Oracle® Universal Installer

Concepts Guide

Release 2.0.1

June 2001

Part No. A88812-01



Oracle Universal Installer Concepts Guide, Release 2.0.1

Part No. A88812-01

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Contents

Se	Send Us Your Comments	
Pr	eface	ix
1	Using the Oracle Universal Installer	
	Introduction	1-1
	System Requirements	1-2
	Installing Oracle Products With the Oracle Universal Installer	1-2
	Using the Welcome Screen	1-3
	Providing a Unix Installer Location with Root Privileges	1-3
	Providing a Unix Group Name	1-4
	Using the File Locations Screen	1-4
	Selecting from the Available Products	1-7
	Selecting an Installation Type	1-7
	Selecting Product Components (For Custom Installation)	1-8
	Selecting Component Locations (For Custom Installation)	1-10
	Reviewing the Summary Screen	1-11
	Reviewing the Install Screen and Checking Log Files	1-12
	Running Required Configuration Tools	1-15
	Running Optional Configuration Tools	1-16
	Performing Post-Installation Tasks	1-16
	Using the Oracle Universal Installer Exit Codes	1-17
	Running the Oracle Universal Installer After It is Installed	1-18
	Deinstalling Products	1-18
	Removing Oracle Products With the Oracle Universal Installer	1-18

Deinstalling Top Level Products that Have Dependees	1-19
Test 1: Test Components Having the "required" Type of Dependees	1-20
Test 2: Test Components Having "1,more" Type of Dependees	1-21
Forcing a Deinstall of a Component with a Different Internal Name	1-22
Using the Error Dialog	1-22
Setting Default Paths for Locations	1-23
Oracle Home Paths	1-23
Inventory Paths	1-24
Optimal Flexible Architecture Paths	1-25
Source Location Path	1-25
Internationalization and Installation Translations Support	1-25
Installer/Installation Dialogs Language	1-25
Product Language Selections	1-25
Installation from the Web	1-26

2 Using Multiple Oracle Homes

Introduction	2-1
Multiple Oracle Homes	2-1
Target Home	2-1
Product Types	2-2
Home Selector (Available on Win32 Platforms)	
Oracle Home Directory Structure for Windows Platform	
Optimal Flexible Architecture Directory Structure (on Solaris)	2-5
Creating an Oracle Home	2-7
ORAPARAM.INI File	

3 Silent Install Using Response Files

Introduction	3-1
Response File Format	3-2
How a Response File is Organized	3-2
General Section of the Response File	3-4
Include Section of the Response File	3-4
Session Section of the Response File	3-4
Components Section of the Response File	3-8
Specifying a Response File for the Oracle Universal Installer	3-10

Silent Install When Using Character Mode Consoles	3-12
Error Handling	3-12
Validation of Values from Response file	3-12

A Sample Response File

Example 1	A-1
Example 2	A-6

B Troubleshooting

Debugging Mechanisms in the Oracle Universal Installer	B-1
Oracle Universal Installer Errors	B-3
Deinstalling, Upgrading, or Downgrading Oracle Universal Installer	B-4
Other Tips	B-4

Index

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Part No. A88812-01

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Preface

This manual describes how to use the Oracle Universal Installer to install Oracle and third-party software.

Intended Audience

This manual is intended for users installing Oracle software products using the Oracle Universal Installer.

Related Documentation

For more information about the Oracle Software Packager, which is used to develop components that can be installed with the Universal Installer, see the *Oracle Software Packager User's Guide*.

The Oracle Software Packager software, as well as the *Oracle Software Packager User's Guide*, is available from the Oracle Technology Network (OTN) at:

http://otn.oracle.com/

To download Oracle Software Packager from OTN, search for Software Packager or select Oracle Software Packager from the Select a Utility or Driver drop-down list on the OTN Software Downloads page.

To locate the User's Guide on OTN, click the **Documentation** link, or search for Software Packager User's Guide.

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Accessibility of Code Examples in Documentation

JAWS, a Windows screen reader, 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, JAWS may not always read a line of text that consists solely of a bracket or brace.

Conventions

Convention	Meaning
	Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.
	Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted
courier text	Courier type in text indicates a code term or example.
boldface text	Boldface type in text indicates a term defined in the text, the glossary, or in both locations.
< >	Angle brackets enclose user-supplied names.
[]	Brackets enclose optional clauses from which you can choose one or none.

In this manual, the following conventions are used:

1

Using the Oracle Universal Installer

Introduction

Oracle has redesigned the architecture of the Oracle Installer, basing it on a Java engine that can handle complex requirements. The Oracle Universal Installer now performs component-based installs and contains object-oriented techniques which enable different levels of integrated bundle, suite, and web-based installs, and complex logic in a single package. The installation engine is easily portable across all Java-enabled platforms, and platform-specific issues can be encapsulated from the overall installation process.

The Oracle Universal Installer provides the following capabilities for addressing software management and distribution:

- Automatic dependency resolution and complex logic handling
- Installation from the Web
- Component and suite installs
- Implicit de-install
- Support for multiple Oracle homes
- National Language Support (NLS)/globalization support
- Support for distributed installations
- Unattended "silent" installations using response files

Note: Although the Oracle Universal Installer can list all products previously installed with another Installer (orainst), it cannot deinstall them.

System Requirements

The Oracle Universal Installer system requirements are listed below:

Java Runtime Environment (JRE)

Automatically installed with the Oracle Universal Installer. Check the release notes or installation guide of the products you are installing for the exact version that is required.

Memory Requirements:

- Memory requirements vary depending on the number of components installed. Check the Release Notes of the products you are installing for details.
- 32 MB minimum recommended on Win32 computers

Disk Space Requirements

- 9 MB for Installer files
- 150 KB/component for the installation required files (for example, log files)

Installing Oracle Products With the Oracle Universal Installer

While installing Oracle Products contained in a single CD on the Windows NT platform, start the Oracle Universal Installer by running the Oracle Universal Installer executable, SETUP.EXE.

While installing Oracle Products residing in a single CD on UNIX platforms, run the script called runInstaller from the top directory of the CD-ROM by typing

runInstaller

In the case of installing products that span multiple CDs for both UNIX and Windows platforms, temporary copies of OUI and JRE are placed in the TEMP or TMP directory so that these applications can be launched when you change CD-ROMs.

If a higher version of the Oracle Universal Installer is detected on your machine, the detected version is used to install rather than the one on the CD-ROM.

If you get an Xlib error or a "Failed to connect to Server" error when you are running the Oracle Universal Installer on Solaris, you need to set up the environment variables as follows:

```
%setenv DISPLAY <machine name>:0.0
%xhost +
```

Then, re-run the runInstaller script again.

The Oracle Universal Installer "Welcome" screen appears.

The sections below describe the Oracle Universal Installer screens.

Using the Welcome Screen

To familiarize yourself with the buttons on the Welcome screen, read the following descriptions before continuing:

- Click **About Oracle Universal Installer** to see the version of Oracle Universal Installer you are using.
- Click **Deinstall Products** to view and deinstall the components already installed on the machine in all Oracle homes.
- Click **Next** to go to the next step.
- Click **Previous** if you want to return to the previous step.
- Click **Installed Products** to view the components already installed on the machine in all Oracle homes. You can deinstall a component if necessary.
- Click **Help** to view the Oracle Universal Installer Help.
- Click **Exit** to exit from the Oracle Universal Installer at any time during the installation. For information on the Oracle Universal Installer's exit codes, refer to "Using the Oracle Universal Installer Exit Codes" on page 1-17.

Note: For information on using response files for silent installations, refer to Chapter 3, "Silent Install Using Response Files" and the installation and configuration guide of your product. A response file contains answers to dialogs that otherwise would be provided by the user in an interactive installation session.

After you have read the information above, click Next to continue or Exit to quit.

Providing a Unix Installer Location with Root Privileges

Various operations need to be performed with root privileges at this time. For example, you must have root privileges to be able to write the Oracle Universal Installer inventory.

If you have root privileges, continue with the required operations.

If you do not have root privileges, run the /Oracle Home/orainstRoot.sh Bourne shell script from another terminal window before proceeding with the install. To successfully run this script, you must be logged on as user with root privileges.

The Oracle Universal Installer inventory is where the inventory location is created. The Inventory location, <orainventory>, is located at \Program Files\Oracle\Inventory on Win32 computers and at the same level as the first <Oracle Home> on UNIX computers. It is the location for the Oracle Universal Installer's bookkeeping. Information about the inventory location is written into HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\inst_loc in the Windows registry. It is written into /var/opt/oracle/oraInst.loc (requires root permissions) on UNIX computers.

Note: You should not exit the install in order to run the oraInstRoot.sh Bourne shell script. Exiting the install removes this script.

The "Unix Installer Location" screen only appears the first time you install.

Providing a Unix Group Name

If you are installing a product on a UNIX system, the Installer prompts you to provide the name of the group which should own the base directory.

You must choose a UNIX group name which will have permissions to update, install, and deinstall Oracle software. Members of this group must have write permissions to the base directory chosen.

Only users who belong to this group are able to install or deinstall software on this machine.

Using the File Locations Screen

Use the File Locations screen to enter the stage (or source) location of your products and the location where you want to install your product. Specify full paths with directory names not exceeding 32 alphanumeric characters. The following sections provide more information about the fields on this screen. Note: Do not leave any fields empty.

Source

Path: Enter the full path of the products.jar file from which the product(s) will be installed. You may also use the **Browse** button to find the products.jar file.

The stage location is the centralized location where components have been placed for installations. It could be a single-CD staging area or a multi-CD staging area which spans across more than one disk. The components are bundled in one stage location and their description file is the products.jar file. The Oracle Universal Installer will read this file and provide a list of the components available to be installed.

The stage location may be a local CD-ROM drive, a network drive, or a web location. See the examples in the table below.

Stage Location	Example
CD-ROM location	D:\install
	When you run the Universal Installer from a CD-ROM, the value of this field should be set automatically.
Network Drive	//net/ <directory_name>/Disk1/stage/products.jar</directory_name>
Web Location	For example: files can be accessed by pointing a browser at:
	http:// <webserver>:<port>/<my_stage>/<stage_loc>/ Diskl/stage/products.jar</stage_loc></my_stage></port></webserver>
	http://www.oracle.com/8I/Disk1/stage/products.jar
	Refer to "Installation from the Web" for more information.

For more information about multi-CD staging, refer to the *Oracle Software Packager User's Guide*.

Destination

Name: Enter an Oracle home name or select it from the drop-down list.

If you currently do not have a home created on your machine, one is created for you during the installation. The home will have whatever name you enter in the Name field.

Oracle homes are identified by name, and the Oracle home name identifies the program group associated with a particular Oracle home, and the Oracle services installed on the associated home. The Oracle home name must be 1 to 16 characters long and can only include alphanumeric characters and underscores. The Oracle home name must not include spaces.

Note: Name field only appears in Windows Platforms.

Path: Enter the Oracle home with its full path or select it from a drop-down list of existing Oracle Homes.

List of Oracle homes the Oracle Universal Installer maintains on Windows platforms:

- All Oracle homes that are already created using the Oracle Universal Installer
- All homes created using the previous Oracle Installer (ORCA-based)
- The home that the ORACLE_HOME environment variable points to

List of Oracle homes the Oracle Universal Installer maintains on UNIX:

- All Oracle homes that are already created using the Oracle Universal Installer
- All homes as defined in the /var/opt/oratab file
- The home that the ORACLE_HOME environment variable points to

If none of these homes exists, a default home is calculated based on the disk volume with the largest amount of free space.

You may also use the **Browse** button to choose a directory to install your product. This location is the destination directory to which the product will be installed.

