Installing Oracle WebLogic Server 11*g*

Objectives

After completing this lesson, you should be able to:

- Explain Oracle WebLogic Server installation steps
- Install WebLogic Server using both the GUI and command line: `admin_client.jar`
- Describe the organization and contents of the WebLogic Server directory structure
- Navigate the WebLogic Server online and offline documentation
- Explain the importance of WebLogic Server installation in the context of other products in the Fusion Middleware suite
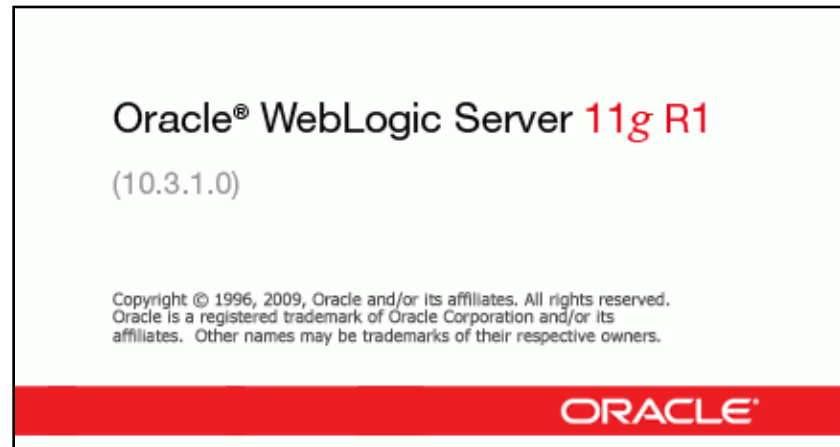
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Road Map

- Setting up an Oracle WebLogic Server environment using the GUI
- Setting up an Oracle WebLogic Server environment using the command line
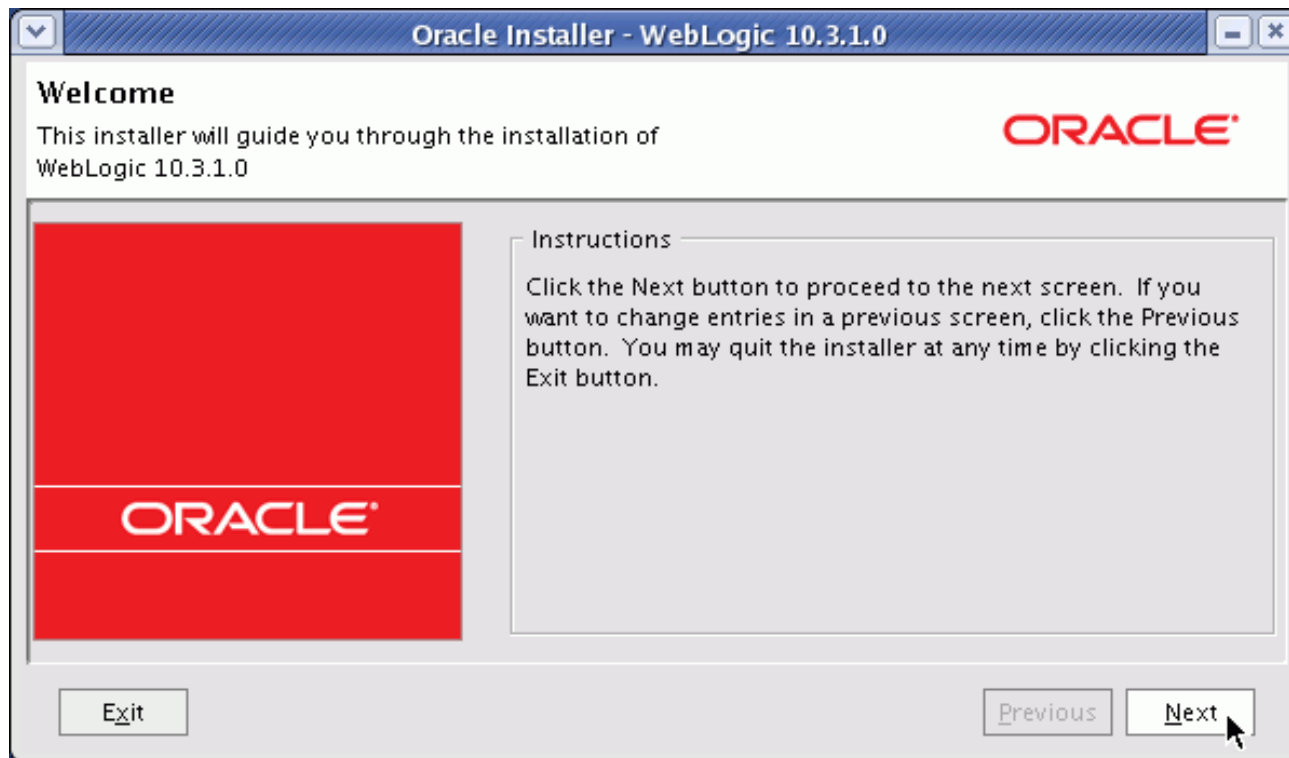
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Oracle WebLogic Server Installation

