

Oracle® Tuxedo

Installing the Oracle Tuxedo Application Runtimes

12c Release 2 (12.2.2)

April 2016

ORACLE®

Installing the Oracle Tuxedo Application Runtimes, 12c Release 2 (12.2.2)

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Preparing to Install the Oracle Tuxedo Application Runtimes

Oracle Universal Installer (OUI)	1-1
Installing Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) with Oracle Home	1-2
Oracle Universal Installer Inventory	1-3
Customizing and Creating Response Files	1-9
Modes of Installation	1-23
Installation Media	1-23
Special Instructions for UNIX Users	1-24
Deinstalling Oracle Products	1-25
About Oracle Universal Installer Log Files	1-27
Oracle Internationalization	1-28
Oracle Tuxedo Application Runtimes Web Distribution	1-28
Oracle Tuxedo Software Components	1-28
Hardware and Software Prerequisites	1-28
System Requirements	1-29
Software Requirements	1-29
Temporary Storage Space Requirements	1-29
Oracle Installation Program	1-30
Installation Methods	1-30
Install Types	1-30
Oracle Home Directory	1-31
Choosing an Oracle Home Directory	1-31
Installation Road Map	1-32

Installing Oracle Tuxedo Application Runtimes Using GUI-Mode Installation

What Is GUI-Mode Installation?	2-1
--------------------------------------	-----

Starting GUI-Mode Installation on a UNIX System	2-1
Running GUI-Mode Installation.....	2-2

Oracle Tuxedo Application Runtimes Console-Mode Install

What Is Console-Mode Installation	3-1
Installing on UNIX Platforms in Console Mode	3-1
See Also	3-7

Installing Oracle Tuxedo Application Runtimes Using Silent Installation

What Is Silent Installation?.....	4-1
Using Silent Installation: Main Steps.....	4-1
Creating a Response File	4-1
Installing with a Response File	4-4
UNIX Template Sample File.....	4-5

Performing Post-Installation Tasks

Understanding the Oracle Tuxedo Application Runtimes Directory Structure	5-1
Installation Verification	5-4
Switch COBOL Compiler.....	5-4
Uninstalling Oracle Tuxedo Application Runtimes	5-5
Uninstalling Oracle Tuxedo Application Runtimes in GUI-Mode.....	5-5
Uninstalling Oracle Tuxedo Application Runtimes in Silent Mode	5-5
Supported Platform Data Sheets.....	A-1
IBM AIX 7.1 (64-bit) on IBM PowerPC.....	A-2
Oracle Linux 6.2 (64-bit) on x86-64.....	A-2
Red Hat Enterprise Linux 6.2 (64-bit) on x86-64.....	A-3
Oracle Solaris 11 (64-bit) on SPARC	A-3

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 (12.2.2) product software:

- [Oracle Universal Installer \(OUI\)](#)
- [Oracle Tuxedo Application Runtimes Web Distribution](#)
- [Oracle Tuxedo Software Components](#)
- [Hardware and Software Prerequisites](#)
- [Oracle Installation Program](#)
- [Installation Road Map](#)

Oracle Universal Installer (OUI)

The Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) product software installer is based on the Oracle Universal Installer (OUI). To install the Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) 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](#).

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.

- **Console:**

Use OUI console mode to bypass the graphical user interface and execute the Oracle Installation program with a console interactive interface. This method is intended for UNIX systems with non-graphical consoles.

- **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.sh (UNIX)`, you should invoke it from the directory where this command is present, or you must specify the complete path to `runInstaller.sh (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 `Xliberror` 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.sh` 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.

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. 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 `$ORACLE_HOME/cfgtoollogs` 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 12c Release 2 (12.2.2) 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 (12.2.2) 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 12c Release 2 (12.2.2) are given in [Table 1-1](#).

Table 1-1 The System Requirements for Oracle Tuxedo 12c Release 2 (12.2.2)

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 .

Software Requirements

Java Runtime Environment (JRE) 1.7 or 1.8 is required to install Oracle Tuxedo Application Runtimes. You need to install the required JRE and set the environment variable `JAVA_HOME` accordingly before installing Oracle Tuxedo Application Runtimes.

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. 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.sh`.

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.

Cancelling Installation

Clicking the “Cancel” or the “close” window button in GUI mode creates an incomplete Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) installation. You will have to re-install Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2).

