# Oracle® Tuxedo

Installing the Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3)

April 2014



Installing the Oracle Tuxedo Application Runtimes, 12c Release 2 (12.1.3)

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# Preparing to Install the Oracle Tuxedo Application Runtimes

The following sections provide information that you need to know before installing the Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3) product software:

- Oracle Universal Installer (OUI)
- Oracle Tuxedo Application Runtimes Web Distribution
- Oracle Tuxedo Software Components
- Hardware and Software Prerequisites
- Oracle Installation Program
- Oracle Home Directory
- Installation Road Map

# **Oracle Universal Installer (OUI)**

The Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3) product software installer is based on the Oracle Universal Installer (OUI). To install the Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3) product software on your host, you must know how to use OUI to install Oracle products. For more information, see Introduction to Oracle Universal Installer.

OUI is a Java-based installer that enables you to install Oracle components.

# Installing Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3) with Oracle Home

When you install Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3), an Oracle home is created. Oracle home is managed by OUI.

## **Oracle Home**

An Oracle home is the system context where Oracle products run. It consists of the following:

- Directory location where the products are installed
- Corresponding system path setup
- Program groups associated with the products installed in that home (where applicable)
- Services running from that home

# Installing Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3)

To install Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3) and create the Oracle home, do the following steps:

- 1. Run OUI.
- 2. In the Specify Home Details page, enter the Oracle home settings for the installation session.
- 3. Continue installation.

## **Removing Oracle Home**

To remove an existing Oracle home, run OUI and click Deinstall Products. In the inventory dialog, select the home(s) you want to delete and click Remove. You can also use the REMOVE\_HOMES variable in the command line or in a response file.

The syntax is as follows:

```
[On UNIX]./runInstaller -deinstall -silent
ORACLE_HOME=<LOCATION_OF_ORACLE_HOME>
"REMOVE_HOMES={<LOCATION_OF_ORACLE_HOME_TO_BE_REMOVED>}"
```

## **Determining the Default Oracle Home**

By default, when you start OUI, it searches your system to determine the default Oracle home where Oracle software should be installed.

In each case, the ORACLE\_HOME name is taken first from the command line if it is specified, or from the response file if specified. If not specified, the following convention is used for the name:

Ora<Oracle Home Name>

The ORACLE\_HOME path is taken first from the command line if specified, or from the response file if specified. If not specified, the ORACLE\_HOME environment variable is used.

If ORACLE\_BASE is specified in the environment, the default ORACLE\_HOME starts with \$ORACLE\_BASE.

### **Multiple Oracle Homes**

OUI supports the installation of several active Oracle homes on the same host as long as the products support this at run-time. Multiple versions of the same product or different products can run from different Oracle homes concurrently. Products installed in one home do not conflict or interact with products installed on another home. You can update software on any home at any time, assuming all Oracle applications, services, and 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 OUI for installation or deinstallation is the target home. To upgrade or remove products from the target home(s), these products must be shut down or stopped.

# **Oracle Universal Installer Inventory**

The OUI inventory stores information about all Oracle software products installed in all Oracle homes on a host (provided the product installed using Oracle Universal Installer).

Inventory information is stored in Extensible Markup Language (XML) format. The XML format allows for easier problems diagnosis and faster data loading. Secure information is not stored directly in the inventory. As a result, during removal of some products, you may be prompted to enter the required credentials for validation.

## **Oracle Universal Installer Inventory Structure**

The OUI inventory has the following hierarchical structure:

- Central Inventory Pointer File
- Central Inventory
- Oracle Home Inventory

#### **Central Inventory Pointer File**

Every Oracle software installation has an associated Central Inventory where details of all Oracle products installed on a host are registered. The Central Inventory is located in the directory that the inventory pointer file specifies. Each Oracle software installation has its own Central Inventory pointer file that is unknown to another Oracle software installation.

For Oracle homes sharing the same Central Inventory, OUI performs all read and write operations on the inventory. The operations on the Central Inventory are performed through a locking mechanism. This implies that when an installation, upgrade, or patching operation occurs on an Oracle home, these operations become blocked on other Oracle homes that share the same Central Inventory.

Below table shows the location of the default inventory pointer file for various platforms:

Linux, LinuxPPC	/etc/oraInst.loc
AIX	/etc/oraInst.loc
Solaris SPARC, HPUX-IA64	/var/opt/oracle/oraInst.loc

In UNIX, if you do not want to use the Central Inventory located in the directory specified by the inventory pointer file, you can use the -invPtrLoc flag to specify another inventory pointer file. The syntax is as follows:

```
./runInstaller -silent -invPtrLoc <Location_of_oraInst.loc>
ORACLE_HOME="<Location_of_Oracle_Home>"
ORACLE_HOME_NAME="<Name_of_Oracle_Home>"
```

Note: If the content of the oraInst.loc file is empty, OUI prompts you to create a new inventory.

#### **Central Inventory**

The Central Inventory contains information relating to all Oracle products installed on a host. It contains the following files and folders:

- Inventory File
- Logs Directory

#### **Inventory File**

This file lists all Oracle homes installed on the node. For each Oracle home, it also lists the Oracle home name, home index, and nodes where home is installed. It also mentions if the home is an Oracle Clusterware home or a removed Oracle home. It can only detect removed Oracle homes created using OUI version 11.1 and later.

This file is located at:

<central inventory location>/ContentsXML/inventory.xml

**Note:** It is recommended that you do not remove or manually edit this file as it could affect installation and patching.

#### **Logs Directory**

The Central Inventory contains installation logs at the following location:

<central inventory location>/logs

The logs directory contains the logs corresponding to all installations performed on a particular node. You can also find a copy of the installation log in the <code>\$ORACLE\_HOME/cfgtoollogs</code> directory.

The installation logs for an installation are identified by the timestamp associated with the log files. These files are generally saved in the following format:

<Name\_of\_Action><YYYY-MM-DD\_HH-MM-SS{AM/PM}>.log

For example, consider an attachHome operation performed on 17th, May, 2007 at 6.45AM. The associated log file would be created as follows:

AttachHome2007-05-17\_06-45-00AM.log

Note: The installation logs do not contain any errors or failures.

#### **Oracle Home Inventory**

The Oracle home inventory (or local inventory), is present inside each Oracle home. It contains information relevant to a particular Oracle home. This file is located at:

\$ORACLE\_HOME/inventory

It contains the following files and folders:

• Components File

This file contains details about third-party applications (like Java Runtime Environment (JRE)), required by different Java-based Oracle tools and components. In addition, it also contains details of all the components as well as patchests or interim patches installed in the Oracle home. This file is located at:

ORACLE\_HOME/inventory/ContentsXML/comps.xml

• Home Properties File

This file contains node list details, the local node name, and the CRS flag for the Oracle home. In a shared Oracle home, the local node information is not presented. This file also contains the following information:

- GUID Unique global ID for the Oracle home
- ARU ID Unique platform ID. The patching and patchset application depends on this ID.
- ARU ID DESCRIPTION Platform description

The information in oraclehomeproperties.xml overrides the information in inventory.xml. This file is located at:

\$ORACLE\_HOME/inventory/ContentsXML/oraclehomeproperties.xml

• Other Folders

The following table lists the other folders you can find in the Oracle home inventory:

Folder Name	Description
Scripts	Contains the scripts used for the cloning operation.
ContentsXML	Contains the details of the components and libraries installed.

Templates	Contains the template files used for cloning.
oneoffs	Contains the details of the one-off patches applied.

#### **Creating the Central Inventory**

OUI enables you to set up the Central Inventory on a clean host or register an existing Oracle home with the Central Inventory when it is lost or corrupted. If the Central Inventory does not exist, OUI creates the Central Inventory in the location specified by the oraInst.loc file.

You can set up the Central Inventory by using the -attachHome flag of Oracle Universal Installer. The syntax is as follows:

```
./runInstaller -silent -attachHome -invPtrLoc ./oraInst.loc
ORACLE_HOME="<Oracle_Home_Location>" ORACLE_HOME_NAME="<Oracle_Home_Name>"
"CLUSTER_NODES={<node1,node2>}" LOCAL_NODE="<node_name>"
```

#### **Using the Session Variables**

You can use the following session variables:

- ORACLE\_HOME
- ORACLE\_HOME\_NAME

#### Verifying the Operation

After attaching the Oracle home, you can verify the success of the operation by verifying the contents of the log file located in the <central\_inventory>/logs directory. You can also view the contents of the inventory.xml file under the <central-inventory>/ContentsXML directory to verify if the Oracle home is registered.

### **Detaching Oracle Homes from the Central Inventory**

You can detach an Oracle home from the Central Inventory. When you pass the flag, it updates the inventory.xml file presented in the Central Inventory. The syntax is as follows:

```
./runInstaller -silent -detachHome -invPtrLoc ./oraInst.loc
ORACLE HOME="<Oracle Home Location>" ORACLE HOME NAME="<Oracle Home Name>"
```

#### **Using Optional Flags**

If you are using a shared Oracle home, use the -cfs flag. This ensures that the local node information is not populated inside a shared Oracle home.

```
./runInstaller -silent -cfs -detachHome -invPtrLoc ./oraInst.loc
ORACLE_HOME="<Oracle_Home_Location>" ORACLE_HOME_NAME="<Oracle_Home_Name>"
./runInstaller -silent -detachHome -invPtrLoc ./oraInst.loc
ORACLE_HOME="<Oracle_Home_Location>" ORACLE_HOME_NAME="<Oracle_Home_Name>"
```

You can completely clean the Oracle home and remove the home directory using the -removeallfiles flag. The syntax is as follows:

```
./runInstaller -silent -deinstall -removeallfiles -invPtrLoc ./oraInst.loc
```

ORACLE\_HOME="<Oracle\_Home\_Location>" ORACLE\_HOME\_NAME="<Oracle\_Home\_Name>"

If you want to disable the warning message that appears when you use the -removeallfiles flag, use the -nowarningonremovefiles flag. The syntax is as follows:

```
./runInstaller -silent -deinstall -nowarningonremovefiles -invPtrLoc
./oraInst.loc
```

ORACLE\_HOME="<Oracle\_Home\_Location>" ORACLE\_HOME\_NAME="<Oracle\_Home\_Name>"

#### **Removing the Central Inventory**

Even after all Oracle homes on a host are removed, you will find traces of the inventory with certain log files. If you do not want to maintain these files and want to remove the Central Inventory, do the following:

#### **Removing the Central Inventory on UNIX Platforms**

You can remove the Central Inventory on UNIX. Do the following steps:

- 1. Locate the oraInst.loc file and get the Central Inventory location (inventory\_loc parameter) from this file.
  - For Solaris, it is located in the /va/opt/oracle folder.
  - For Linux, it is located in the /etc folder.
- 2. Remove the Central Inventory by executing the following command:

rm -rf <central\_inventory\_location>

- 3. Remove the oraInst.loc file by executing the following command with root privileges:
  - Solaris: rm /va/opt/oracle/oraInst.loc
  - Linux:rm /etc/oraInst.loc

#### **Backing up the Inventory**

You can back up the Oracle home using your preferred method. You can use any method (such as zip, tar, and cpio), to compress the Oracle home.

