

Oracle® Tuxedo Mainframe Adapter for SNA

Installation Guide

12c Release 2 (12.1.3)

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ORACLE®

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Preparing to Install the Oracle Tuxedo Mainframe Adapter for SNA

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

- [Oracle Universal Installer \(OUI\)](#)
- [Determining Your Configuration](#)
- [Oracle Tuxedo Mainframe Adapter for SNA Components](#)
- [Hardware and Software Prerequisites](#)
- [Installing the Prerequisite Software](#)
- [Oracle Installation Program](#)
- [Oracle Home Directory](#)
- [Installation Road Map](#)

Oracle Universal Installer (OUI)

The Oracle Tuxedo Mainframe Adapter for SNA 12c Release 2 (12.1.3) product software installer is based on the Oracle Universal Installer (OUI). To install the Oracle Tuxedo Mainframe Adapter for SNA 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 Mainframe Adapter for SNA 12c Release 2 (12.1.3) with Oracle Home

When you install Oracle Tuxedo Mainframe Adapter for SNA 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 Mainframe Adapter for SNA 12c Release 2 (12.1.3)

To install Oracle Tuxedo Mainframe Adapter for SNA 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_oracleInst.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 `$ORACLE_HOME/cfgtoollogs` 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 patchsets 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, and 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>
```

Replace the `<response_file_name>`

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

```
./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.

Type	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 Mainframe Adapter for SNA specific response file parameters, see [“Required Variables in Oracle Tuxedo Mainframe Adapter for SNA Response File” on page 5-2.](#)

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`, which 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", "1.0.0.0.0"}
```

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:

```
./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 on 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 `$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.

Determining Your Configuration

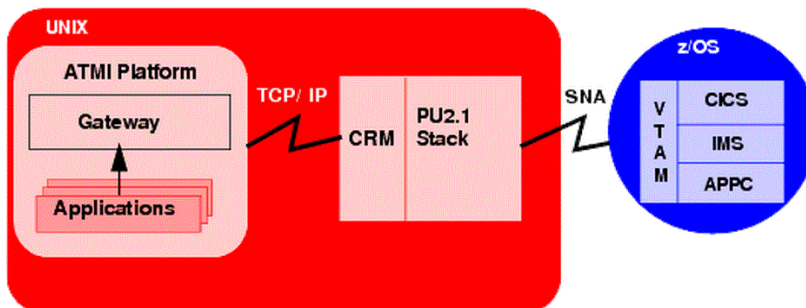
You must consider configuration as you prepare to install the TMA SNA software. The normal TMA SNA environment includes two properly configured components: the Tuxedo Mainframe Adapter for SNA Gateway and the Communications Resource Manager (CRM). The type of network connectivity you are working with determines which type of CRM installation and configuration is required.

When the Tuxedo Mainframe Adapter for SNA Gateway and CRM are installed on the same machine with the CRM configured as a Tuxedo server, the installation is referred to as a local (combined) configuration. When these components are installed on different UNIX, or mainframe platforms, the installation is referred to as a distributed (or remote) configuration. The diagrams in the following sections show examples of the TMA SNA components in three types of configurations.

Local Configuration

Local configuration consists of the application, which is the Tuxedo Mainframe Adapter for SNA Gateway and the CRM with the necessary libraries needed to communicate with the stack on the same UNIX platform. This configuration uses the IBM proprietary SNA protocol for transactions with the mainframe via the stack. This configuration requires a one-to-one relationship between the local Tuxedo Mainframe Adapter for SNA Gateway and the CRM.

Figure 1-1 Local Configuration

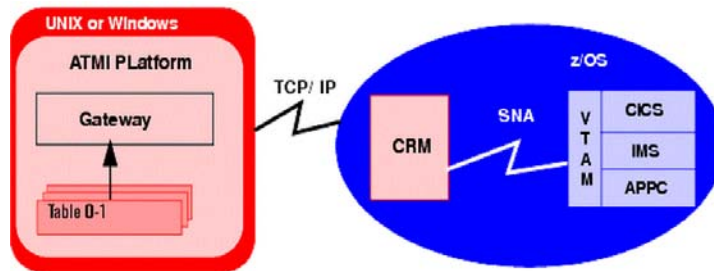


Distributed Configurations

In a distributed configuration, the CRM is installed on a different platform than the Tuxedo Mainframe Adapter for SNA Gateway and applications.