- Install Oracle WebLogic Server in three different ways:
    - GUI mode
    - Console mode
    - Silent mode
- Oracle WebLogic Server supports a number of platforms including:
    - Linux
    - Sun Solaris
    - HP-UX
    - Windows 2000, 2003 Server, XP

Oracle® WebLogic Server 11*g* R1

(10.3.1.0)

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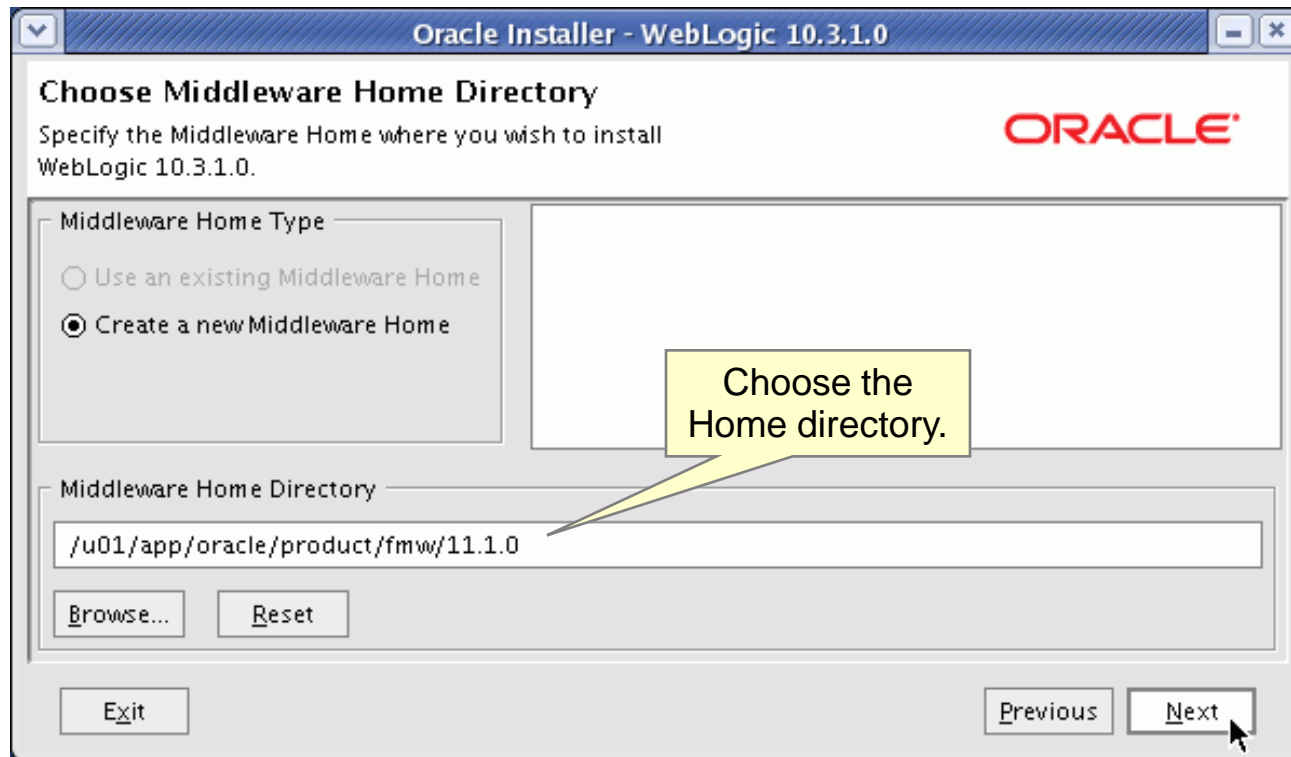
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GUI Mode Installation

Start the Installer (net or package).

