Computer	3-6
3.6	Creating and Starting Managed Servers on a Remote Machine	3-6

4 Silent Oracle Fusion Middleware Installation and Deinstallation

4.1	What is a Silent Installation?	
4.2	Response Files	. 4-2
4.2.1	Creating a Response FIle	. 4-2
4.2.2	Sample Response Files	. 4-2
4.2.3	Securing Your Response Files for Silent Installation	. 4-2
4.3	Pre-Installation Tasks	. 4-2
4.3.1	UNIX Users: Creating the oraInst.loc File	. 4-3
4.3.2	Windows Users: Creating the Registry Key	
4.4	Silent Database Schema Creation	. 4-3
4.5	Silent Oracle WebLogic Server Installation	. 4-3
4.6	Silent Product Installation	. 4-4
4.6.1	Sample Silent Install Commands	. 4-6
4.6.2	Sample Silent Install Output	. 4-6
4.7	Silent Product Configuration	. 4-7
4.7.1	System Components	. 4-7
4.7.2	Java Components	. 4-8
4.8	Silent Product Deinstallation	. 4-8
4.8.1	Command Line Parameters for Silent Deinstallation	. 4-8
4.8.2	Sample Silent Deinstall Output	4-10

Index

Preface

The Oracle Fusion Middleware Installation Planning Guide covers common Oracle Fusion Middleware concepts that affect installation, installation procedures, and troubleshooting.

Intended Audience

This guide is intended for users who are installing Oracle Fusion Middleware products for the first time and are comfortable running some system administration operations, such as creating users and groups, adding users to groups, and installing operating system patches on the computer where the products are going to be installed. Users on UNIX systems who are installing Oracle Fusion Middleware need root access to run some scripts.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at http://www.oracle.com/accessibility/.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Deaf/Hard of Hearing Access to Oracle Support Services

To reach Oracle Support Services, use a telecommunications relay service (TRS) to call Oracle Support at 1.800.223.1711. An Oracle Support Services engineer will handle technical issues and provide customer support according to the Oracle service request process. Information about TRS is available at

http://www.fcc.gov/cgb/consumerfacts/trs.html, and a list of phone numbers is available at http://www.fcc.gov/cgb/dro/trsphonebk.html.

Related Documents

For additional information, see the following manuals:

- Oracle Fusion Middleware Repository Creation Utility User's Guide
- Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite
- Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server
- Oracle Fusion Middleware Installation Guide for Oracle SOA Suite
- Oracle Fusion Middleware Installation Guide for Oracle WebCenter
- Oracle Fusion Middleware Installation Guide for Oracle Identity Management
- Oracle Fusion Middleware Installation Guide for Oracle Portal, Forms, Reports and Discoverer
- Oracle Fusion Middleware Installation Guide for Oracle Web Tier
- Oracle Application Server Administrator's Guide
- Oracle Fusion Middleware Concepts
- Oracle Fusion Middleware High Availability Guide

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Understanding Your Installation Starting Point

Oracle Fusion Middleware is a collection of standards-based software products that spans a range of tools and services from J2EE and developer tools, to integration services, business intelligence, collaboration, and content management. Oracle Fusion Middleware offers complete support for development, deployment, and management.

This guide provides important information about preparing your system and instructions for obtaining the latest version of Oracle Fusion Middleware, which is 11g Release 1 (11.1.1.3.0). The procedures you will need to follow will vary depending on the configuration of your existing system.

Find the starting point that best describes your current environment and go to that section for more information:

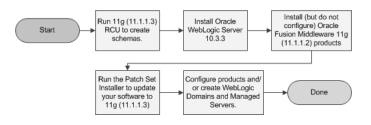
- Section 1.1, "Starting as a New Oracle Fusion Middleware User"
- Section 1.2, "Starting with Oracle Application Server 10g"
- Section 1.3, "Starting with Oracle Fusion Middleware 11g (11.1.1.1.0)"
- Section 1.4, "Starting with Oracle Fusion Middleware 11g (11.1.1.2.0)"

1.1 Starting as a New Oracle Fusion Middleware User

You cannot install the 11g Release (11.1.1.3.0) products directly, as the installers for this release are designed only to patch an existing installation. Therefore, you must install the latest full versions of your product, which are available in 11g Release 1 (11.1.1.2.0). Then you must patch your installation to update your software to the latest version.

Figure 1–1 illustrates the overall installation and configuration flow.

Figure 1–1 11g (11.1.1.3.0) Install Flow for New Oracle Fusion Middleware Users



Note: If you are installing Oracle Fusion Midleware Release 11.1.1.3.0 on a SUSE11 Linux platform, take note of the following:

The SUSE11 Linux platform is only supported for Release 11.1.1.3.0 and later. Because you must first install Release 11.1.1.2.0 (which does not support SUSE11) and then patch your software to Release 11.1.1.3.0, you must start the Release 11.1.1.2.0 installer with the -ignoreSysPreregs option from the command line.

1.1.1 Create Database Schemas

Installation of most Oracle Fusion Middleware products requires the availability of a database (only Oracle Web Tier does not require a database). This database must be up and running, and does not have to be on the same system where you are installing the components. The database must also be compatible with Repository Creation Utility (RCU), which is used to create the schemas necessary for your Oracle Fusion Middleware components.

Note: RCU is available only on 32-bit Linux and Windows platforms. Either the Linux RCU or Windows RCU may be used to create schemas on any supported database platform.

For information about which databases are certified for use with Oracle Fusion Middleware and RCU, and important database configuration information, see "RCU System and Database Requirements" in *Oracle Fusion Middleware Repository Creation Utility User's Guide*.

After your database is installed and configured, run the latest version of RCU to create your schemas. For instructions, see "Creating Schemas" in *Oracle Fusion Middleware Repository Creation Utility User's Guide*.

1.1.2 Install Oracle WebLogic Server

Installation of all Oracle Fusion Middleware products requires the presence of an Oracle Middleware home directory, which can be created by installing Oracle WebLogic Server.

To determine the version of WebLogic Server required for your installation, refer to "Oracle WebLogic Server Information" in the System Requirement and Specifications document:

http://www.oracle.com/technology/software/products/ias/files/fusion_ requirements.htm

You should be installing the latest available version or Oracle WebLogic Server. For installation instructions, refer to "Running the Installation Program in Graphical Mode" in *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*.

1.1.3 Install Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Products

After the schemas and Oracle WebLogic Server are installed, you are ready to install your Oracle Fusion Middleware products.

Note: You must install but do not configure the 11*g* Release 1 (11.1.1.2.0) version of your product. You should only configure your products after you have run the Patch Set Installer and updated your software to the latest version.

For Fusion Middleware products with Java components (for example, Oracle SOA Suite and Oracle WebCenter), this means running the installer but not running the Fusion Middleware Configuration Wizard until after you have updated your software with the Patch Set Installer.

For Fusion Middleware products with system components (for example, Oracle Identity Management or Oracle Portal, Forms, Reports and Discoverer) you should select the **Install Software - Do Not Configure** installation type on the Select Installation Type screen.

If you happen to configure your products before you upgrade your software to the latest version, you must follow the instructions in Section 1.4, "Starting with Oracle Fusion Middleware 11g (11.1.1.2.0)" in order to properly upgrade and configure your software.

