

Oracle® Fusion Middleware

Installation Planning Guide

11g Release 1 (11.1.1)

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Contents

Preface	vii
Intended Audience.....	vii
Documentation Accessibility	vii
Related Documents	viii
Conventions	viii
1 Installation Overview	
1.1 System Requirements and Prerequisites	1-1
1.2 Oracle Fusion Middleware Concepts for All Users	1-1
1.2.1 Oracle Fusion Middleware Components	1-1
1.2.2 Oracle Fusion Middleware Environment.....	1-2
1.2.2.1 Oracle WebLogic Server Domain	1-3
1.2.2.2 System Components.....	1-4
1.2.2.3 Administration Servers.....	1-4
1.2.2.4 Managed Servers and Clusters.....	1-4
1.2.2.5 Node Manager	1-5
1.3 Oracle Fusion Middleware Directory Structure and Concepts.....	1-5
1.3.1 Middleware Home and WebLogic Home Directories.....	1-5
1.3.2 Oracle Home Directory	1-6
1.3.3 WebLogic Domain	1-6
1.3.4 Multiple Products with Multiple WebLogic Domains.....	1-7
1.3.5 Extending a Domain.....	1-7
1.3.6 Oracle Instance and WebLogic Domain	1-8
1.3.7 Oracle Metadata Repository.....	1-8
1.4 Oracle Fusion Middleware Documentation Roadmap	1-9
2 Oracle Fusion Middleware Products	
2.1 Oracle Repository Creation Utility (RCU).....	2-1
2.2 Oracle WebLogic Server (10.3.1).....	2-2
2.3 Oracle SOA Suite 11g (11.1.1.0.0).....	2-2
2.4 Oracle WebCenter 11g (11.1.1.0.0)	2-3
2.5 Oracle Identity Management 11g (11.1.1.0.0).....	2-4
2.6 Oracle Portal, Forms, Reports and Discoverer 11g (11.1.1.0.0).....	2-4
2.7 Oracle Web Tier Utilities 11g (11.1.1.0.0)	2-6
2.8 Oracle Fusion Middleware Companion CD	2-6

2.9	Oracle Data Integrator 10g (10.1.3.2)	2-6
2.10	Oracle Business Intelligence Publisher 10g (10.1.3.4)	2-7
2.11	Oracle Business Process Analysis Suite 11 (11.1.1.0.0)	2-7
2.12	Oracle Access Manager 10g Core Components (10.1.4.3.0) DVD	2-7
2.13	Oracle Access Manager 10g Webgates (10.1.4.3.0) CD	2-8
2.14	Oracle Access Manager 10g NLS Packages (10.1.4.3.0) CD	2-8
2.15	Oracle Secure Enterprise Search (SES).....	2-8
2.16	Oracle JDeveloper 11g and Oracle Application Development Framework (ADF) 11g DVD..	2-8
2.17	Oracle Application Developer 11 (11.1.1.0).....	2-9
2.18	Oracle Fusion Middleware Adapters and Connectors.....	2-9
2.19	Oracle WebLogic Operations Control CD.....	2-10
2.20	Oracle Clusterware 11g (11.1.1.1.0) - Linux Only	2-10
2.21	Oracle Fusion Middleware 11g Documentation Library	2-10

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.

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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 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 Fusion Middleware 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.
<i>italic</i>	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.

Installation Overview

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 chapter contains the following content:

- Section 1.1, "System Requirements and Prerequisites"
- Section 1.2, "Oracle Fusion Middleware Concepts for All Users"
- Section 1.3, "Oracle Fusion Middleware Directory Structure and Concepts"
- Section 1.4, "Oracle Fusion Middleware Documentation Roadmap"

1.1 System Requirements and Prerequisites

Before performing any installation you should read the system requirements and certification 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

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

1.2 Oracle Fusion Middleware Concepts for All Users

This section describes several important Oracle Fusion Middleware concepts. You should be familiar with these concepts before proceeding with an installation.

1.2.1 Oracle Fusion Middleware Components

Oracle Fusion Middleware provides two types of components:

- Java Components

Oracle Fusion Middleware components that are deployed as one or more Java EE applications and a set of resources. Java components are deployed to an Oracle WebLogic Server domain as part of a domain template. Examples of Java components are the Oracle SOA Suite and Oracle WebCenter components.

- **System Components**

Manageable processes that are not deployed as Java applications. Instead, system components are managed by the Oracle Process Manager and Notification (OPMN). The system components are:

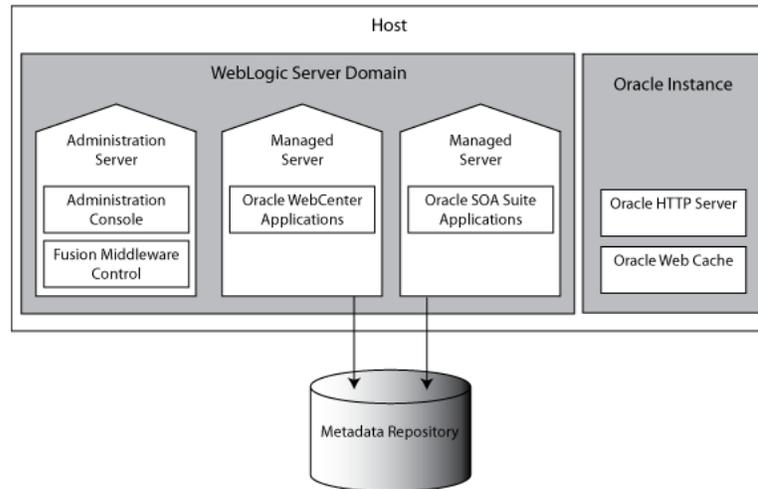
- Oracle HTTP Server
- Oracle Web Cache
- Oracle Internet Directory
- Oracle Virtual Directory
- Oracle Forms Services
- Oracle Reports
- Oracle Business Intelligence Discoverer
- Oracle Business Intelligence

Java components and system components are considered peers.