When you have entered the appropriate information, click **Next** to continue. The Available Products screen appears.

Selecting from the Available Products

Select a product option to install and click Next to continue.

Selecting an Installation Type

An installation type is a pre-defined component set that automatically selects which components to install.

The Installation Types which appear in this screen depend on the list that the install developer had specified when the components were built with the Oracle Software Packager, an installation definition tool which allows you to define the installation characteristics of a component. Oracle Software Packager is available from the Oracle Technology Network (OTN) at:

http://otn.oracle.com/

From the Oracle Technology Web site, search for Software Packager, or select **Oracle Software Packager** from the **Select a Utility or Driver** drop-down list on the OTN Software Downloads page.

Refer to the *Oracle Software Packager User's Guide* for detailed information about building components.

Installation Types are given a name, followed by a description of what is installed when you select the installation type.

Examples of Installation Types for a product could be Minimum, Complete, Custom, and Typical, and the order of the types may differ depending on how the installation had been developed.

Туре	Definition
Minimum	Installs required dependee components.
Complete	Installs all dependee components.
Custom	Installs end-user selected dependee components. If you choose Custom, a tree listing appears which allows you to specify which dependee components to install.
Typical	Installs default dependee components.

Examples for the installation types are listed below:

Note: When the number of Installation Types cannot fit as radio buttons on the screen, you may see a scrollable list of install types instead of radio buttons. Additional information may be provided through pop-up descriptions or an I button. For a pop-up description of a specific Installation Type, you can move the mouse cursor over the Installation Type and hold it there briefly to display the description. Click the I button for additional information.

When you have chosen the Installation Type, click **Next** to continue. The screen which appears next depends on the Installation Type you have chosen.

Selecting Product Components (For Custom Installation)

Use the Available Product Components screen to select a component or patch to install or to deselect components you do not want to install.

To familiarize yourself with the behavior of the checkmarks next to each component, review the following descriptions before continuing:

- White background/black checkmark: User-selected item with all dependencies selected. If you select this item again, it will be deselected and the item will not be installed. If you select the item after that, the item will return to the selected state.
- Gray background/black checkmark: User-selected item with some dependencies selected. If you select this item again, it will be deselected and the item will not be installed. If you select the item after that, the item will return to the selected state.
- White background/white checkmark: System-selected item with all dependencies selected. This icon only appears if the item in its current context has not been user-determined.
- Gray background/white checkmark: System-selected item with only some dependencies selected. This icon only appears if the item in its current context has not been user-determined.
- Gray background/gray check mark: System-selected item with only some dependencies selected. This icon only appears if the item in its current context has not been user-determined.

A component that is to be installed may depend on the installation of other components. If you try to deselect a required component, the following message appears: "This is a required component. You cannot deselect a required component." Click **Show Details** on the Error Dialog screen for information on why the component is required.

For information on the status of the installations, see the Install Status column.

- New Install: Products to be installed for the first time on the machine.
- Upgrade: Products to be upgraded to a higher version.
- Installed: Products which are already installed if they are the same version. The Oracle Universal Installer does not install these products.
- Reinstall: Products which are already installed, but which you have chosen to install again.

Attention: Patches are installable units that have bug fixes for released products and are associated with the component they patch. You can install a patch over a component or a patched component with a lower or equal patch version. Patchsets are top level installable items containing a group of patches. The patches in a patchset can be different versions for one component (patch) and/or multiple components (patches). Refer to the *Oracle Software Packager User's Guide* for detailed information on patches.

The **Product Languages** button allows you to select all languages your product will be running in.

Note: Changing the language of a product does not affect the installation session's language. The Oracle Universal Installer runs in the language detected at the operating system level.

Refer to "Internationalization and Installation Translations Support" on page 1-25 for more information changing the language of a product.

Click **Next** to continue. If you are performing a Custom installation, the Component Locations screen appears. Otherwise, the Summary screen appears.

Selecting Component Locations (For Custom Installation)

On the Component Locations screen, you can see where each component is to be installed, select alternate locations for some of the components, and check for available disk drive space.

To show a list of all the components to be installed, check the "Show all Components to be Installed" box.

For more information on a specific component, you can move the mouse cursor over the component in the list box and hold it there briefly to display a pop-up description.

To see if a component's location can be changed, and to see where a component is to be installed, click the component in the list. If the component's location can be changed, a Destination Location field appears where you can type the new location. You can also browse for new locations using the **Change Location** button.

To check for available space on your different disk drives, select the arrow in the Available Disk Space field. By default, the disk space is shown for the volume in which the files will be copied to. Disk space is only refreshed when you complete one of the following actions:

- Click a different component in the list.
- Choose a different drive in the disk space panel.
- Press the **Previous** button; then, the **Next** button.
- Press the **Next** button; then, the **Previous** button.

Check "show all available volumes" to see the disk space on all volumes.

Note: If there is insufficient disk space, the items in the problem volume will be displayed in red with an icon next to it.

When you have entered the appropriate information, press the **Next** button to continue. The "Summary" screen appears.

Reviewing the Summary Screen

The Summary screen presents a summary of the options you have selected. Depending on your installation, information may include the following:

Global Settings

- Source: The centralized location where components have been placed for installations. To change the Source, you must return to the "File Locations" screen.
- Destination: The location of the Oracle home where you want to install your product. To change the Destination, you must return to the "File Locations" screen.
- Installation Type: A pre-defined component set that automatically selects which components and dependency groups to install. To change the Installation Type, you must return to the Installation Types screen.

Product Languages

The language you have chosen for running the Oracle product. To change Product Languages setting, you must return to the "Available Product Components" screen.

Refer to "Internationalization and Installation Translations Support" on page 1-25 for more information changing the language of a product.

Space Requirements

The disk space required to install the product. The space requirement appears in a different color if the disk space available is less than what is expected.

New Installations

Products to be installed for the first time on the machine.

Upgrades

Products to be upgraded to a higher version.

Reinstallations

The Oracle Universal Installer deinstalls earlier versions of the product first before starting the installation.

De-Installations

Products to be removed as part of this installation because no other products depend on them and are replaced by newer versions. Deinstalling any component will deinstall all its dependees unless there are other components that depend on them. To install a lower version of a product, you must explicitly deinstall the product first to be able to install a lower version of it. Note that you can install a lower version of a product if the higher version was not marked by the install

developer to replace the lower version. In this case however it is not considered a downgrade because both versions will coexist.

Already Installed

Products which are already installed. The Oracle Universal Installer does not re-install these products.

Note: If there is a disk space shortage and you press the **Install** button, a warning dialog appears. If you press the **No** button, the space information is refreshed.

When you have checked your choices, press the Install button to continue.

The "Install" screen appears.

If other disks are required, the Oracle Universal Installer will prompt you for another disk during the Install phase. For example, the Oracle Universal Installer prompts you after you click the **Install** button on the Summary page.

Note: Depending on the products selected for installation, there may be other product-specific screens which appear. Press the **Help** button for more information on these screens.

Reviewing the Install Screen and Checking Log Files

The Install screen appears while the product is installing. Installation operations include copying files, adding services on Windows NT systems, linking on Solaris systems, and executing decision points and calculations.

The first time the Oracle Universal Installer is invoked on a machine, whether from a CD or from the hard drive, it will write the oraInstall.err and oraInstall.out files in the following locations:

- Windows platform: c:\temp\oraInstall\
- UNIX: /temp/oraInstall

For the subsequent invocations of the Oracle Universal Installer on the same machine, these files will be placed in the same location as the installActions.log file, that is: <inventory_location>\logs.

If a problem occurs during the installation, look for Java exceptions in these files.

The jar files, which can contain files which are part of your product or which can contain libraries which are used by the Oracle Universal Installer, are first copied to this default location before they are extracted to their install location. Native libraries are copied here also. Make sure you have enough space in the default TEMP or TMP directory otherwise the installation will not succeed. The amount of space required depends on the product being installed.

A progress bar shows the status of the installation on a per component basis, based on the component size. The size is relative to the total size of the installation.

Note: For upgrades and reinstallations, the Oracle Universal Installer deinstalls earlier versions of the product first before starting the installation.

If you want to stop the installation, press the **Cancel** button.

If there are no required or optional configuration tools for the installation, the "End of Installation" screen appears when the installation is completed.

Using the Installer Log Files

Several logs are created during installation:

- installation logs
- silent installation logs
- deinstall logs
- relinking logs (if applicable)

Installation Log

During the install, the Oracle Universal Installer writes a text file that contains information on:

- variable settings
- action calls
- queries
- exception information

The installation log is located in <oraInventory>\logs\InstallActions.log.

It is backed up as installActions<date>.log.

By default, the Inventory location, <orainventory>, is located at \Program Files\Oracle\Inventory on NT and at the same level as the first <Oracle Home> on Solaris.

The details of the install session exists in installActions.log.

The Installation Log is used for debugging purposes only. All actions, queries, everything that happens during the install, and all modifications to the target machine are logged in the file.

Silent Installation Log

The silentInstall.log is only created for silent installs. The installActions.log is still created for silent installs. silentInstall.log only contains the result of the installation, i.e. either a success or fail, whereas the details of the install session exists in installActions.log.

If there is an existing inventory on the system, the silentInstall.log is created in the <Inventory location>/logs directory. If no inventory is present, it will be created in /tmp/silentinstall.log

Deinstall Log

The Deinstall Log is written to when the Oracle Universal Installer starts the installation process (indicated by a progress bar).

The Deinstall Log is a binary file, which contains a record of every action the Oracle Universal Installer performed during the installation. It is called install.log. Every Oracle Universal Installer action defined, must have an "undo" action defined. Therefore, when the installer records the action and the parameters for this action, it automatically "knows" what the "undo" of that action will be. If you perform a de-installation of a component afterwards, the Oracle Universal Installer reads the log backwards and then runs all the "undo" actions for the recorded actions for that component.

To see a list of all components currently installed, go to the software Inventory location (INST_LOC in registry on NT; the content of the /var/opt/oracle/instloc file on Solaris). Each of these component structures will have an install.log file, which contains the Oracle Universal Installer actions performed.

Note: Do not remove this log.

Relinking log

The relinking log is created only if any linking is performed. For example: Oracle8*i* linking writes to a single relinking log. Do not remove this log.

Running Required Configuration Tools

The Required Configuration Tools screen shows the name and status of the tools which are required to run before the installation is completed.

The status shown for the tool could be succeeded, failed, or pending.

When you select a tool, its details are shown in the Details box. Details are displayed as the tool is running. When a tool is running, you may not see the details of another tool.

If all tools succeed on the first try, the Oracle Universal Installer automatically proceeds to the next screen. Otherwise, it remains on the Required Configuration Tools screen until all tools are completed successfully. You can then click **Next** to proceed.

If you want to stop a configuration tool while it is running, you can click **Stop**.

If a required tool fails even after retrying it, the Oracle Universal Installer considers the entire installation session as having failed. No products are registered in the Oracle Universal Installer inventory.

Tip: If a required tool fails and the Oracle Universal Installer considers the entire installation session as having failed, you may consider manually deleting files that were copied into the Oracle Home and then restarting your installation.

Running Optional Configuration Tools

The Optional Configuration Tools screen shows the name and status of the optional tools which you can run during the installation.

The status shown for the tool could be succeeded, failed, or pending.

When you select a tool, its details are shown in the Details box. Details are displayed as the tool is running. When a tool is running, you may not see the details of another tool.

If all tools succeed on the first try, the Oracle Universal Installer automatically proceeds to the next screen.

If you want to stop a configuration tool while it is running, you can click Stop.

You can still proceed with the installation if an optional tool fails.