It is highly recommended to back up the Oracle home before any upgrade or patch operation. You should also back up the Central Inventory when Oracle home is installed or deinstalled.

#### **Recovering from Inventory Corruption**

The inventory (Central and the Oracle home inventory) is critically important in Oracle software life-cycle management. The following sections explain what you need to do in case of inventory corruption.

# **Customizing and Creating Response Files**

This section introduces you OUI response file availability for silent and suppressed installations. This section also describes how to modify or create a response file so you can customize and standardize Oracle products installation in your organization.

## **About Response Files**

#### What Is a Silent Installation?

A silent installation runs in the console and does not use the GUI. The interactive dialogs you normally see are not displayed during silent installation. Instead of prompting you to select a series of installation options, OUI installs the software using a predefined set of options stored in the response file or entered in the command line. You can view silent installation progress in the console.

#### What Is a Response File?

A response file is a specification file containing information you normally enter through the OUI user interface during an interactive installation session. Each answer is stored as a value for a variable identified in the response file. For example, values for Oracle home or installation type can be set automatically within the response file.

#### Why Perform a Silent Installation?

Silent installation can be useful if you have to install an Oracle product multiple times on multiple computers. If the options you select while installing on each computer are always the same, you save the time of reviewing each installation screen and selecting the various installation options.

Silent installations can also ensure that multiple users in your organization use the same installation options when they install your Oracle products. This makes supporting those users easier because you already know what components and options have been installed on each computer.

Before you perform silent installation, you should review the settings in the response file template provided with your Oracle product.

#### Notes:

- If you attempt to perform silent installation on a UNIX computer where no Oracle products have been installed, OUI uses the default inventory location, then prompts you to run the oraInstRoot.sh script with root privileges upon successful installation.
- The script is saved in the \_\*Central Inventory oraInventory \*\_ directory. This script sets up the Central Inventory on a clean host. You can override the default location by setting it in INVENTORY\_LOCATION.
- This location is ignored if a Central Inventory already exists and is pointed to /var/opt/oracle/oraInst.loc (or /etc/oraInst.loc for Linux, AIX, and Sequent).

For more information, see "Oracle Universal Installer Inventory" on page 1-3.

# **Creating a Response File With Record Mode**

You can create a new response file, based on the installation options you select, using OUI record mode.

When you use record mode, OUI records the installation session into a response file. You specify the name of the response file in the command line. The recorded response file is generated immediately after the Summary page, so you do not need to actually install your Oracle product to create the response file. That is, you can start the installation in Record mode and proceed through the installation options until you get to the Summary page. On the Summary Page, click Exit to stop the installation from proceeding with the installation. However, all the options you selected will be saved in the resulting response file.

You can use the newly created response file to run identical installation sessions on other computers in your organization.

Record mode can be also used during a silent installation. In those cases, the variable values specified in the original source response file will be recorded into the new response file.

The following sections describe how to use record mode on UNIX systems.

#### **Using Record Mode**

To record a new response file:

- 1. At the command prompt, use the cd command to change to the directory that contains the Oracle Universal Installer executable file (runInstaller.sh) for your installation.
- 2. Enter the following command:

```
./runInstaller -record -destinationFile <response_file_name> (on UNIX)
```

Replace the <response\_file\_name>

with the complete path for the new response file. For example:

#### On UNIX:

```
./runInstaller -record -destinationFile
/private/temp/install_oracle11g.rsp
```

3. Use the OUI user interface to select your installation options. These will be recorded.

When OUI displays the Summary page, you can either continue with the installation or exit.

OUI saves your new response file using the path and file name you specified on the command line.

### **Response File Format**

The following sections describe the organization and content of an OUI response file.

**Note:** It is recommended that you use an absolute path for the file name. However, if the file name is a relative path, it should be relative to the directory where the oraparam.ini file is presented.

#### **Variable Values**

#### Variable Lookup Order

All variable values within a response file are in the name-value format. If two components have a variable with the same name, the expression should be written as follows to preserve the uniqueness of each variable:

<component>:<variable>=<value>

#### **Component Nomenclature and Version Ambiguity**

If two components have the same internal name, but are different versions, resolve the ambiguity by specifying the expression as follows:

<component>:<version>:<variable>=<value>

#### **Order of Variables**

OUI looks for command line variables in the following order:

```
<component>:<version>:<variable>=<value>
```

```
<component>:<variable>=<value>
```

<variable>=<value>

Similarly, if command line variables are not found, OUI looks for variables in the response file in the same order as shown above.

**Note:** OUI treats incorrect context, format, or type values within a response file as if no value were specified.

#### **Response File Entries Order**

There are no restrictions on where you place entries in the response file. You can insert entries in any order desired. You can also subsequently move existing entries to any other position within the file. Be aware, however, that although the order of the entries is unimportant, naming conventions require that the variable names must be unique regardless of where they appear in the file.

#### **Setting the Recommendation Value**

Values for variables are specified as:

<variable> = <recommendation> : <value>

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

For values given as <value\_unspecified>, you can optionally specify a value, where <value> can be one of the following types listed in below table.

Туре	Representation
Number	10
Boolean	TRUE or FALSE (case insensitive)
String	"Value"
String List	{"value1", "value2"}

The <recommendation> parameter can be specified as Forced or Default.

- If you specify Forced, no dialog appears during installation. The value is automatically used. You cannot change the value.
- If you specify Default, the dialog appears during installation with the value as the default. You can choose another value if desired.
- If nothing is specified for <recommendation>, Forced is used as the default.

#### Comments

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

The header is a comment that 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 on UNIX platforms.
#Example : UNIX_GROUP_NAME = "install"
UNIX_GROUP_NAME=<Value Unspecified>
```

### **Response File Parameters**

The following list describes OUI parameters. All products installed using OUI have these parameters in addition to product-specific variables.

**Note:** The parameters provided below are OUI-specific and not necessarily the parameters applicable for your platform and version. Always check your specific installation guide for the list of valid response file parameters.

For Oracle Tuxedo Application Runtimes specific response file parameters, see "Required Variables in Oracle Tuxedo Application Runtimes Response File" on page 4-2.

#### INCLUDE

Specifies the list of response files to be included in a particular response file. If you want to include other response files in your main response file, you must use this parameter. Note that the values in the main response file have priority over the included response files.

```
INCLUDE={"file1.rsp", "file2.rsp", ......"filen.rsp"}
```

You should specify the absolute path in the INCLUDE statement for each response file to be included. If you wish to specify a relative path, note that the location is relative to the current working directory (the location of the oraparam.ini file).

### RESPONSEFILE\_VERSION

Specifies the version number of the response file.

```
RESPONSEFILE_VERSION = <version_number>
```

#### FROM\_LOCATION

The location of the source of the products to be installed. The default generated value for this parameter is a path relative to the location of the runInstaller file oraparam.ini. Relative paths are necessary for shared response files used by multiple users over a network. Since people may be mapping to different drives, absolute paths will not work for shared response files.

Notes:

- You must enter a value for FROM\_LOCATION for a complete silent installation. You may want to use the command line to set this parameter. If the location is a relative path, remember that the path should be relative to the location of the oraparam.ini file.
- Make sure that /var/opt/oracle/oraInst.loc (or /etc/oraInst.loc for Linux, AIX, and Sequent) exists. The response file for UNIX has a public variable, setunixinstallgroup, that only becomes effective when it is the first OUI installation and the oraInst.loc file is not already present at the location mentioned above.

#### FROM\_LOCATION\_CD\_LABEL

Used in multiple-CD installations. It includes the label of the compact disk where the file products.jar exists. You can find the label in the disk.label file in the same directory as products.jar.

#### LOCATION\_FOR\_DISK2

This parameter is for the complete path to other disks.

```
LOCATION_FOR_DISK2="F:\teststage\cd\Disk2"
```

If there are more than two disks, more variables will be added as LOCATION\_FOR\_DISK3, and so on.

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

- OUI looks for the Location\_For\_Disk{DiskNumber} variable in the response file and uses that location.
- If the variable does not have a value or does not have the required files, it looks for the components under ../../Disk{DiskNumber}/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:

<Product\_Shiphome\_Location>/stage

#### **RESTART\_SYSTEM**

Set this boolean variable to TRUE if you want to restart the system without user confirmation. This is the force value for restarting the system.

### 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.

NEXT\_SESSION = TRUE

### NEXT\_SESSION\_ON\_FAIL

Set this boolean variable to TRUE to allow users to invoke another installation session even if the current installation session fails. This variable is used only if NEXT\_SESSION variable is set to TRUE.

NEXT\_SESSION\_ON\_FAIL = TRUE

### NEXT\_SESSION\_RESPONSE

Use this string variable to enter the complete path of the response file for the next session 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, OUI ignores the value of this variable.

NEXT\_SESSION\_RESPONSE="/private/usr2/nextinstall.rsp"

#### ORACLE\_HOME

The location where products are to be installed. You must enter a value for ORACLE\_HOME for a complete silent installation.

#### ORACLE\_HOME\_NAME

The name of the current Oracle home. You must enter a value for ORACLE\_HOME\_NAME for a complete silent installation.

### SHOW\_COMPONENT\_LOCATIONS\_PAGE

The location page, which appears in a custom installation type, can be suppressed by setting this value to FALSE. If you set the value to FALSE, you are 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 deselected. This page appears only during custom installation type.

#### SHOW\_END\_SESSION\_PAGE

The installation 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 you need to show the confirmation when exiting the installer.

```
SHOW_EXIT_CONFIRMATION = TRUE
```

#### SHOW\_INSTALL\_PROGRESS\_PAGE

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

#### SHOW\_OPTIONAL\_CONFIG\_TOOL\_PAGE

Set to TRUE if you must show the Optional Configuration Tools page in the installer. The Optional Configuration Tools page shows a 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\_ROOTSH\_CONFIRMATION

Set to TRUE if you need to show the Confirmation dialog asking to run the root.sh script in the installer. This variable is valid only on UNIX platforms.

```
SHOW_ROOTSH_CONFIRMATION = TRUE
```

### SHOW\_SPLASH\_SCREEN

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

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 you need to show the Welcome page on the installer.

SHOW\_WELCOME\_PAGE = FALSE

#### SHOW\_RELEASE\_NOTES

Set this parameter to TRUE if you want the release notes for this installation to be shown at the end of the installation. A dialog box lists the available release notes. Note that the SHOW\_END\_SESSION parameter must be set to TRUE before you can use this parameter.

#### TOPLEVEL\_COMPONENT

The name of the component (products), and the version as a string list. 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, the second representing the version.

For example, RDBMS 11.1. may be represented as { "oracle.rdbms", "11.1.0.0.0" }.

#### UNIX\_GROUP\_NAME

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

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

#### **REMOVE\_HOMES**

Use to identify the Oracle home(s) you want to remove from the inventory during a deinstallation session. For each home, specify the home name using the full path information.

REMOVE\_HOMES={"/home/oracle/ora9i","/home/oracle/ora8i"}

#### DEINSTALL\_LIST

Use to enter a list of components to be removed during a silent deinstall session. For each component, specify the internal component name and version.