Table 1–1 lists the Oracle Fusion Middleware product along with its corresponding installation guide. Follow the instructions in the installation guide to install your products:

Product	Install Guide
Oracle SOA Suite	Oracle Fusion Middleware Installation Guide for Oracle SOA Suite
Oracle WebCenter	Oracle Fusion Middleware Installation Guide for Oracle WebCenter
Oracle Application Developer	Oracle Fusion Middleware Installation Guide for Application Developer
Oracle Web Tier	Oracle Fusion Middleware Installation Guide for Oracle Web Tier
Oracle Portal, Forms, Reports and Discoverer	Oracle Fusion Middleware Installation Guide for Oracle Portal, Forms, Reports and Discoverer
Oracle Identity Management	Oracle Fusion Middleware Installation Guide for Oracle Identity Management
Oracle Enterprise Content Management Suite	Oracle Fusion Middleware Installation Guide for Oracle Enterprise Content Management Suite

Table 1–1 Oracle Fusion Middleware Products and Corresponding Install Guides

1.1.4 Update Your Products to 11g Release 1 (11.1.1.3.0)

Run the Patch Set Installer to update your software to the latest version. For instructions, see "Applying the Latest Oracle Fusion Middleware Patch Set" in *Oracle Fusion Middleware Patching Guide*.

Note: If you are a new Oracle Fusion Middleware user, you should only read the following sections in this chapter:

- "Summary of the Patch Set Installation Process"
- "Before You Begin"
- "Download and Start the Patch Set Installer"
- "Patch Set Installer Instructions"

After completing these sections, you should skip to Section 1.1.5, "Configure Your Products and Create the WebLogic Domains".

Note: Oracle Fusion Middleware 11*g* Release 1 (11.1.1.3.0) includes a new product: Oracle Business Process Management Suite. This product is installed when you run the Patch Set Installer for Oracle SOA Suite.

1.1.5 Configure Your Products and Create the WebLogic Domains

After your product is installed, you must configure them for use. For system components, you can run the OUI-based Configuration Tool to create a WebLogic Domain, Oracle instances and Managed Servers. For Java components, you can run the Fusion Middleware Configuration Wizard to create your WebLogic Domain, Administration Server, and various Managed Servers.

Instructions for running the Configuration Tool for system components can be found in the various product installation guides (see Table 1–1).

Information about creating domains and Managed Servers with the Configuration Wizard can be found in *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard*.

1.2 Starting with Oracle Application Server 10g

For information on upgrading from Oracle Application Server 10*g* to Oracle Fusion Middleware 11*g* Release 1 (11.1.1.3.0), refer to the *Oracle Fusion Middleware Upgrade Planning Guide*, as well as the other upgrade guides in the Oracle Fusion Middleware 11*g* documentation library:

- Oracle Fusion Middleware Upgrade Guide for Java EE
- Oracle Fusion Middleware Upgrade Guide for Oracle Portal, Forms, Reports, and Discoverer
- Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management
- Oracle Fusion Middleware Upgrade Guide for Oracle SOA Suite, WebCenter, and ADF
- Oracle Fusion Middleware Upgrade Guide for Oracle WebCenter Suite

1.3 Starting with Oracle Fusion Middleware 11g (11.1.1.1.0)

Figure 1–2 illustrates the overall installation and configuration flow.

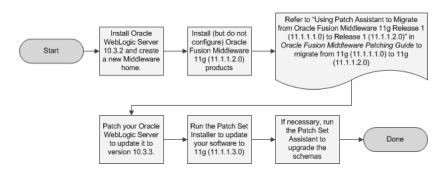


Figure 1–2 11g (11.1.1.3.0) Install Flow for Existing 11g (11.1.1.1.0) Users

1.3.1 Update Oracle WebLogic Server

You must first update the version of Oracle WebLogic Server on your system to 10.3.2. In order to update your WebLogic Server, you must have a My Oracle Support account. If you have Oracle WebLogic Server version 10.3.0 or 10.3.1, there are two ways for you to update your WebLogic Server to 10.3.2:

- Use the Smart Update tool. For more information, see "Downloading and Installing Maintenance Packs" in Oracle Smart Update Installing Patches and Maintenance Packs.
- Use the upgrade installers. For more information, see "Downloading an Upgrade Installer From My Oracle Support" in Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server.

Note: This link will take you to a document in the Release 11.1.1.3.0 documentation library. The instructions, however, are applicable for updating your Oracle WebLogic Server to 10.3.2, which is the version supported in Release 11.1.1.2.0.

If you have Oracle WebLogic Server version 10.2.x or earlier, then you must refer to the upgrade instructions in *Oracle Fusion Middleware Upgrade Guide for Oracle WebLogic Server*.

1.3.2 Install Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Products

You cannot install the 11g Release (11.1.1.3.0) products directly, as the installers for this release are designed only to patch an existing installation. Therefore, you must install the latest full versions of your product, which are available in 11g Release 1 (11.1.1.2.0).

Table 1–1 lists the Oracle Fusion Middleware product along with its corresponding installation guide. Follow the instructions in the installation guide to install your products:

Product	Install Guide
Oracle SOA Suite	Oracle Fusion Middleware Installation Guide for Oracle SOA Suite
Oracle WebCenter	Oracle Fusion Middleware Installation Guide for Oracle WebCenter
Oracle Application Developer	Oracle Fusion Middleware Installation Guide for Application Developer

Table 1–2 Oracle Fusion Middleware Products and Corresponding Install Guides

Product	Install Guide
Oracle Web Tier	Oracle Fusion Middleware Installation Guide for Oracle Web Tier
Oracle Portal, Forms,	Oracle Fusion Middleware Installation Guide for Oracle Portal,
Reports and Discoverer	Forms, Reports and Discoverer
Oracle Identity	Oracle Fusion Middleware Installation Guide for Oracle Identity
Management	Management
Oracle Enterprise Content	Oracle Fusion Middleware Installation Guide for Oracle Enterprise
Management Suite	Content Management Suite

 Table 1–2 (Cont.) Oracle Fusion Middleware Products and Corresponding Install Guides

1.3.3 Update Your Existing Software

Use the Patch Set Installer to update your existing software to the latest version. Refer to "Applying the Latest Oracle Fusion Middleware Patch Set with the Patch Set Installers" in *Oracle Fusion Middleware Patching Guide* for instructions.

Note: Oracle Fusion Middleware 11g Release 1 (11.1.1.3.0) includes a new product: Oracle Business Process Management Suite. This product is installed when you run the Patch Set Installer for Oracle SOA Suite.

1.3.4 Update Your Database Schemas

If you are updating any software that uses one or more of the following schemas, you must run the Patch Set Assistant to upgrade the existing schemas in your database from version 11.1.1.2.0 to version 11.1.1.3.0:

- Oracle Portal (PORTAL)
- Oracle Identity Management (OID)
- SOA Infrastructure (SOAINFRA)
- Audit Services (IAU)

For instructions, refer to "Updating Your Schemas with Patch Set Assistant" in *Oracle Fusion Middleware Patching Guide*.

1.4 Starting with Oracle Fusion Middleware 11g (11.1.1.2.0)

Figure 1–3 illustrates the overall installation and configuration flow.