Performing Post-Installation Tasks

The End of Installation screen informs the user whether the installation was successful or unsuccessful.

For information on the Oracle Universal Installer's exit codes, refer to "Using the Oracle Universal Installer Exit Codes" on page 1-17.

Viewing Release Information

To view release information, click Release Information.

Note: The **Release Information** button is not available if there is no release information.

For Solaris only: When the Oracle Universal Installer prompts you to enter a tool/command to display the readme, you must type in xterm -e before the name of the tool if you are using a tool such as vi or emacs to view the readme.

For example, xterm -e vi, which brings up a separate xterm window that immediately executes the vi <filename> command.

Launching Additional Configuration Tools

To launch additional configuration tools, click **Additional Configuration Tools** to access the "Optional Configuration Tools" screen. Select the appropriate item from the list box and double-click or press the space bar.

Note: The **Additional Configuration Tools** button is not available if there is no additional configuration tool.

Installing Another Product or Exiting

To install another product, click Next Install.

Exiting the Oracle Universal Installer

To Exit from the Oracle Universal Installer, click Exit.

Using the Oracle Universal Installer Exit Codes

The Oracle Universal Installer returns one of the following exit codes:

Code	Description
0	All installations were successful
1	All installation were successful but some optional configuration tools failed
-1	At least one installation failed

Note that:

 This feature will not work if the Oracle Universal Installer is running in "bootstrap" mode. In this case setup.exe/runInstaller will just launch the JRE process and return immediately without waiting for the exit code. The Oracle Universal Installer will be running in "bootstrap" mode if the following line exists in the file "oraparam.ini":

BOOTSTRAP=TRUE

2. If you exit without installing any products (for example if you exit from the "Welcome" screen), the exit code will be -1.

Running the Oracle Universal Installer After It is Installed

The Oracle Universal Installer is installed on your system during the installation of your Oracle products:

- On NT: \Program Files\Oracle\oui
- On Solaris: it is at the same level as <orainventory>

A new version of the Oracle Universal Installer replaces its older version.

The Oracle Universal Installer is placed under "Independent Products" in the Inventory panel as a "non-Oracle Home" product because it maintains an inventory across all Oracle Homes.

To run the Oracle Universal Installer:

- On Windows platforms, select Start=>Programs=>Oracle Installation Products=>Oracle Universal Installer.
- On Solaris, execute ./runInstaller from the area where it is installed.

For example: if the <OraInventory> is /u01/oracle/oraInventory; then, the Oracle Universal Installer will be at /u01/oracle/oui

When the Oracle Universal Installer is first run/installed, it checks for the JRE path (the location where it is run from), using the location specified in the oraparam.ini file. If the JRE does not exist here, the Oracle Universal Installer looks for a local JRE.

Deinstalling Products

The following sections describe how to remove products you have installed with the Oracle Universal Installer.

Removing Oracle Products With the Oracle Universal Installer

A deinstallation can be performed before making your selection of products to install or after a successful install.

To remove Oracle products, perform the following steps:

- 1. Start the Oracle Universal Installer from a CD-ROM or
 - For Windows platforms, launch the Oracle Universal Installer from the Start menu. Choose Start > Installation Products > Oracle Universal Installer.

• For UNIX platforms, run the script called runInstaller from the directory it was installed in, which is by default at the same level with the first Oracle Home called "oui" created on that machine.

runInstaller

2. Press Deinstall Products on the "Welcome" screen.

The Inventory panel appears.

- **3.** Check the product(s) you want to remove from the Inventory panel and click **Remove**.
- **4.** The Remove Confirmation Dialog appears, asking if you want to remove the products and their dependee components. Press the **Yes** button.

The Oracle Universal Installer warns you of any product dependencies that might cause problems if particular products are removed, and prompts you to confirm the de-installation.

Pay special attention to the full list of products being deinstalled before proceeding. The Oracle Universal Installer computes this list based on the dependencies of each component.

Note: You can also remove products by using the **Installed Products** button on the Oracle Universal Installer as long as this action is performed before making your selection of products to install.

Deinstalling Top Level Products that Have Dependees

A top level component is the most important component of an installation. It is the installable product you see at the first install screen. You can only install one top level component per install session.

The following examples use top level components that have dependees of different types offered by Oracle Software Packager/Oracle Universal Installer.

Test 1: Test Components Having the "required" Type of Dependees

Setup:

Create 2 top level components (A, B), each having the same "required" dependee (C).

Install:

I1a. Choosing A results in the install of A and C.

11b. Later, choosing B results in only B being installed (its dependee C was previously installed).

Deinstall:

D1a. Choosing A results in deinstall of A only. C is not deinstalled since it is also a "required" dependee of B, and thus is still needed.

D1b. Choosing A and C results in deinstalling A, B, and C. B is also deinstalled since its "required" dependee C is being deinstalled and it cannot be left installed without it.

D1c. Choosing C results in deinstalling A, B, and C. A and B are also deinstalled since their "required" dependee C is being deinstalled and they cannot be left installed without it.

Test 2: Test Components Having "1,more" Type of Dependees

Setup:

Create 2 top level components (A, B), each having the SAME two '1,more' type dependees (C,D).

Install Test 2:

I2.a. Choosing A and both dependees (C,D) results in the install of A,C,D.

I2.b. Later, choosing B (without C,D) results in the install of only B.

Deinstall Test 2:

D2.a1. Choosing A results in deinstall of only A.

D2.a2. Choosing A and ONE dependee C (under A) results in deinstall of all (A,B,C,D). Note the deinstall of B and D occurs.

D2.a3. Choosing only ONE dependee C (under A) results in deinstall of all (A,B,C,D). Note the deinstall of A, B and D occurs.

D2.a4. Choosing only one dependee D (under A) results in deinstall of all (A,B,C,D). Note the deinstall of A, B and C occurs.

D2.a5. Choosing both dependee C and D (under A) results in deinstall of all (A,B,C,D). Note the deinstall of A and B occurs.

D2.b1. Choosing B results in deinstall of only B.

D2.b2. Choosing B and one dependee C (under B) results in deinstall of all (A,B,C,D). Note the deinstall of A and D occurs.

D2.b3. Choosing only one dependee C (under B) results in deinstall of all (A,B,C,D). Note the deinstall of A, B and D occurs.

D2.b4. Choosing only one dependee D (under B) results in deinstall of all (A,B,C,D). Note the deinstall of A, B and C occurs.

D2.b5. Choosing both dependee C and D (under B) results in deinstall of all (A,B,C,D). Note the deinstall of A and B occurs.

Forcing a Deinstall of a Component with a Different Internal Name

You cannot programmatically force the deinstallation of a certain component from a certain component; however, the Oracle Universal Installer's dependency engine should take care of the deinstallation should deinstall the component and replace it with the new component.

The rule is as follows:

If:

- A.v1 depends on B
- A.v2 depends on C
- A.v1 is in the replace range of A.v2

Then:

Upgrading A from v1 to v2 will perform the following:

- deinstall A.v1 and B
- install A.v2 and C

Note: Make sure the new version is marked to replace the old version. For example, the old version should be in the replace range of the new version.

Note: Make sure the new version is marked to replace the old version. In the .prp, you can specify the version range to be replaced. For example, the old version should be in the replace range of the new version.

Using the Error Dialog

The dialog comes up when an error occurs while executing an action or query. For example, running out of disk space while copying files is an exception/error condition.

Read the following button descriptions before continuing:

Retry

Try the action/query again

Ignore

Ignore the error and continue the installation.

Continue

Use the default value and continue the installation.

Cancel

Cancel the installation. The two options are:

- Stop the installation of this component only
- Stop the installation of all components

Setting Default Paths for Locations

This section describes how the Oracle Universal Installer computes the default paths for the following:

- Oracle Home
- Inventory
- OFA
- Source Location

Oracle Home Paths

The list of Oracle homes on Windows platforms consists of the following:

- all Oracle homes that are already created using the Oracle Universal Installer
- all homes created using the previous Oracle Installer (ORCA-based). Note: The Oracle Universal Installer only displays these homes. No actions can be performed on the homes creating using the previous Oracle Installer.
- the home that the ORACLE_HOME environment variable points to

The list of Oracle homes on UNIX consists of the following:

- all Oracle homes that are already created using the Oracle Universal Installer
- all homes as defined in the /var/opt/oratab file. Note: This location may vary for different UNIX platforms
- the home that the ORACLE_HOME environment variable points to

If none of these homes exists on a machine, a default home is calculated based on the disk volume with the largest amount of free space.

Inventory Paths

The global inventory is a collection of:

- All Oracle software products installed in all Oracle homes on a machine
- Other non—Oracle products (such as JRE)

Locating the Inventory on Windows NT

On the Windows NT platform, the Oracle Universal Installer first queries the registry to see if the following Oracle Home setting present:

```
HKEY_LOCAL_MACHINE
Software
Oracle
INST LOC
```

If this value is found, it will be used as the inventory location. If the value is not found, the following sequence occurs:

1. The Oracle Universal Installer requests the location of the Program Files directory.

The Program Files folder is a system-defined directory usually on the C drive.

2. The directory structure is created in the form:

```
<program Files>
\Oracle
\bin
\inventory
\locks
\logs
\oui
```

3. The registry is updated with this inventory location.

Locating the Inventory on UNIX

At startup, the Oracle Universal Installer first looks for the following file: var/opt/oracle/oraInst.loc

If this value is found, it will be used as the inventory location. If the value is not found, the inventory path is created as follows:

```
ORACLE_BASE\oraInventory
```

If the ORACLE_BASE is not defined, it is created at the same level as the first Oracle home. For example, if your first Oracle home is at /private/ORACLEHome1, then, the inventory is at /private/oraInventory.

If the Oracle Universal Installer is unable to create an inventory directory at these locations, it prompts you with a locations dialog.

Clicking the **Save As** button pops up a File browse dialog to accept a file name. The inventory as seen in the inventory tree will be logged into this file as text.

Optimal Flexible Architecture Paths

For detailed information about the Optimal Flexible Architecture (OFA), "Optimal Flexible Architecture Directory Structure (on Solaris)" on page 2-5.

Source Location Path

The source location default value is listed in the oraparam.ini file which is a part of your staging area. For example, the source location can be a directory on a CD-ROM.

Internationalization and Installation Translations Support

The following sections describe how Oracle Universal Installer supports multiple languages and internationalization.

Installer/Installation Dialogs Language

The Oracle Universal Installer runs in the language of the operating system. The Oracle Universal Installer uses the language that Java detects, the system locale value, and sets that to the default language. The Installer dialogs will be displayed in this language if available. If specific Installer dialogs are not translated in the language of the operating system, those dialogs will be shown in English.

Product Language Selections

If multiple languages are defined for the products installed, the Universal Installer allows language selection via the Custom install type only. The languages selections are for the top level component being installed. A top level component is the product selected on the Products Selection dialog, a single one per installation session. If any sub-components (lower level) do not have files defined for the language the user selects, English only will be installed. The English files are always installed for all components, regardless of user selection or operating system language.

If a component is already installed, but with a different language set, that component will be reinstalled.

At install time, the Oracle Universal Installer looks at the language list of each file/filegroup to determine which need to be copied.

Installation from the Web

The Oracle Universal Installer is capable of installing a product from Web. You can publish your staging area from a Web server and then in the Universal Installer's **From** location, specify the http location for the products.jar file.

For example, you can enter:

http://www.oracle.com/product/ouiinstall/stage/products.jar

The Oracle Universal Installer recognizes a Web staging area just like a local, network, or CD-ROM stage.