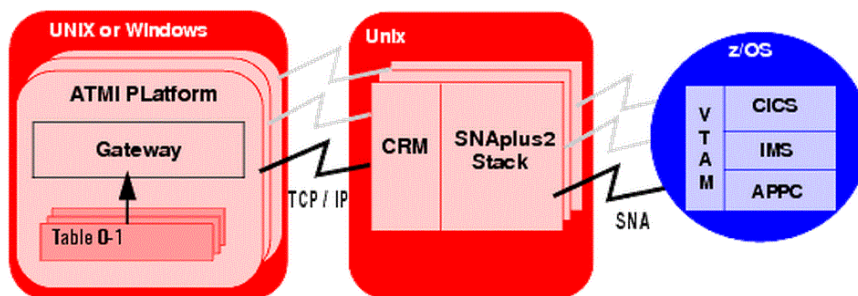
One type of distributed configuration separates applications and the Tuxedo Mainframe Adapter for SNA Gateway from the CRM by installing the CRM to the z/OS mainframe. This configuration eliminates the need for a third-party stack on the UNIX machine. This configuration requires a one-to-one relationship between the local Tuxedo Mainframe Adapter for SNA Gateway and the remote CRM.

Figure 1-2 Distributed Configuration



Another type of distributed configuration separates applications and the Tuxedo Mainframe Adapter for SNA Gateway from the CRM on different UNIX-based platforms. This configuration uses Transmission Control Protocol/Internet Protocol (TCP/IP) connectivity between the TMA SNA Gateway and the CRM, as well as the SNA connectivity to the mainframe environment(s). This configuration provides the flexibility to deploy the ATMI platform separately from the CRM in installations that require the ATMI platform on an operating system other than the one on which the SNA stack is running. This configuration also requires a one-to-one relationship between the local Tuxedo Mainframe Adapter for SNA Gateway and the remote CRM.

Figure 1-3 Alternate Distributed Configuration



Oracle Tuxedo Mainframe Adapter for SNA Components

Oracle Tuxedo Mainframe Adapter for SNA 12c Release 2 (12.1.3) contains the following components:

- Oracle Tuxedo Mainframe Adapter for SNA Gateway
The component that contains the Oracle Tuxedo Mainframe Adapter for SNA Gateway files.
- Oracle Tuxedo Mainframe Adapter for SNA CRM (Only supported on certain platforms)
The component that contains the Oracle Tuxedo Mainframe Adapter for SNA CRM files.

Hardware and Software Prerequisites

The Oracle Tuxedo Mainframe Adapter for SNA must be installed into an Oracle Home which has already installed Oracle Tuxedo 12c Release 2 (12.1.3) server component (Rolling Patch 003 or above is required on certain platforms).

System Requirements

Oracle Tuxedo Mainframe Adapter for SNA 12c Release 2 (12.1.3) must be installed on a supported OS version for the given platform. Refer to [“Supported Oracle Tuxedo Mainframe Adapter for SNA Gateway Platforms”](#) for the supported platforms.

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 Mainframe Adapter for SNA 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](#)” on page 1-35.

By default, the installation program uses the temporary directories shown in [Table 1-1](#).

Table 1-1 Temporary Directories

Platform	Directory
UNIX	/tmp

To ensure there is adequate temporary space, you may want to allocate an alternate directory for use as a temporary directory for the installation. To do so, perform the appropriate step in [Table 1-2](#) and clean up files as more as possible in the temporary directory before starting the Oracle Installation program.

Table 1-2 Perform This Step

On This Platform...	Perform This Step...
UNIX	Enter the following command at the shell prompt: <pre>export IATEMPDIR=tmpdirname</pre> Replace <code>tmpdirname</code> with the name of a temporary directory of your choice.