`wls1031_ccjk_linux32.bin,`
`wls1031_linux32.bin,` or `wls1031_win32.exe`

Choosing or Creating a Home Directory

Browse or enter a destination.

Registering for Support

Optional, but recommended

Choosing an Installation Type and Products

Select the products and components.
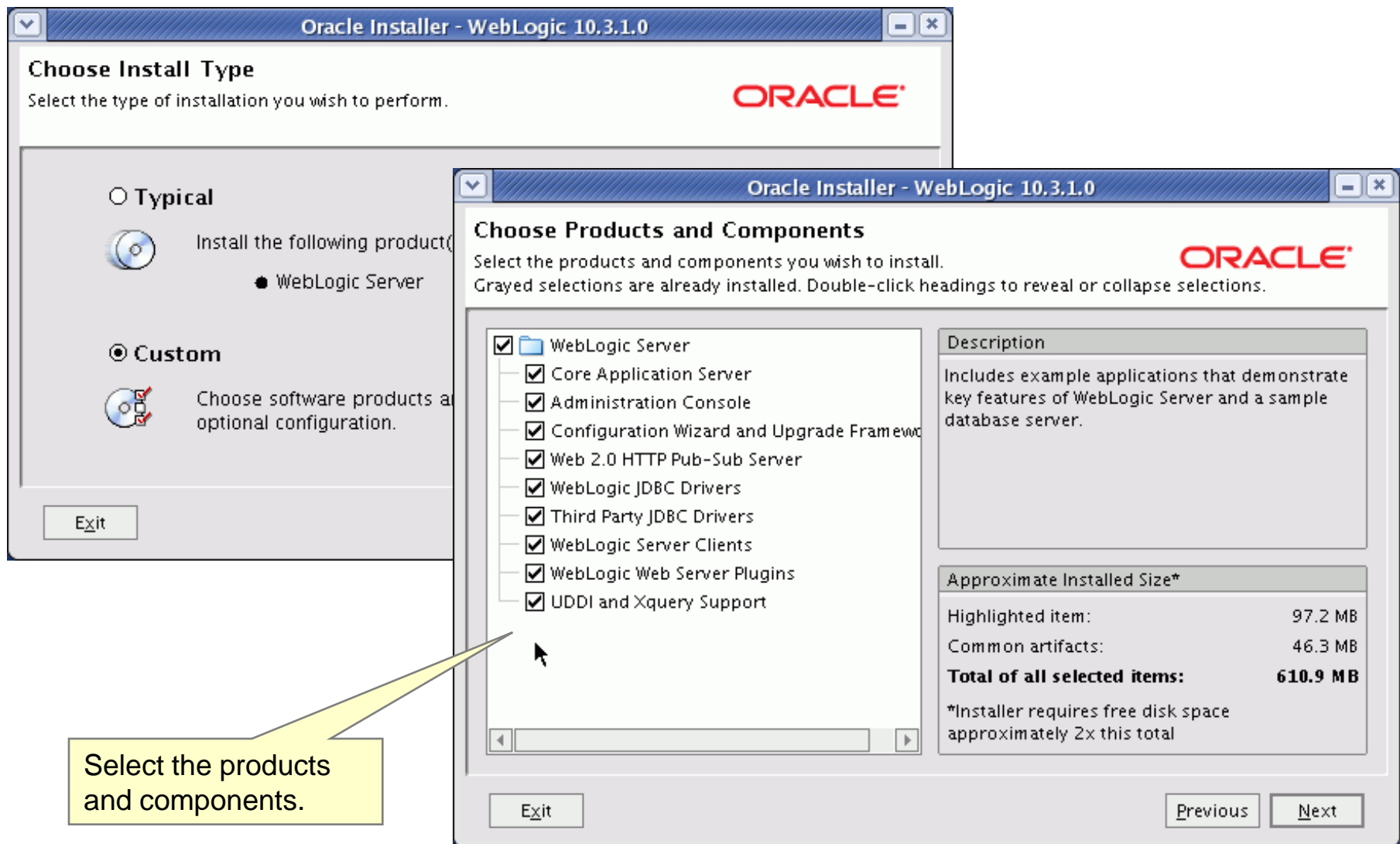
Choosing the JDK and Product Directory