System administrators of large customers who may want to deploy Oracle software to more than one target can use a combination of the Web installation and response file features:

- 1. Copy the staging area to a shared file system and make it accessible on the Intranet or a Web server.
- **2.** Include predetermined response files on the same location. (Different groups of users might rely on different response files.)
- **3.** Clients run Oracle Universal Installer locally and use the local response file that is emailed or downloaded so they can perform a silent install.

The Web installation capability relies on some guidelines that must be followed at installation development time. Check your installation guide for your product to see if the installation of your product is certified for Web installation.

To test if your stage is Web-enabled, you may try the following:

- 1. Copy the stage to your Web server.
- 2. Start the Oracle Universal Installer locally and point to the location of the products.jar file. For example:

http://smpweb.us.oracle.com/product/ouiinstall/stage/products.jar
2

Using Multiple Oracle Homes

Introduction

The Oracle Universal Installer supports the installation of several active Oracle homes on the same machine. An Oracle home is the system context in which Oracle products run. This context consists of the directory location where the products are installed, the corresponding system path setup, and where applicable, the program groups associated with the products installed in that home, and the services running from that home.

Multiple Oracle Homes

The Oracle Universal Installer supports the installation of several active Oracle homes on the same machine as long as the products support this at runtime. You can have multiple versions of the same product or different products running from different Oracle homes concurrently. Products installed in one home will not conflict or interact with products installed in another home. You can update software in any home at any time, assuming all Oracle applications/services/processes installed on the target home are shut down. Processes from other homes may still be running.

Target Home

The Oracle home currently accessed by the Oracle Universal Installer for installation or deinstallation is the target home. In order to upgrade or remove products from the target homes, those products must be shut down/stopped.

Product Types

Different levels of support are available with multiple Oracle homes for the following product types:

- Products that can be installed once in any new Oracle home. Ensure that the
 previous product installation is first removed so that only one copy/version of
 that application can run at the same time. If such product is already installed,
 and you try to install it again on a different home, the Oracle Universal Installer
 issues an error message.
- Products that can be installed multiple times, in different homes, on the same machine, with no conflicts or interaction at install-time, run-time, or deinstall-time. These are products which can be used concurrently.

Note: The installation guide of your products will specify what type they are and whether they can be installed once in a home or multiple times.

Home Selector (Available on Win32 Platforms)

Overview

The Home Selector is part of the installation software and is installed with the Oracle Universal Installer. It is installed in <oui_location>\HomeSelector.

If your application is not installed in one of the Oracle homes, you need to ensure it uses the right product version, by pointing it to the right home. That specific (target) home must take precedence over the other homes in your path when you launch your application.

The Home Selector enables you to easily change your primary Oracle home (the one that appears first in the PATH environment variable). If you need to switch the active home or need to perform batch work which requires a "default home" to be active, the Oracle Home Selector can be used to change the Windows NT system settings.

When using the Home Selector to make a specific \$ORACLE_HOME the active one, the software installation in question is moved to the top of the PATH variable, making it the first directory to be scanned for executables and library files.

How It Works

When you perform an install on a system, the first \$ORACLE_HOME will be named the "DEFAULT_HOME" and will register itself in the Windows NT registry under the key:

```
HKEY_LOCAL_MACHINE
Software
Oracle
```

This is the default Windows NT registry hive which contains all the "generic" Oracle settings. Also the PATH variable is adjusted and the BIN directory of the \$ORACLE_HOME is added to the environment variable.

Starting with Oracle 8.0.4, the first version to be multiple \$ORACLE_HOME aware, some additional parameters will also be written to the key:

```
HKEY_LOCAL_MACHINE
Software
Oracle
Home0
```

With the Oracle Universal Installer, you can change the "DEFAULT_HOME" name to something else. Also, it registers all Oracle settings in the "Home0" subkey of the ORACLE key.

When an additional \$ORACLE_HOME is added to the system, the PATH variable is adjusted again to add the new BIN directory of the newly installed Oracle software. The registry variables are written to a key named "HOMEx," where X is the next available number in the Oracle key.

When several \$ORACLE_HOMEs are installed, the executables referenced are all found in the first \$ORACLE_HOME\BIN directory of the PATH variable. When you want to switch the order of the PATH variable, you can use the Home Selector to switch the order of the \$ORACLE_HOMEs installed on the system.

Together with the installation and registration of the software in the registry, a second series of registry variables are written in the following key:

```
HKEY_LOCAL_MACHINE
Software
Oracle
ALL HOMES
```

This is the starting point for the list of all \$ORACLE_HOME installations, done on this system.

The following variables are written in this key:

- HOME_COUNTER: Number of Oracle home directories already present on the system. This counter is a number, exactly 1 higher as the last ID subkey present.
- LAST_HOME: ID number of the currently active \$ORACLE_HOME
- IDx: List of registry key's containing the name, number and installation directory of this ORACLE_HOME. The first installation is written in ID0, the next one in ID1, etc.

If the Home Selector is started in interactive mode, the registry hive "ALL_HOMES" is read, including all subkeys, and a dialog box will be dispayed with all available installations. As soon as the you select one, the PATH variable will be adjusted at the system level.

In order to make batch processing possible, this tool also has a commandline interface, making it possible to use the tool to switch the PATH settings while executing a series of commands:

ohsel -switch "Oracle Home Name"

The name of this \$ORACLE_HOME is one of the names found in the ID subkeys.

Oracle Home Directory Structure for Windows Platform

A typical Oracle home on Windows platforms contains the files and directories shown in Table 2–1.

Oracle Home Directory	Contents
\BIN	Product executables and DLLs
\DBS	Common message files
\PROD1	PROD1 product files
\PROD2	PROD2 product files

Table 2–1 Oracle Home Directory for Windows Platforms

Optimal Flexible Architecture Directory Structure (on Solaris)

The Optimal Flexible Architecture (OFA) standard is a set of configuration guidelines for fast, reliable Oracle databases that require little maintenance.

OFA is designed to:

- organize large amounts of complicated software and data on disk to avoid device bottlenecks and poor performance
- facilitate routine administrative tasks such as software and data backup functions, which are often vulnerable to data corruption
- alleviate switching among multiple Oracle databases
- adequately manage and administer database growth
- help eliminate fragmentation of free space in the data dictionary, isolate other fragmentation, and minimize resource contention

The OFA directory structure is described below.

ORACLE_BASE Directory

ORACLE_BASE specifies the BASE of the Oracle directory structure for OFA-compliant databases. A typical ORACLE_BASE directory structure is described in Table 2–2. When installing an OFA-compliant database using the Oracle Installer, ORACLE_BASE is by default set to /pm/app/oracle.

Table 2–2 Sample ORACLE_BASE Directory Structure and Content

admin	administrative files
doc	online documentation
local	subtree for local Oracle software
product	Oracle software

ORACLE_HOME Directory

The following is an example of an Oracle Server Install.

If you install an OFA-compliant Oracle Server, the ORACLE_HOME directory is /mount_point/app/oracle/product/release_number. ORACLE_HOME directory structure and content are described in Table 2–3. Under UNIX, the ORACLE_HOME directory might contain the following subdirectories, as well as a subdirectory for each Oracle product selected.

_

Note: The examples in this table are for sample only. The directories that appear in your own Oracle Home will depend upon whether the corresponding products are installed and the version of the Oracle database you are running.

assistants	configuration Assistants
bin	binaries for all products
ctx	interMedia Text cartridge
dbs	init <i>sid</i> .ora,lk <i>sid</i>
install	install related files
lib	Oracle product libraries
jlib	Java classes
md	Spatial cartridge
mlx	Xerox Stemmer (for interMedia Text cartridge)
network	Net8
nlsrtl	NLS runtime loadable data
ocommon	common files for all products
odg	data gatherer
opsm	Parallel Server Manager Components
oracore	core libraries
ord	data cartridges
otrace	Oracle TRACE
plsql	PL/SQL
precomp	precompilers
rdbms	server files and libraries required for the database
slax	SLAX parser
sqlplus	SQL*Plus

Table 2–3 Sample ORACLE_HOME Directory Structure and Content

Creating an Oracle Home

To create an Oracle home, follow the steps below.

- 1. Run the Oracle Universal Installer.
- **2.** In the File Locations page, enter the Oracle home settings for the installation session under Destination. See Table 2–4 for a description of the fields in this section of the screen.

Note: The Name field only appears in Windows platforms.

3. Continue with your installation. Refer to Chapter 1, "Using the Oracle Universal Installer" for detailed information.

Settings	Functions
Name	For Windows platforms, Oracle homes are identified by name, and the Oracle home name identifies the program group associated with a particular Oracle home, and the Oracle services installed on the associated home. The Oracle home name must be 1 to 16 characters long and can only include alphanumeric characters and underscores.
Path	Enter an Oracle home and its full path or select an Oracle home from a drop down list of existing Oracle Homes. The Oracle home location is the directory where products are installed.
	List of Oracle homes on Windows platforms:
	 all Oracle homes that are already created using the Oracle Universal Installer
	 all homes created using the previous Oracle Installer (ORCA-based)
	 the home that the ORACLE_HOME environment variable points to
	List of Oracle homes on UNIX:
	 all Oracle homes that are already created using the Oracle Universal Installer
	 all homes as defined in the /var/opt/oratab file
	 the home that the ORACLE_HOME environment variable points to
	If none of these homes exists, a default home is calculated based on the disk volume with the largest amount of free space.
	Datafiles may or may not be installed within an Oracle home. You may use the Browse button to choose a directory to install your product.
	For Windows platforms: it must be a valid path that is not in the Windows directory. Different homes cannot share the same location.

Table 2–4 Oracle Installation Settings in Destination

ORAPARAM.INI File

Note: A typical user does not need to modify the ORAPARAM.INI file. This file is manipulated when you are building your own installation using the Oracle Universal Installer.

The ORAPARAM.INI is the Oracle Universal Installer's initialization file. Edit the parameters according to sample file provided. The file provides parameters for the following:

[Oracle]

DISTRIBUTION

Set DISTRIBUTION to TRUE if the ORAPARAM.INI file is on a distribution media. A distribution media can be a CD-ROM or the Web.

SOURCE

Location of your staging area (the products.jar file). This location is relative to the directory where oraparam.ini exists.

LICENSE_LOCATION

Location of a text file for License information. This location is relative to the directory where oraparam.ini exists. The legal terms file should be a plain text file.

If you specify the LICENSE_LOCATION variable, the Oracle Universal Installer will ask for license acceptance after you click the Next button on the "Welcome" screen. The Oracle Universal Installer will let the user proceed only after license is accepted.

This parameter is ignored if the file is not found.

LICENSE_TITLE

The value of this variable displays as the title of the license agreement. The Oracle Universal Installer only reads this value if the license dialog is displayed. That is, if the LICENSE_LOCATION variable has a valid value.

JRE_LOCATION

Location to the Java Runtime Environment (JRE) which will be used by the Oracle Universal Installer.

Note: For a single install to point to two different JRE versions, move the oraparam.ini file one level below its original location and then specify the individual platform's JRE location. For example, if the original location is in the Disk1/install directory, move it to the Disk1/install/win32 or the Disk1/install/solaris directory and then specify the individual platform's JRE location.

OUI_LOCATION

Location to the Oracle Universal Installer files.

JRE_MEMORY_OPTIONS

Set these to increase the initial heap size for JRE.

DEFAULT_HOME_LOCATION

Location of the default home.

DEFAULT_HOME_NAME

The default name for the Oracle Home. This parameter is used only if the install takes place on a machine with no previous Oracle installations. This parameter is used only on Windows platforms.

NO_BROWSE

List directories which you do not want to browse. These are typically large directories which will take a long time to list. For example, /net, /nfs.