Requirements for Other Components

Whether your TMA SNA software is installed on UNIX, or a mainframe, make sure your system meets the appropriate requirements and that supporting software is operating correctly. The following sections describe mainframe and non-mainframe requirements, and verification of supporting software installations.

Note: Because TMA SNA interacts with mainframe applications, involve your mainframe system support personnel early in the process of planning and installing your TMA SNA software. Different individuals may be responsible for Multiple Virtual System (MVS), Virtual Telecommunications Access Method (VTAM), Information Management System (IMS), and Customer Information Control System/Enterprise Systems Architecture (CICS TS). Make sure everyone is involved.

Mainframe Requirements

Whether the CRM component of TMA SNA is located on the mainframe environment or not, mainframe configurations affect how TMA SNA software functions. Prepare the mainframe to conduct operations within the Tuxedo Mainframe Adapter for SNA/ATMI platform environment by:

- Establishing the VTAM configuration
- Configuring the CICS TS Logical Unit (LU) by defining proper connections and sessions
- Completing cross-platform definitions for non-mainframe CRM
- Ensuring that APPC and transaction definitions exist for that environment, if using IMS or APPC/MVS

Refer to the *Oracle Tuxedo Mainframe Adapter for SNA CRM Administration Guide* for detailed information about these tasks.

Non-Mainframe Requirements

A non-mainframe environment is a UNIX machine running the TMA SNA software. The software is fully bidirectional, supporting the local system as either a client or server. This environment consists of the following components:

- Hardware, defined as any workstation and network interface supported by the required software.
- Operating system software and SNA protocol stacks (PU servers) if the CRM is not installed on the mainframe. (Refer to the Tuxedo Mainframe Adapter for SNA *Release Notes* for a complete listing.) Stack installation should also be completed and verified. Refer to vendor documentation for stack installation and verification information.
- Tuxedo ATMI platform. Refer to the *Oracle Tuxedo Mainframe Adapter for SNA Release Notes* for information on platform support.

The Tuxedo ATMI platform is not required if you are installing only the CRM on Unix.

Installing the Prerequisite Software

The following software should be installed and configured prior to installing the TMA SNA software for UNIX:

1. If you are installing the CRM on Unix:
 - a. Install a supported SNA stack on the operating system where the CRM will be installed. Validate the stack software installation, running any sample applications provided by the vendor.
 - b. Configure the supported SNA stack.

Refer to the Tuxedo Mainframe Adapter for SNA *Release Notes* for a list of supported SNA stacks.

Note: Refer to the SNA stack vendor's documentation on configuring your environment. A properly configured SNA protocol stack is required for the CRM to communicate with the mainframe application.

2. Install and configure the Tuxedo ATMI platform. Validate the software installation by running the sample applications, such as `simpapp` or `bankapp`.

Refer to the corresponding product installation documentation for installation and configuration information. Some specific configuration tasks must be completed before you install TMA SNA.

3. Shut down all domain administrative and gateway servers within an application domain prior to installing TMA SNA software, particularly the following:

- GWTDOMAIN
- GWADM
- DMADM

Do not run the following commands until the installation is complete:

- `dmadmin`
- `dmloadcf`
- `dmunloadcf`

Oracle Installation Program

The Oracle Tuxedo Mainframe Adapter for SNA 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 Mainframe Adapter for SNA 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 Mainframe Adapter for SNA product software:

- Graphical user interface (GUI) installation, described in [“Installing Oracle Tuxedo Mainframe Adapter for SNA Using GUI-Mode Installation”](#) on page 4-1.
- Silent installation, described in [“Installing Oracle Tuxedo Mainframe Adapter for SNA Using Silent Installation”](#) on page 5-1.

Cancelling Installation

Clicking the “Cancel” or the “close” window button in GUI mode creates an incomplete Oracle Tuxedo Mainframe Adapter for SNA 12c Release 2 (12.1.3) installation. You will have to re-install Oracle Tuxedo Mainframe Adapter for SNA 12c Release 2 (12.1.3).

If you installed Oracle Tuxedo Mainframe Adapter for SNA 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 Mainframe Adapter for SNA version.