Figure 1–3 11g (11.1.1.3) Install Flow for Existing 11g (11.1.1.2.0) Users



1.4.1 Update WebLogic Server

You must first update the version of Oracle WebLogic Server on your system to 10.3.3. In order to update your WebLogic Server, you must have a My Oracle Support account. If you have Oracle WebLogic Server version 10.3.0, 10.3.1, or 10.3.2, there are two ways for you to update your WebLogic Server to 10.3.3:

- Use the Smart Update tool. For more information, see "Downloading and Installing Maintenance Packs" in Oracle Smart Update Installing Patches and Maintenance Packs.
- Use the upgrade installers. For more information, see "Downloading an Upgrade Installer From My Oracle Support" in Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server.

Note: This link will take you to a document in the Release 11.1.1.3.0 documentation library. The instructions, however, are applicable for updating your Oracle WebLogic Server to 10.3.3, which is the version supported in Release 11.1.1.3.0.

If you have Oracle WebLogic Server version 10.2.x or earlier, then you must refer to the upgrade instructions in *Oracle Fusion Middleware Upgrade Guide for Oracle WebLogic Server*.

1.4.2 Update Your Existing Software

Use the Patch Set Installer to update your existing software to the latest version. Refer to "Applying the Latest Oracle Fusion Middleware Patch Set with the Patch Set Installers" in *Oracle Fusion Middleware Patching Guide* for instructions.

Note: Oracle Fusion Middleware 11g Release 1 (11.1.1.3.0) includes a new product: Oracle Business Process Management Suite. This product is installed when you run the Patch Set Installer for Oracle SOA Suite.

1.4.3 Update Your Database Schemas

If you are updating any software that uses one or more of the following schemas, you must run the Patch Set Assistant to upgrade the existing schemas in your database from version 11.1.1.2.0 to version 11.1.1.3.0:

- Oracle Portal (PORTAL)
- Oracle Identity Management (ODS)
- SOA Infrastructure (SOAINFRA)
- Audit Services (IAU)

For instructions, refer to "Updating Your Schemas with Patch Set Assistant" in *Oracle Fusion Middleware Patching Guide*.

Oracle Fusion Middleware Concepts

During the installation process, you will be asked for a variety of directory locations. This section defines each of these directories and explains the contents of each directory.

This chapter contains the following content:

- Section 2.1, "Oracle Fusion Middleware Concepts"
- Section 2.2, "Oracle Fusion Middleware Directory Structure"

2.1 Oracle Fusion Middleware Concepts

For more information about important Oracle Fusion Middleware concepts for all users, refer to *Oracle Fusion Middleware Concepts*.

2.2 Oracle Fusion Middleware Directory Structure

This section describes the various directories that are created when you install Oracle Fusion Middleware products.

2.2.1 Middleware Home and WebLogic Home Directories

The top-level directory for all Oracle Fusion Middleware products is called the Middleware home; this directory is created when Oracle WebLogic Server is installed. The WebLogic home directory is inside the Middleware home, and is also created when Oracle WebLogic Server is installed. Figure 2–1 shows the directory structure after an Oracle WebLogic Server installation:

Figure 2–1 Directory Structure after an Oracle WebLogic Server Installation

	Middleware Home
/h	ome/Oracle/Middleware
	WebLogic Home

2.2.2 Oracle Home and Oracle Common Home Directories

Each Oracle Fusion Middleware product must be installed in its own Oracle home location. When a product is installed, two Oracle home directories are created: the product Oracle home and the Oracle Common home.

The product's software binaries will be installed into the product Oracle home; no runtime process can write to this directory.

The Oracle Common home contains the binary and library files required for the Oracle Enterprise Manager Fusion Middleware Control and Java Required Files (JRF). There can be only one Oracle Common home within each Middleware home.

Both the product Oracle home (in the example shown in Figure 2–2, the SOA Oracle home) and Oracle Common home directories must reside inside an existing Middleware home directory:

Figure 2–2 Directory Structure with Oracle Home Directories

	Middleware Home /home/Oracle/Middleware	
		WebLogic Home
SOA Oracle Home	Oracle Common Home	

2.2.2.1 Creating the Product Oracle Home

The product Oracle home directory can be created in the following ways:

- Before running the installation, you can create your Oracle home directory on your system. Remember that the Oracle home must reside inside the Middleware home directory, and it must also be an empty directory. Then, when you run the installer and are asked to provide the location of your Oracle home, you can specify the directory you have created.
- While running the installer, you can specify the name of a new directory. This
 directory will automatically be created for you by the installer and will be located
 inside the Middleware home directory.

2.2.2.2 Creating the Oracle Common Home

The Oracle Common home directory is created in the following ways:

- Installing Oracle Application Developer. For more information, see the Oracle Fusion Middleware Installation Guide for Application Developer.
- Installing any Oracle Fusion Middleware product. The directory oracle_common is automatically created inside the Middleware home directory.

2.2.2.3 Checking Port Numbers Across Multiple Oracle Homes

Each product requires its own Oracle home directory. If you are creating an environment where you will have multiple products (and therefore, multiple Oracle home directories), Oracle recommends that you use the staticports.ini file, so that you will have a record of all the ports that are in use on your system to help avoid conflicts.

To use the staticports.ini file, select **Specify Ports using Configuration file** on the Configure Ports screen during installation.

2.2.3 WebLogic Domain

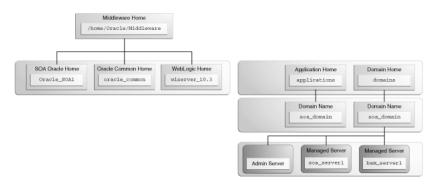
After a product is installed, it can be configured into a WebLogic Domain. See *Oracle Fusion Middleware Concepts* for more information about WebLogic Domains.

During configuration, you will be asked for the location where you want to store data for your domains and applications. These locations are called the Domain home and Application home, respectively. The Domain home and Application home can be created anywhere on your system.

The default location for the Domain home is user_projects/domains under the Middleware home. The default location for the Application home is the user_projects/applications, also under the Middleware home.

Refer to the Enterprise Deployment Guide for your specific product for additional information and recommendations about domain configuration.

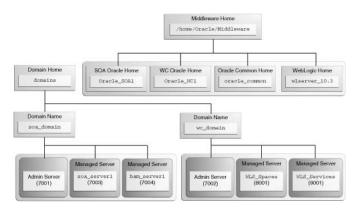
Figure 2–3 Directory Structure after a WebLogic Domain is Created



2.2.4 Multiple Products with Multiple WebLogic Domains

If you install multiple products and choose to create a separate domain for each product, then your directory structure would look something like the one shown in Figure 2–4:





Notice that each product has its own Oracle home directory. To differentiate among all the product Oracle home directories, the install guides typically refer to each Oracle home by product name; for example, the Oracle home for Oracle SOA Suite is referred

to as the SOA Oracle home, while the Oracle home for Oracle WebCenter Suite is referred to as the WebCenter Oracle home.

2.2.4.1 Notes for Creating Multiple Domains

If you choose to create multiple domains on a single machine, make sure that each domain has a unique name. When you are running the Configuration Wizard to create and configure your domains, be sure to specify a unique domain name on the "Specify Domain Name and Location" screen. For example, in Figure 2–4, the WebCenter domain might have the name wc_domain, while the SOA domain could be called soa_domain. Refer to the product installation guides for more information.

When you are configuring multiple domains, you must also make sure that the Administration Server and Managed Servers in each domain use a unique port number. There is no provision for checking port numbers across multiple domains, so you will have to keep track of this manually.

To customize the Administration Server port number, select **Administration Server** on the "Select Optional Configuration" screen in the Configuration Wizard. This will cause the Configure the Administration Server screen to appear, on which you can specify the Administration Server port number.