NLS_ENABLED

Set NLS_ENABLED to TRUE for the Oracle Universal Installer to enable NLS support. Set NLS_ENABLED to FALSE to disable the installation session translations. The Oracle Universal Installer displays in English even if you run on a non-English system.

BOOTSTRAP

In the case of installing products that span multiple CDs, a "bootstrap" occurs in which temporary copies of OUI and JRE are placed in the TEMP or TMP directory so that these applications can be launched when you change CD-ROMs.

As a user/developer of an install, you need to set BOOTSTRAP to True or False. BOOTSTRAP tells the Oracle Universal Installer to attempt a bootstrap. Set BOOTSTRAP to True before cutting CDs, but set it to False once you have copied the staging area to the hard disk.

If you are running a multiple CD install, you must set the bootstrap variable BOOTSTRAP=TRUE.

Otherwise, the first CD cannot be ejected on Solaris because the file system is busy. The Oracle Universal Installer is holding open several files on the CD including the JRE executable, and on Solaris, ejectable volumes cannot be ejected if a process has opened files on the volume.

Setting the BOOTSTRAP variable to TRUE informs the Oracle Universal Installer to copy the Oracle Universal Installer classes and the JRE executables to a temporary directory where you can launch them; thereby freeing the CD device.

You may also need to launch runInstaller in the background by using the ampersand character:

./runInstaller &

By launching runInstaller in the background, you can change your current directory after you launch the Oracle Universal Installer so that you can eject the CD.

You may want to create a shell script that launches the Oracle Universal Installer in the background and then exits. If you choose to create a shell script, remember to also pass all parameters that passed to the shell script along to runInstaller in case you want to pass a response file name to run a silent installation.

OUI_VERSION = <2.0.1.0.0>

Set the version of the Oracle Universal Installer you are using.

Note: You must set the Universal Installer version correctly in order for the bootstrap to work.

[IMAGES]

To show advertisements during an install, you must specify each image as a separate variable. For example:

FILE1=../stage/adimages/adimage0.gif

FILE2=../stage/adimages/adimage1.gif

This means the variables have to have the same structure of:

```
FILE<image_number>=<image location relative to oraparam.ini
file's location>
```

Images display in the order they are listed in the oraparam.ini file. The images will be shown on equal intervals throughout the install session. All images must be in .gif format. Oracle Universal Installer displays the images as follows:

The amount of space allocated to advertisement images is subject to change in future Oracle Universal Installer releases.

Note: Images are only visible to users running Oracle Universal Installer version 1.5.1.4.x or higher. Advertisement images should not exceed 160 (width) x 225 (height) pixels.

A sample ORAPARAM.INI file is shown below.

[Oracle]

DISTRIBUTION=TRUE

#Set DISTRIBUTION to TRUE if the ORAPARAM.INI file is on a distribution media. A distribution media can be a CD-ROM or the Web.

SOURCE=../stage/products.jar

#Location of the products.jar file. This location is relative to the directory where oraparam.ini exists.

LICENSE_LOCATION=

#Location of a text file for License information. This location is relative to the directory where oraparam.ini exists.

#After you click the Next button on the Welcome page, the Oracle Universal Installer will ask for license acceptance. If this file exists, the Oracle Universal Installer will let the user proceed only after license is accepted.

JRE_LOCATION=../stage/Components/oracle/swd/jre/1.1.6.2.10/2/DataFiles/Expanded /ojre

#Relative location to the Java Runtime Environment (JRE) which will be used by the Oracle Universal Installer

OUI_LOCATION=../stage/Components/oracle/swd/oui/1.5.1.4.2/1/DataFiles/Expanded #Relative location to the Oracle Universal Installer files

DEFAULT_HOME_NAME="OUIHome"

#The default name for the Oracle Home. This parameter is used only if the install takes place on a machine with no previous Oracle installations. This parameter is used only on Windows platforms.

HLP_LOCATION= #For future use only

EWT_LOCATION= #For future use only

NLS_ENABLED=TRUE

#Set NLS_ENABLED to FALSE to disable the translations. The Oracle Universal Installer displays in English even if you run on a non-English system.

JRE_MEMORY_OPTIONS=-ms16m -mx32m #Set these to increase the initial heap size for JRE.

NO_BROWSE= #list directories which you do not want to browse. These are typically large directories which will take a long time to list. # =/net, /nfs

OUI_VERSION = <1.7.0.1.0> Set the version of the Oracle Universal Installer you are using. **Note:** you must set the version correctly in order for the bootstrap to work.

[IMAGES] FILE1=images/installAd0.gif FILE2=images/installAd1.gif

•

Silent Install Using Response Files

This chapter presents an overview of how to use a response file for silent installations.

Introduction

Silent install is recommended when no user interaction is intended or if non-graphical terminals are used for installation.

You can customize an installation by supplying a response file to the Oracle Universal Installer. A response file contains answers to dialogs that otherwise would be provided by the user in an interactive installation session. Response files provide values for variables which are used in the component installation definition. For example, values for Oracle home or Install Type can be set automatically using a response file. For more information on variables, refer to the *Oracle Software Packager User's Guide*.

When a variable is initialized, the Oracle Universal Installer reads the response file to see if a value has been assigned for the variable. If a value is assigned, this value is used for the variable.

Response file templates are generated when building an installation using Oracle Software Packager during the Stage Verification Phase. The Response file template for the installation of your product can be found on your stage (CD-ROM) under the <root of CD>/response directory. Response files can then be modified by end-users to customize an installation to suppress some or all installation dialogs.

Refer to "Sample Response File" on page A-1 for a sample response file.

Response File Format

Before you attempt to modify a response file, you should understand the organization of information within the file and the types of information included within each section of the file.

How a Response File is Organized

Response files are divided into sections. Each section has a specific purpose and specific keywords and variables you can define.

Sections of a Response File

Each section of a response file begins with a line, in brackets, that specifies the section name.

For example: [GENERAL] for the General Section, [INCLUDE] for the Include section, and [Session] for the Session section.

Response File Sections	Function
General	The General Section contains the version number of the response file.
Include	The Include section contains a list of response files that are included in this response file. Refer to the "Include Section of the Response File" on page 3-4 for more information.
Session	The Sessions section lists various dialogs of the Oracle Universal Installer.
Components	Component sections define public variables. They can also define installer variables.

Values Within a Section

Values for variables are specified as <name> = <recommendation> : <value>

The values that are given as <value required> must be specified for a silent installation to be successful.

To specify a default value, specify the value as <name> = <default> : <value>

For values that are given as <value unspecified>, you may optionally specify a value, where <value> can be one of the following types listed below:

Туре	Represented As
Number	10
Boolean	true or false (either case can be used)
String	"Value"
String List	{"value1", "value2"}

<recommendation> can be specified as Forced or Default.

If you specify Forced, no dialog appears during installation. The value is automatically used. The user does not have the option to change the value.

If you specify Default, the dialog appears during installation with the value as the default. The user has the option to choose another value.

If nothing is specified for <recommendation>, Forced is used as the default.

For example of the format of values is shown below: InstallType=Default:"Minimum"

Comments Within a Section

Comments begin with a "#" (hash or pound) symbol. They contain information about the type of the variable, state whether the variable appears in dialog, and describe the function of the variable. A variable and a value are associated with a comment.

For example:

```
#TopLevelComponent;StringList;Used in Dialog
TopLevelComponent={"Demo", "1.0"}
```

Headers Within a Section

The header is a comment which describes the different formats and comment conventions used in a response file.

For example:

```
#Parameter : UNIX_GROUP_NAME
#Type : String
#Description : Unix group to be set for the inventory directory. Valid only in
```

Unix platforms. #Example : UNIX_GROUP_NAME = "install" UNIX_GROUP_NAME=<Value Unspecified>

General Section of the Response File

A General section appears in the beginning of a response file, providing the version number of the response file. There is only one General section per response file.

The General Section consists of the following variables

```
[GENERAL]
RESPONSEFILE_VERSION = <version_number>
```

Include Section of the Response File

The Include section is not automatically generated when you create a response file. If you want to include other response files in your main response file, you must add an Include section with a list of response files.

For example:

[INCLUDE] FILE1="C:/Oracle/oracle/dba.rsp"

The values in the main response file take priority over the included response files.

Note: Ensure that the [session] section is in the included file. The Oracle Universal Installer ignores any values that are assigned outside of a section.

Session Section of the Response File

The Sessions section lists pre-defined (generic) dialogs of the Oracle Universal Installer and shows whether the dialogs are visible to the user.

The dialog appears if the value is set to true. The dialog does not appear if its value is set to false.

An example is shown below:

[SESSION] SHOW_INSTALL_PROGRESS_PAGE=true The install progress page will be shown during installation.

The Sessions section also lists global variables that are set during one installation session (from the start of the installation to the end of installation). These variables include top level component, languages, and others.

Currently, the following variables are generated under the Sessions section.

FROM_LOCATION

"From" Location in the installer. The location of the source of the products to be installed.

Note: You must enter a value for FROM_LOCATION for a complete silent install.

FROM_LOCATION_CD_LABEL

FROM_LOCATION_CD_LABEL is used in multi-CD installations. It includes the label of the Compact Disk where the file "products.jar" exists. The label can be found in the file "disk.label" in the same directory as "products.jar".

LOCATION_FOR_DISK2

Complete path to other disks.

For example: LOCATION_FOR_DISK2 = "..\..\Disk2"

LOCATION_FOR_DISK2="F:\teststage\cd\Disk3"

If there are more than two disks, the above variable will be repeated as ${\tt LOCATION_FOR_DISK3}$ and so on.

The CD location for a silent installation is located by two mechanisms:

- 1. The Oracle Universal Installer looks for the Location_For_Disk{DiskNumber} variable in the response file and uses that location.
- 2. If the variable does not have a value or does not have the required files, it will look for the components under .. / .. /Disk{DiskNumer}/stage (from products.jar).

Therefore, you can either specify the location to look for it in the Response file or you can copy them into the disk. For example:

E:/Disk1/stage E:/Disk2/stage

NEXT_SESSION

Set this boolean variable to true if the installer needs to go to the File Locations page for another installation or to another response file if you are performing a silent installation.

Example: NEXT_SESSION = true

NEXT_SESSION_ON_FAIL

Set this boolean variable to true to allows users to invoke another installation session even if the the current installation session fails. This variable is used only if the NEXT_SESSION variable is set to true.

Example: NEXT_SESSION_ON_FAIL = true

NEXT_SESSION_RESPONSE

Use this string variable to enter the complete path of the next session's response file if you want to automatically begin another silent installation when the current installation is complete. If you specify only a file name, the Installer looks for the response file in the <TEMP>/orainstall directory. This variable is only used if NEXT_SESSION is set to true; otherwise, the Installer ignores the value of this variable.

Example: NEXT_SESSION_RESPONSE="/private/usr2/nextinstall.rsp"

ORACLE_HOME

"To" Location in the installer where products are to be installed.

Note: You must enter a value for ORACLE_HOME for a complete silent install.

ORACLE_HOME_NAME

The name of the current Oracle home name for Win32 platforms.

Note: You must enter a value for ORACLE_HOME_NAME for a complete silent install.

SHOW_COMPONENT_LOCATIONS_PAGE

The location page, which appears in a custom install type, can be suppressed by setting this value to false. If you set the value to false, the user is prevented from specifying alternate directories. If there are products with installed directories which can be changed, you may want to set the value to true.

SHOW_CUSTOM_TREE_PAGE

Set SHOW_CUSTOM_TREE_PAGE to true if the custom tree page in the installer must be shown. In the Custom Tree page, dependencies can be selected or unselected. This page appears only in a custom install type.

SHOW_END_SESSION_PAGE

The install success/failure page, which appears at the end of an installation, can be suppressed by setting this value to false.