Install Types

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

- Full Installation - consists of all the Oracle Tuxedo Mainframe Adapter for SNA 12c Release 2 (12.1.3) components.
- Gateway Only Installation - consists of the following component:
 - Oracle Tuxedo Mainframe Adapter for SNA Gateway
- Distributed CRM Installation - consists of the following component:
 - Oracle Tuxedo Mainframe Adapter for SNA CRM

Notes:

- Install types are supported on certain platforms only.
- The top component "Oracle Tuxedo Mainframe Adapter for SNA" and sub-component "Oracle Universal Installer" are installed for every install type.

In addition to selecting an install set during an Oracle Tuxedo Mainframe Adapter for SNA 12c 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 Mainframe Adapter for SNA Using GUI-Mode Installation” on page 4-1.](#)

Oracle Home Directory

When you install Oracle Tuxedo Mainframe Adapter for SNA, 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 Mainframe Adapter for SNA 12c Release 2 (12.1.3), you are prompted to choose an existing Oracle Home directory, where Oracle Tuxedo Mainframe Adapter for SNA is installed. Particularly, CRM can also be installed in a different directory from Oracle home.

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 on 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.

Installation Road Map

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

- [“Installing Oracle Tuxedo Mainframe Adapter for SNA Using GUI-Mode Installation”](#) on page 4-1
- [“Installing Oracle Tuxedo Mainframe Adapter for SNA Using Silent Installation”](#) on page 5-1

If you want to uninstall your Oracle Tuxedo Mainframe Adapter for SNA software, see [“Post Installation Tasks for Oracle Tuxedo Mainframe Adapter for SNA”](#) on page 5-1.

Installing Oracle Tuxedo Mainframe Adapter for SNA Using GUI-Mode Installation

The following sections describe how to install Oracle Tuxedo Mainframe Adapter for SNA 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](#)
- [Assigning File Ownership on a UNIX System](#)

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 Mainframe Adapter for SNA on a UNIX system with a non-graphics console, use silent install mode.

The Oracle Tuxedo Mainframe Adapter for SNA installer program can be displayed in English or Japanese. You can set certain language-related environment variable on the target platform to specify the language displayed during the installation and the language-specific message catalog installed during the installation. If the language-related environment variable is not set or set to an unknown value, the installer program displays in English.

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 [“Hardware and Software Prerequisites”](#) on page 1-30.
2. Log in to the UNIX system as the Oracle Tuxedo Mainframe Adapter for SNA administrator.
3. Ensure that you have enough free space for the Oracle Tuxedo Mainframe Adapter for SNA installation.
4. Install Oracle Tuxedo Mainframe Adapter for SNA by downloading from the Oracle Web site:
 - a. Go to <http://www.oracle.com/technology/software/index.html> and download the Oracle Tuxedo Mainframe Adapter for SNA 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` to invoke the installation procedure.

Note: GUI mode is the default for Oracle Tuxedo Mainframe Adapter for SNA 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”](#) on page 4-2.

Running GUI-Mode Installation

The Oracle Tuxedo Mainframe Adapter for SNA installer program prompts you to enter specific information about your system and configuration. For instructions on responding to the prompts during installation, see [Table 4-1](#).

Table 4-1 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 and Credentials	<p>Enter the full path of the inventory directory or select an existing inventory directory.</p> <p>If this is the first Oracle installation on a host running UNIX or Linux system software or if you do not have permissions on inventory directory, a warning message appears.</p>
Select Installation Type	<p>This panel is displayed for certain platforms only. Select the install type that you want installed on your system. For a detailed list of software components for each install type, see “Install Types” on page 1-34.</p> <p>Select an install type and then click Next to launch the Choose Oracle Home Directory window.</p>
Specify Home Details	<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>Path: 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 Oracle Tuxedo Mainframe Adapter for SNA is installed.</p> <p>If you enter an invalid path for Oracle Home directory, you cannot continue the installation.</p> <p>If the selected ORACLE_HOME is not empty and does not recorded in inventory, 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>
Sample Install Confirm	If the selected install feature sets include server component, this screen appears to confirm install the samples.
Choose CRM Product Directory	<p>This panel is displayed for platforms only which support CRM. Enter or select the full path where CRM products are installed.</p> <p>If you enter an invalid directory, you will get an error message.</p>