To customize the Managed Server port numbers, select **Managed Servers, Clusters and Machines** on the "Select Optional Configuration" screen in the Configuration Wizard. This will cause the Configure Manager Servers screen to appear, on which you can specify the port numbers for your managed servers.

2.2.4.2 Additional Information for Multiple Products and Multiple Domains

For more information about multiple products and multiple domains, refer to the following documentation:

- Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite
- Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter
- Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management

2.2.5 Extending an Existing Domain

During installation and configuration, you may chose to extend an existing domain rather than creating a new domain. Extending a domain means that you add products and functionality to an existing domain. If, for example, you first install Oracle SOA Suite to create a new domain, then install Oracle WebCenter while choosing to extend the existing Oracle SOA Suite domain, then your topology would look like the one shown in Figure 2–5:

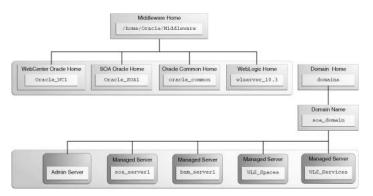


Figure 2–5 Directory Structure with Multiple Oracle Fusion Middleware Products in a Single Domain

In essence, you are adding the products and functionality of Oracle WebCenter Suite to the existing Oracle SOA Suite domain.

2.2.6 Oracle Instance and WebLogic Domain

instance1

ohs1

webcachel

Figure 2–6 shows the directory structure when two products are installed, but one product (Oracle SOA Suite) is configured in a WebLogic domain (because it consists of Java components) while the other product (Oracle WebTier) is configured in an Oracle Instance (because it consists of system components):

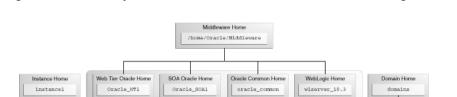


Figure 2–6 Directory Structure with an Oracle Instance and a WebLogic Domain

Fore more information about Java components and system components, refer to "Understanding Key Oracle Fusion Middleware Concepts" in *Oracle Application Server Administrator's Guide*.

oa_server1

bam_server1

Domain Name

Admin Server

Common Installation Tasks

This chapter describes some common tasks that should be performed prior to beginning any Oracle Fusion Middleware installation.

The following topics are covered:

- Section 3.1, "Before You Begin"
- Section 3.2, "Installing and Configuring Java Access Bridge (Windows Only)"
- Section 3.3, "Installing on DHCP Hosts"
- Section 3.4, "Installing on a Non-Networked Computer"
- Section 3.5, "Installing on a Multihomed Computer"
- Section 3.6, "Creating and Starting Managed Servers on a Remote Machine"

3.1 Before You Begin

This section contains important information that you should read before you begin to install or upgrade your system:

- Section 3.1.1, "Review System Requirements and Specifications"
- Section 3.1.2, "Review Certification Information"
- Section 3.1.3, "Read and Understand Oracle Fusion Middleware Concepts"
- Section 3.1.4, "Obtain the Oracle Fusion Middleware Software"
- Section 3.1.5, "Install Oracle WebLogic Server"
- Section 3.1.6, "Install and Configure a Database"
- Section 3.1.7, "Create Operating System Users for IBM DB2 Databases"

3.1.1 Review System Requirements and Specifications

Before performing any upgrade or installation you should read the system requirements documentation to ensure that your environment meets the minimum installation requirements for the products you are installing.

The system requirements document covers information such as hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches:

http://www.oracle.com/technology/software/products/ias/files/fusion_ requirements.htm

3.1.2 Review Certification Information

Before performing any upgrade or installation you should read the certification document. The certification document covers supported installation types, platforms, operating systems, databases, JDKs, and third-party products:

http://www.oracle.com/technology/software/products/ias/files/fusion_ certification.html

3.1.3 Read and Understand Oracle Fusion Middleware Concepts

If you are new to Oracle Fusion Middleware, you should read Chapter 2, "Oracle Fusion Middleware Concepts" to familiarize yourself with some of the concepts and terminology you will encounter. You should also be familiar with the concepts described in *Oracle Fusion Middleware Concepts* before proceeding with an installation or upgrade.

3.1.4 Obtain the Oracle Fusion Middleware Software

Table 3–1 describes the Oracle Web sites where you can download the latest Oracle Fusion Middleware software.

Oracle Web Site	Purpose and Location
Oracle Technology Network	If you are a developer, go to the Oracle Technology Network (OTN) to download Oracle software under the terms of the OTN Developer License:
	http://www.oracle.com/technology/middleware
	For more information, refer to the <i>Download and Certification</i> <i>Frequently Asked Questions</i> document, which is available by clicking the FAQ icon on the main Middleware download page.
	Note: Oracle Technology Network requires free registration.
My Oracle Support	If you are a customer with a valid support agreement with Oracle and you want to download software updates and fixes, then go to My Oracle Support:
	http://support.oracle.com/
	To obtain the specific patch set numbers for your installation, as well as additional information about maintaining your software, refer to My Oracle Support document ID 1073776.1.
Oracle E-Delivery	If you have purchased an Oracle software license and you want to download software under the terms of that license, or if you want to download Oracle software under the terms of the Oracle Electronic Delivery Trial License then go to Oracle E-Delivery:
	http://edelivery.oracle.com/

Table 3–1 Where to Download Oracle Fusion Middleware

3.1.5 Install Oracle WebLogic Server

Most Oracle Fusion Middleware products require the presence of Oracle WebLogic Server.

When you install Oracle WebLogic Server, the installer creates a Middleware home directory, then a WebLogic Server home directory under Middleware home directory. When you install your Oracle Fusion Middleware product, an Oracle home for your product and Oracle Common home (oracle_common) directories are created. The product Oracle home contains the product binaries and support files, and the Oracle

Common home contains the binary and library files required for the Oracle Enterprise Manager Fusion Middleware Control and Java Required Files (JRF).

When you configure your Oracle Fusion Middleware product to create a domain, a product domain directory is created inside the user projects directory. The product domain directory contains the Administration Server and other managed servers that host the various product components.

To determine the version of WebLogic Server required for your installation, refer to "Oracle WebLogic Server Information" in the System Requirement document:

http://www.oracle.com/technology/software/products/ias/files/fusion_ requirements.htm

For instructions on how to install Oracle WebLogic Server, "Running the Installation Program in Graphical Mode" in *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*.

For more information about the Oracle Fusion Middleware directory structure, refer to Chapter 2, "Oracle Fusion Middleware Concepts".

3.1.6 Install and Configure a Database

Some Oracle Fusion Middleware products, such as Oracle SOA Suite and Oracle WebCenter, require an metadata repository with schemas before those products can be successfully configured. To create or update schemas in a database, use the Repository Creation Utility (RCU).

Note: It is recommended that all metadata repositories reside on a database at the same site as the products to minimize network latency issues.

For more information about managing metadata repositories, refer to "Managing the Oracle Metadata Repository" in *Oracle Application Server Administrator's Guide*.

For more information about running RCU, refer to Oracle Fusion Middleware Repository Creation Utility User's Guide.

3.1.7 Create Operating System Users for IBM DB2 Databases

If you are not using an IBM DB2 database, you can skip this section.