If you installed Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) 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 (12.2.2) offers the following five install types:

- Full Install - consists of all the Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) components.
- CICS Runtime Install - consists of the Oracle Tuxedo Application Runtime for CICS 12c Release 2 (12.2.2) component.
- Batch Runtime Install - consists of the Oracle Tuxedo Application Runtime for Batch 12c Release 2 (12.2.2) component.
- IMS Runtime Install - consists of the Oracle Tuxedo Application Runtime for IMS 12c Release 2 (12.2.2) component.
- Custom Install

In addition to selecting an install set during an Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) 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](#).

Installation Road Map

You are now ready to begin your installation. To install Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2), see one of the following sections:

- [Installing Oracle Tuxedo Application Runtimes Using GUI-Mode Installation](#)
- [Oracle Tuxedo Application Runtimes Console-Mode Installation](#)
- [Installing Oracle Tuxedo Application Runtimes Using Silent Installation](#)

If you want to uninstall your Oracle Tuxedo Application Runtimes software, see [Performing Post-Installation Tasks](#).

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.

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

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](#)

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 12c 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.sh` 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 may use console mode or silent mode installation. For more information, see [What Is Console-Mode Installation](#) and [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 2-1](#).

Table 2-1 Instructions

In This Window . . .	Perform the Following Action . . .
Welcome	Click Next 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.
Choose Install type	<p>Select the install type that you want installed on your system. The following five choices are available:</p> <ul style="list-style-type: none"> • Full Install (the default) - all the Oracle Tuxedo Application Runtimes. • CICS Runtime Install - consists of the Oracle Tuxedo Application Runtime for CICS component. • 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. <p>For a detailed list of software components for each install type, see Install Types.</p> <p>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.</p>

Table 2-1 Instructions

In This Window . . .	Perform the Following Action . . .
Specify Oracle Home	<p>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.</p> <p>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.</p> <p>Oracle Tuxedo Application Runtimes Installation Directory is "\$ORACLE_HOME/art12.2.2.0.0" by default (UNIX) and cannot be changed after the ORACLE_HOME is determined. The installer doesn't allow to install two same version tuxedo product into the same ORACLE_HOME.</p> <p>If the selected ORACLE_HOME already installed the same version Oracle Tuxedo Application Runtimes, the installer will show a warning.</p> <p>If the selected ORACLE_HOME does not include Tuxedo Server component, you cannot continue the installation.</p>
Customize Install	<p>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.</p> <p>After selecting or deselecting one or more software components from the selected install set, click Next to continue with the installation.</p>
Select samples installation	<p>If the selected install feature sets include server component, this screen appears to confirm install the samples.</p>
COBOL Compiler Selection	<p>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.</p>
Choose COBOL-IT Install Directory	<p>If you choose "COBOL-IT", you will be required to specify the COBOL Compiler location (the default location is /opt/cobol-it-64).</p>
Summary	<p>Click Install to start the installation.</p>

Table 2-1 Instructions

In This Window . . .	Perform the Following Action . . .
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!

Oracle Tuxedo Application Runtimes Console-Mode Installation

The following sections describe how to install Oracle Tuxedo Application Runtimes using console-mode installation:

- [What Is Console-Mode Installation](#)
- [Installing on UNIX Platforms in Console Mode](#)

What Is Console-Mode Installation

Console-mode installation is a text-based method for executing the Oracle Installation program. It can be run only on UNIX systems and is intended for UNIX systems with non-graphical consoles. Console-mode installation offers the same capabilities as GUI (graphical-based) installation.

Installing on UNIX Platforms in Console Mode

Perform the following steps to install Oracle Tuxedo Application Runtimes software in console mode on a certified UNIX platform:

1. Log on as root or another user with sufficient permissions.
2. Execute the installation program in character-based mode:

```
./runInstaller.sh -console
```
3. The installation program runs and prompts you for responses (see [Listing 3-1](#) for an example).

Listing 3-1 UNIX Console Mode Installation Example

```
./runInstaller.sh -console
```

```
=====
```

```
Introduction
```

```
-----
```

```
This shell script guides you through the installation and configuration of
your Oracle Products. Press "Enter" to accept the default and proceed to the
next screen.
```

```
Press "Enter" to continue:
```

```
=====
```

```
Choose Inventory
```

```
-----
```

```
->1- Central Inventory
```

```
2- Private Inventory
```

```
0- Go back
```

```
Enter a number:
```

```
 /etc/oraInst.loc exists
```

```
=====
```

```
Select Installation Type
```

```
Oracle Tuxedo Application Runtimes 12.2.2.0.0
```

```
-----
```

What type of installation do you want?