1.2.2 Oracle Fusion Middleware Environment

After installation, a typical Oracle Fusion Middleware environment contains the following (Figure 1–1):

- One Oracle WebLogic Server domain, which contains one Administration Server and one or more Managed Servers. See Section 1.2.2.1, "Oracle WebLogic Server Domain".
- If you installed system components, they are configured in an Oracle Instance. See Section 1.2.2.2, "System Components".
- A metadata repository, if the components you installed require one. For example, Oracle SOA Suite requires a metadata repository. See Section 1.3.7, "Oracle Metadata Repository".
- A Middleware home, which contains product binary files. See Section 1.3.1, "Middleware Home and WebLogic Home Directories".

Figure 1–1 Oracle Fusion Middleware Environment

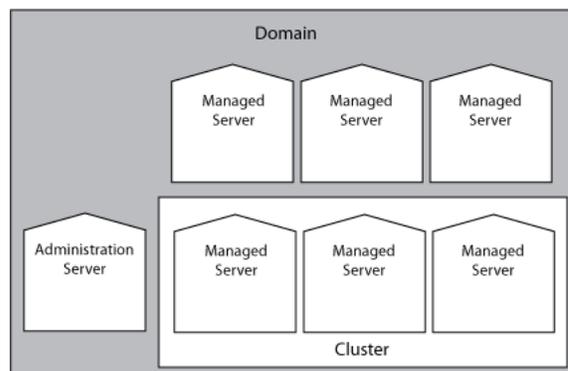
1.2.2.1 Oracle WebLogic Server Domain

A WebLogic Server administration domain is a logically related group of Java components. A WebLogic Server domain includes a special WebLogic Server instance called the Administration Server, which is the central point from which you configure and manage all resources in the domain. Usually, you configure a domain to include additional WebLogic Server instances called Managed Servers. You deploy Java components, such as Web applications, EJBs, and Web services, and other resources to the Managed Servers and use the Administration Server for configuration and management purposes only.

Managed Servers in a WebLogic Server domain can be grouped together into a cluster (see Figure 1–2).

The directory structure of an WebLogic Server domain is separate from the directory structure of the WebLogic Server home. It can reside anywhere; it need not be within the Middleware home directory.

Figure 1–2 shows a domain with an Administration Server, three standalone Managed Servers, and three Managed Servers in a cluster.

Figure 1–2 WebLogic Server Domain

1.2.2.2 System Components

System components are configured in an Oracle Instance directory, which contains files such as configuration files, log files, and temporary files that can be updated. All system components in an Oracle Instance directory must reside on the same machine.

An Oracle Instance directory is a peer of an Oracle WebLogic Server domain in that both contain specific configurations outside of their Oracle Product Home directories. However, it is important to note that a WebLogic Server domain may cross machine boundaries and may contain a distributed business application. An Oracle Instance directory contains a portion of a topology restricted only to a single machine.

Each instance of a system component must be uniquely identified within the Oracle Instance directory.

1.2.2.3 Administration Servers

The Administration Server operates as the central control entity for the configuration of the entire domain. It maintains the domain's configuration documents and distributes changes in the configuration documents to Managed Servers. You can also use the Administration Server as a central location from which to monitor all resources in a domain.

Each Oracle WebLogic Server domain must have one server instance that acts as the Administration Server.

To interact with the Administration Server, you can use the Oracle WebLogic Server Administration Console, Oracle WebLogic Scripting Tool (WLST), or create your own JMX client. In addition, you can use Oracle Enterprise Manager Fusion Middleware Control for some tasks.

Fusion Middleware Control and the WebLogic Administration Console run in the Administration Server. Fusion Middleware Control is a Web-based administration console used to manage Oracle Fusion Middleware, including components such as Oracle HTTP Server, Oracle SOA Suite and Oracle WebCenter, Oracle Portal, Forms, Reports, and Discoverer, and the Oracle Identity Management components. Oracle WebLogic Server Administration Console is the Web-based administration console used to manage the resources in an Oracle WebLogic Server domain, including the administration server and managed servers in the domain.

1.2.2.4 Managed Servers and Clusters

Managed Servers host business applications, application components, Web services, and their associated resources. To optimize performance, Managed Servers maintain a read-only copy of the domain's configuration document. When a Managed Server starts up, it connects to the domain's Administration Server to synchronize its configuration document with the document that the Administration Server maintains.

When you create a domain, you create it using a particular domain template. That template supports a particular component or group of components, such as the Oracle SOA Suite. The Managed Servers in the domain are created specifically to host those particular Oracle Fusion Middleware system components.

Java-based Oracle Fusion Middleware system components (such as Oracle SOA Suite, Oracle WebCenter, and some Identity Management components), as well as customer-developed applications, are deployed to Managed Servers in the domain.

If you want to add other components, such as Oracle WebCenter, to a domain that was created using a template that supports another component, you can extend the domain by creating additional managed servers in the domain, using a domain template for the component which you wish to add.

For production environments that require increased application performance, throughput, or high availability, you can configure two or more Managed Servers to operate as a cluster. A cluster is a collection of multiple WebLogic Server server instances running simultaneously and working together to provide increased scalability and reliability. In a cluster, most resources and services are deployed identically to each Managed Server (as opposed to a single Managed Server), enabling failover and load balancing. A single domain can contain multiple WebLogic Server clusters, as well as multiple Managed Servers that are not configured as clusters. The key difference between clustered and non-clustered Managed Servers is support for failover and load balancing. These features are available only in a cluster of Managed Servers.