IBM DB2 databases authenticates its database users using equivalent operating system users. Therefore, prior to running RCU, one operating system user must be created on the database host for each schema. The operating system user name must match the schema owner name and must contain only lowercase letters; no all-uppercase or mixed-case names are allowed. For example, if you plan to create a schema named DEV_MDS using RCU, then the operating system user must be named dev_mds (all lowercase letters).

You can create the operating system user with the following command (this example creates the operating system user dev_mds and assigns the password welcome1):

/usr/sbin/useradd dev_mds -p welcome1 -d /scratch/dev_mds

Refer to your system documentation for more information.

3.2 Installing and Configuring Java Access Bridge (Windows Only)

If you are installing on a Windows operating system, you have the option of installing and configuring Java Access Bridge for Section 508 Accessibility. For more information on how to do this, refer to "Install and Configure Java Access Bridge (Windows Only)" in *Oracle Application Server Administrator's Guide*.

3.3 Installing on DHCP Hosts

If you are installing your Oracle Fusion Middleware product on a DHCP host, you must follow the configuration steps in this section for your platform.

3.3.1 For Linux x86 Platforms

On Linux x86 operating systems, configure the host to resolve host names to the loopback IP address by modifying the /etc/hosts file to contain the following entries:

127.0.0.1 hostname.domainname hostname 127.0.0.1 localhost.localdomain localhost

After doing so, check that the host name resolves to the loopback IP address by entering the following command:

/bin/ping hostname.domainname

3.3.2 For Windows x86 Platforms

On Windows operating systems, install a loopback adapter on the DHCP server (see Section 3.3.3, "Installing a Loopback Adapter (Windows Only)"). This assigns a local IP address to your computer.

After installing the adapter, add a line to the %SYSTEMROOT%\system32\drivers\etc\hosts file with the following format, immediately after the localhost line:

IP_address hostname.domainname hostname

Replace *IP_address* with the local IP address of the loopback adapter.

3.3.3 Installing a Loopback Adapter (Windows Only)

To install a loopback adapter on Windows 2003 or Windows XP:

1. Open the Windows Control Panel.

Windows 2003: Select Start > Control Panel > Add Hardware.

Windows XP: Select Start > Control Panel, then double-click Add Hardware.

- 2. In the "Welcome" window, click Next.
- **3.** In the "Is the hardware connected?" window, select **Yes**, **I have already connected the hardware**, then click **Next**.
- 4. In the "The following hardware is already installed on your computer" window, in the list of installed hardware, select Add a new hardware device, then click Next.
- 5. In the "The wizard can help you install other hardware" window, select Install the hardware that I manually select from a list, then click Next.

- **6.** In the "From the list of hardware types, select the type of hardware you are installing" window, select **Network adapters**, then click **Next**.
- 7. In the "Select Network Adapter" window, make the following selections:
 - Manufacturer: Microsoft
 - Network Adapter: Microsoft Loopback Adapter
- 8. Click Next.
- 9. In the "The wizard is ready to install your hardware" window, click Next.
- **10.** In the "Completing the Add Hardware Wizard" window, click **Finish**.
- **11.** If you are using Windows 2003, restart your computer.
- **12.** Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network Connections Control Panel.
- **13.** Right-click the connection that was just created. This is usually named "Local Area Connection 2". Choose **Properties**.
- 14. On the "General" tab, select Internet Protocol (TCP/IP), then click Properties.
- **15.** In the "Properties" dialog box, click **Use the following IP address** and do the following:
 - **a.** IP Address: Enter a non-routable IP for the loopback adapter. Oracle recommends the following non-routable addresses:

```
192.168.x.x (x is any value between 1 and 255) 10.10.10.10
```

- **b.** Subnet mask: Enter 255.255.255.0.
- **c.** Record the values you entered, which you will need later in this procedure.
- **d.** Leave all other fields empty.
- e. Click OK.
- **16.** In the "Local Area Connection 2 Properties" dialog, click **OK**.
- 17. Close Network Connections.
- **18.** Restart the computer.

3.3.4 Removing a Loopback Adapter (Windows Only)

To remove a loopback adapter on Windows 2003 or Windows XP:

1. Start the System Control panel.

Windows 2003: Select Start > Control Panel > System.

Windows XP: Select Start > Control Panel, then double-click System.

- 2. In the "Hardware" tab, click Device Manager.
- **3.** In the "Device Manager" window, expand **Network adapters**. You should see **Microsoft Loopback Adapter**.
- 4. Right-click Microsoft Loopback Adapter and select Uninstall.
- 5. Click OK.

3.4 Installing on a Non-Networked Computer

You can install your Oracle Fusion Middleware product on a non-networked computer, such as a laptop. Because a non-networked computer has no access to other computers, you have to install all the components that you need on the computer.

In addition, you must follow the instructions in Section 3.3, "Installing on DHCP Hosts" to install a loopback adapter and modify the hosts file on your system.

3.5 Installing on a Multihomed Computer

You can install your Oracle Fusion Middleware product on a multihomed computer. A multihomed computer is associated with multiple IP addresses. This is typically achieved by having multiple network cards on the computer. Each IP address is associated with a host name; additionally, you can set up aliases for each hostname.

The installer picks up the fully qualified domain name from the first entry in /etc/hosts (on UNIX operating systems) or %SYSTEMROOT%\system32\drivers\etc\hosts (on Windows operating systems) file. So if your file looks like the following:

127.0.0.1 localhost.localdomain localhost 10.222.333.444 myhost1.mycompany.com myhost1 20.222.333.444 devhost2.mycompany.com devhost2

myhost1.mycompany.com would be picked for configuration.

For specific network configuration of a system component, refer to the individual component's configuration documentation.

3.6 Creating and Starting Managed Servers on a Remote Machine

To create and start a Managed Server in a WebLogic domain on a remote machine, complete the following steps:

Use the pack command located in the WebLogic_Home/common/bin (on UNIX operating systems) or WebLogic_Home\common\bin (on Windows operating systems) directory to create a Managed Server template that contains a subset of the files in a domain that are required to create a Managed Server domain directory hierarchy on a remote machine.

The -managed={true|false} parameter of the pack command specifies whether the template is to be used to create Managed Servers on remote machines.

 Use the unpack command located in the WebLogic_Home/common/bin (on UNIX operating systems) or WebLogic_Home\common\bin (on Windows operating systems) directory to create the Managed Server domain directory on the remote machine.

For more information, see the "Creating and Starting a Managed Server on a Remote Machine" in *Oracle Fusion Middleware Creating Templates and Domains Using the Pack and Unpack Commands*.

4

Silent Oracle Fusion Middleware Installation and Deinstallation

This chapter describes how to install and deinstall your Oracle Fusion Middleware environment from the command line in silent mode.

This chapter contains the following content:

- Section 4.1, "What is a Silent Installation?"
- Section 4.2, "Response Files"
- Section 4.3, "Pre-Installation Tasks"
- Section 4.4, "Silent Database Schema Creation"
- Section 4.5, "Silent Oracle WebLogic Server Installation"
- Section 4.6, "Silent Product Installation"
- Section 4.7, "Silent Product Configuration"
- Section 4.8, "Silent Product Deinstallation"

4.1 What is a Silent Installation?

Silent installation eliminates the need to monitor your product installation because no graphical output is displayed and no input by the user is required.

Silent installation of your Oracle Fusion Middleware product is accomplished by using the -silent flag on the command line when you start the installer. In most cases, you will need to supply the location and name of a file containing certain variable and parameter values (for example, installation location). These are the values that would be asked for during a typical installation using the graphical user interface.