- >1- Full Install
- 2- CICS Runtime Install
- 3- Batch Runtime Install
- 4- IMS Runtime Install
- 0- Go back

Enter a number:

=====

Specify Home Details

- >1- Use existing Oracle Home
- 0- Go back

Enter a number:

Please choose number from the following Oracle Home List:

- 1- /home/oracle/app/oracle/product/12.1.0/dbhome_1
- 2- /home/oracle/oraHome/art
- 0- Go back

Enter a number: 2

=====

Samples Install Confirm

Install Samples?

->1- Yes

2- No

0- Go back

Enter a number:

=====

Cobol Compiler Selection

Please select the default cobol compiler you are using (Note: Refer to the
install guide if you need to
switch the COBOL compiler after the installation)

->1- Micro Focus Cobol

2- COBOL-IT

0- Go back

Enter a number:

=====

Pre-Installation Summary

Install type: "Full Install"

Install Folder: "/home/oracle/oraHome/art"

->1- Start installation

0- Go back

Enter a number:

Starting Oracle Universal Installer...

Checking swap space: must be greater than 500 MB. Actual 33535 MB Passed

Preparing to launch Oracle Universal Installer from
/tmp/OraInstall2016-05-04_06-17-21PM. Please wait ...Oracle Universal
Installer, Version 12.2.0.1.0 Production

Copyright (C) 1999, 2014, Oracle. All rights reserved.

You can find the log of this install session at:

/home/oracle/app/oraInventory/logs/installActions2016-05-04_06-17-21PM.log
..... 100% Done.

Loading Product Information
..... 100% Done.

Analyzing dependencies
..... 100% Done.

Summary

Global Settings

Source: /home/oracle/artinstaller/Disk1/install/./stage/products.xml

Oracle Home: /home/oracle/oraHome/art (arthome)

Installation Type: Full Install

Product Languages

English

Space Requirements

/ Required 96MB (includes 13MB temporary) : Available 3.82GB

New Installations (4 products)

Oracle Tuxedo Application Runtimes 12.2.2.0.0

Oracle Tuxedo Application Runtime for CICS 12.2.2.0.0

Oracle Tuxedo Application Runtime for Batch 12.2.2.0.0

Oracle Tuxedo Application Runtime for IMS 12.2.2.0.0

Already Installed (4 products)

Oracle Universal Installer 12.1.0.1.0

Oracle One-Off Patch Installer 11.2.0.1.2

Installer SDK Component 12.1.0.1.0

oracle.swd.oui.core.min 12.1.0.1.0

Installation in progress (Wednesday, May 4, 2016 6:17:26 PM CST)

.....80% Done.

Install successful

Linking in progress (Wednesday, May 4, 2016 6:17:28 PM CST)

Link successful

Setup in progress (Wednesday, May 4, 2016 6:17:28 PM CST)

..... 100% Done.

Setup successful

Saving inventory (Wednesday, May 4, 2016 6:17:31 PM CST)

Saving inventory complete

Configuration complete

End of install phases.(Wednesday, May 4, 2016 6:17:32 PM CST)

Starting to execute configuration assistants

Configuration assistant "PostInstall" succeeded

The installation of Oracle Tuxedo Application Runtimes was successful.

Please check

'/home/oracle/app/oraInventory/logs/silentInstall2016-05-04_06-17-21PM.log

' for more details.

See Also

- [Performing Post-Installation Tasks](#)

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.sh -record -destinationFile <response_file_name>
```

Replace the `<response_file_name>` with the complete path for the new response file.

For example:

On UNIX:

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

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.sh -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.sh -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 12c Release 2 (12.2.2).

Listing 4-1 UNIX response File

```
#####
## Copyright (c) 1999, 2016 Oracle. All rights reserved.      ##
##                                                            ##
## Specify values for the variables listed below to customize  ##
## your installation.                                         ##
##                                                            ##
## Each variable is associated with a comment. The comment    ##
## identifies the variable type.                              ##
```

```

##                                                                 ##
## Please specify the values in the following format:                ##
##                                                                 ##
##      Type      Example                                           ##
##      String    "Sample Value"                                    ##
##      Boolean   True or False                                     ##
##      Number    1000                                             ##
##      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
UNIX_GROUP_NAME="dba"
FROM_LOCATION="/home/oracle/artinstaller/Disk1/stage/products.xml"
FROM_LOCATION_CD_LABEL=<Value Unspecified>
ORACLE_HOME="/home/oracle/oraHome/art"
ORACLE_BASE=<Value Unspecified>
ORACLE_HOME_NAME="arthome"
SHOW_WELCOME_PAGE=true
SHOW_CUSTOM_TREE_PAGE=true
SHOW_COMPONENT_LOCATIONS_PAGE=true
SHOW_SUMMARY_PAGE=true

```