SHOW_EXIT_CONFIRMATION

Set to true if the confirmation when exiting the installer needs to be shown.

Example: SHOW_EXIT_CONFIRMATION = true

SHOW_INSTALL_PROGRESS_PAGE

The install progress page, which appears during the install phase, can be suppressed by setting the value to false.

SHOW_OPTIONAL_CONFIG_TOOL_PAGE

Set to true if the Optional Configuration Tools page in the installer must be shown. The Optional Configuration Tools page shows the list of optional configuration tools that are part of this installation and the status of each tool, including detailed information on why the tool has failed.

SHOW_REQUIRED_CONFIG_TOOL_PAGE

Set to true if the Required Configuration Tools page in the installer must be shown. The Required Configuration Tools page shows the list of required configuration tools that are part of the installation and the status of each tool, including detailed information on why the tool has failed.

SHOW_ROOTSH_CONFIRMATION

Set to true if the Confirmation dialog asking to run the root.sh script in the installer needs to be shown. This variable is valid only on Unix platforms.

Example: SHOW_ROOTSH_CONFIRMATION = true

SHOW_SPLASH_SCREEN

Set to true if the initial splash screen in the installer needs to be shown.

Example: SHOW_SPLASH_SCREEN = true

SHOW_SUMMARY_PAGE

The summary page can be suppressed by setting this value to false.

SHOW_WELCOME_PAGE

Set to true if the Welcome page in the installer needs to be shown.

Example: SHOW_WELCOME_PAGE = false

TOPLEVEL_COMPONENT

The name of the component (products) and the version as string list.

Note: You must enter a value for TOPLEVEL_COMPONENT.

Usually the components are represented with a pair of strings: the first one representing the internal name and the second representing the version.

For example, rdbms 8.1.5 is represented as, { "oracle.rdbms", "8.1.5.0.0}.

UNIX_GROUP_NAME

The UNIX group name to be set for the inventory in UNIX platforms.

Note: The UNIX group name is used for first-time installations only.

Components Section of the Response File

The remaining sections in the response file are component sections, which are identified by a component's internal name and version.

In order to find a value for a variable, the Oracle Universal Installer looks under the appropriate component section to which the variable belongs.

A typical example of a component section is shown below:

```
[oracle.server_8.1.5.0.0]
```

Note: Ensure that the /var/opt/oracle/oraInst.loc exists. The response file for Unix has a public variable, setunixinstallgroup, which only takes effect when it is the first Oracle Universal Installer installation and the oraInst.loc file is not already present in /var/opt/oracle.

Apart from the public variables defined in a component, each component can define the installer variables listed below:

- DEPENDENCY_LIST
- PROD_HOME
- OPTIONAL_CONFIG_TOOLS
- INSTALL_TYPE
- COMPONENT_LANGUAGES

DEPENDENCY_LIST

The DEPENDENCY_LIST is the list of dependees on which the component depends on. These dependee components represents the list of components that appear as "selected" during installation.

The DEPENDENCY_LIST variable is only generated when dependencies are present and if the dependency is not a required one.

You cannot list components to appear as de-selected items in a dialog. The selection is always defaultSelection (user specified selection in Oracle Software packager) or present in (DEPENDECY_LIST).

Specifying required dependees is redundant since they will be selected anyway. The dependees selection can have the other two types of dependees: optional and at least one.

The list of components is specified by an internal name and version number.

A typical example is shown below:

DEPENDENCY_LIST={"oracle.netclt","8.1.5.0.0","oracle.netmgr","8.1.5.0.0"}

PROD_HOME

The PROD_HOME is the product location of the component on the target machine.

If you have an Oracle home component, the path specified must be in the Oracle home.

Note: The PROD_HOME variable is only used for non-Oracle Home components.

OPTIONAL_CONFIG_TOOLS

While all the required configuration tools are launched by the installer, you can control the configuration tools you would want to launch by specifying the tool's internal names in the OPTIONAL_CONFIG_TOOLS section.

Note: The OPTIONAL_CONFIG_TOOLS variable is only generated when at least one optional configuration tool is available.

You can specify both the Auto-launch optional tools and User-launch optional tools in a string list.

```
#Example : OPTIONAL_CONFIG_TOOLS = {"configtool2 ", "configtool3"}
OPTIONAL_CONFIG_TOOLS=<Value Unspecified>
```

If no value is specified for this variable, then all the tools are run by default.

If there is a value specified, then only those tools are run while the rest of the tools are ignored.

The way to suppress the configuration tool is to mention only the tools that you want to run as part of the OPTIONAL_CONFIG_TOOLS variable added per component. You should use the internal names of the configuration tool. The response file generator generates these internal names also as part of the options given for the variable.

For example, oracle.server has tool1 and tool2 and you want to run only tool1 in the response file, you metion it as follows:

```
[oracle.server_81500]
OPTIONAL_CONFIG_TOOLS={"tool1"}
```

INSTALL_TYPE

You can set the install type variable to determine the install type of the currently selected top level component.

The install type variable is only generated for the top level components and only when there are more than one install type available.

Note: You must enter a value for INSTALL_TYPE.

COMPONENT_LANGUAGES

You can set the languages in which the components will be installed. You must use the internal name while specifying the value:

en, : English fr, : French de, : German ja, : Japanese

For example: COMPONENT_LANGUAGES = { "en " }

Note: the COMPONENT_LANGUAGES variable is only generated when more than one is available.

Specifying a Response File for the Oracle Universal Installer

To enable the Oracle Universal Installer to use the Response file, at the command prompt, type in the command to invoke the installer and specify the response file as a parameter: -responseFile <filename>.

Optional parameters you may use with the -responseFile flag are:

- -nowelcome
- -silent

Use the -nowelcome flag along with the -responseFile flag to suppress the Welcome dialog that appears during installation.

Use the <code>-silent</code> flag along with the <code>-responseFile</code> flag to run the Universal Installer in complete silent mode. Note that the Welcome dialog is suppressed automatically.

Note that when the -silent flag is specified to the Universal Installer and if there are no values specified to a particular variable in a dialog, then the installer will abort. The success or failure of the installation, when this flag is specified, is generated in a file called silentInstall.log. This file will be generated in the /tmp directory in Solaris and the directory specified by the variable TEMP in Win32 platforms.

To start Oracle Universal Installer and specify the response file on Windows NT, enter the following command at the command line in the directory where the Universal Installer is installed:

setup.exe -responseFile <filename> -silent

or

setup.exe -responseFile <filename> -nowelcome

On Solaris, enter the following command at the command line in the directory where the Universal Installer is installed:

runInstaller -responseFile <filename> -silent

or

runInstaller -responseFile <filename> -nowelcome

Note: You must specify the complete responseFile path.

Note: Using the -nowelcome option with the -silent option is unnecessary since the Welcome screen does not appear when you use the -silent option.

Silent Install When Using Character Mode Consoles

When character mode consoles are used, Oracle recommends that you use the silent install, which is available with 8.1.5 and 8.1.6. Most (if not all) UNIX systems have the X packages by default. No additional installation is required.

In 8.1.5 and 8.1.6 versions of the Oracle Universal Installer, the Database Configuration Assistant and Net8 Configuration Assistant require that the X software runs. They all instantiate some GUI classes, but no GUI needs to be displayed if you running in silent mode. An installation can be run from a console (non-X-Window system or a telnet/dial up session) as long as the target system has X started.

Error Handling

The Oracle Universal Installer treats wrong context, format, or type values as if no value were specified. Basically, these are ignored.

Variables which are outside of any section are ignored.

Validation of Values from Response file

All the values that are retrieved from the response file are validated through the regular variable validation process.

Calculation and validation are specified using the Oracle Software Packager (OSP) and performed at install time by the Oracle Universal Installer.

Failure of the validation process can result in the termination of installation.

A Sample Response File

Example 1

###	*****	*****	###
##	typical.rsp [Aug. 4	th, 2000]	##
##	This is a sample res	ponsefile for a typical EE install.	##
##		(minimal)	##
##	Copyright(c) Oracle	Corporation 2000. All rights reserved	.##
##			##
##	Specify values for t	he variables listed below to customize	≥##
##	your installation.		##
##			##
##	Each variable is ass	ociated with a comment. The comment	##
##	identifies the varia	ble type.	##
##			##
##	Please specify the v	alues in the following format:	##
##			##
##	Туре	Example	##
##	String	"Sample Value"	##
##	Boolean	True or False	##
##	Number	1000	##
##	StringList	{"String value 1","String Value 2"}	##
##			##
##			##
##	!!!!!IMPORT	ANT!!!!!	##
##			##
##	PLEASE VERIFY (CUST	OMISE) THE VALUES FOR THE FOLLOWING	##
##	VARIABLES BEFORE US	ING THIS FILE FOR SILENT INSTALL.TKX!	##
##			##
##	1) UNIX_GROUP_NAME		##

##	2) ORACLE_HOME && ORACLE_HOME_NAME	##
##	3) s_GlobalDBName	##
##	4) s_dbSid	##
##	5) s_mountPoint	##
##		##
##	ALSO, MAKE SURE /var/opt/oracle/oraInst.loc EXISTS.	##
##	TYPICAL ENTRY IN "oraInst.loc" LOOKS LIKE -	##
##	inventory_loc=/home/dba/oraInventory	##
##	BASICALLY, WHEREVER INVENTORY NEEDS TO BE LOCATED.	##
##		##
##	AT THE END OF SILENT INSTALL LOOK UP THE FOLLOWING LOGS:	##
##	- oraInventory/logs/installActions.log	##
##	(for \$ORACLE_HOME/root.sh execution, etc.)	##
##	- /tmp/silentInstall.log	##
##		##
####	*****	+##
[Ger	neral]	
RESI	PONSEFILE_VERSION=1.0.0.0.0	
[Ses	ssion]	
#Thi	is entry is not used on Windows platforms	
#UN]	IX_GROUP_NAME;String;Used in Dialog	

#Group that the current user is part of, for ownership of the install files. #UNIX_GROUP_NAME="dba"

#FROM_LOCATION;String;Used in Dialog
#Full path for the products.jar file.
#Replace the X: with the drive letter of your CD-ROM device.
FROM_LOCATION="X:\stage\products.jar"

```
#FROM_LOCATION_CD_LABEL;String:Used in multi-CD installations.
#It includes the label of the Compact Disk where the file "products.jar" exists.
#The label can be found in the file "disk.label" in the same directory as
#"products.jar".
```

```
#ORACLE_HOME;String;Used in Dialog
#Enter the path to your oracle home. Replace the drive letter and optionally
#alter the home path.
ORACLE_HOME="X:\Oracle\Ora81"
```

#ORACLE_HOME_NAME;String;Used in Dialog #Enter the name of this oracle home. The name will be used to identify this #home.
ORACLE_HOME_NAME="OraHome81"

```
#TOPLEVEL_COMPONENT;StringList;Used in Dialog
#Choices: "oracle.server", "8.1.5.0.0"
TOPLEVEL_COMPONENT={"oracle.server", "8.1.5.0.0"}
```

#SHOW_COMPONENT_LOCATIONS_PAGE;Boolean;Used in Dialog #Some components are flexible in where they are installed, although all have # default locations. Set this to FALSE if you want to accept the default locations # and not show this page. SHOW_COMPONENT LOCATIONS_PAGE=false

#SHOW_SUMMARY_PAGE;Boolean;Used in Dialog <------#MUST be <false> for "silent" install SHOW_SUMMARY_PAGE=false

#SHOW_INSTALL_PROGRESS_PAGE;Boolean;Used in Dialog <------#MUST be <false> for "silent" install SHOW_INSTALL_PROGRESS_PAGE=false