1.2.2.5 Node Manager

Node Manager is a Java utility that runs as separate process from Oracle WebLogic Server and allows you to perform common operations for a Managed Server, regardless of its location with respect to its Administration Server. While use of Node Manager is optional, it provides valuable benefits if your WebLogic Server environment hosts applications with high-availability requirements.

If you run Node Manager on a machine that hosts Managed Servers, you can start and stop the Managed Servers remotely using the Administration Console or the command line. Node Manager can also automatically restart a Managed Server after an unexpected failure.

For more information about Node Manager, refer to *Oracle Fusion Middleware Node Manager Administrator's Guide for Oracle WebLogic Server*.

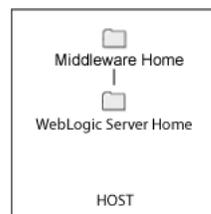
1.3 Oracle Fusion Middleware Directory Structure and Concepts

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.

1.3.1 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 WebLogic Server is installed. The WebLogic Home directory is inside the Middleware Home, and is also created when WebLogic Server is installed. Figure 1–3 shows the directory structure after a WebLogic Server installation:

Figure 1–3 Directory Structure after WebLogic Server Installation

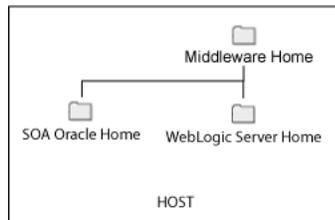


1.3.2 Oracle Home Directory

Each Oracle Fusion Middleware product must be installed in its own Oracle Home location. The software binaries will be installed into the Oracle Home; no runtime process can write to this directory.

The Oracle Home directories (in this case, the SOA Oracle Home) for each product must reside inside an existing Middleware Home directory (see Figure 1–5):

Figure 1–4 Directory Structure with an Oracle Home Directories



The Oracle Home directory can be created in the following ways:

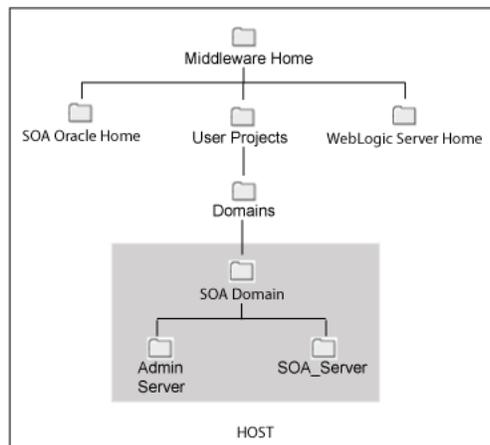
- Before running the installation, you can create your Oracle Home directory on your system. Remember that the Oracle Home must reside inside the Middleware Home directory, and it must also be an empty directory. Then, when you run the installer and are asked to provide the location of your Oracle Home, 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.

1.3.3 WebLogic Domain

After a product is installed, it can be configured into a WebLogic Domain (see Section 1.2.2.1, "Oracle WebLogic Server Domain").

The User Projects directory is created when you create or configure a domain (in this case, a SOA domain). By default, new domains are created inside the Domains folder, but you can choose to create these elsewhere if you want.

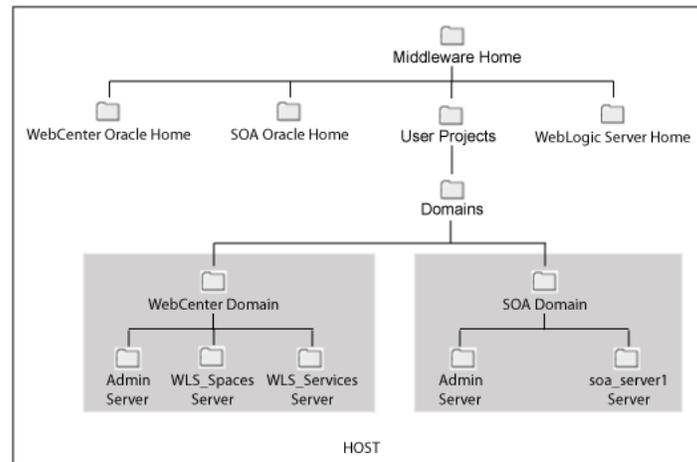
Figure 1–5 Directory Structure after an WebLogic Domain is Created



1.3.4 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 1–6:

Figure 1–6 Directory Structure with Multiple Oracle Fusion Middleware Products



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.

If you choose to create multiple domains on a single machine, make sure that each domain has a unique name.

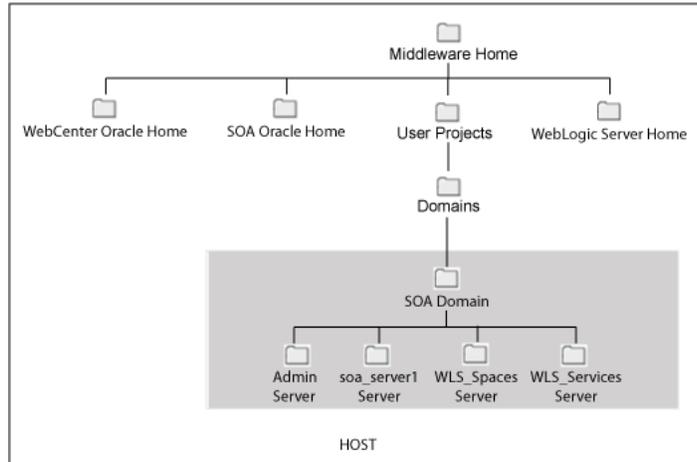
For more information about multiple products and multiple domains, refer to the following documentation:

- *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*

1.3.5 Extending a Domain

During installation and configuration, you may choose 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 Suite while choosing to extend the existing Oracle SOA Suite domain, then your topology would look like the one shown in Figure 1–7:

Figure 1–7 Directory Structure with Multiple Oracle Fusion Middleware Products in a Single Domain

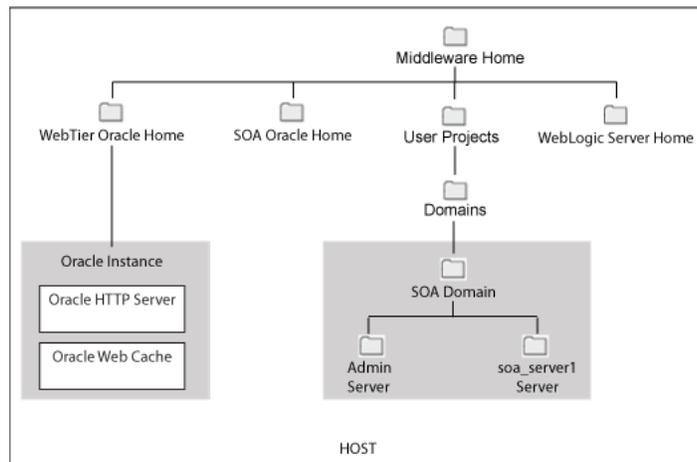


In essence, you are adding the products and functionality of Oracle WebCenter Suite to the existing Oracle SOA Suite domain.

1.3.6 Oracle Instance and WebLogic Domain

Figure 1–8 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 1–8 Directory Structure with an Oracle Instance and a WebLogic Domain



For more information about Java components and system components, refer to Section 1.2, "Oracle Fusion Middleware Concepts for All Users".

1.3.7 Oracle Metadata Repository

Some Oracle Fusion Middleware products, such as Oracle BPEL Process Manager, Oracle Business Activity Monitoring, and Oracle Portal, require an existing metadata repository before those products can be successfully installed and configured. This is

done by running the Repository Creation Utility (RCU) prior to installation. RCU creates the necessary schemas in your database that are required for installation to be successful.

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

Although a metadata repository can be database-based or file-based, it is recommended that database-based repositories be used in a production environment. If you initially configured your environment with a file-based repository, you can change it to a database-based repository.

Oracle Fusion Middleware supports multiple repository types. A repository type represents a specific schema or set of schemas that belong to a specific Oracle Fusion Middleware component (for example, Oracle SOA Suite or Oracle Internet Directory.)

A particular type of repository, the MDS repository, contains metadata for most Oracle Fusion Middleware components, such as Oracle B2B, and for certain types of applications.

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

1.4 Oracle Fusion Middleware Documentation Roadmap

This section contains information about the Oracle Fusion Middleware 11g Release 1 (11.1.1) documentation and the order in which the documentation should be read to get your products installed and configured.

1. Read the System Requirements and Certification documentation to ensure that your environment meets the minimum installation requirements for your products:
 - a. 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
 - b. 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
2. If the products you are installing require a database, make sure you have installed a database and that it is up and running.
3. If the products you are installing require schemas, create the schemas in your database by running RCU. See *Oracle Fusion Middleware Repository Creation Utility User's Guide* for more information. In addition, each product installation guide contains instructions for creating the schemas necessary for that product.
4. If the products you are installing require Oracle WebLogic Server, install Oracle WebLogic Server on your system. Refer to *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server* for more information. In addition, each product installation guide contains instructions for installing Oracle WebLogic Server.

5. Install and configure your products. Refer to the instructions in your product installation guide or quick installation guide for more information. For example, to install and configure Oracle WebCenter Suite, you would go to:

- a. *Oracle Fusion Middleware Quick Installation Guide for Oracle WebCenter*
- b. *Oracle Fusion Middleware Installation Guide for Oracle WebCenter*

Some products allow you to install and configure in one step using the Oracle Universal Installer; others require that you run the Oracle Fusion Middleware Configuration Wizard after you install the software. For detailed information about using the Oracle Fusion Middleware Configuration Wizard, see *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard*.

6. If you are installing your products with a complex topology, you should refer to the enterprise deployment guides. The following enterprise deployment guides are available for 11g Release 1 (11.1.1):

- a. *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*
- b. *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter*
- c. *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management*

7. If you are installing in a high availability environment, you should refer to the *Oracle Fusion Middleware High Availability Guide* for more information.

8. After your products are installed and configured, you should refer to the administration guides for information on how to begin managing your products and applications:

- a. *Oracle Fusion Middleware 2 Day Administration Guide*
- b. *Oracle Fusion Middleware Administrator's Guide*

Oracle Fusion Middleware Products

There are multiple installation CD-ROMs and DVDs, each containing a separate piece of Oracle Fusion Middleware. This chapter describes the contents of these CD-ROMs and DVDs:

- Oracle Repository Creation Utility (RCU)
- Oracle WebLogic Server (10.3.1)
- Oracle SOA Suite 11g (11.1.1.0.0)
- Oracle WebCenter 11g (11.1.1.0.0)
- Oracle Identity Management 11g (11.1.1.0.0)
- Oracle Portal, Forms, Reports and Discoverer 11g (11.1.1.0.0)
- Oracle Web Tier Utilities 11g (11.1.1.0.0)
- Oracle Fusion Middleware Companion CD
- Oracle Data Integrator 10g (10.1.3.2)
- Oracle Business Intelligence Publisher 10g (10.1.3.4)
- Oracle Business Process Analysis Suite 11 (11.1.1.0.0)
- Oracle Access Manager 10g Core Components (10.1.4.3.0) DVD
- Oracle Access Manager 10g Webgates (10.1.4.3.0) CD
- Oracle Access Manager 10g NLS Packages (10.1.4.3.0) CD
- Oracle Secure Enterprise Search (SES)
- Oracle JDeveloper 11g and Oracle Application Development Framework (ADF) 11g DVD
- Oracle Application Developer 11 (11.1.1.0)
- Oracle Fusion Middleware Adapters and Connectors
- Oracle WebLogic Operations Control CD
- Oracle Clusterware 11g (11.1.1.1.0) - Linux Only
- Oracle Fusion Middleware 11g Documentation Library

2.1 Oracle Repository Creation Utility (RCU)

Many of the Oracle Fusion Middleware components require the existence of schemas in a database prior to installation. These schemas are created and loaded in your database using the Repository Creation Utility (RCU).