```
DEINSTALL_LIST={"sample1","1.0.0.0"}
```

#### SHOW\_DEINSTALL\_CONFIRMATION

Set to FALSE if you want to hide the deinstall confirmation dialog box during silent deinstallation.

#### SHOW\_DEINSTALL\_PROGRESS

Set this parameter to FALSE if you want to hide the deinstallation progress dialog box during silent deinstallation.

#### DEPENDENCY\_LIST

List of dependents on which the component depends. These dependent components represent the list of components that appear as "selected" during installation. Following is a list of a few parameter characteristics:

- 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 deselected items in a dialog.
- Specifying required dependents is redundant since they will be selected anyway. The dependents selection can have two other types of dependents: optional and one-or-more.
- The list of components is specified by an internal name and version number.

A typical example is listed here:

DEPENDENCY\_LIST={"oracle.netclt","9.2.0.4.0","oracle.netmgr","9.2.0.4.0"}

#### CLUSTER\_NODES

Lists the nodes on the cluster where Oracle home is installed or would be installed. For new installations, this would be the node list where the installation needs to be done (including the local node). For patching or upgrades, this is the node list where Oracle home is already installed.

```
"CLUSTER_NODES={alpha-1, alpha-2}"
```

#### REMOTE\_NODES

Lists the remote nodes (apart from the local node), on the install cluster during a silent installation. OUI installs on all named nodes.

```
"REMOTE_NODES={alpha-1, alpha-2}"
```

#### LOCAL\_NODE

This parameter specifies the current node where the installation occurs.

```
LOCAL_NODE={ }
```

### OPTIONAL\_CONFIG\_TOOLS

While all the required configuration tools are launched by the installer, you can control the optional configuration tools you would want to launch by specifying the tool 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 also call the Net Configuration Assistant or the Database Configuration Assistant at the end of a database installation in silent mode. For example, to launch the Net Configuration Assistant in silent mode, you can pass the parameter s\_responseFileName="netca.rsp".

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

For Example:

```
OPTIONAL_CONFIG_TOOLS = {"configtool2 ", "configtool3"}
```

```
OPTIONAL_CONFIG_TOOLS=<Value Unspecified>
```

If no value is specified for this variable, all the tools are run by default. If there is a value specified, only those optional tools are run while the rest of the tools are ignored.

Suppress the configuration tool by mentioning only the tools that you want to run as part of the OPTIONAL\_CONFIG\_TOOLS variable added for each component. You should use the configuration tool internal names.

The response file generator generates these internal names also as part of the options provided for the variable.

For example, if oracle.server has Tool1 and Tool2 and you want to run only Tool1 in the response file, you can specify it as follows:

```
oracle.server:11.1.0.0.0:OPTIONAL_CONFIG_TOOLS={"Tool1"}
```

### INSTALL\_TYPE

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

The installation type variable is only generated for top-level components and only when there is more than one installation type available.

Note: You must enter a value for INSTALL\_TYPE.

#### SELECTED\_LANGUAGES

You can set the languages for component installation. You must use the internal name while specifying the value:

en, : English

ja, : Japanese

For example, to specify Japanese:

SELECTED\_LANGUAGES = { "ja" }

**Note:** The SELECTED\_LANGUAGES variable is only generated when more than one language is available.

### Installing with a Response File

Many Oracle software products provide tools and procedures for running OUI from the command line without displaying OUI screens or responding to questions during the installation.

These are called silent installations. Instead of prompting you to select a series of installation options, OUI installs the software using a predefined set of options. These options are stored in a response file (.rsp).

**Note:** If you attempt to perform a silent installation on a UNIX computer where no Oracle products have been installed, you will receive an error message. Before you can perform a silent installation on such a computer, you must first run the oraInstRoot.sh script, which is saved in the /oraInventory directory. You must run this script with root privileges. This enables OUI to set up the Central Inventory on a clean host.

For more information, see "Oracle Universal Installer Inventory" on page 1-3.

#### **Specifying a Response File**

To start OUI and specify the response file, enter the following on the command line in the directory where the executable file is installed:

On UNIX: ./runInstaller -responseFile <filename> <optional\_parameters>

**Note:** You must specify the complete responseFile path. If you do not, OUI assumes the location to be relative to the oraparam.ini file associated with the launched OUI.

For help on command line usage, enter the following on the command line in the directory where the executable file is stored:

On UNIX:

./runInstaller -help

#### **Optional Parameters When Specifying a Response File**

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

- -nowelcome Used flag with the -responseFile flag to suppress the Welcome dialog that appears during installation.
- -silent Used with the -responseFile flag to run OUI in complete silent mode. Note that the Welcome dialog is suppressed automatically.
- In a file named silentInstall<timestamp>.log for hosts without an Oracle inventory. This file is generated in the /tmp directory (UNIX).
- In the inventory logs directory for hosts that already had an inventory.
- **Note:** Using the -nowelcome option with the -silent option is unnecessary since the Welcome screen does not appear when you use the -silent option.

#### Setting Response File Variables From the Command Line

With OUI 2.1 and higher, you can specify the value of certain variables when you start OUI from the command line. Specifically, you can specify session and component variables.

For more information, see "Response File Format" on page 1-11.

**Note:** When you specify the value of a variable on the command line, that value overrides the value of the variable if it is defined in the response file.

#### Specifying the Value of a Session Variable

To specify the value of a session variable, use the following command syntax:

On UNIX:

./runInstaller session:<variable\_name>=<value>

For example, to prevent the Universal Welcome page from displaying:

On UNIX:

./runInstaller session:SHOW\_WELCOME\_PAGE=false

Note: The "session:" tag is optional and is used mainly to remove any possible ambiguity.

#### Specifying the Value of a Component Variable

To specify the value of a component variable, use the following command syntax:

```
On UNIX:
```

```
./runInstaller
```

```
<component_name>:<component_version>:<variable_name>=<value>
```

# **Modes of Installation**

You can use OUI to install Oracle products in any of the three following modes:

• Interactive:

Use OUI interactive mode to use the graphical user interface to walk through the installation, providing information in the installation dialogs when prompted. This method is most useful when installing a small number of products in different setups on a small number of hosts.

• Suppressed:

Use OUI suppressed mode to supply the necessary information by using a combination of a response file or command line entries with certain interactive dialogs. You can choose which dialogs to suppress by supplying the information on the command line when you invoke OUI. This method is most useful when an installation has a common set of parameters that can be captured in a response file, in addition to custom information that must be input by hand.

• Silent:

Use OUI silent installation mode to bypass the graphical user interface and supply the necessary information in a response file. This method is most useful when installing the same product multiple times on multiple hosts. By using a response file, you can automate the installation of a product for which you know the installation parameters.

# **Installation Media**

Note: When you invoke runInstaller (UNIX), you should invoke it from the directory where this command is present, or you must specify the complete path to runInstaller (UNIX).

# **Special Instructions for UNIX Users**

The following sections describe special instructions that apply when you are installing certain products on a UNIX system.

# Failed to Connect to Server Error

If you receive an Xlib error or a "Failed to connect to Server" error when you are running OUI on the Solaris operating system, do the following:

- 1. Define the following environment variable on the host computer where you are running OUI: %setenv DISPLAY <machine name>:0.0
- 2. Replace <machine name> with the name of the computer that will display OUI.
- 3. On the computer that will display OUI, enter the following command, which allows other computers to display information on the computer monitor: %xhost +
- 4. Rerun the runInstaller script after you have set the DISPLAY environment variable.
- **Note:** You can run OUI without specifying the DISPLAY variable by running in silent mode using a response file.

## **Providing a UNIX Installer Location with Root Privileges**

You must have root privileges to perform various UNIX installation operations. For example, you must have root privileges to be able to create the OUI inventory.

If you are installing OUI for the first time, you are prompted to run a shell script from another terminal window before proceeding with the installation. OUI prompts you to run root.sh after installation completes only if the script is required to run as root before configuration assistants are run. Otherwise, you are prompted to run root.sh as root later.

**Note:** When running OUI in silent mode, if root.sh is required prior to configuration assistants, OUI skips configuration assistants during the installation. You must run root.sh as root and then run the skipped configuration assistants after the silent installation is complete.

To successfully run the required shell script:

- 1. Leave the OUI window open and open another terminal window.
- 2. In the new terminal window, use the substitute user command to log in with root privileges: su -root

- 3. Change directory to the Oracle home into which you are currently installing your Oracle software product.
- 4. Run the shell script ./root.sh.
- 5. When the script is finished and you are returned to the command prompt, exit from the new terminal window and return to OUI to continue installation.
- **Note:** Do not exit the installation to run the shell script. Exiting the installation removes this script.

You are prompted to run the script only the first time you install.

# **Providing a UNIX Group Name**

If you are installing a product on a UNIX system, the Installer also prompts you to provide the name of the group that owns the base directory.

You must choose a UNIX group name that has permissions to update, install, and remove Oracle software. Members of this group must have write permissions for the chosen base directory.

Only users who belong to this group are able to install or remove software on this host.

# **Deinstalling Oracle Products**

## **Removing Oracle Products and Oracle Homes**

You can deinstall Oracle products before selecting products to install, or after a successful installation.

To remove an Oracle product or Oracle home using interactive mode, do the following steps:

- 1. Start OUI from a CD-ROM or:
  - For UNIX platforms, from the command line, run the script called runInstaller from the directory where it is stored by default at the same level as the first Oracle home created on that host.
- 2. Click Deinstall Products on the Welcome screen.

The Inventory panel appears.

3. Select the product(s) you want to remove from the **Contents** tab of the Inventory panel and click **Remove**. You can also remove Oracle homes in the same manner. After you have removed an Oracle home, you can reuse its name and location to install other products.

4. The Remove Confirmation Dialog appears, you are prompted if you want to remove the products and their dependent components. Click **Yes**.

OUI warns you of any product dependencies that might cause problems if particular products are removed, and prompts you to confirm the deinstallation.

Pay special attention to the full list of products being removed before proceeding. OUI computes this list based on the dependencies of each component.

**Note:** You can also remove products by using the OUI **Installed Products** button as long as you perform this action before selecting products to install.

# **Deinstalling Top-level Products With Dependents**

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

When you select a specific component for removal, OUI analyzes the dependency information to determine if other components should be removed along with it. Generally, if a component is selected for removal, the following components are removed with it:

All components that have a required dependency on the selected component.

Dependents of the selected component that have no other dependents. A dependent is a component on which the top-level component (dependent), has a dependency.

# **Silent Deinstallation**

Not only can you perform command line installations, you can also perform command line deinstallations. A command line deinstallation enables you to remove Oracle products or Oracle homes from your system without using the OUI graphical user interface.

You can choose to display no dialog boxes or prompts, or you can selectively avoid displaying certain dialog boxes that are normally used during a deinstallation.

#### Immediately Displaying the Inventory Dialog Box

Use the following commands to immediately display the Inventory dialog box, which allows you to select items for removal without navigating the OUI startup screen:

```
./runInstaller -deinstall -silent (on UNIX)
```

### Hiding the Inventory Dialog Box

If you want to hide the inventory dialog box during a deinstallation, you can specify the products to be removed in the response file DEINSTALL\_LIST parameter; specify Oracle homes to be removed with the REMOVE\_HOMES variable.

As with other response file parameters, you can also specify the DEINSTALL\_LIST parameter on the OUI command line. For example, on a UNIX machine, enter:

```
./runInstaller -deinstall -silent
DEINSTALL_LIST={"component1","1.0.1.2.0"}
```

To remove Oracle homes from the inventory, use the REMOVE\_HOMES variable.

#### Hiding the Deinstallation Confirmation and Progress Dialog Boxes

Use the following commands to hide the deinstallation confirmation and progress dialog boxes during a command line deinstallation:

On a UNIX system:

```
./runInstaller -deinstall -silent session:SHOW_DEINSTALL_PROGRESS=false
session:SHOW_DESINSTALL_CONFIRMATION=false
```

# **About Oracle Universal Installer Log Files**

When you install or deinstall products using OUI, important information about each installation is saved not only in the inventory, but also in a series of log files, located in the following directory:

```
$ORACLE_HOME/cfgtoollogs
```

You can use these log files to troubleshoot installation problems. These files are also crucial for removing and configuring the various software components you install on your UNIX computer. OUI displays the name and location of the current session log file on the Install page. Each installation or configuration utility provides a separate folder containing the logs inside the <code>\$ORACLE\_HOME/cfgtoollogs</code> folder.

**Note:** The logs used to remove products are different from the

installActions<timestamp>.log generated during the install process. The installActions<timestamp>.log is easier to read and can be used to view the operations performed at installation time.

# **Oracle Internationalization**

### **Installation Dialogs Language**

OUI runs in the operating system language. OUI uses the language that Java detects, the system locale value, and sets that to the default language. OUI dialogs are displayed in this language if available. If specific OUI dialogs are not translated in the language of the operating system, these dialogs are shown in English.

OUI displays the translated GUI only if the variable NLS\_ENABLED has been set to TRUE in the oraparam.ini file. If the NLS\_ENABLED variable is set to FALSE, all text is shown in English.

**Note:** The dialogs displayed for internationalization can only be customized parts; some of them are embedded in OUI.

# **Oracle Tuxedo Application Runtimes Web Distribution**

An evaluation copy of Oracle Tuxedo Application Runtimes is available for download from the Oracle corporate Web site at http://www.oracle.com/technology/software/index.html.

Platform-specific installer files for the Oracle Tuxedo Application Runtimes product software are available for download from the Oracle corporate Web site.

# **Oracle Tuxedo Software Components**

Included with the Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3) software distribution is the Oracle Tuxedo Application Runtimes administrative utilities and Oracle Tuxedo Application Runtimes sample applications (optionally installed).

The Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3) distribution contains the following components:

- Oracle Tuxedo Application Runtime for CICS
- Oracle Tuxedo Application Runtime for Batch
- Oracle Tuxedo Application Runtime for IMS

# **Hardware and Software Prerequisites**

The Oracle Tuxedo Application Runtimes must be installed into an Oracle Home which has already installed Oracle Tuxedo Server component.

# **System Requirements**

The system requirements for Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3) are given in Table 1-1.

Component	Requirement
Platform*	Any platform identified in Supported Platforms.
Hard disk drive	As stated in the data sheet for the target platform in Supported Platforms.
Memory	As stated in the data sheet for the target platform in Supported Platforms.

Table 1-1 The System Requirements for Oracle Tuxedo 12c Release 2 (12.1.3)

# **Temporary Storage Space Requirements**

The Oracle Installation program uses a temporary directory in which it extracts the files from the archive that are needed to install Oracle Tuxedo Application Runtimes on the target system. During the installation process, your temporary directory must contain sufficient space to accommodate the compressed Java Runtime Environment (JRE) bundled with the installer and an uncompressed copy of the JRE that is expanded into the temporary directory. The installation program moves the JRE from the temporary directory to the *Oracle Home directory* at the end of the installation process. For information about the Oracle Home directory, see Oracle Home Directory.

The amount of temporary storage space needed depends upon the target platform, as stated in the data sheets in Supported Platforms.

When you start OUI, it automatically copies some executable files and link files into the default /tmp directory on the machine. If the machine is set to run cron jobs periodically (along with many other processes that may be running), these jobs attempt to clean up the default temporary directory, thereby deleting some files and causing OUI to fail.

To ensure there is adequate temporary space, you may want to allocate an alternate directory for use as a temporary directory for the installation. If there are any cron jobs or processes that are automatically run on the machines to clean up the temporary directories, ensure you set the TMP or TEMP environment variable to a different location (other than the default location) that is secure on the hard drive (meaning a location on which the cleanup jobs are not run). Also ensure that you have write permissions on this alternative TEMP directory. This must be done before you execute runInstaller.

**Note:** Specifying an alternative temporary directory location is not mandatory, and is required only if any cron jobs are set on the computers to clean up the /tmp directory.

# **Oracle Installation Program**

The Oracle Tuxedo Application Runtimes software is distributed as an installer file, which also contains a copy of the Oracle Installation program. The Oracle Installation program is the Oracle standard tool for installing the Oracle Tuxedo Application Runtimes software on UNIX systems.

# **Installation Methods**

The Oracle Installation program supports two installation methods. You can use any of these methods to install the Oracle Tuxedo Application Runtimes product software:

- Graphical user interface (GUI) installation, described in "Installing Oracle Tuxedo Application Runtimes Using GUI-Mode Installation" on page 3-1.
- Silent installation, described in "Installing Oracle Tuxedo Application Runtimes Using Silent Installation" on page 4-1.

# **Cancelling Installation**

Clicking the "Cancel" or the "close' window button in GUI mode creates an incomplete Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3) installation. You will have to re-install Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3).

If you installed Oracle Tuxedo Application Runtimes 12c Release 2(12.1.3) in a previous Tuxedo product directory, and you want to return to your original configuration, you must re-install your previous Oracle Tuxedo Application Runtimes version.

# Install Types

An install type is a bundle of product software components related by function. Oracle Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3) offers the following five install types:

• Full Install - consists of all the Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3) components.

- CICS Runtime Install consists of the Oracle Tuxedo Application Runtime for CICS 12*c* Release 2 (12.1.3) component.
- Batch Runtime Install consists of the Oracle Tuxedo Application Runtime for Batch 12*c* Release 2 (12.1.3) component.
- IMS Runtime Install consists of the Oracle Tuxedo Application Runtime for IMS 12*c* Release 2 (12.1.3) component.
- Custom Install

In addition to selecting an install set during an Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3) installation, a user can further customize the installation by selecting (adding) or deselecting (deleting) one or more software components from the install set. Customizing is only possible for GUI-mode installation methods described in "Installing Oracle Tuxedo Application Runtimes Using GUI-Mode Installation" on page 3-1.

### **Oracle Home Directory**

When you install Oracle Tuxedo Application Runtimes, you are prompted to specify an Oracle Home directory. The Oracle Home directory is a repository for common files that are used by multiple Oracle products installed on the same machine.

An Oracle home is the system context where Oracle products run. This context consists of the following:

- Directory location where the products are installed
- Corresponding system path setup
- Program groups associated with the products installed in that home (where applicable)
- Services running from that home

### **Choosing an Oracle Home Directory**

During the installation of Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3), you are prompted to choose an existing Oracle Home directory, where Oracle Tuxedo Server components are already installed.

# **Installation Road Map**

You are now ready to begin your installation. To install Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3), see one of the following sections:

- "Installing Oracle Tuxedo Application Runtimes Using GUI-Mode Installation" on page 3-1
- "Installing Oracle Tuxedo Application Runtimes Using Silent Installation" on page 4-1

If you want to uninstall your Oracle Tuxedo Application Runtimes software, see "Performing Post-Installation Tasks" on page 4-1.



# Installing Oracle Tuxedo Application Runtimes Using GUI-Mode Installation

The following sections describe how to install Oracle Tuxedo Application Runtimes using graphical user interface (GUI) mode installation on UNIX systems:

- What Is GUI-Mode Installation?
- Starting GUI-Mode Installation on a UNIX System
- Running GUI-Mode Installation

# What Is GUI-Mode Installation?

The graphical user interface mode installation is the graphics-based method of executing the Oracle Installation program. It can be run on UNIX system.

To run GUI-mode installation, the console attached to the machine on which you are installing the software must support a Java-based GUI. Not all consoles for UNIX systems support Java-based GUIs.

# **Starting GUI-Mode Installation on a UNIX System**

To start the GUI-mode installation process on a UNIX system, follow these steps:

1. Select a UNIX system that meets the hardware and software requirements described in Supported Platforms

**Note:** To install Oracle Tuxedo Application Runtimes on a UNIX system with a non-graphics console, use silent install mode.

- 2. Log in to the UNIX system as the Oracle Tuxedo Application Runtimes administrator.
- 3. Ensure that you have enough free space for the Oracle Tuxedo Application Runtimes installation.

For disk space requirements, see Supported Platforms.

- 4. Install Oracle Tuxedo Application Runtimes by downloading from the Oracle Web site:
  - a. Go to http://www.oracle.com/technology/software/index.html and download the Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3) installation file specific to your platform.
  - b. Go to the directory where you downloaded the installer, unzip the installer file, and then go to the Disk1\install directory, run the runInstaller to invoke the installation procedure.
  - **Note:** GUI mode is the default for Oracle Tuxedo Application Runtimes 12c Release 2 (12.1.3) installation. If a GUI interface is not available on your Unix platform, you will receive an error message and the installation process is aborted.

If a GUI interface is not available on your Unix platform, you must use silent mode installation. For more information, see What Is Silent Installation?

5. Proceed to Running GUI-Mode Installation.

# **Running GUI-Mode Installation**

The Oracle Tuxedo Application Runtimes installer program prompts you to enter specific information about your system and configuration. For instructions on responding to the prompts during installation, see Table 3-1.

In This Window	Perform the Following Action
Welcome	Click <b>Next</b> to proceed with the installation. You may cancel the installation at any time by clicking Cancel.
Specify Inventory directory (Unix only)	On UNIX operating systems, this screen appears if this is the first time you are installing any Oracle product on this host. Specify the location where you want to create your central inventory. Make sure that the operating system group name selected on this screen has write permissions to the central inventory location.

In This Window	Perform the Following Action
Choose Install type	Select the install type that you want installed on your system. The following five choices are available:
	<ul> <li>Full Install (the default) - all the Oracle Tuxedo Application Runtimes.</li> <li>CICS Runtime Install - consists of the Oracle Tuxedo Application Runtime for CICS component.</li> </ul>
	• Batch Runtime Install - consists of the Oracle Tuxedo Application Runtime for Batch component.
	• IMS Runtime Install - consists of the Oracle Tuxedo Application Runtime for IMS component.
	Custom Install.
	For a detailed list of software components for each install type, see "Install Types" on page 1-30.
	Select an install type and then click Next to launch the Choose Oracle Home Directory window-your selection. Or select an install type and then click Customize to launch the Customize Install window.
Specify Oracle Home	Name: Enter a name for the Oracle home. This name identifies the program group associated with a particular home and the Oracle services installed on this home. The Oracle home name must be between 1 to 127 characters long, and can include only alphanumeric characters and underscores.
	Enter the full path to an Oracle home, or select an Oracle home from the drop-down list of existing Oracle homes. The Oracle home location is the directory where products are installed. Data files may or may not be installed within an Oracle home. You can use the Browse button to choose a directory to install your product. Different homes cannot share the same location.
	Oracle Tuxedo Application Runtimes Installation Directory is "\$ORACLE_HOME/art12.1.3.0.0" by default (UNIX) and cannot changed after the ORACLE_HOME is determined. The installer doesn't allow to install two same version tuxedo product into the same ORACLE_HOME.
	If the selected ORACLE_HOME already installed the same version Oracle Tuxedo Application Runtimes, the installer will show a warning.
	If the selected ORACLE_HOME does not include Tuxedo Server component, you cannot continue the installation.

Table 3-1 Instructions

In This Window	Perform the Following Action
Customize Install	Select (add) or deselect (clear) one or more software components from the selected install type, or choose one of the other four install types or Custom Set from the drop-down list menu and customize its software components.
	After selecting or deselecting one or more software components from the selected install set, click Next to continue with the installation.
Select samples installation	If the selected install feature sets include server component, this screen appears to confirm install the samples.
COBOL Compiler Selection	If the components that you selected include "Oracle Tuxedo Application Runtime for CICS" or "Oracle Tuxedo Application Runtime for Batch", you can choose any of following COBOL compiler: Micro Focus COBOL, COBOL-IT, or No COBOL.
Choose COBOL-IT Install Directory	If you choose "COBOL-IT", you will be required to specify the COBOL Compiler location (the default location is /opt/cobol-it-64).
Summary	Click Install to start the installation.
Installing	Nothing to do.
Install End	Click Exit to exit the installation program.

Congratulations! Your installation of the Oracle Tuxedo Application Runtimes software is complete!



# Installing Oracle Tuxedo Application Runtimes Using Silent Installation

The following sections describe how to install Oracle Tuxedo Application Runtimes using silent installation on UNIX systems:

- What Is Silent Installation?
- Using Silent Installation: Main Steps

# What Is Silent Installation?

Silent installation reads the settings for your configuration from a text file that you create prior to beginning the installation. Manual intervention is not necessary during the installation process. Silent installation works on UNIX systems.

Silent installation is a way of setting installation configurations only once and then using those configurations to duplicate the installation on many machines.

# **Using Silent Installation: Main Steps**

### **Creating a Response File**

You can create a new response file, based on the installation options you select, by using the OUI record mode.

When you use record mode, OUI records the installation session to a response file. You specify the name of the response file on the command line. The recorded response file is generated immediately after the Summary page; you do not need to actually install your Oracle product to

create the response file. That is, you can start the installation in Record mode and proceed through the installation options until you get to the Summary page. On the Summary Page, click **Exit** to stop the installation from proceeding with the installation. However, all the options you selected are saved in the resulting response file.

You can use the newly created response file to run identical installation sessions on other computers in your organization.

Record mode can be also used during a silent installation. In this case, the variable values specified in the original source response file will be recorded to the new response file.

The following sections describe how to use record mode on UNIX systems.

### **Using Record Mode**

To record a new response file:

- 1. At the command prompt, use the cd command to change to the directory that contains the OUI executable file (runInstaller.sh) for your installation.
- 2. Enter the following command on UNIX:

```
./runInstaller -record -destinationFile <response_file_name>
```

Replace the <response\_file\_name> with the complete path for the new response file. For example:

On UNIX:

./runInstaller -record -destinationFile
/private/temp/install\_oraclellg.rsp

3. Use the OUI user interface to select and record your installation options.

When OUI displays the Summary page, you can either continue with the installation or exit.

OUI saves your new response file using the path and file name you specified on the command line.

### **Required Variables in Oracle Tuxedo Application Runtimes Response File**

The variables defined in this section are specific for Tuxedo installer.

Note: For String type variables, you must contain the value using the double quote.

### ORACLE\_HOME

The location where products are to be installed. You must enter a value for ORACLE\_HOME for a complete silent installation.

### ORACLE\_HOME\_NAME

The name of the current Oracle home. You must enter a value for ORACLE\_HOME\_NAME for a complete silent installation.

### **INSTALL\_TYPE**

You can set the installation type variable to determine the installation type of the currently selected top level component. Install\_type can be selected from below table:

Install type	Description
Full Install	This install type will install all of the Oracle Tuxedo Application Runtimes components.
CICS Runtime Install	This install type will install the Oracle Tuxedo Application Runtime for CICS component.
Batch Runtime Install	This install type will install the Oracle Tuxedo Application Runtime for Batch component.
IMS Runtime Install	This install type will install the Oracle Tuxedo Application Runtime for IMS component.
Custom Install	This install type will install the components selected by customer.

For more information, see Install Types.

### SAMPLE\_INSTALLED

If the install samples for ART products set it to true. It is required.

### COBOL\_COMPILER\_TYPE

Configures the COBOL compiler type.

It keeps records for the default COBOL compiler type you are using.

If artcics component is not selected and artbatch component is selected, the value can be "Micro-Focus-Cobol", "COBOL-IT", or "No-COBOL".

If artcics component is selected, the value can be "Micro-Focus-Cobol" or "COBOL-IT".

If only artims component is selected, it is not required.

### COBOL\_IT\_DIR

Configures the full path of COBOL-IT installation directory.

```
It is required if COBOL_COMPILER_TYPE is "COBOL-IT".
```

# Installing with a Response File

Many Oracle software products provide tools and procedures for running OUI from the command line without displaying OUI screens or responding to questions during the installation.

This is called silent installation.

Instead of prompting you to select a series of installation options, OUI installs the software using a predefined set of options. These options are stored in a response file (.rsp).

**Note:** If you attempt to perform a silent installation on a UNIX computer where no Oracle products have been installed, you will receive an error message. Before you can perform a silent installation in this situation, you must first run the oraInstRoot.sh script located in the /oraInventory directory. You must run this script with root privileges. This enables OUI to set up the Central Inventory on a clean host.

For more information, see Oracle Universal Installer Inventory.

### **Specifying a Response File**

To start OUI and specify the response file, enter the following command on the command line in the directory where the executable file is installed:

### On UNIX:

./runInstaller -responseFile <filename> <optional\_parameters>

### Notes:

- To install Oracle Tuxedo Application Runtimes in complete silent mode, you must specify <optional\_parameters> to -silent.
- You must specify the complete responseFile path. If you do not, OUI assumes the location is relative to the oraparam.ini file associated with the launched OUI.

For help on command line usage, enter the following on the command line in the directory where the executable file is stored:

#### On UNIX:

./runInstaller -help

### **Optional Parameters When Specifying a Response File**

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

- -nowelcome Use the -nowelcome flag with the -responseFile flag to suppress the Welcome dialog that appears during installation.
- -silent Use the -silent flag with the -responseFile flag to run OUI in complete silent mode. Note that the Welcome dialog is suppressed automatically.
- -waitforcompletion Use the -waitforcompletion flag with -silent flag to wait for completion instead of spawning the java engine and exiting.
- In a file named silentInstall<timestamp>.log for hosts without an Oracle inventory. This file is generated in the /tmp directory on UNIX platforms.
- In the inventory logs directory for hosts that already had an inventory.
- Note: Using the -nowelcome option with the -silent option is unnecessary since the Welcome screen does not appear when you use the -silent option.

### **UNIX Template Sample File**

This sample UNIX response file in Listing 4-1 applies to a silent installation of Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3).

#### Listing 4-1 UNIX response File

```
## identifies the variable type.
                                                           ##
##
                                                           ##
## Please specify the values in the following format:
                                                           ##
##
                                                           ##
##
         Type
                    Example
                                                           ##
         String
                   "Sample Value"
##
                                                           ##
         Boolean True or False
##
                                                           ##
         Number 1000
##
                                                           ##
##
         StringList {"String value 1", "String Value 2"}
                                                           ##
##
                                                           ##
## The values that are given as <Value Required> need to be
                                                           ##
## specified for a silent installation to be successful.
                                                           ##
##
                                                           ##
##
                                                           ##
## This response file is generated by Oracle Software
                                                           ##
## Packager.
                                                           ##
************
```

RESPONSEFILE\_VERSION=2.2.1.0.0

#-----------#Name : UNIX\_GROUP\_NAME

#Datatype : String

#Description: Unix group to be set for the inventory directory. Valid only in Unix platforms.

#Example: UNIX\_GROUP\_NAME = "install"

```
_____
UNIX_GROUP_NAME="oinstall"
#-----
_____
#Name : FROM_LOCATION
#Datatype : String
#Description: Complete path to the products.xml.
#Example: FROM_LOCATION = "../stage/products.xml"
____
FROM_LOCATION="/nfs/users/huchchen/art/stage_art_linux/Disk1/stage/product
s.xml"
_____
#Name : FROM_LOCATION_CD_LABEL
#Datatype : String
#Description: This variable should only be used in multi-CD installations.
It includes the label of the compact disk where the file "products.xml"
exists. The label can be found in the file "disk.label" in the same directory
as products.xml.
#Example: FROM_LOCATION_CD_LABEL = "CD Label"
_ _ _ _ _ _
FROM_LOCATION_CD_LABEL=<Value Unspecified>
_ _ _ _ _ _
```

#Name : ORACLE\_HOME #Datatype : String #Description: Complete path of the Oracle Home. #Example: ORACLE\_HOME = "C:\OHOME1" #-----\_\_\_\_ ORACLE\_HOME="/nfs/users/huchchen/OraHome\_8" #-----\_\_\_\_\_ #Name : ORACLE\_BASE #Datatype : String #Description: Complete path of the Oracle Base. #Example: ORACLE\_BASE = "C:\app" #-----\_\_\_\_ ORACLE\_BASE=<Value Unspecified> \_\_\_\_\_ : ORACLE\_HOME\_NAME #Name #Datatype : String #Description: Oracle Home Name. Used in creating folders and services. #Example: ORACLE\_HOME\_NAME = "OHOME1" \_\_\_\_ ORACLE\_HOME\_NAME="OUIHome8"