#SHOW_REQUIRED_CONFIG_TOOL_PAGE;Boolean;Used in Dialog SHOW_REQUIRED_CONFIG_TOOL_PAGE=false

#SHOW_OPTIONAL_CONFIG_TOOL_PAGE;Boolean;Used in Dialog SHOW_OPTIONAL_CONFIG_TOOL_PAGE=false

#SHOW_END_SESSION_PAGE;Boolean;Used in Dialog <------#MUST be <false> for "silent" install SHOW_END_SESSION_PAGE=false

#Parameter : LOCATION_FOR_DISK2
#Type : String
#Description : Complete path to the other disks.
#Example : LOCATION_FOR_DISK2 = "..\..\Disk2"
LOCATION FOR DISK2="F:\teststage\cd\Disk3"

#Parameter : NEXT_SESSION
#Type : Boolean
#Description : Set to true if the installer needs to go to the File
Locations page for another installation.
#Example : NEXT_SESSION = true
NEXT_SESSION=true

```
#Parameter : SHOW_SPLASH_SCREEN
#Type : Boolean
#Description : Set to true if the initial splash screen in the installer
needs to be shown.
#Example : SHOW_SPLASH_SCREEN = true
SHOW SPLASH SCREEN=true
#Parameter : SHOW WELCOME PAGE
#Type : Boolean
#Description : Set to true if the Welcome page in the installer needs to
be shown.
#Example : SHOW_WELCOME_PAGE = false
SHOW_WELCOME_PAGE=false
#Parameter : SHOW_ROOTSH_CONFIRMATION
#Type : Boolean
#Description : Set to true if the Confirmation dialog asking to run the
root.sh script in the installer needs to be shown.
#Valid only in Unix platforms.
#Example : SHOW_ROOTSH_CONFIRMATION = true
SHOW_ROOTSH_CONFIRMATION=true
#Parameter : SHOW_EXIT_CONFIRMATION
#Type : Boolean
#Description : Set to true if the confirmation when exiting the
installer needs to be shown.
#Example : SHOW_EXIT_CONFIRMATION = true
SHOW_EXIT_CONFIRMATION=true
[oracle.server_8.1.5.0.0]
#INSTALL_TYPE;String;Used in Dialog
# Minimal - Optional pre-configured DB (b_createDB), Networking services, Server
utilities
# Typical - Pre-configured starter DB, Licensable options and Cartridges,
#
            Networking services, Server utilities
INSTALL_TYPE="Typical"
[oracle.rdbms_8.1.5.0.0]
#OPTIONAL_CONFIG_TOOLS;StringList
#OPTIONAL CONFIG TOOLS={"dbassist"} OR OPTIONAL CONFIG TOOLS={"Oracle Database
Configuration Assistant"
#s_GlobalDBName;String;Used in Dialog
```

#This is the name of the database which will be created as part of the typical install. #You should modify this string to use an appropriate name. s_GlobalDEName="acme.us.oracle.com"

#This entry not needed for Windows installation.
#s_mountPoint;String;Used in Dialog
#Database file location: directory for datafiles, control files, redo logs
#s_mountPoint="/home/oracle/dbs"

#s_dbSid;String;Used in Dialog
#Value for ORACLE_SID. Change this to an appropriate SID.
s_dbSid="ORCL"

#b_createDB;Boolean
#Relevant only in MINIMAL, set to TRUE if you want a starter database, set to
FALSE if not.
#b_createDB=true

Example 2

```
## typical.rsp [Nov. 4th, 1998]
                                                         ##
## This is a sample responsefile for a typical EE install.
                                                         ##
##
                                    (minimal)
                                                         ##
## Copyright(c) Oracle Corporation 1998. All rights reserved.##
##
                                                         ##
## Specify values for the variables listed below to customize##
## your installation.
                                                         ##
##
                                                         ##
## Each variable is associated with a comment. The comment
                                                         ##
## identifies the variable type.
                                                         ##
##
                                                         ##
## Please specify the values in the following format:
                                                         ##
##
                                                         ##
          Type
##
                      Example
                                                         ##
##
          String
                      "Sample Value"
                                                         ##
##
          Boolean
                      True or False
                                                         ##
          Number
                      1000
##
                                                         ##
                      {"String value 1", "String Value 2"}
                                                         ##
##
          StringList
##
                                                         ##
##
                                                         ##
##
           !!!!!IMPORTANT!!!!!
                                                         ##
##
                                                         ##
##
  PLEASE VERIFY (CUSTOMISE) THE VALUES FOR THE FOLLOWING
                                                         ##
  VARIABLES BEFORE USING THIS FILE FOR SILENT INSTALL.TKX! ##
##
##
                                                         ##
   1) UNIX_GROUP_NAME
                                                         ##
##
                                                         ##
##
   2) ORACLE_HOME && ORACLE_HOME_NAME
                                                         ##
##
   3) s GlobalDBName
   4) s dbSid
                                                         ##
##
##
   5) s_mountPoint
                                                         ##
##
                                                         ##
## ALSO, MAKE SURE /var/opt/oracle/oraInst.loc EXISTS.
                                                         ##
## TYPICAL ENTRY IN "oraInst.loc" LOOKS LIKE -
                                                         ##
                                                         ##
##
  inventory_loc=/home/dba/oraInventory
## BASICALLY, WHEREVER INVENTORY NEEDS TO BE LOCATED.
                                                         ##
##
                                                         ##
## AT THE END OF SILENT INSTALL LOOK UP THE FOLLOWING LOGS: ##
   - oraInventory/logs/installActions.log
                                                         ##
##
##
     (for $ORACLE_HOME/root.sh execution, etc.)
                                                         ##
##
   - /tmp/silentInstall.log
                                                         ##
##
                                                         ##
```

[General]

RESPONSEFILE_VERSION=1.0.0.0.0

[Session]

#This entry is not used on Windows platforms
#UNIX_GROUP_NAME;String;Used in Dialog
#Group that the current user is part of, for ownership of the install files.
#UNIX_GROUP_NAME="dba"

#FROM_LOCATION;String;Used in Dialog
#Full path for the products.jar file.
#Replace the X: with the drive letter of your CD-ROM device.
FROM_LOCATION="G:\81500\EEdition\990211_CDM2\stage\products.jar"

#ORACLE_HOME;String;Used in Dialog
#Enter the path to your oracle home. Replace the drive letter and optionally
#alter the home path.
ORACLE_HOME="E:\16080_2.12\815sil"

#ORACLE_HOME_NAME;String;Used in Dialog
#Enter the name of this oracle home. The name will be used to identify this
#home.
ORACLE HOME NAME="OraHome81"

#TOPLEVEL_COMPONENT;StringList;Used in Dialog
#Choices: "oracle.server", "8.1.5.0.0"
TOPLEVEL_COMPONENT={"oracle.server", "8.1.5.0.0"}

#SHOW_COMPONENT_LOCATIONS_PAGE;Boolean;Used in Dialog #Some components are flexible in where they are installed, although all have # default locations. Set this to FALSE if you want to accept the default locations # and not show this page. SHOW_COMPONENT_LOCATIONS_PAGE=false

#SHOW_SUMMARY_PAGE;Boolean;Used in Dialog <-----#MUST be <false> for "silent" install SHOW_SUMMARY_PAGE=false

```
#SHOW_INSTALL_PROGRESS_PAGE;Boolean;Used in Dialog <------
#MUST be <false> for "silent" install
SHOW_INSTALL_PROGRESS_PAGE=false
```

```
#SHOW_REQUIRED_CONFIG_TOOL_PAGE; Boolean; Used in Dialog
SHOW REQUIRED CONFIG TOOL PAGE=false
#SHOW_OPTIONAL_CONFIG_TOOL_PAGE; Boolean; Used in Dialog
SHOW OPTIONAL CONFIG TOOL PAGE=false
#SHOW_END_SESSION_PAGE; Boolean; Used in Dialog <-----
#MUST be <false> for "silent" install
SHOW END SESSION PAGE=false
[oracle.server_8.1.5.0.0]
#INSTALL_TYPE;String;Used in Dialog
# Minimal - Optional pre-configured DB (b_createDB), Networking services, Server
utilities
# Typical - Pre-configured starter DB, Licensable options and Cartridges,
            Networking services, Server utilities
#
INSTALL TYPE="Typical"
[oracle.rdbms_8.1.5.0.0]
#OPTIONAL CONFIG TOOLS; StringList
#OPTIONAL CONFIG TOOLS={"dbassist"} OR OPTIONAL CONFIG TOOLS={"Oracle Database
Configuration Assistant"
#s GlobalDBName;String;Used in Dialog
#This is the name of the database which will be created as part of the typical
install.
#You should modify this string to use an appropriate name.
s GlobalDBName="B815.us.oracle.com"
#This entry not needed for Windows installation.
#s_mountPoint;String;Used in Dialog
#Database file location: directory for datafiles, control files, redo logs
#s_mountPoint="/home/oracle/dbs"
#s_dbSid;String;Used in Dialog
#Value for ORACLE_SID. Change this to an appropriate SID.
s_dbSid="B815"
#b createDB;Boolean
#Relevant only in MINIMAL, set to TRUE if you want a starter database, set to
FALSE if not.
b createDB=true
```

Troubleshooting

This chapter describes possible troubleshooting issues.

- Debugging Mechanisms in the Oracle Universal Installer
- Oracle Universal Installer Errors
- Deinstalling, Upgrading, or Downgrading Oracle Universal Installer
- Other Tips

Debugging Mechanisms in the Oracle Universal Installer

During the install, the Oracle Universal Installer writes a text file that contains information on:

- variable settings
- action calls
- queries
- exception information

The installActions.log is located in the <oraInventory>\logs directory. It is backed-up as installActions<date>.log.

The Installation Log is used for debugging purposes only. All actions, queries, everything that happens during the install, and all modifications to the target machine are logged in the file.

A sample file is shown below:

```
installActions1999-06-16_09-52-16-AM.log
Environment variables:
ORACLE_HOME =
```

```
PATH = E:\OEM\bin;E:\ORACLE815\bin;C:\Program
Files\Oracle\jre\1.1.7\bin;C:\ORATST\BIN
CLASSPATH = C:\Program Files\Exceed.nt\hcljrcsv.zip;
Username is: pjlee
The installer version is 1.7.0.0.0
*** Welcome Page***
Setting value of FROM LOCATION to E:\bootstrap\cd\Disk1\stage\products.jar
Setting value of INVENIORY_LOCATION to C:\Program Files\Oracle\Inventory
Setting value of UNIX_GROUP_NAME to
Setting value of FROM LOCATION to E:\bootstrap\cd\Disk1\stage\products.jar
Setting value of ORACLE_HOME to E:\Universal
Setting value of ORACLE_HOME_NAME to Universal
*** File Locations Page***
FromLocation = FROM_LOCATION = E:\bootstrap\cd\Disk1\stage\products.jar
ToLocation = ORACLE_HOME = E:\Universal
ToName = ORACLE HOME NAME = Universal
Initializing installer access setup
Setting value of ORACLE HOME to E:\Universal
Setting value of ORACLE HOME KEY to Software\ORACLE\HOME3
Setting value of ORACLE HOME FOLDER to Oracle - Universal
Setting value of ORACLE_HOME_SERVICE to Universal
Setting value of ToplevelComp to oracle.swd, 1.7.0.0.0, >0.0, [ 912 453 615 50
601 173 467 295 87 610 198 918 913 162 2 30 21 10021 111 90 168 888 [OH:0]
Setting value of SELECTED LANGUAGES to [en]
Doing operation for installer access setup
Initializing inventory setup WCCE
Doing operation in inventory setup WCCE
*** Available Products Page***
TopLevelComp = ToplevelComp = oracle.swd, 1.7.0.0.0, >0.0, [ 912 453 615 50 601
173 467 295 87 610 198 918 913 162 2 30 21 10021 111 90 168 888 ][OH:0]
LangsSel = SELECTED_LANGUAGES = [en]
Setting value of ToplevelComp to oracle.swd, 1.7.0.0.0, >0.0, [ 912 453 615 50
601 173 467 295 87 610 198 918 913 162 2 30 21 10021 111 90 168 888 ][OH:0]
Setting value of DepMode to Complete
Setting value of TLDepModes to Complete,
*** Installation Types Page***
DepMode = DepMode = Complete
TLDepModes = TLDepModes = Complete,
Setting value of DepMode to Complete
Setting value of PROD_HOME to E:\Universal\oracle.swd
```
```
Setting value of PROD_HOME to E:\Universal\oracle.swd
Setting value of PRE_REQUISITE to true
Setting value of PROD_HOME to E:\Universal\oracle.swd
Setting value of SHOW_COMPONENT_LOCATIONS_PAGE to true
*** Component Locations Page***
ShowCompLocs = SHOW_COMPONENT_LOCATIONS_PAGE = true
Entering component: oracle.swd installation
*** Summary Page***
ShowSummary = SHOW_SUMMARY_PAGE = null
Global Settings
Source : E:\bootstrap\cd\Disk1\stage\products.jar
Destination : E:\Universal
```

Text files are also written in the temp directory:

<temp>\OraInstall\oraInstall.err <temp>\OraInstall\oraInstall.out

If a problem occurs during the installation, you should look for Java exceptions in these files.