Note: RCU is available only on Linux and Windows platforms. Use the Linux RCU to create schemas on supported UNIX databases and Windows RCU to create schemas on supported Windows databases.

Refer to *Oracle Fusion Middleware Repository Creation Utility User's Guide* for more information.

2.2 Oracle WebLogic Server (10.3.1)

Oracle WebLogic Server, a key component of Oracle Fusion Middleware, offers a comprehensive solution for developing, integrating, and deploying enterprise applications, Web sites, portals, and Web services. Based on a scalable Java EE server, Oracle WebLogic Server enables application deployment, business integration, and portals. Oracle WebLogic Server is designed for grid computing as well as full lifecycle support for SOA.

Many of the Oracle Fusion Middleware components require the existence of Oracle WebLogic Server prior to installation.

This CD-ROM contains:

- Oracle WebLogic Server
- Oracle JDBC Driver
- Merrant DataDirect JDBC Drivers

Refer to *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server* for more information on installing Oracle WebLogic Server.

2.3 Oracle SOA Suite 11g (11.1.1.0.0)

Oracle SOA Suite is a middleware component of Oracle Fusion Middleware. Oracle SOA Suite enables services to be created, managed, and orchestrated into SOA composite applications. Composites enable you to easily assemble multiple technology components into one SOA composite application. Oracle SOA Suite plugs into heterogeneous infrastructures and enables enterprises to incrementally adopt SOA.

This CD-ROM contains:

- Oracle Fusion Middleware Services - Logging Service, Diagnostic Service, Backup and Recovery Service, Recovery Manager Service, Cloning Service, Topology Service, Deployment Service, Resource Discovery Service, Performance Monitoring Service, Process Control Service, Distributed Persistence Service, Patching Service, Audit Service, Oracle IPMON, Oracle MDS, Oracle Fusion Middleware Application Guard, OFM Load Balancer.
- Oracle SOA Infrastructure - Oracle BPEL Process Manager, Oracle Human Workflow, Oracle Mediator, Oracle Web Services Manager Agent, Oracle B2B Server, Oracle BAM Adapter, Oracle Business Rules, Oracle JCA Adapters included - Database, Files, FTP, JMS, AQ, MQ Series, Oracle Applications
- Oracle Business Activity Monitor - Oracle BAM Server and Oracle BAM Report Server
- Oracle Messaging Enabler and drivers
- Oracle Fusion Middleware Upgrade Assistant

- Oracle Remote Diagnostic Agent
- Oracle Configuration Manager

Oracle SOA Suite enables services to be created, managed, and orchestrated into SOA composite applications. Composites enable you to easily assemble multiple technology components into one SOA composite application. Oracle SOA Suite plugs into heterogeneous IT infrastructures and enables enterprises to incrementally adopt SOA.

For more information about Oracle SOA Suite, refer to:

- *Oracle Fusion Middleware Repository Creation Utility User's Guide* for instructions on how to create the necessary schemas for Oracle SOA Suite.
- *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server* for instructions on installing Oracle WebLogic Server, which is also required before you install Oracle SOA Suite.
- *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite* for simple installation using basic topologies.
- *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite* for enterprise deployments.
- *Oracle Fusion Middleware High Availability Guide* for high availability scenarios.

2.4 Oracle WebCenter 11g (11.1.1.0.0)

Oracle WebCenter includes a number of collaborative and sharing services that can be integrated with an application to give users improved communication, content management capabilities, customization, and advanced search support. Oracle WebCenter also provides a development framework that provides essential capabilities, such as the ability to consume portlets and content in a JSF application, declarative security, and life cycle management tools.

This CD-ROM includes:

- Oracle WebCenter - Framework, Portal Services, Content Integration Services, Resource Catalog, Oracle WebCenter Services, Oracle Threaded Discussion Forums, Oracle Secure Enterprise Search, Oracle Wiki Server, Personal Space(s), Project Space(s), Community Space(s), Content Adapters, Voice Option
- Oracle Enterprise Manager Application Server Control
- Oracle Fusion Middleware Upgrade Assistant
- Oracle Remote Diagnostic Agent
- Oracle Configuration Manager

For more information about Oracle WebCenter Suite, refer to:

- *Oracle Fusion Middleware Repository Creation Utility User's Guide* for instructions on how to create the necessary schemas for Oracle WebCenter.
- *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server* for instructions on installing Oracle WebLogic Server, which is also required before you install Oracle WebCenter.
- *Oracle Fusion Middleware Installation Guide for Oracle WebCenter* for simple installations using basic topologies.
- *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle WebCenter* for enterprise deployments.

- *Oracle Fusion Middleware High Availability Guide* for high availability scenarios.