For Oracle Fusion Middleware products, this file is typically called a response file. For more information, see Section 4.2, "Response Files".

Note: For UNIX users, if this is a first time installation of any Oracle product, you must create the oraInst.loc file before starting. Please refer to Section 4.3.1, "UNIX Users: Creating the oraInst.loc File" for more information.

Following installation of your product, you need to run the root.sh script as the root user. The root.sh script detects settings of environment variables and enables you to enter the full path of the local bin directory. **Note:** For Windows users, if this is a first time installation of any Oracle product, you must create the registry keys before starting. Registry key creation is described in Section 4.3.2, "Windows Users: Creating the Registry Key"

4.2 Response Files

Before doing a silent installation, you must provide information specific to your installation in a response file. The installer will fail if you attempt an installation using a response file that is not configured correctly. Response files are text files that you can create or edit in a text editor.

4.2.1 Creating a Response File

Oracle recommends creating a response file in the following manner:

- **1.** Run your product's graphical installer, as described in your product installation guide.
- **2.** On the Installation Summary Screen, click **Save** to save your installation parameters to a response file.

You will be prompted for a name and location where you want to create this response file. After it is created, you can use it exactly as-is to replicate the installation on other systems, or modify it as needed.

4.2.2 Sample Response Files

Pre-existing sample response files are provided in the Disk1/stage/Response (on UNIX operating systems) or Disk1\stage\Response (on Windows operating systems) directory on the installation CD-ROM.

Refer to your product installation guide for more detailed descriptions of the sample installation and deinstallation response files that are provided for each product.

4.2.3 Securing Your Response Files for Silent Installation

Your response files contain certain passwords required by the installer. To minimize security issues regarding these passwords in the response file, follow these guidelines:

- Set the permissions on the response files so that they are readable only by the operating system user who will be performing the silent installation.
- If possible, remove the response files from the system after the silent installation is completed.

4.3 Pre-Installation Tasks

This section covers the pre-installation tasks that may be required before you are able to perform a silent installation.

The following topics are covered:

- Section 4.3.1, "UNIX Users: Creating the oraInst.loc File"
- Section 4.3.2, "Windows Users: Creating the Registry Key"

4.3.1 UNIX Users: Creating the oraInst.loc File

The Oracle inventory directory is used by the installer to keep track of all Oracle products installed on the computer. The inventory directory is stored in a file called oraInst.loc. If this file does not already exist on your system, you must create it before starting a silent installation. This file is used by the installer.

1. Log in as the root user.

prompt> **su**

2. Using a text editor such as vi or emacs, create the oraInst.loc file in the directory of your choice. The contents of the file consist of the following two lines:

```
inventory_loc=oui_inventory_directory
inst_group=oui_install_group
```

Replace *oui_inventory_directory* with the full path to the directory where you want the installer to create the inventory directory. Then, replace *oui_install_group* with the name of the group whose members have write permissions to this directory.

3. Exit from the root user.

exit

4.3.2 Windows Users: Creating the Registry Key

If you have not installed Oracle SOA Suite on your computer, then you need to create the following Registry key and value:

HKEY_LOCAL_MACHINE / SOFTWARE / Oracle / inst_loc = [inventory_directory]

Replace *Inventory_Directory* with the full path to your installer files. For example:

C:Program Files\Oracle\Inventory

4.4 Silent Database Schema Creation

If your Oracle Fusion Middleware product requires database schemas, you must first create the schemas in your database before installing and configuring your product.

For instructions on how to create the schemas in silent mode, refer to "Running Repository Creation Utility (RCU) from the Command Line" in *Oracle Fusion Middleware Repository Creation Utility User's Guide*.

4.5 Silent Oracle WebLogic Server Installation

Installation of all Oracle Fusion Middleware products requires the presence of an Oracle Middleware home directory, which can be created by installing Oracle WebLogic Server.

To install Oracle WebLogic Server in silent mode, refer to "Running the Installation Program in Silent Mode" in *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*.

4.6 Silent Product Installation

To install your Oracle Fusion Middleware product in silent mode, use the -silent mode from the command line. The full syntax for running the installer from the command line on UNIX operating systems is shown below:

runInstaller [-mode] [-options] [(<CommandLinevariable=Value>)*]

On Windows operating systems:

setup.exe [-mode] [-options] [(<CommandLinevariable=Value>)*]
Table 4-1 lists the valid command line parameters for silent installation.

Parameter	Description	
Installation Modes - Only One Mode Can be Specified		
-i	Launches the installer in GUI mode. This is the default mode	
-install	and is used if no mode is specified on the command line.	
-silent	Install in silent mode. The installer must be passed either a response file or command line variable value pairs.	
-d	Launches the installer in GUI mode for deinstallation.	
-deinstall	NOTE - this option is only available when you start the deinstaller from the <i>ORACLE_HOME</i> /oui/bin (on UNIX operating systems) or <i>ORACLE_HOME</i> \oui\bin (on Windows operating systems) directory.	
-p -prerequisite	Launches the installer in GUI mode but only checks the prerequisites. No software is installed.	
-v	Launches the installer in GUI mode and performs all	
-validate	prerequisite and validation checking, but does not install any software.	
-sv	Performs all prerequisite and validation checking in silent mode.	
-silentvalidate	You must pass the installer either a response file or a series of command line variable value pairs.	
Installation Options		
-help	Displays the usage parameters for the runInstaller	
help	command.	
usage		
-invPtrLoc file	Pointer to the inventory location file. Replace <i>file</i> with the full path and name of the oraInst.loc file.	
-response file	Pointer to the response file. Replace <i>file</i> with the full path and	
-responseFile file	name of the response file.	
	See Section 4.2, "Response Files" for information about creating the response files.	
-jreLoc <i>location</i>	Pointer to the location where Java Runtime Environment (JRE) is installed. Replace <i>location</i> with the full path to the jre directory where your JRE is installed.	

 Table 4–1
 Installer Command Line Parameters

Parameter	Description
-logLevel level	Specify the level of logging performed by the installer; all messages with a lower priority than the specified <i>level</i> will be recorded. Valid levels are:
	 severe
	 warning
	 info
	 config
	■ fine
	■ finer
	 finest
-debug	Obtain debug information from the installer.
-force	Allow the silent installation to proceed in a non-empty directory
-printdiskusage	Log debugging information pertaining to disk usage.
-printmemory	Log debugging information pertaining to memory usage.
-printtime	Log debugging information pertaining to time usage. This command causes the timeTakentimestamp.log file to be created.
-waitforcompletion	Windows only - the installer will wait for completion instead of spawning the Java engine and exiting.
-noconsole	Messages will not be displayed to the console window.
-ignoreSysPrereqs	Ignore the results of the system prerequisite checks and continue with the installation.
-executeSysPrereqs	Execute the system prerequisite checks only, then exit.
-paramFile <i>file</i>	Specify the full path to the oraparam.ini file. This file is the initialization file for the installer. The default location of this file is Disk1/install/platform (on UNIX operation systems) or Disk1\install\platform (on Windows operation systems).
-novalidation	Disables all validation checking performed by the installer.
-nodefaultinput	For the GUI install, several screens have information or default values pre-populated. Specifying this option disables this behavior so that no information or values are pre-populated.
Command Line Variables	
Installer Variables	Installer variables are specified using varName=value. For example, on a UNIX operating system:
	ORACLE_HOME=/home/Oracle/Middleware/as_1
	On a Windows operating system:
	ORACLE_HOME=C:\products\Oracle\Middleware\as_1
Session Variables	Session variables are specified using session:varName=value.
Component Variables	Component variables are specified using session:compInternalName:[Version:]varName=value.