Oracle Universal Installer Errors

Refer to the Release Notes for information on any Oracle Universal Installer limitations for a particular version.

The most common Oracle Universal Installer errors are listed below:

out of "temp" space

Make sure you have enough space in the default TEMP or TMP directory otherwise the installation will not succeed. The amount of space required depends on the product being installed.

incomplete stage and missing files in file groups

Verify the staging file. There may be runtime errors that the install developer missed which causes the unexpected environment changes.

- exceptions from action libraries:
 - NT Services, if a service is already started
 - file permissions

UNCAUGHT_RUNTIME exception when user tries to install the product on his machine

This is a blanket error catch which catches any runtime errors like NullPointers from libraries. Check if the temp\OraInstall\orainsrall.err has any stack trace. If there is none, the user will have to call support to debug his staging area.

Deinstalling, Upgrading, or Downgrading Oracle Universal Installer

Consider the following restrictions and guidelines when deinstalling, upgrading, or downgrading Oracle Universal Installer:

- You cannot deinstall the Oracle Universal Installer if you are running it from the installed area. To deinstall the Oracle Universal Installer, run it from the stage area.
- To upgrade the Oracle Universal Installer, you need to run it from the staging area.
- Downgrades are allowed for the Oracle Universal Installer and any other product.

Other Tips

Make sure the correct version of the JRE is used from the PATH.

If Java cannot run applications from a Sun machine on an NCD X terminal (the Oracle Universal Installer does not start), remove the following file:

```
$JAVA_HOME/lib/font.properties
```

X terminal emulators which were tested with the Oracle Universal Installer are listed below:

- Exceed
- Reflection X

Refection X 6.2+: Select Settings/Window Manager/ Default Local Window Manager/ Reflection Window Manager. You may also have to select "X terminal desktop."

Reflection X 6.0: Select Connection/New XDMCP Connection/Connection Settings/Direct method/ type host destination and press connect. If you are deleting an Oracle Home manually without using the Oracle Universal Installer, the products remain registered with the Oracle Universal Installer. You must then simulate a de-install so that all Oracle Universal Installer references are removed.

If the install is canceled:

- Products will not be registered with the Oracle Universal Installer
- Some files may have been copied, depending on when you issued the Cancel.

Other Tips

Index

Α

About Oracle Universal Installer button, 1-3 Additional Configuration Tools button, 1-17 Already Installed listings on Summary screen, 1-12 Available Product Components screen, 1-8 Available Products screen, 1-7

В

Browse button, 1-5 buttons About Oracle Universal Installer, 1-3 Additional Configuration Tools, 1-17 Browse, 1-5 Cancel, 1-13, 1-23 Change Location, 1-10 Continue, 1-23 Deinstall Products, 1-3, 1-19 Exit, 1-3 Help, 1-3 I, 1-8 Ignore, 1-22 Installed Products, 1-3, 1-19 Next, 1-3 Next Install, 1-17 Previous, 1-3 Product Languages, 1-9 radio, 1-8 Release Information, 1-16 Remove, 1-19 Retry, 1-22 Stop, 1-15, 1-16 Yes, 1-19

С

Cancel button, 1-13, 1-23 cation, 1-26 Change Location button, 1-10 Complete installation type, 1-7 Component Locations screen, 1-10 COMPONENT_LANGUAGES, 3-10 Components section of the response file, 3-8 COMPONENT_LANGUAGES, 3-10 DEPENDENCY_LIST, 3-9 INSTALL_TYPE, 3-10 OPTIONAL_CONFIG_TOOLS, 3-9 PROD_HOME, 3-9 Continue button, 1-23 Custom installation type, 1-7

D

default paths, setting for locations, 1-23 DEFAULT_HOME_NAME parameter, 2-13 Deinstall Products button, 1-3, 1-19 De-Installations listings on Summary screen, 1-11 DEPENDENCY_LIST, 3-9 DISTRIBUTION parameter, 2-13

Ε

End of Installation screen, 1-16 error dialog, 1-22 errors Failed to connect to Server, 1-2 Xlib, 1-2 EWT_LOCATION parameter, 2-13 Exit button, 1-3

F

Failed to connect to Server error, 1-2 File Locations screen, 1-4 FROM_LOCATION, 3-5 FROM_LOCATION_CD_LABEL, 3-5

G

General section of the response file, 3-4 Global Settings listings on Summary screen Destination, 1-11 Installation Type, 1-11 Source, 1-11

Н

Help button, 1-3 HLP_LOCATION parameter, 2-13 Home Selector, 2-2

I button, 1-8 Ignore button, 1-22 Include section of the response file, 3-4 Install screen, 1-12 INSTALL_TYPE, 3-10 installation dialogs language, 1-25 installation from the web using the Oracle Universal Installer, 1-26 Installation Type screen, 1-7 Installed Products button, 1-3, 1-19 internationalization and installation translations support, 1-25 inventory directory, 1-25

J

JRE_LOCATION parameter, 2-13 JRE_MEMORY_OPTIONS parameter, 2-13

L

LICENSE_LOCATION parameter, 2-13 LOCATION_FOR_DISK2, 3-5

Μ

Minimum installation type, 1-7 multi-CD support, 1-5, 3-5 Multiple Oracle Homes (MOH), 2-1

Ν

Name field, 1-6 New Installations listings on Summary screen, 1-11 Next button, 1-3 Next Install button, 1-17 NEXT_SESSION, 3-6 NEXT_SESSION_ON_FAIL, 3-6 NEXT_SESSION_RESPONSE, 3-6 NLS_ENABLED parameter, 2-13 NO_BROWSE parameter, 2-14

0

Optimal Flexible Architecture characteristics of OFA, 2-5 directory structure, 2-5 Optional Configuration Tools screen, 1-16 OPTIONAL_CONFIG_TOOLS, 3-9 Oracle home, 1-23, 2-4 creating, 2-7 name. 1-6 Oracle Installer, 1-1 Oracle products installing with the Oracle Universal Installer, 1-2 removing with the Oracle Universal Installer. 1-18 Oracle Universal Installer, 1-1 **ORACLE BASE directory**, 2-5 ORACLE_HOME, 3-6 **ORACLE HOME directory**, 2-5 ORACLE HOME NAME, 3-6 oraInstRoot.sh Bourne shell script, 1-4 ORAPARAM.INI file, 2-9

DEFAULT_HOME_NAME parameter, 2-13 DISTRIBUTION parameter, 2-13 EWT_LOCATION parameter, 2-13 HLP_LOCATION parameter, 2-13 JRE_LOCATION parameter, 2-13 JRE_MEMORY_OPTIONS parameter, 2-13 LICENSE_LOCATION parameter, 2-13 NLS_ENABLED parameter, 2-13 NO_BROWSE parameter, 2-14 OUI_LOCATION parameter, 2-13 SOURCE parameter, 2-13

Ρ

Path field, 1-6
preface, ix
Previous button, 1-3
PROD_HOME, 3-9
Product Languages, 1-25
Product Languages listings on Summary screen, 1-11
product types, 2-2
products that can be installed multiple times in different homes, 2-2
products that can be installed once in any new Oracle home, 2-2
products.jar file, 1-5

R

radio buttons, 1-8 Reinstallations, 1-11 Release Information button, 1-16 Remove button, 1-19 Required Configuration Tools screen, 1-15 response file flags -nowelcome, 3-11 -silent, 3-11 format Components section, 3-8 General section, 3-4 Include section, 3-4 Session section, 3-4 general format comments, 3-3 headers, 3-3 sections, 3-2 values, 3-2 sample, A-1 specifying, 3-10 Retry button, 1-22 runInstaller script, 1-2, 1-19

S

Session section of the response file, 3-4 FROM LOCATION, 3-5 LOCATION_FOR_DISK2, 3-5 NEXT_SESSION_ON_FAIL, 3-6 NEXT_SESSION_RESPONSE, 3-6 ORACLE HOME, 3-6 ORACLE_HOME_NAME, 3-6 SHOW_COMPONENT_LOCATIONS_PAGE, 3 -6 SHOW_CUSTOM_TREE_PAGE, 3-7 SHOW_END_SESSION_PAGE, 3-7 SHOW_OPTIONAL_CONFIG_TOOL_PAGE, 3 -7 SHOW_REQUIRED_CONFIG_TOOL_PAGE, 3-SHOW_SUMMARY_PAGE, 3-7 TOPLEVEL_COMPONENT, 3-8 UNIX_GROUP_NAME, 3-8 setting default paths for locations, 1-23 SHOW_COMPONENT_LOCATIONS_PAGE, 3-6 SHOW_CUSTOM_TREE_PAGE, 3-7 SHOW_END_SESSION_PAGE, 3-7 SHOW EXIT CONFIRMATION. 3-7 SHOW INSTALL PROGRESS PAGE, 3-7 SHOW_OPTIONAL_CONFIG_TOOL_PAGE, 3-7 SHOW_REQUIRED_CONFIG_TOOL_PAGE, 3-7 SHOW ROOTSH CONFIRMATION, 3-7 SHOW_SPLASH_SCREEN, 3-7 SHOW_SUMMARY_PAGE, 3-7 SHOW WELCOME PAGE, 3-7 silent install using response files, 3-1

silentInstall.log, 1-14 source location, 1-25 SOURCE parameter, 2-13 Space Requirements listings on Summary screen, 1-11 stage location, 1-5 Stop button, 1-15, 1-16 Summary screen, 1-11 Already Installed, 1-12 De-Installations, 1-11 Global Settings, 1-11 New Installations, 1-11 Product Languages, 1-11 Space Requirements, 1-11 Upgrades, 1-11

Т

target home, 2-1 TOPLEVEL_COMPONENT, 3-8 Typical installation type, 1-7

U

Unix Group Name screen, 1-4 Unix Installer Location screen, 1-3 UNIX_GROUP_NAME, 3-8 Upgrades listings on Summary screen, 1-11

V

variable values, 3-2

W

web installation, 1-26 Welcome screen, 1-3

Х

Xlib error, 1-2

Υ

Yes button, 1-19