```
_____
#Name : SHOW_WELCOME_PAGE
#Datatype : Boolean
#Description: Set to true if the Welcome page in OUI needs to be shown.
#Example: SHOW_WELCOME_PAGE = false
#-----
_____
SHOW_WELCOME_PAGE=true
_ _ _ _ _ _
#Name : SHOW_CUSTOM_TREE_PAGE
#Datatype : Boolean
#Description: Set to true if the custom tree page in OUI needs to be shown.
#Use this page to select or de-select dependencies. This page appears only
in a custom install type.
#Example: SHOW_CUSTOM_TREE_PAGE = false
_____
SHOW_CUSTOM_TREE_PAGE=true
_____
#Name : SHOW_COMPONENT_LOCATIONS_PAGE
#Datatype : Boolean
#Description: Set to true if the component locations page in OUI needs to
be shown.
#This page only appears if there are products whose installed directory can
be changed.
```

#If you set this to false you will prevent the user from being able to specify alternate directories.

#Example: SHOW\_COMPONENT\_LOCATIONS\_PAGE = false

#-----

-----

SHOW\_COMPONENT\_LOCATIONS\_PAGE=true

\_\_\_\_ #Name : SHOW\_SUMMARY\_PAGE #Datatype : Boolean #Description: Set to true if the summary page in OUI needs to be shown. #The summary page shows the list of components that will be installed in this session. #Example: SHOW\_SUMMARY\_PAGE = true \_\_\_\_\_ SHOW\_SUMMARY\_PAGE=true \_\_\_\_ #Name : SHOW\_INSTALL\_PROGRESS\_PAGE #Datatype : Boolean #Description: Set to true if the install progress page in OUI needs to be shown. #This page shows the current status in the installation. The current status includes the product being installed and the file being copied. #Example: SHOW\_INSTALL\_PROGRESS\_PAGE = true \_\_\_\_\_

SHOW\_INSTALL\_PROGRESS\_PAGE=true

```
#-----
```

#Name : SHOW\_REQUIRED\_CONFIG\_TOOL\_PAGE

#Datatype : Boolean

#Description: Set to true if the required config assistants page in OUI needs to be shown.

#This page shows the list of required configuration assistants that are part of this installation.

#It shows the status of each assistant, including any failures with detailed information on why it failed.

#Example: SHOW\_REQUIRED\_CONFIG\_TOOL\_PAGE = true

```
#-----
-----
```

SHOW\_REQUIRED\_CONFIG\_TOOL\_PAGE=true

```
#-----
```

#Name : SHOW\_CONFIG\_TOOL\_PAGE

#Datatype : Boolean

#Description: Set to true if the config assistants page in OUI needs to be shown.

#This page shows the list of configuration assistants that are part of this installation and are configured to launch automatically.

#It shows the status of each assistant, including any failures with detailed information on why it failed.

#Example: SHOW\_CONFIG\_TOOL\_PAGE = true

#-----

SHOW\_CONFIG\_TOOL\_PAGE=true

#-----

#Name : SHOW\_RELEASE\_NOTES

#Datatype : Boolean

#Description: Set to true if the release notes of this installation need to be shown at the end of installation.

#This dialog is launchable from the End of Installation page and shows the list of release notes available for the products just installed.

# This also requires the variable SHOW\_END\_SESSION\_PAGE variable to be set to true.

#Example: SHOW\_RELEASE\_NOTES = true

#-----

-----

SHOW\_RELEASE\_NOTES=true

#-----

\_\_\_\_\_

#Name : SHOW\_ROOTSH\_CONFIRMATION

#Datatype : Boolean

#Description: Set to true if the Confirmation dialog asking to run the root.sh script in OUI needs to be shown.

#Valid only for Unix platforms.

#Example: SHOW\_ROOTSH\_CONFIRMATION = true

\_\_\_\_

SHOW\_ROOTSH\_CONFIRMATION=true

```
_____
#Name
   : SHOW_END_SESSION_PAGE
#Datatype : Boolean
#Description: Set to true if the end of session page in OUI needs to be
shown.
#This page shows if the installation is successful or not.
#Example: SHOW_END_SESSION_PAGE = true
#-----
____
SHOW_END_SESSION_PAGE=true
_ _ _ _ _ _
#Name : SHOW_EXIT_CONFIRMATION
#Datatype : Boolean
#Description: Set to true if the confirmation when exiting OUI needs to be
shown.
#Example: SHOW_EXIT_CONFIRMATION = true
____
SHOW_EXIT_CONFIRMATION=true
_____
#Name : NEXT_SESSION
#Datatype : Boolean
```

#Description: Set to true to allow users to go back to the File Locations page for another installation. This flag also needs to be set to true in order to process another response file (see NEXT\_SESSION\_RESPONSE).

#Example: NEXT\_SESSION = true #\_\_\_\_\_ \_ \_ \_ \_ \_ \_ NEXT\_SESSION=false #------\_\_\_\_ #Name : NEXT\_SESSION\_ON\_FAIL #Datatype : Boolean #Description: Set to true to allow users to invoke another session even if current install session has failed. This flag is only relevant if NEXT\_SESSION is set to true. #Example: NEXT\_SESSION\_ON\_FAIL = true \_\_\_\_\_ NEXT\_SESSION\_ON\_FAIL=true \_\_\_\_\_ #Name : NEXT\_SESSION\_RESPONSE #Datatype : String #Description: Set to true to allow users to go back to the File Locations page for another installation. This flag also needs to be set to true in order to process another response file (see NEXT\_SESSION\_RESPONSE). #Example: NEXT\_SESSION\_RESPONSE = "nextinstall.rsp" \_\_\_\_\_ NEXT\_SESSION\_RESPONSE=<Value Unspecified>

```
_____
#Name : DEINSTALL_LIST
#Datatype : StringList
#Description: List of components to be deinstalled during a deinstall
session.
#Example: DEINSTALL_LIST = {"artbase", "12.1.3.0.0"}
____
DEINSTALL_LIST={"artbase","12.1.3.0.0"}
_____
#Name : SHOW_DEINSTALL_CONFIRMATION
#Datatype : Boolean
#Description: Set to true if deinstall confimation is needed during a
deinstall session.
#Example: SHOW_DEINSTALL_CONFIRMATION = true
_ _ _ _ _ _
SHOW_DEINSTALL_CONFIRMATION=true
____
#Name : SHOW_DEINSTALL_PROGRESS
#Datatype : Boolean
#Description: Set to true if deinstall progress is needed during a deinstall
session.
```

#Example: SHOW\_DEINSTALL\_PROGRESS = true

#-----

SHOW\_DEINSTALL\_PROGRESS=true

\_\_\_\_\_ #Name : CLUSTER\_NODES #Datatype : StringList #Description: This variable represents the cluster node names selected by the user for installation. #Example: CLUSTER\_NODES = { "node1", "node2" } \_ \_ \_ \_ \_ \_ CLUSTER\_NODES={ } \_\_\_\_\_ #Name : ACCEPT\_LICENSE\_AGREEMENT #Datatype : Boolean #Description: By setting this variable to true, you are accepting the license agreement. This variable is used only for silent installations. #Example: ACCEPT\_LICENSE\_AGREEMENT = true \_\_\_\_ ACCEPT\_LICENSE\_AGREEMENT=false \_\_\_\_ #Name : METALINK\_LOCATION #Datatype : String

```
#Description: This variable represents the Oracle metalink location.
_____
METALINK_LOCATION=<Value Unspecified>
_ _ _ _ _ _
#Name : METALINK_USERNAME
#Datatype : String
#Description: This variable represents the Oracle metalink user name.
_____
METALINK_USERNAME =< Value Unspecified>
____
#Name : METALINK_PASSWORD
#Datatype : String
#Description: This variable represents the corresponding Oracle metalink
password.
_ _ _ _ _ _
METALINK_PASSWORD=<Value Unspecified>
_____
#Name : PROXY_HOST
#Datatype : String
#Description: The proxy host used to connect to Oracle metalink.
```

#Example: PROXY\_HOST = #-----\_\_\_\_\_ PROXY\_HOST="" \_ \_ \_ \_ \_ \_ #Name : PROXY\_PORT #Datatype : String #Description: The proxy port used to connect to Oracle metalink. #Example: PROXY\_PORT = #-----\_\_\_\_ PROXY PORT="" \_\_\_\_ #Name : PROXY\_REALM #Datatype : String #Description: The realm for the proxy used to connect to Oracle metalink. #Example: PROXY\_REALM = \_\_\_\_ PROXY\_REALM=<Value Unspecified> \_\_\_\_ #Name : PROXY\_USER #Datatype : String

```
#Description: The username for the proxy used to connect to Oracle metalink.
#Example: PROXY_USER =
_____
PROXY_USER=""
____
#Name : PROXY_PWD
#Datatype : String
#Description: The password for the proxy used to connect to Oracle metalink.
#Example: PROXY_PWD =
_ _ _ _ _ _
PROXY_PWD=<Value Unspecified>
#-----
____
#Name : DONT_PROXY_FOR
#Datatype : String
#Description: The dont proxy for list.
#Example: DONT_PROXY_FOR =
_____
DONT_PROXY_FOR=<Value Unspecified>
#-----
_____
#Name : TOPLEVEL_COMPONENT
```

```
#Datatype : StringList
#Description: The top level component to be installed in the current
session.
#Example: TOPLEVEL_COMPONENT = { "artbase", "12.1.3.0.0" }
_____
TOPLEVEL_COMPONENT={"artbase","12.1.3.0.0"}
____
#Name : SHOW_SPLASH_SCREEN
#Datatype : Boolean
#Description: Set to true if the initial splash screen in OUI needs to be
shown.
#Example: SHOW_SPLASH_SCREEN = true
_____
SHOW_SPLASH_SCREEN=true
____
#Name : SELECTED_LANGUAGES
#Datatype : StringList
#Description: Languages in which the components will be installed.
#Component : artbase
_____
```

SELECTED\_LANGUAGES={"en"}