Oracle Installer - WebLogic 10.3.1.0

JDK Selection

JDK(s) chosen for use with this product installation will be installed. Supported defaults if not deselected will be used in script string-substitution.

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Discard Changes

Bundled JDK:

☐ Sun SDK 1.6.0_11
☑ Oracle JRockit 1.6.0_05 SDK

Approximate installed size*

Highlighted item:	185.6 MB
All selected bundled JDK's:	192.6 MB
Total of all selected items:	**803.6 MB**

Local JDK:

☐ Sun SDK 1.5.0_11 (/u01/app/oracle/produ

Browse...

Exit

Select Java Development Kit (JDK).

Oracle Installer - WebLogic 10.3.1.0

Choose Product Installation Directories

Provide the directories where you wish to install WebLogic 10.3.1.0.

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Discard Changes

Middleware Home Directory

/u01/app/oracle/product/fmw/11.1.0

Product Installation Directories

The Product Home might contain shared utilities and any products or components for which unique directories are not set.

WebLogic Server:

/u01/app/oracle/product/fmw/11.1.0/wlserver_10.3   Browse...

Select Oracle WebLogic Server Home.

Exit   Previous   Next

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Installation and Summary
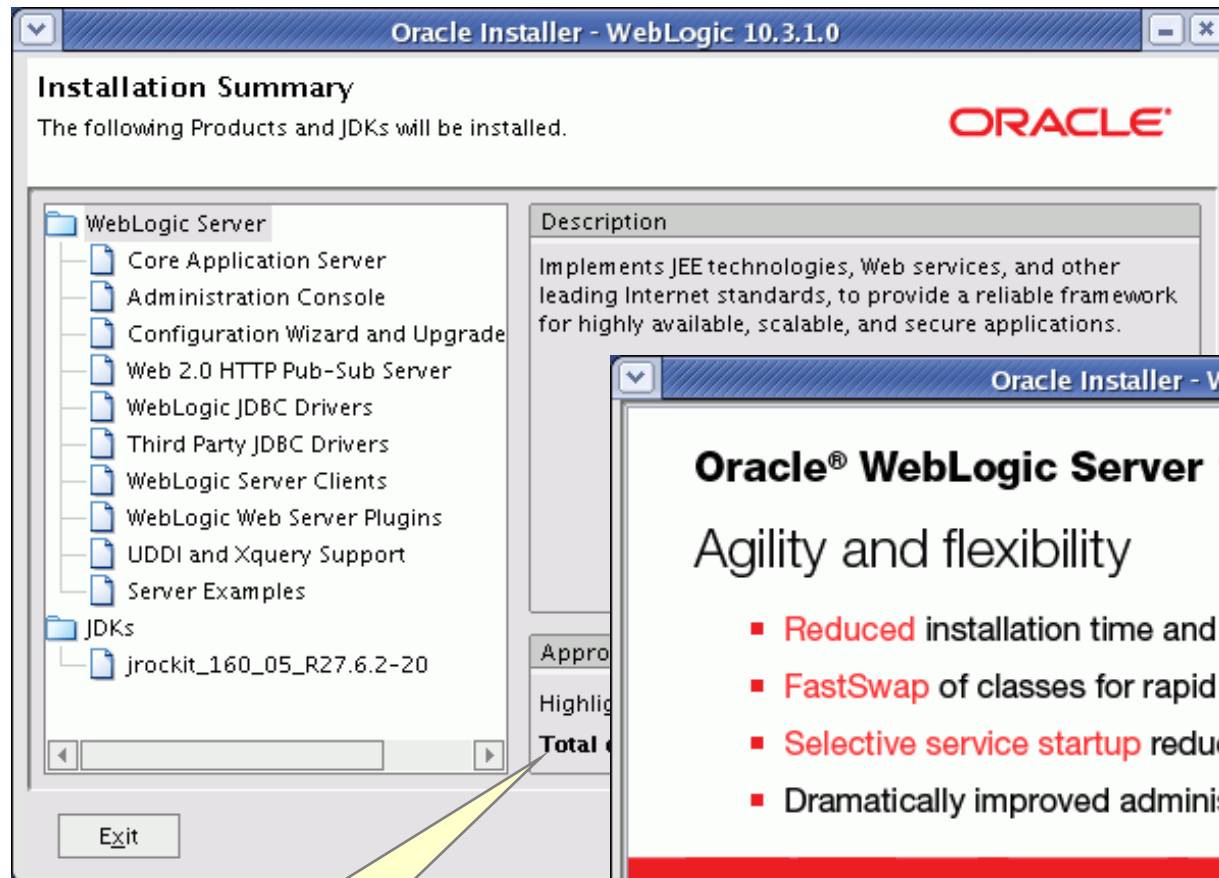
Repeats total selected size: 803.6 MB.