```
SHOW_INSTALL_PROGRESS_PAGE=true
SHOW_REQUIRED_CONFIG_TOOL_PAGE=true
SHOW_CONFIG_TOOL_PAGE=true
SHOW_RELEASE_NOTES=true
SHOW_ROOTSH_CONFIRMATION=true
SHOW_END_SESSION_PAGE=true
SHOW_EXIT_CONFIRMATION=true
NEXT_SESSION=false
NEXT_SESSION_ON_FAIL=true
NEXT_SESSION_RESPONSE=<Value Unspecified>
DEINSTALL_LIST={"artbase", "12.2.2.0.0"}
SHOW_DEINSTALL_CONFIRMATION=true
SHOW_DEINSTALL_PROGRESS=true
CLUSTER_NODES={}
ACCEPT_LICENSE_AGREEMENT=false
METALINK_LOCATION=<Value Unspecified>
METALINK_USERNAME=<Value Unspecified>
METALINK_PASSWORD=<Value Unspecified>
PROXY_HOST=" "
PROXY_PORT=" "
PROXY_REALM=<Value Unspecified>
PROXY_USER=" "
PROXY_PWD=<Value Unspecified>
DONT_PROXY_FOR=<Value Unspecified>
TOPLEVEL_COMPONENT={"artbase", "12.2.2.0.0"}
SHOW_SPLASH_SCREEN=true
SELECTED_LANGUAGES={"en" }
```

```
COMPONENT_LANGUAGES={"en"}
INSTALL_TYPE="Full Install"
SAMPLE_INSTALLED=false
COBOL_COMPILER_TYPE="Micro-Focus-Cobol"
COBOL_IT_DIR=" "
```

Performing Post-Installation Tasks

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

- [Understanding the Oracle Tuxedo Application Runtimes Directory Structure](#)
- [Installation Verification](#)
- [Switch COBOL Compiler](#)
- [Uninstalling Oracle Tuxedo Application Runtimes](#)

Understanding the Oracle Tuxedo Application Runtimes Directory Structure

During the Oracle Tuxedo Application Runtimes software installation, all files are decompressed within the installation directory.

[Table 5-1](#) lists Oracle Tuxedo Application Runtimes directories and files under installed directory `$ORACLE_HOME/art12.2.2.0.0`.

Table 5-1 Oracle Tuxedo Application Runtimes Directory and File Structure

Directory Name	Description
<code>Cics_RT</code>	Directory for CICS Runtime.
<code>Cics_RT/bin</code>	CICS Runtime binaries.

Table 5-1 Oracle Tuxedo Application Runtimes Directory and File Structure

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_nochl
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 5-1 Oracle Tuxedo Application Runtimes Directory and File Structure

<code>Batch_RT/ejr*/GENERATION_FILE</code>	Batch Runtime Execution Engine components managing the generation groups.
<code>Batch_RT/ejr*/GENERATION_FILE_DB</code>	Batch Runtime Execution Engine components managing the generation groups, based on DB.
<code>Batch_RT/ejr*/SAMPLE</code>	Batch Runtime Execution Engine samples. Optional install.
<code>Batch_RT/ejr*/SORT_MicroFocus</code>	Batch Runtime Execution Engine components depending on MFSORT.
<code>Batch_RT/ejr*/SORT_SyncSort</code>	Batch Runtime Execution Engine components depending on SyncSort.
<code>Batch_RT/ejr*/SORT_MFSyncSort</code>	Batch Runtime Execution Engine components depending on MFSyncSort.
<code>Batch_RT/ejr*/SORT_CIT</code>	Batch Runtime Execution Engine components depending on CITSORT.
<code>Batch_RT/bin</code>	Batch Runtime TuxJES binaries.
<code>Batch_RT/include</code>	Batch Runtime TuxJES header files.
<code>Batch_RT/lib</code>	Batch Runtime TuxJES libraries.
<code>Batch_RT/locale</code>	Batch Runtime TuxJES locales.
<code>Batch_RT/sample</code>	Batch Runtime TuxJES samples. Optional install.
<code>Batch_RT/udataobj</code>	Batch Runtime TuxJES facilities.
<code>IMS_RT/artims.env</code>	IMS Runtime env.
<code>IMS_RT/bin</code>	IMS Runtime binaries.
<code>IMS_RTchgcbol.sh</code>	IMS Runtime change COBOL script.
<code>IMS_RTinclude</code>	IMS Runtime include file.
<code>IMS_RTlib</code>	IMS Runtime libraries.
<code>IMS_RTobj</code>	IMS Runtime objective files.
<code>IMS_RTodbaproxy</code>	IMS Runtime odbaproxy.

Table 5-1 Oracle Tuxedo Application Runtimes 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 FMT and MSG files.
IMS_RT/sysmap2	IMS Runtime optimizable SIGNON MFS/FMT/MSG files.
IMS_RT/tools	IMS Runtime utilities.
IMS_RT/coblib_mf	IMS Runtime COBOL libraries for Micro Focus COBOL.
IMS_RT/coblib_cit	IMS Runtime COBOL libraries for COBOL-IT COBOL.

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 Runtimes, 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/oracle/oraHome/art12.2.2.0.0`, the command you need to run is:

```
ln -s /opt/cobol-it-64/bin/cobcrun
/home/oracle/oraHome/art12.2.2.0.0/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.sh" on Unix/Linux platform. You can completely remove Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) 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 uninstalled 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.sh -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.sh -deinstall -silent  
"DEINSTALL_LIST={"artbase", "12.2.2.0.0"}" ORACLE_HOME_NAME="OUIHome2"
```


Supported Platforms

[Table A-1](#) lists Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) supported platforms.

Table A-1 Oracle Tuxedo Application Runtimes 12c Release 2 (12.2.2) Supported Platforms

Platform	Components	GA Port/ Post-GA Port	OS EOL Date
IBM AIX 7.1 (64-bit) on IBM PowerPC	All	GA	TBD
Oracle Linux 6.2 (64-bit) on x86-64	All	GA	TBD
Red Hat Enterprise Linux 6.2 (64-bit) on x86-64	All	GA	TBD
Oracle Solaris 11 (64-bit) on SPARC	All	GA	TBD

Supported Platform Data Sheets

- [IBM AIX 7.1 \(64-bit\) on IBM PowerPC](#)
- [Oracle Linux 6.2 \(64-bit\) on x86-64](#)
- [Red Hat Enterprise Linux 6.2 \(64-bit\) on x86-64](#)
- [Oracle Solaris 11 \(64-bit\) on SPARC](#)

Notes: When using Micro Focus Visual COBOL 2.2:

- **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
```

- We recommend you set COBOL runtime tunable parameter `subsystem_cancel_mode=1`, which specifies logical cancel for `CBL_SUBSYSTEM` cancels. See Micro Focus documentation for more information.

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 (12.2.2)
- IBM XL C/C++ Enterprise Edition V10.1 for AIX or later compatible versions
- Visual COBOL 2.2 or later, or COBOL-IT Enterprise Edition 3.9.16 or later
- Korn shell complies with ksh88
- Oracle DB 12c, UDB 9.7 or UDB 10.1
- WebSphere MQ version 7.0.1.3

Oracle Linux 6.2 (64-bit) on x86-64

The following section lists the software requirements for Oracle Linux 6.2 (64-bit) on x86-64:

- Oracle Tuxedo 12c Release 2 (12.2.2)
- gcc version 4.4.7 20120313 (GCC)
- Visual COBOL 2.2 or later, or COBOL-IT Enterprise Edition 3.9.16 or later
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle DB 12c, UDB 9.7, or UDB 10.1
- WebSphere MQ version 7.0.1.3

Red Hat Enterprise Linux 6.2 (64-bit) on x86-64

The following section lists the software requirements for Red Hat Enterprise Linux 6.2 (64-bit) on x86-64:

- Oracle Tuxedo 12c Release 2 (12.2.2)
- gcc version 4.4.7 20120313 (Red Hat 4.4.7-11)(GCC)
- Visual COBOL 2.2 or later, or COBOL-IT Enterprise Edition 3.9.16 or later
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle DB 12c, UDB 9.7 or UDB2 10.1
- WebSphere MQ version 7.0.1.3

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 (12.2.2)
- Sun Studio 12.4
- Visual COBOL 2.2 or later, or COBOL-IT Enterprise Edition 3.9.16 or later
- Korn shell complies with ksh88 (for example, PD KSH v5.2.14 or later)
- Oracle DB 12c
- WebSphere MQ version 7.0.1.3