Table 4–1 (Cont.) Installer Command Line Parameters

4.6.1 Sample Silent Install Commands

If this is the first time you are installing on your system (meaning there is no pre-existing Oracle Inventory location), use the following command to perform a silent installation on UNIX systems:

./runInstaller -silent -response file -invPtrLoc file

On Windows systems:

setup.exe -silent -response file -invPtrLoc file

Below is a full example of this command for UNIX systems:

./runInstaller -silent -response /home/Oracle/response/devSOA.rsp -invPtrLoc /home/jdoe/oraInst.loc

On Windows operating systems:

```
setup.exe -silent -response C:\home\Oracle\response\devSOA.rsp -invPtrLoc
c:\home\Oracle\oraInst.loc
```

If you have already installed an Oracle product on your system and do not need to specify an inventory location, then you can use a command similar to the following on UNIX systems:

```
./runInstaller -silent -response file
```

On Windows systems:

setup.exe -silent -response file

Below is a full example of this command on a UNIX system:

./runInstaller -silent -response /home/Oracle/response/devSOA.rsp

On Windows operating systems:

setup.exe -silent -response c:\home\Oracle\response\devSOA.rsp

4.6.2 Sample Silent Install Output

Below is a sample output from a silent Oracle SOA Suite installation using the sampleResponse.rsp template:

```
$ ./runInstaller -jreLoc /home/Oracle/Middleware/jdk160_14_R27.6.4-18/ -silent
-response /home/Oracle/response/sampleResponse.rsp
Platform is Linux X86 32 bit
Starting Oracle Universal Installer...
```

Checking if CPU speed is above 300 MHz. Actual 2999 MHz Passed Checking Temp space: must be greater than 150 MB. Actual 69669 MB Passed Checking swap space: must be greater than 512 MB. Actual 1395 MB Passed Preparing to launch Oracle Universal Installer from /tmp/OraInstall2009-04-03_ 10-49-20PM. Please wait ...[jdoe@dadvmn0789 Disk1]\$ Log: /home/Oracle/oraInventory/logs/install2009-04-03_10-49-20PM.log Copyright © 1999, 2009, Oracle and/or its affiliates. All rights reserved. Reading response file.. Expected result: One of enterprise-4, enterprise-5, redhat-4, redhat-5, SuSE-10 Actual Result: enterprise-4 Check complete. The overall result of this check is: Passed CertifiedVersions Check: Success. Checking for gcc-3.4.3-22.1; found gcc-3.4.6-10.0.1-i386. Passed Checking for gcc-c++-3.4.3-22.1; found gcc-c++-3.4.6-10.0.1-i386. Passed Checking for openmotif21-2.1.30-11.RHEL4.4 ; found openmotif21-2.1.30-11.0.1.RHEL4.6-i386. Passed Checking for setarch-1.6-1; found setarch-1.6-1-i386. Passed Checking for pdksh-5.2.14-30; found pdksh-5.2.14-30.6-i386. Passed Checking for sysstat-5.0.5-1; found sysstat-5.0.5-19.el4-i386. Passed Checking for gnome-libs-1:1.4.1.2.90-44.1; found gnome-libs-1:1.4.1.2.90-44.2-i386. Passed Checking for libstdc++-3.4.3-22.1 ; found libstdc++-3.4.6-10.0.1-i386. Passed Checking for libstdc++-devel-3.4.3-22.1; found libstdc++-devel-3.4.6-10.0.1-i386. Passed Checking for compat-libstdc++-296-2.96-132.7.2; found compat-libstdc++-296-2.96-132.7.2-i386. Passed Checking for compat-db-4.1.25-9; found compat-db-4.1.25-9-i386. Passed Checking for control-center-2.8.0-12; found control-center-1:2.8.0-12.rhel4.5-i386. Passed Checking for glibc-common-2.3.4-2.9; found glibc-common-2.3.4-2.41-i386. Passed Checking for binutils-2.15.92.0.2-13; found binutils-2.15.92.0.2-25-i386. Passed Checking for make-1:3.80-5; found make-1:3.80-7.EL4-i386. Passed Checking for xscreensaver-4.18-5.rhel4.2; found xscreensaver-1:4.18-5.rhel4.14.0.1-i386. Passed Check complete. The overall result of this check is: Passed Packages Check: Success. Checking for VERSION=2.6.9; found VERSION=2.6.9-78.0.0.0.1.ELxenU. Passed Checking for hardnofiles=4096; found hardnofiles=4096. Passed Checking for softnofiles=4096; found softnofiles=4096. Passed Check complete. The overall result of this check is: Passed Kernel Check: Success. Expected result: ATLEAST=2.3.4-2.19 Actual Result: 2.3.4-2.41 Check complete. The overall result of this check is: Passed GLIBC Check: Success. Expected result: 922MB Actual Result: 4000MB Check complete. The overall result of this check is: Passed TotalMemory Check: Success. Verifying data..... Copying Files... -----20%------40%------60%------80%------100%

The installation of Oracle SOA Suite 11g completed successfully.

4.7 Silent Product Configuration

The way in which you can configure your Oracle Fusion Middleware product from the command line varies depending on the type of product.

4.7.1 System Components

If your product contains system components (for example, Oracle Web Tier, Oracle Portal, Forms, Reports and Discoverer, or Oracle Identity Management), you can use the same commands as described in Section 4.6, "Silent Product Installation".

These products use the same engine for both installation and configuration, so the contents of the response file determine whether you are only installing the software, only configuring existing software, or installing and configuring at the same time.

As mentioned in Section 4.2, "Response Files", the recommended way to create these response files is to run the graphical installer once and save the configuration to a response file. each product also comes with sample response files that you can use. Refer to the product installation guides for more information.

4.7.2 Java Components

If your product contains Java components (for example, Oracle SOA Suite, or Oracle WebCenter), the installer and the Configuration Wizard are essentially different products and therefore you cannot configure your products silently using the same silent installation commands.

Instead, silent configuration for Java components must be done using WebLogic Scripting Tool (WLST) commands.

For more information, refer to:

- Oracle Fusion Middleware WebLogic Scripting Tool Command Reference
- Oracle Fusion Middleware Oracle WebLogic Scripting Tool

4.8 Silent Product Deinstallation

To deinstall the Oracle Fusion Middleware product software on your system (both system and java components), use the -d or -deinstall parameter from the command line. You must start the deinstaller from the *ORACLE_HOME*/oui/bin (on UNIX operating systems) or *ORACLE_HOME*\oui\bin (on Windows operating systems) directory; this is the only directory where the -d or -deinstall parameters are accepted.

On UNIX operating systems:

./runInstaller -silent -deinstall -response file

On Windows operating systems:

setup.exe -silent -deinstall -response file

4.8.1 Command Line Parameters for Silent Deinstallation

Table 4–2 lists the valid command line parameters for silent deinstallation.