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Road Map

- Setting up an Oracle WebLogic Server environment using the GUI

- **Setting up an Oracle WebLogic Server environment using the command line**

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Console and Silent Mode Installations

- Console mode:
  - `wls1031_linux32.bin –mode=console`
  - The installation steps are similar to the GUI-based installation.
- Silent mode:
  - Create a `silent.xml` file.
  - `wls1031_linux32.bin –mode=silent`
    `–silent_xml=path_to_silent.xml`

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Postinstallation: Oracle Home

- `/u01/app/oracle/product/fmw/11.1.0/`: Oracle Home

- `registry.dat/registry.xml`: Record of all Oracle Middleware products

- `utils`: Additional or utility JAR files

- `wlserver_10.3`: Oracle WebLogic Server 10.3.1 Home

- `logs`: Installation logs

- `modules`: Modules (`.jar`) installed in Oracle Home

```
[oracle@wls-sysadm /]$ ls /u01/app/oracle/product/fmw/11.1.0
jrockit_160_05_R27.6.2-20    logs    modules    ocm.rsp    registry.dat  registry.xml
    utils    wlserver_10.3

[oracle@wls-sysadm /]$ ls /u01/app/oracle/product/fmw/11.1.0/wlserver_10.3/
common    inventory    samples    server    uninstall
```

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Oracle WebLogic Server Directory Structure

- `common`: The files shared by the Oracle WebLogic Server 10.3.1 components, including the template JAR files used by the Configuration Wizard when creating domains
- `samples`: Sample code and resources
- `server`: Server software components (executables, database files, XML JAR files, alternative JDBC drivers, Oracle WebLogic Server JAR files, and plug-ins)
- `uninstall`: The code required to uninstall Oracle WebLogic Server 10.3.1

```
[oracle@wls-sysadm /]$ ls /u01/app/oracle/product/fmw/11.1.0
jrockit_160_05_R27.6.2-20    logs    modules    ocm.rsp    registry.dat  registry.xml
    utils    wlserver_10.3

[oracle@wls-sysadm /]$ ls /u01/app/oracle/product/fmw/11.1.0/wlserver_10.3/
common    inventory    samples    server    uninstall
```

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Setting Environment Variables

- Run `setWLSEnv.sh` under `<WL_HOME>/server/bin` to set `WL_HOME`, `JAVA_HOME`, `PATH`, and `CLASSPATH`.

- `setWLSEnv.sh` makes a call to `commEnv.sh` under `<WL_HOME>/common/bin` to set common environment variables, such as `ORACLE_HOME`, `ANT_HOME`, and `POINTBASE_HOME`.