2.5 Oracle Identity Management 11g (11.1.1.0.0)

The Oracle Identity Management products enable you to configure and manage the identities of users, devices, and services across diverse servers, to delegate administration of these identities, and to provide end users with self-service privileges:

- Oracle Fusion Middleware Services - Logging Service, Diagnostic Service, Backup and Recovery Service, Recovery Manager Service, Cloning Service, Topology Service, Deployment Service, Resource Discovery Service, Performance Monitoring Service, Process Control Service, Notification Service (ONS), Distributed Persistence Service, Patching Service, Audit Service, Oracle IPMON, Oracle MDS, Oracle Fusion Middleware Application Guard, OFM Load Balancer
- Oracle Enterprise Manager Application Server Control
- Oracle Web Cache
- Oracle EM Agent
- Oracle Internet Directory (OID)
- Oracle Directory Integration Platform (DIP)
- Oracle Virtual Directory (OVD)
- Oracle Directory Services Manager
- Oracle Delegated Administration Services (DAS)
- Oracle Fusion Middleware Upgrade Assistant
- Oracle Remote Diagnostic Agent
- Oracle Configuration Manager

These products also enable you to configure single sign-on across applications and to process users' credentials to ensure that only users with valid credentials can log into and access online resources.

For more information about Oracle Identity Management, refer to:

- *Oracle Fusion Middleware Repository Creation Utility User's Guide* for instructions on how to create the necessary schemas for Oracle Identity Management.
- *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server* for instructions on installing Oracle WebLogic Server, which is also required before you install Oracle Identity Management.
- *Oracle Fusion Middleware Installation Guide for Oracle Identity Management for simple installation using basic topologies.*
- *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management for enterprise deployments.*
- *Oracle Fusion Middleware High Availability Guide* for high availability scenarios.

2.6 Oracle Portal, Forms, Reports and Discoverer 11g (11.1.1.0.0)

Oracle Portal allows you to view content from multiple sources on a single page.

Oracle Reports enables businesses to give immediate access to information to all levels within and outside of the organization in a scalable and secure environment. Using

Oracle Reports, you can rapidly develop and deploy sophisticated Web and paper reports against any data source (including an Oracle database, JDBC, XML, and text files). Leveraging J2EE technologies such as JSP and XML, you can publish your reports in a variety of formats (including HTML, XML, PDF, spreadsheet, delimited text, PostScript, and RTF) to any destination (including e-mail, Web browser, Oracle Portal, and file system) in a scalable, efficient manner. Oracle Reports consists of Oracle Reports Developer (a component of the Oracle Developer Suite) and Oracle Reports Services (a component of Oracle Fusion Middleware)

Oracle Forms Services is a part of Oracle Fusion Middleware that contains tools and services that enables you to deploy Forms applications over a network. Forms Services is a comprehensive application framework optimized to deploy Forms applications in a multi-tiered environment. It takes advantage of the ease and accessibility of the Web and elevates it from a static information-publishing mechanism to an environment capable of supporting complex applications.

Oracle Business Intelligence Discoverer is an intuitive ad-hoc query, reporting, analysis, and Web publishing set of tools that gives business users immediate access to information in databases.

This CD contains the following:

- Oracle Fusion Middleware Services - Logging Service, Diagnostic Service, Backup and Recovery Service, Recovery Manager Service, Cloning Service, Topology Service, Deployment Service, Resource Discovery Service, Performance Monitoring Service, Process Control Service, Notification Service (ONS), Distributed Persistence Service, Patching Service, Audit Service, Oracle IPMON, Oracle MDS, Oracle Fusion Middleware Application Guard, OFM Load Balancer
- Oracle HTTP Server (2.2.x based) - All mods included
- Oracle Web Cache
- Oracle Enterprise Manager Application Server Control
- Oracle EM Agent
- Oracle Portal
- Oracle JPDK
- Oracle Forms Services and Oracle Forms Builder
- Oracle Reports Services and Oracle Reports Builder
- Oracle BI Discoverer Administration Server
- Oracle BI Discoverer Plus and Viewer
- Oracle Fusion Middleware Upgrade Assistant
- Oracle Remote Diagnostic Agent
- Oracle Configuration Manager

For more information about Oracle Portal, Forms, Reports, and Discoverer, refer to:

- *Oracle Fusion Middleware Repository Creation Utility User's Guide* for instructions on how to create the necessary schemas for Oracle Portal and Discoverer.
- *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server* for instructions on installing Oracle WebLogic Server, which is also required before you install Oracle Portal or Oracle Discoverer.
- *Oracle Fusion Middleware Installation Guide for Oracle Portal, Forms, Reports and Discoverer* for simple installations using basic topologies.

- *Oracle Fusion Middleware High Availability Guide* for high availability scenarios.

2.7 Oracle Web Tier Utilities 11g (11.1.1.0.0)

Oracle Web Tier contains the following primary components:

- Oracle HTTP Server (OHS)
- Oracle Web Cache
- Oracle Process Manager and Notification Server (OPMN)

These products work together and are responsible for managing incoming HTTP requests, caching web messages, and sending XML and HTML back to the client.

This CD contains the following:

- Oracle HTTP Server (2.2.x based) - All mods included (OUI)
- Oracle Web Cache (OUI)
- Oracle Proxy Plug-In (File)
- Oracle OSSO Plug-In (File)
- Oracle Fusion Middleware Upgrade Assistant
- Oracle Remote Diagnostic Agent
- Oracle Configuration Manager

For more information about Oracle WebTier Utilities Suite, refer to:

- *Oracle Fusion Middleware Installation Guide for Oracle Web Tier* for simple installations using basic topologies.
- *Oracle Fusion Middleware High Availability Guide* for high availability scenarios.

2.8 Oracle Fusion Middleware Companion CD

The companion CD contains additional products that you can install. These products are meant to be used in conjunction with other products in Oracle Fusion Middleware. Whether or not you need to install anything from the CD depends on the Oracle Fusion Middleware products you are installing. Refer to the product documentation for more information.