```
#-----
_____
#Name : COMPONENT_LANGUAGES
#Datatype : StringList
#Description: Languages supported by this component.List of supported
languages : {"en","ja"}
#Component : artbase
_____
COMPONENT_LANGUAGES={ "en" }
#-----
____
#Name : INSTALL_TYPE
#Datatype : String
#Description: Installation type of the component.
#Component : artbase
#-----
____
INSTALL_TYPE="Full Install"
____
#Name : SAMPLE_INSTALLED
#Datatype : Boolean
#Description: true if it install samples for art
```

#Component : artbase #------

#### SAMPLE\_INSTALLED=true

#----#Name : COBOL\_COMPILER\_TYPE
#Datatype : String
#Description: It keep record the default COBOL compiler you are using.
#Component : artbase
#------

COBOL\_COMPILER\_TYPE="COBOL-IT"

```
#------
#Name : COBOL_IT_DIR
#Datatype : String
#Description: the full path of COBOL-IT installation directory.
#Component : artbase
#------
```

COBOL\_IT\_DIR="/opt/cobol-it-64"



# Performing Post-Installation Tasks

The following sections describe the tasks you perform after installing Oracle Tuxedo Application Runtimes:

- Understanding the Oracle Tuxedo Application Runtime for CICS and Batch Directory Structure
- Installation Verification
- Switch COBOL Compiler
- Uninstalling Oracle Tuxedo Application Runtimes

# Understanding the Oracle Tuxedo Application Runtime for CICS and Batch Directory Structure

During the Oracle Tuxedo Application Runtime for CICS, Batch and IMS software installation, all files are decompressed within the installation directory.

Table 4-1 lists Oracle Tuxedo Application Runtime for CICS, Batch and IMS directories and files under installed directory <code>\$ORACLE\_HOME/art12.1.3.0.0</code>.

Table 4-1 Oracle Tuxedo Application Runtime for CICS, Batch and IMS Directory and File Structure

Directory Name	Description
Cics_RT	Directory for CICS Runtime.

Cics_RT/bin	CICS Runtime binaries.
Cics_RT/cpylib	CICS Runtime Copies.
Cics_RT/lib	CICS Runtime libraries.
Cics_RT/objs	CICS Runtime objective files.
Cics_RT/sample	CICS Runtime samples. Optional install.
Cics_RT/sysmap	CICS Runtime system MAP definitions.
Cics_RT/coblib	Directory for COBOL programs and libraries.
Cics_RT/tools	CICS Runtime utilities.
Batch_RT	Directory for Batch Runtime.
Batch_RT/ejr	Batch Runtime Execution Engine. It is one of the following directories.
	Batch_RT/ejr_mf_ora
	Batch_RT/ejr_mf_db2
	Batch_RT/ejr_cit_db2
	Batch_RT/ejr_cit_ora
	Batch_RT/ejr_nocbl
Batch_RT/ejr*/COBOL_MF	Batch Runtime Execution Engine components depending on Micro Focus COBOL.
Batch_RT/ejr*/COBOL_IT	Batch Runtime Execution Engine components depending on COBOL-IT.
Batch_RT/ejr*/COBOL_NONE	Batch Runtime Execution Engine components independent of COBOL.
Batch_RT/ejr*/COMMON	Batch Runtime Execution Engine common components.
Batch_RT/ejr*/CONF	Batch Runtime Execution Engine configuration files.
Batch_RT/ejr*/DB_ORACLE	Batch Runtime Execution Engine components depending on Oracle Database.
Batch_RT/ejr*/DB_DB2LUW	Batch Runtime Execution Engine components depending on DB2 Database.

Table 4-1 Oracle Tuxedo Application Runtime for CICS, Batch and IMS Directory and File Structure

Understanding the Oracle Tuxedo Application Runtime for CICS and Batch Directory Structure

Batch_RT/ejr*/GENERATION_FILE_ DBBatch Runtime Execution Engine components managing the generation groups, based on DB.Batch_RT/ejr*/SAMPLEBatch Runtime Execution Engine samples. Optional install.Batch_RT/ejr*/SORT_MicroFocusBatch Runtime Execution Engine components depending on MFSORT.Batch_RT/ejr*/SORT_SyncSortBatch Runtime Execution Engine components depending on SyncSort.Batch_RT/ejr*/SORT_MFSyncSortBatch Runtime Execution Engine components depending on MFSyncSort.Batch_RT/ejr*/SORT_CITBatch Runtime Execution Engine components depending on CITSORT.Batch_RT/includeBatch Runtime TuxJES binaries.Batch_RT/lincludeBatch Runtime TuxJES header files.Batch_RT/localeBatch Runtime TuxJES libraries.Batch_RT/localeBatch Runtime TuxJES locales.Batch_RT/attims.envIMS Runtime env.IMS_RT/attims.envIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RT1ibIMS Runtime include file.IMS_RT1ibIMS Runtime objective files.IMS_RT0dbaproxyIMS Runtime objective files.	Batch_RT/ejr*/GENERATION_FILE	Batch Runtime Execution Engine components managing the generation groups.	
install.Batch_RT/ejr*/SORT_MicroFocusBatch Runtime Execution Engine components depending on MFSORT.Batch_RT/ejr*/SORT_SyncSortBatch Runtime Execution Engine components depending on SyncSort.Batch_RT/ejr*/SORT_MFSyncSortBatch Runtime Execution Engine components depending on MFSyncSort.Batch_RT/ejr*/SORT_CITBatch Runtime Execution Engine components depending on CITSORT.Batch_RT/binBatch Runtime Execution Engine components depending on CITSORT.Batch_RT/includeBatch Runtime TuxJES binaries.Batch_RT/libBatch Runtime TuxJES libraries.Batch_RT/localeBatch Runtime TuxJES libraries.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RTlibIMS Runtime include file.			
on MFSORT.Batch_RT/ejr*/SORT_SyncSortBatch Runtime Execution Engine components depending on SyncSort.Batch_RT/ejr*/SORT_MFSyncSortBatch Runtime Execution Engine components depending on MFSyncSort.Batch_RT/ejr*/SORT_CITBatch Runtime Execution Engine components depending on CITSORT.Batch_RT/binBatch Runtime TuxJES binaries.Batch_RT/includeBatch Runtime TuxJES header files.Batch_RT/localeBatch Runtime TuxJES libraries.Batch_RT/localeBatch Runtime TuxJES locales.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RTlibIMS Runtime include fil	Batch_RT/ejr*/SAMPLE		
on SyncSort.Batch_RT/ejr*/SORT_MFSyncSortBatch Runtime Execution Engine components depending on MFSyncSort.Batch_RT/ejr*/SORT_CITBatch Runtime Execution Engine components depending on CITSORT.Batch_RT/binBatch Runtime TuxJES binaries.Batch_RT/includeBatch Runtime TuxJES header files.Batch_RT/libBatch Runtime TuxJES libraries.Batch_RT/localeBatch Runtime TuxJES locales.Batch_RT/ocaleBatch Runtime TuxJES locales.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RT1ibIMS Runtime include file.	Batch_RT/ejr*/SORT_MicroFocus		
on MFSyncSort.Batch_RT/ejr*/SORT_CITBatch Runtime Execution Engine components depending on CITSORT.Batch_RT/binBatch Runtime TuxJES binaries.Batch_RT/includeBatch Runtime TuxJES header files.Batch_RT/libBatch Runtime TuxJES libraries.Batch_RT/localeBatch Runtime TuxJES locales.Batch_RT/sampleBatch Runtime TuxJES samples. Optional install.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RT1ibIMS Runtime libraries.IMS_RT1ibIMS Runtime libraries.	Batch_RT/ejr*/SORT_SyncSort		
on CITSORT.Batch_RT/binBatch Runtime TuxJES binaries.Batch_RT/includeBatch Runtime TuxJES header files.Batch_RT/libBatch Runtime TuxJES libraries.Batch_RT/localeBatch Runtime TuxJES locales.Batch_RT/sampleBatch Runtime TuxJES samples. Optional install.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RTlibIMS Runtime libraries.IMS_RTlibIMS Runtime libraries.	Batch_RT/ejr*/SORT_MFSyncSort		
Batch_RT/includeBatch Runtime TuxJES header files.Batch_RT/libBatch Runtime TuxJES libraries.Batch_RT/localeBatch Runtime TuxJES locales.Batch_RT/sampleBatch Runtime TuxJES samples. Optional install.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RT1ibIMS Runtime libraries.IMS_RT1ibIMS Runtime libraries.	Batch_RT/ejr*/SORT_CIT		
Batch_RT/libBatch Runtime TuxJES libraries.Batch_RT/localeBatch Runtime TuxJES locales.Batch_RT/sampleBatch Runtime TuxJES samples. Optional install.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime binaries.IMS_RTchgcobol.shIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RTlibIMS Runtime libraries.IMS_RTlibIMS Runtime libraries.	Batch_RT/bin	Batch Runtime TuxJES binaries.	
Batch_RT/localeBatch Runtime TuxJES locales.Batch_RT/sampleBatch Runtime TuxJES samples. Optional install.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime binaries.IMS_RTchgcobol.shIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RTlibIMS Runtime libraries.IMS_RTobjIMS Runtime libraries.	Batch_RT/include	Batch Runtime TuxJES header files.	
Batch_RT/sampleBatch Runtime TuxJES samples. Optional install.Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime binaries.IMS_RTchgcobol.shIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RT1ibIMS Runtime libraries.IMS_RTobjIMS Runtime libraries.	Batch_RT/lib	Batch Runtime TuxJES libraries.	
Batch_RT/udataobjBatch Runtime TuxJES facilities.IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime binaries.IMS_RTchgcobol.shIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RTlibIMS Runtime libraries.IMS_RTobjIMS Runtime objective files.	Batch_RT/locale	Batch Runtime TuxJES locales.	
IMS_RT/artims.envIMS Runtime env.IMS_RT/binIMS Runtime binaries.IMS_RTchgcobol.shIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RTlibIMS Runtime libraries.IMS_RTobjIMS Runtime objective files.	Batch_RT/sample	Batch Runtime TuxJES samples. Optional install.	
IMS_RT/binIMS Runtime binaries.IMS_RTchgcobol.shIMS Runtime change COBOL script.IMS_RTincludeIMS Runtime include file.IMS_RTlibIMS Runtime libraries.IMS_RTobjIMS Runtime objective files.	Batch_RT/udataobj	Batch Runtime TuxJES facilities.	
IMS_RTchgcobol.sh       IMS Runtime change COBOL script.         IMS_RTinclude       IMS Runtime include file.         IMS_RTlib       IMS Runtime libraries.         IMS_RTobj       IMS Runtime objective files.	IMS_RT/artims.env	IMS Runtime env.	
IMS_RTinclude     IMS Runtime include file.       IMS_RTlib     IMS Runtime libraries.       IMS_RTobj     IMS Runtime objective files.	IMS_RT/bin	IMS Runtime binaries.	
IMS_RTlib     IMS Runtime libraries.       IMS_RTobj     IMS Runtime objective files.	IMS_RTchgcobol.sh	IMS Runtime change COBOL script.	
IMS_RTobj IMS Runtime objective files.	IMS_RTinclude	IMS Runtime include file.	
· · · · · · · · · · · · · · · · · · ·	IMS_RTlib	IMS Runtime libraries.	
IMS_RTodbaproxy IMS Runtime odbaproxy.	IMS_RTobj	IMS Runtime objective files.	
	IMS_RTodbaproxy	IMS Runtime odbaproxy.	

#### Table 4-1 Oracle Tuxedo Application Runtime for CICS, Batch and IMS Directory and File Structure

IMS_RT/samples	IMS Runtime samples.
IMS_RT/samples_ORA	IMS Runtime samples_ORA.
IMS_RT/syscfg	IMS Runtime syscfg.
IMS_RT/sysmap	IMS Runtime system MAP definitions.
IMS_RT/tools	IMS Runtime utilities.

Table 4-1 Oracle Tuxedo Application Runtime for CICS, Batch and IMS Directory and File Structure

## **Installation Verification**

Sample applications are provided for CICS Runtime, Batch Runtime Execution Engine, and Batch Runtime TuxJES, respectively; they can be used to verify the installation and to demonstrate the configuration. The Readme file in the samples provides guidance on how to execute the samples.

Before executing Oracle Tuxedo Application Runtime for CICS and Batch, Oracle recommends you set umask value as strict as possible.

# Switch COBOL Compiler

If you didn't choose "COBOL-IT" as the default COBOL compiler during installation, and want to switch to COBOL-IT afterwards, you need to add one extra symbol link.

For example, if your COBOL-IT is installed at /opt/cobol-it-64, and Oracle Tuxedo Application Runtime for CICS and Batch is installed at

/home/user/oracle\_home/art12.1.3.0.0, the command you need to run is:

ln -s /opt/cobol-it-64/bin/cobcrun
/home/user/oracle\_home/art12.1.3.0.0/Batch\_RT/bin/cobrun

**Note:** After installing Oracle Tuxedo Application Runtime for IMS only, you can switch its COBOL compiler between Micro Focus COBOL and COBOL-IT by using chgcobol.sh.

## Uninstalling Oracle Tuxedo Application Runtimes Uninstalling Oracle Tuxedo Application Runtimes in GUI-Mode

The following steps show uninstallation process in GUI mode.

1. Invoke uninstall ART introduction panel

Go to <ORACLE\_HOME>/oui/bin, run "runInstaller" on Unix/Linux platform. You can completely remove Oracle Tuxedo Application Runtimes 12*c* Release 2 (12.1.3) just by clicking "Deinstall" Products.

2. Uninstalling panel

Select products and click "Remove" to remove those products from your system.

3. Confirm panel

To remove the products, click "Yes" in the following Confirmation dialog. Click "No" to cancel the removal.

4. Uninstall complete panel

After uninstall finishes, this panel appears and reports whether it is successful.

5. Inventory panel

Check the product list from Inventory, finding if the product is already uninstall successfully.

# Uninstalling Oracle Tuxedo Application Runtimes in Silent Mode

Not only can you perform command line installations, you can also perform command line deinstallations. A command line deinstallation enables you to remove Oracle products or Oracle homes from your system without using the Oracle Universal Installer graphical user interface.

You can choose to display no dialog boxes or prompts, or you can selectively avoid displaying certain dialog boxes that are normally used during a deinstallation.

Use the following commands to immediately display the Inventory dialog box, which allows you to select items for removal without navigating the Oracle Universal Installer startup screen:

./runInstaller -deinstall -silent (on UNIX)

If you want to hide the inventory dialog box during a deinstallation, you can specify the products to be removed in the DEINSTALL\_LIST parameter of the response file; specify Oracle homes to be removed with the REMOVE\_HOMES variable; specify the name of the current Oracle home name with ORACLE\_HOME\_NAME. For example, on a UNIX machine, enter:

```
./runInstaller -deinstall -silent
"DEINSTALL_LIST={"artbase","12.1.3.0.0"}" ORACLE_HOME_NAME="OUIHome2"
REMOVE_HOMES={"/home/test/OraHome_2"}
```



# Supported Platforms

Table A-1 lists Oracle Tuxedo Application Runtime for IMS 12*c* Release 2 (12.1.3) supported platforms.

Platform	GA Port/ Post-GA Port	OS EOL Date
IBM AIX 6.1 (64-bit) on IBM PowerPC	GA	TBD
IBM AIX 7.1 (64-bit) on IBM PowerPC	GA	TBD
Oracle Linux 5.6 (64-bit) on x86-64	GA	TBD
Oracle Linux 6.0 (64-bit) on x86-64	GA	TBD
Oracle Linux 5.6 (64-bit) on Exalogic 2.0	GA	TBD
Oracle Solaris 10 (64-bit) on SPARC	GA	TBD
Oracle Solaris 11 (64-bit) on SPARC	GA	TBD
Red Hat Enterprise Linux 5.6 (64-bit) on x86-64	GA	TBD
Red Hat Enterprise Linux 6.0 (64-bit) on x86-64	GA	TBD
Red Hat Enterprise Linux 6.3 (64-bit) on s390x	Post-GA	TBD

Table A-1 Oracle Tuxedo Application Runtime for IMS 12c Release 2 (12.1.3) Supported Platforms

#### Supported Platforms

### **Supported Platform Data Sheets**

- IBM AIX 6.1 (64-bit) on IBM PowerPC
- IBM AIX 7.1 (64-bit) on IBM PowerPC
- Oracle Linux 5.6 (64-bit) on x86-64
- Oracle Linux 6.0 (64-bit) on x86-64
- Oracle Linux 5.6 (64-bit) on Exalogic 2.0
- Oracle Solaris 10 (64-bit) on SPARC
- Oracle Solaris 11 (64-bit) on SPARC
- Red Hat Enterprise Linux 5.6 (64-bit) on x86-64
- Red Hat Enterprise Linux 6.0 (64-bit) on x86-64
- Red Hat Enterprise Linux 6.3 (64-bit) on s390x

Note: When using Micro Focus Visual COBOL 2.1 on AIX/Solaris OS platforms, make the following soft links in \$cobdir/lib.

```
ln -s libcobrts64.so.3 libcobrts64.so.2
```

- ln -s libcobrts64\_t.so.3 libcobrts64\_t.so.2
- ln -s libcobmisc64.so.3 libcobmisc64.so.2
- ln -s libcobmisc64\_t.so.3 libcobmisc64\_t.so.2
- ln -s libcobcrtn64.so.3 libcobcrtn64.so.2

### IBM AIX 6.1 (64-bit) on IBM PowerPC

The following section lists the software requirements for IBM AIX 6.1 (64-bit) on IBM PowerPC:

- Oracle Tuxedo 12c Release 2 (12.1.3)
- Micro Focus Server Express 5.1, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- IBM XL C/C++ Enterprise Edition V10 or V11 for AIX or later compatible versions
- Perl v5.8.2 (aix-thread-multi option is required)

- Korn shell complies with ksh88
- Oracle RDBMS 11gR2, or 12cR1

### IBM AIX 7.1 (64-bit) on IBM PowerPC

The following section lists the software requirements for IBM AIX 7.1 (64-bit) on IBM PowerPC:

- Oracle Tuxedo 12c Release 2 (12.1.3)
- Micro Focus Server Express 5.1, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- IBM XL C/C++ Enterprise Edition V10 or V11 for AIX or later compatible versions
- Perl v5.8.2 (aix-thread-multi option is required)
- Korn shell complies with ksh88
- Oracle RDBMS 11gr2

### Oracle Linux 5.6 (64-bit) on x86-64

The following section lists the software requirements for Oracle Linux 5.6 (64-bit) on x86-64:

- Oracle Tuxedo 12c Release 2 (12.1.3)
- Micro Focus Server Express 5.1 WrapPack 6 or later, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- gcc 4.1.2
- Perl v5.8.8
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle RDBMS 11gR2, or 12cR1

### Oracle Linux 6.0 (64-bit) on x86-64

The following section lists the software requirements for Oracle Linux 6.0 (64-bit) on x86-64:

• Oracle Tuxedo 12c Release 2 (12.1.3)

#### Supported Platforms

- Micro Focus Server Express 5.1 WrapPack 6 or later, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- gcc 4.4.4
- Perl v5.8.9
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle RDBMS 11gR2, or 12cR1

### Oracle Linux 5.6 (64-bit) on Exalogic 2.0

The following section lists the software requirements for Oracle Linux 5.6 (64-bit) on Exalogic 2.0:

- Oracle Tuxedo 12c Release 2 (12.1.3)
- Micro Focus Server Express 5.1 WrapPack 6 or later, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- gcc 4.1.2
- Perl v5.8.8
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle RDBMS 11gR2, or 12cR1

### Oracle Solaris 10 (64-bit) on SPARC

The following section lists the software requirements for Oracle Solaris 10 (64-bit) on SPARC:

- Oracle Tuxedo 12c Release 2 (12.1.3)
- Micro Focus Server Express 5.1, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- C/C++ Sun Studio 12
- Perl v5.8.4
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle RDBMS 11gR2, or 12cR1

### Oracle Solaris 11 (64-bit) on SPARC

The following section lists the software requirements for Oracle Solaris 11 (64-bit) on SPARC:

- Oracle Tuxedo 12c Release 2 (12.1.3)
- Micro Focus Server Express 5.1, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- C/C++ Sun Studio 12
- Perl v5.8.4
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle RDBMS 11gR2, or 12cR1

### Red Hat Enterprise Linux 5.6 (64-bit) on x86-64

The following section lists the software requirements for Red Hat Enterprise Linux 5.6 (64-bit) on x86-64:

- Oracle Tuxedo 12c Release 2 (12.1.3)
- Micro Focus Server Express 5.1 WrapPack 6 or later, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- gcc 4.1.2
- Perl v5.8.8
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle RDBMS 11gR2, or 12cR1

### Red Hat Enterprise Linux 6.0 (64-bit) on x86-64

The following section lists the software requirements for Red Hat Enterprise Linux 6.0 (64-bit) on x86-64:

- Oracle Tuxedo 12*c* Release 2 (12.1.3)
- Micro Focus Server Express 5.1 WrapPack 6 or later, Visual COBOL 2.1 or later, or COBOL-IT Enterprise Edition 3.7.x (x>=10)
- gcc 4.4.4

#### Supported Platforms

- Perl v5.8.9
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle RDBMS 11gR2, or 12cR1

### Red Hat Enterprise Linux 6.3 (64-bit) on s390x

The following section lists the software requirements for Red Hat Enterprise Linux 6.3 (64-bit) on s390x:

- Oracle Tuxedo 12c Release 2 (12.1.3)
- Micro Focus Server Express 5.1 WrapPack 8 or later, or COBOL-IT Enterprise Edition 3.7.26
- gcc version 4.4.6
- Perl v5.8.8 built for s390x-linux-thread-multi
- UDB v9.7 and v10.1
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle RDBMS v12.1.0 for clients