- Check the version of JDK:
  - `java -version`

```
[oracle@wls-sysadm /]$ java -version
java version "1.6.0_05"
Java(TM) SE Runtime Environment (build 1.6.0_05-b13)
BEA JRockit(R) (build R27.6.1-25_o-105709-1.6.0_05-20081111-1602-linux-ia32,
     compiled mode)
```

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Defining Environment Variables

- OS specific:
  - Windows: `%SOME_VAR%`
  - UNIX: `$SOME_VAR`
  - Generic: `<SOME_VAR>`
- Kinds of environment variables:
  - Location variables: `*_HOME`
  - Path variables: `*PATH`
  - Names
  - Miscellaneous
- Scope:
  - Preinstallation
  - Running session

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List of Environment Variables and Their Meanings

- **BEA_HOME**
- **MW_HOME**
- **WL_HOME**
- **PATH**
- **CLASSPATH**
- **JAVA_HOME**
- **JAVA_OPTIONS**
- **JAVA_VENDOR**
- **JAVA_VM**
- **JAVA_USE_64BIT**
- **LD_LIBRARY_PATH**
- **LIBPATH**
- **SHLIB_PATH**
- **MEM_ARGS**
- **SERVER_NAME**

- **WEBLOGIC_CLASSPATH**
- **CLASSPATHSEP**
- **PATHSEP**
- **POINTBASE_HOME**
- **POINTBASE_TOOL**
- **POINTBASE_CLASSPATH**
- **POINTBASE_CLIENT_CLASSPATH**
- **PRODUCTION_MODE**
- **PATCH_CLASSPATH**
- **PATCH_LIBPATH**
- **PATCH_PATH**
- **WEBLOGIC_EXTENSION_DIRS**
- **USER_MEM_ARGS**
- **PRODUCTION_MODE**
- **DOMAIN_PRODUCTION_MODE**

- **ANT_HOME**
- **ANT_CONTRIB**
- **PRE_CLASSPATH**
- **POST_CLASSPATH**
- **PRE_PATH**
- **POST_PATH**

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Documentation

Offline (Web)

- http://edocs.bea.com/wls/docs103/sitemap.html
- http://download.oracle.com/docs/cd/E12840_01/wls/docs103/sitemap.html

Online (WLS)

- Administration Console
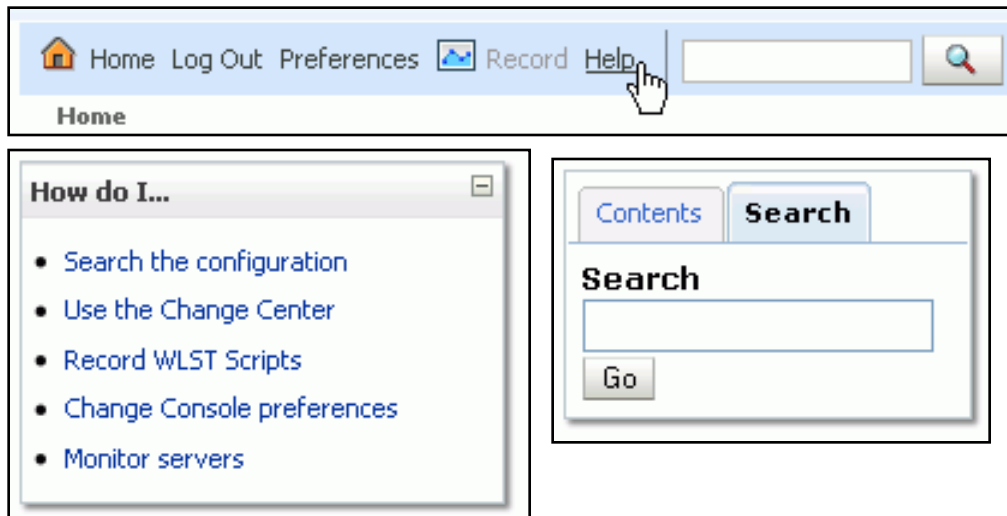
Downloading Software from OTN

Quiz

Net installer is preferred over the package installer if you want to install select components using only the Custom option and have access to the Internet.

1. True
2. False

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Quiz

Which JDK does Oracle WebLogic Server 10.3.1 come bundled with for a Linux platform?

1. Sun SDK 1.6
2. JRockit SDK 1.6
3. Both

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Summary

In this lesson, you should have learned how to:

- Install Oracle WebLogic Server 10.3.1
- Describe the organization and contents of the WebLogic Server directory structure
- Navigate the WebLogic Server online and offline documentation

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Practice 3 Overview:
Installing Oracle WebLogic Server 11*g*

This practice covers the following topics:

- Installing Oracle WebLogic Server with JRockit
- Navigating through the installed folder structure

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