This CD-ROM contains the following:

- ADR Libraries
- Oracle TopLink
- Oracle MapViewer
- Oracle WebCenter Suite JDeveloper Extension
- Oracle SOA Suite JDeveloper Extension

2.9 Oracle Data Integrator 10g (10.1.3.2)

Oracle Data Integrator delivers unique next-generation Extract Load and Transform (E-LT) technology that improves performance and reduces data integration costs, even across heterogeneous systems. Oracle Data Integrator offers the productivity of a declarative design approach, as well as the benefits of an active integration platform for seamless batch and real-time integration.

This CD contains the following:

- Oracle Data Integrator
- Oracle Remote Diagnostic Agent

2.10 Oracle Business Intelligence Publisher 10g (10.1.3.4)

Oracle Business Intelligence Publisher reduces the high costs associated with the development, customization and maintenance of business documents, while increasing the efficiency of reports management. Utilizing a set of familiar desktop tools, you can create and maintain custom report formats based on data extracts from diverse sources.

This CD contains the following:

- Oracle BI Publisher
- Oracle BI Publisher Desktop
- Oracle Remote Diagnostic Agent

2.11 Oracle Business Process Analysis Suite 11 (11.1.1.0.0)

Oracle Business Process Analysis (BPA) Suite contains enables you to rapidly model business processes and converting them into IT executables. Oracle BPA Suite is based on the IDS Scheer ARIS Design Platform and delivers a comprehensive set of integrated products that allows business users to design, model, simulate, and optimize business processes to achieve maximum operational efficiency.

This CD-ROM contains the following:

- Oracle Business Process Architect
- Oracle Business Process Publisher
- Oracle Business Process Simulator
- Oracle Business Process Repository Server
- Oracle SOA Designer Extensions
- Oracle Business Process Blueprint Editor
- Oracle Remote Diagnostic Agent

2.12 Oracle Access Manager 10g Core Components (10.1.4.3.0) DVD

Oracle Access Manager is an enterprise-class authentication, authorization, and auditing solution that provides centralized security administration. This includes functionality for access control, single sign-on (separate from Oracle Single Sign-On), personalization, and user profile management in heterogeneous application environments across a variety of application servers, legacy applications, and databases. Oracle Access Manager provides key features for creating, managing, and enforcing access policies. If you have different sets of users that require access to different data sets, while all require access to a common set of data, Oracle Access Manager can allow the right levels of access to each group so that everyone can access only the data that is appropriate for them.

2.13 Oracle Access Manager 10g Webgates (10.1.4.3.0) CD

This is a component of Oracle Access Manager that serves as the policy enforcer. It is a Web server plug-in access client (with an associated Apache mod for use on Oracle HTTP Server) that intercepts HTTP requests and forwards them to the Access Server for authentication and authorization. In comparison, an AccessGate is a custom access client, built with the Oracle Access Manager SDK, that processes Web and non-Web resource requests from users or applications. It intercepts user requests and forwards them to the Access Server for authentication and authorization. The terms WebGate and AccessGate can be used interchangeably in most situations.

2.14 Oracle Access Manager 10g NLS Packages (10.1.4.3.0) CD

This component of Oracle Access Manager contains the software required to run Oracle Access Manager using different supported languages.

2.15 Oracle Secure Enterprise Search (SES)

This CD-ROM contains Oracle Secure Enterprise Search (SES) version 10.1.8.3.

Oracle SES enables a secure, high quality, easy-to-use search across all enterprise information assets. Key features include:

- The ability to search and locate public, private, and shared content across intranet web servers, databases, files on local disk or on file-servers, IMAP e-mail, document management systems, applications, and portals.
- Secure crawling, indexing, and searching.
- A simple and intuitive search interface.
- Excellent search quality, with the most relevant items for a query shown first, even when the query spans diverse public or private data sources.
- Analytics on search results and understanding of usage patterns.
- Sub-second query performance.

2.16 Oracle JDeveloper 11g and Oracle Application Development Framework (ADF) 11g DVD

Oracle ADF is a comprehensive productivity layer for J2EE developers. It simplifies building applications as a set of business services with Web, Wireless, and Rich Client interfaces. ADF accelerates development with ready-to-use J2EE Design Pattern implementations and metadata-driven components that you'd otherwise have to code, test, and debug by hand. Since its implementation is based on standards and its features embody years of experience from Oracle's own business application developers, your ADF-powered applications are high-performance, well-architected, and portable.

Oracle JDeveloper includes integrated visual design tools for ADF, providing a single environment to model, test, debug, tune, maintain, deploy, and version all of the layers of your J2EE application. Oracle ADF provides a flexible, end-to-end application infrastructure that accommodates your technology choices in each architectural layer, and Oracle JDeveloper offers drag and drop ease of use throughout the lifecycle, giving you productivity with choice.

This DVD contains the following:

- Oracle JDeveloper
- Oracle Application Development Framework (ADF)
- Oracle Team Productivity Center (TPC)
- Oracle WebCenter Services (does not include backend servers for Wikis, Discussion Forums, and Blogs)
- Oracle SOA Suite

If you want to install Oracle JDeveloper, refer to *Oracle Fusion Middleware Installation Guide for Oracle JDeveloper*.

2.17 Oracle Application Developer 11 (11.1.1.0)

The CD-ROM for Oracle Application Developer contains the following:

- Java Required Files (JRF)
- Oracle Enterprise Manager

For information about installing Application Developer, refer to *Oracle Fusion Middleware Installation Guide for Application Developer*.

2.18 Oracle Fusion Middleware Adapters and Connectors

Oracle Adapters provides standards-based connectivity to various backend applications.