Table 4–2 Deinstaller Command Line Parameters			
Parameter	Description		
Installation Modes - Only One Mode Can be Specified			
-d	Launches the installer in GUI mode for deinstallation.		
-deinstall			
Installation Options			
-help	Displays the usage parameters for the runInstaller (on		
help	UNIX operating systems) or setup.exe (on Windows operating systems) command.		
usage			
-invPtrLoc file	Pointer to the inventory location file. Replace <i>file</i> with the full path and name of the oraInst.loc file.		
-response file	Pointer to the response file. Replace <i>file</i> with the full path and name of the response file.		
-responseFile <i>file</i>			

Table 4–2 Deinstaller Command Line Parameters

Parameter	Description
-jreLoc location	Pointer to the location where Java Runtime Environment (JRE) is installed. Replace <i>location</i> with the full path to the jre directory where your JRE is installed.
-logLevel <i>level</i>	Specify the level of logging performed by the installer; all messages with a lower priority than the specified <i>level</i> will be recorded. Valid levels are:
	 severe
	■ warning
	■ info
	■ config
	■ fine
	 finer
	 finest
-debug	Obtain debug information from the installer.
-force	Allow the silent installation to proceed in a non-empty directory.
-printdiskusage	Log debugging information pertaining to disk usage.
-printmemory	Log debugging information pertaining to memory usage.
-printtime	Log debugging information pertaining to time usage. This command causes the timeTaken <i>timestamp</i> .log file to be created.
-waitforcompletion	Windows only - the installer will wait for completion instead of spawning the Java engine and exiting.
-noconsole	Messages will not be displayed to the console window.
-ignoreSysPrereqs	Ignore the results of the system prerequisite checks and continue with the installation.
-executeSysPrereqs	Execute the system prerequisite checks only, then exit.
-paramFile <i>file</i>	Specify the full path to the oraparam.ini file. This file is the initialization file for the installer. The default location of this file is Disk1/install/platform (on UNIX operation systems) or Disk1\install\platform (on Windows operation systems).
-novalidation	Disables all validation checking performed by the installer.
-nodefaultinput	For the GUI install, several screens have information or default values pre-populated. Specifying this option disables this behavior so that no information or values are pre-populated.
Command Line Variables	
Installer Variables	Installer variables are specified using varName= <i>value</i> . For example, on a UNIX operating system:
	ORACLE_HOME=/home/Oracle/Middleware/as_1
	On a Windows operating system:
	ORACLE_HOME=C:\products\Oracle\Middleware\as_1
Session Variables	Session variables are specified using session:varName=value.
Component Variables	Component variables are specified using session:compInternalName:[Version:]varName=value.

Table 4–2 (Cont.) Deinstaller Command Line Parameters

4.8.2 Sample Silent Deinstall Output

Below is a sample output from a silent install using the deinstall_oh.rsp template:

```
$ ./runInstaller -silent -deinstall -jreLoc /home/Oracle/Middleware/jdk160_17_
R28.0.0-655/ -response /home/Oracle/Response/deinstall_oh.rsp
Starting Oracle Universal Installer...
```

```
Checking swap space: must be greater than 500 MB. Actual 4047 MB Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2010-03-26_
10-01-21AM. Please wait ...[]$ Log: /home/oraInventory/logs/deinstall2010-03-26_
10-01-21AM.log
Reading response file..
Starting silent deinstallation...
Starting Oracle Home deinstallation...
Completed deinstallation of Oracle Home.
```

Index

Α

accessibility, vii Java Access Bridge, 3-4

С

certification for Oracle Fusion Middleware, 3-2
common installation tasks, 3-1
conventions

for documentation, viii
creating a WebLogic Domain, 1-4
creating database schemas, 1-2
creating operating system users for IBM DB2
databases, 3-3

creating the Silent installation and deinstallation, 4-2
creating the Middleware home directory, 2-1
creating the Oracle Common home directory, 2-2
creating the registry keys, 4-2
creating the WebLogic home directory, 2-1

D

DHCP server, 3-4 documentation accessibility, vii documentation conventions, viii

Ε

extending a domain, 2-4

I

IBM DB2 databases creating operating system users, 3-3
installation instructions for SUSE11 platforms, 1-2
installing on a DHCP host, 3-4
installing on a multihomed computer, 3-6
installing on a non-networked computer, 3-6

J

Java Access Bridge, 3-4

L

loopback adapter installing, 3-4 removing, 3-5

М

Middleware home directory creating, 2-1 multihomed computer installing on, 3-6 multiple domains notes, 2-4

Ν

non-networked computer installing on, 3-6

0

Oracle Common home directory creating, 2-2 Oracle Fusion Middleware, vii certification, 3-2 concepts, 3-2 directory structure concepts, 2-1 installing on SUSE11, 1-2 installing the latest version, 1-1 overview, 1-1 starting as a new user, 1-1 starting with Oracle Application Server 10g, 1-4 starting with Oracle Fusion Middleware Release 11.1.1.1.0, 1-4 starting with Oracle Fusion Middleware Release 11.1.1.2.0, 1-6 system requirements, 3-1 updating your software, 1-3 Oracle Fusion Middleware 11g Release 1 (11.1.1.2.0) Products installing, 1-2 Oracle home directory creating, 2-2 Oracle Instance in a WebLogic Domain, 2-5 Oracle WebLogic Server installing, 3-2

Smart Update tool, 1-5, 1-7 updating, 1-5, 1-6 upgrade installers, 1-5, 1-7 oracle_common directory, 2-2 oraInst.loc file, 4-1 overview of Oracle Fusion Middleware, 1-1

Ρ

Patch Set Assistant, 1-6 Patch Set Installers, 1-3 port numbers across multiple Oracle homes, 2-2

R

RCU, 1-2 registry keys creating, 4-2 related documents, viii Repository Creation Utility (RCU), 1-2 response files, 4-1 creating, 4-2 samples, 4-2 securing, 4-2 root access, vii root.sh script, 4-1

S

sample output for silent deinstallation, 4-10 sample output for silent installation, 4-6 sample response files, 4-2 sample silent installation commands, 4-6 schemas creating, 1-2 securing your silent installation, 4-2 silent deinstallation instructions, 4-8 sample output, 4-10 silent installation instructions, 4-4 sample comments, 4-6 sample output, 4-6 securing, 4-2 silent installation and deinstallation, 4-1 response files, 4-2 Smart Update tool, 1-5, 1-7 starting as a new Oracle Fusion Middleware user, 1-1 starting with Oracle Application Server 10g, 1-4 starting with Oracle Fusion Middleware Release 11.1.1.1.0, 1-4 starting with Oracle Fusion Middleware Release 11.1.1.2.0, 1-6 staticports.ini file, 2-2 SUSE11 installation instructions, 1-2 system requirements for Oracle Fusion Middleware, 3-1

U

updating Oracle WebLogic Server, 1-5, 1-6
updating Oracle WebLogic Server with the Smart Update tool, 1-5, 1-7
updating Oracle WebLogic Server with the upgrade installers, 1-5, 1-7
updating your database schemas Patch Set Assistant, 1-6
updating your Oracle Application Server 10g to the latest software version, 1-4
updating your Oracle Fusion Middleware Release 11.1.1.1.0 to the latest software version, 1-4
updating your Oracle Fusion Middleware Release 11.1.1.2.0 to the latest software version, 1-6
upgrade installers, 1-5, 1-7

W

WebLogic Domain, 1-4, 2-3 directory structure for multiple products, 2-3 extending, 2-4 notes for creating multiple domains, 2-4 with Oracle Instance, 2-5
WebLogic home directory creating, 2-1