This CD-ROM contains the following:

- Oracle Adapter for mySAP
- Oracle Adapter for PeopleSoft
- Oracle Adapter for Siebel
- Oracle Adapter for J.D. Edwards OneWorld XE
- Oracle Adapter for CICS
- Oracle Adapter for ebMS
- Oracle Adapter for EDI
- Oracle Adapter for IMS/TM
- Oracle Adapter for IMS/DB
- Oracle Adapter for VSAM
- Oracle Adapter for Tuxedo
- Oracle BeanConnect for CICS
- Oracle Adapter for Rosettanet
- Oracle Adapter for Healthcare
- Oracle JSR 170 Adapter for Oracle ContentDB, Oracle Portal, and Oracle File System

2.19 Oracle WebLogic Operations Control CD

WebLogic Operations Control is a management framework for virtualized and non-virtualized enterprise Java applications. WebLogic Operation Control:

- Introduces a layer of abstraction over complex operations environments that enables your operations staff to think in terms of supply and demand.
- Offers a policy-based framework for creating and automatically enforcing service level agreements for Java applications.
- Monitors the use of resources across the operations center and distributes the deployment of Java applications in a manner that ensures the most efficient use of resources overall.

2.20 Oracle Clusterware 11g (11.1.1.1.0) - Linux Only

Oracle Clusterware is the cross platform cluster software required to run Oracle Real Application Clusters (RAC) databases. It provides the basic clustering services at the operating system level that enable Oracle software to run in clustering mode.

2.21 Oracle Fusion Middleware 11g Documentation Library

This CD-ROM contains the complete documentation library for Oracle Fusion Middleware 11g Release 1 (11.1.1).

Index

A

accessibility, vii
Administration Console, 1-4
Administration Server, 1-4

C

certification for Oracle Fusion Middleware, 1-1
clustered and non-clustered managed servers
 comparing, 1-5
clusters, 1-5
Companion CD, 2-6
conventions
 for documentation, viii
creating a domain, 1-6
creating a metadata repository, 1-9
creating the Oracle Home directory, 1-6

D

documentation accessibility, vii
documentation conventions, viii
documentation library, 2-10
documentation roadmap, 1-9

E

extending a domain, 1-7

J

java components, 1-1

M

managed servers, 1-4
MDS repository, 1-9
metadata repository, 1-8
 creating with RCU, 1-9
 MDS repository, 1-9
 types of, 1-9
Middleware Home directory, 1-5

N

Node Manager, 1-5

O

Oracle Access Manager (OAM) Core
 Components, 2-7
Oracle Access Manager NLS Packages, 2-8
Oracle Access Manager Webgates, 2-8
Oracle Application Developer, 2-9
Oracle Business Intelligence Publisher, 2-7
Oracle Business Process Analysis (BPA) Suite, 2-7
Oracle Clusterware, 2-10
Oracle Data Integrator (ODI), 2-6
Oracle Fusion Middleware, vii
 CDs and DVDs, 2-1
 certification, 1-1
 components, 1-1
 concepts, 1-1
 creating the Oracle Home directory, 1-6
 directory structure concepts, 1-5
 documentation roadmap, 1-9
 environment, 1-2
 java components, 1-1
 Middleware Home directory, 1-5
 Oracle Home directory, 1-6
 overview, 1-1
 products, 2-1
 system components, 1-2
 system requirements, 1-1
 WebLogic Home directory, 1-5
Oracle Fusion Middleware Adapters and
 Connectors, 2-9
Oracle Fusion Middleware Companion CD, 2-6
Oracle Fusion Middleware products
 Companion CD, 2-6
 documentation library, 2-10
 Oracle Access Manager (OAM) Core
 Components, 2-7
 Oracle Access Manager NLS Packages, 2-8
 Oracle Access Manager Webgates, 2-8
 Oracle Adapters and Connectors, 2-9
 Oracle Application Developer, 2-9
 Oracle Business Intelligence Publisher, 2-7
 Oracle Business Process Analysis (BPA) Suite, 2-7
 Oracle Clusterware, 2-10
 Oracle Data Integrator (ODI), 2-6
 Oracle Identity Management, 2-4
 Oracle JDeveloper and Oracle Application

- Development Framework (ADF), 2-8
- Oracle Portal, Forms, Reports and Discoverer, 2-4
- Oracle Secure Enterprise Search (SES), 2-8
- Oracle SOA Suite, 2-2
- Oracle Web Tier, 2-6
- Oracle WebCenter, 2-3
- Oracle WebLogic Server, 2-2
- Repository Creation Utility (RCU), 2-1
- Oracle Home directory, 1-6
- Oracle Identity Management, 2-4
- Oracle Instance directory, 1-4
- Oracle Instance in a WebLogic Domain, 1-8
- Oracle JDeveloper and Oracle Application Development Framework (ADF), 2-8
- Oracle Metadata Repository
 - See metadata repository
- Oracle Portal, Forms, Reports and Discoverer, 2-4
- Oracle Secure Enterprise Search (SES), 2-8
- Oracle SOA Suite, 2-2
- Oracle Web Tier, 2-6
- Oracle WebCenter, 2-3
- Oracle WebLogic Scripting Tool (WLST), 1-4
- Oracle WebLogic Server, 2-2
- Oracle WebLogic Server Administration
 - Console, 1-4
- Oracle WebLogic Server domain
 - See WebLogic Domain
- overview of Oracle Fusion Middleware, 1-1

R

- related documents, viii
- Repository Creation Utility (RCU), 1-9, 2-1
- root access, vii

S

- system components, 1-2, 1-4
- system requirements for Oracle Fusion Middleware, 1-1

W

- WebLogic Domain, 1-6
 - creating, 1-6
 - directory structure for multiple products, 1-7
 - Domains directory, 1-6
 - extending, 1-7
 - User Projects directory, 1-6
 - with Oracle Instance, 1-8
- WebLogic Home directory, 1-5
- WebLogic Server domain
 - See WebLogic Domain
- WLST (Oracle WebLogic Scripting Tool), 1-4