Table 4-1 Instructions

In This Window . . .	Perform the Following Action . . .
Summary	<p>Click Install to start the installation.</p> <p>If previous version components are already installed, the installation program just upgrades the higher version sub-components in the same ORACLE_HOME by default. If you want to reinstall the same version sub-components, you can specify the value of DEPENDENCY_LIST. For example:</p> <pre>./runInstaller -force "DEPENDENCY_LIST={ "TMASNAGateway:12.1.3.0.0", "TMASNA CRM:12.1.3.0.0" } "</pre>
Install	<p>When this panel appears, files of the selected installation type are being copied to the target installation directory.</p>
End of Installation	<p>Click Exit to exit the installation program.</p> <p>If this is the first Oracle installation on a host running UNIX or Linux system software or if you do not have permissions on inventory directory, a warning message appears.</p>

Congratulations! Your installation of the Oracle Tuxedo Mainframe Adapter for SNA software is complete!

Assigning File Ownership on a UNIX System

If you installed the Oracle Tuxedo Mainframe Adapter for SNA on a UNIX system, Oracle strongly recommends that you create a separate user account for the Oracle Tuxedo administrator and grant the Oracle TMA files ownership to that account. To change ownership of the Oracle Tuxedo Mainframe Adapter for SNA on a UNIX machine, enter the following command:

```
chown -R adm_account full_path_of_tux_prod_dir  
chgrp -R adm_group full_path_of_tux_prod_dir
```

- `adm_account`: Oracle Tuxedo administrator account
- `adm_group`: Oracle Tuxedo administrator group ID
- `full_path_of_tux_prod_dir`: The full pathname of the product directory where you installed the Oracle Tuxedo Mainframe Adapter for SNA.

Installing Oracle Tuxedo Mainframe Adapter for SNA Using Silent Installation

The following sections describe how to install Oracle Tuxedo Mainframe Adapter for SNA 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_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 Mainframe Adapter for SNA 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.

RESPONSEFILE_VERSION

The format version number of response file.

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.

DEPENDENCY_LIST

List of dependents that need to be installed along with this product.

Example:

```
DEPENDENCY_LIST={"TMSNAGateway:12.1.3.0.0", "TMSNACRM:12.1.3.0.0"}
```

Oracle Tuxedo Mainframe Adapter for SNA Specific Variables**INSTALL_TYPE**

Component installation type. It is required. The value can be `Full`, `Gateway Only`, and `Distributed CRM`.

For more information, see [“Install Types” on page 1-34](#).

SAMPLE_INSTALLED

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

CRM_FOLDER

The full path of CRM installation directory. It is optional. The default value is `$ORACLE_HOME/tuxedo12.1.3.0.0`.

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” on page 1-3](#).

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 Mainframe Adapter for SNA 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.

- `-force` - Use the `-force` flag with the `-responseFile` flag to suppress the dialog when specifying a new folder for `ORACLE_HOME`.
- `-waitforcompletion` - Use the `-waitforcompletion` flag with `-silent` flag to wait for completion instead of spawning the java engine and exiting.

For example, on a UNIX machine, enter:

```
./runInstaller -responseFile /tma/tmasna_linux_silent.rsp -silent
```

Note:

- Using the `-nowelcome` option with the `-silent` option is unnecessary since the Welcome screen does not appear when you use the `-silent` option.
- If the `ORACLE_HOME` is not empty, use the `-force` option to overwrite it; otherwise, you will get the following error message:

```
SEVERE:OUI-10029:You have specified a non-empty directory to
install this product. It is recommended to specify either an empty
or a non-existent directory. You may, however, choose to ignore
this message if the directory contains Operating System generated
files or subdirectories like lost+found.
```

Response File Examples

[Listing 5-1](#) and [Listing 5-2](#) show response file examples that apply to a silent installation of Oracle Tuxedo Mainframe Adapter for SNA 12c Release 2 (12.1.3).

Listing 5-1 Example - A Brief Response File

```
RESPONSEFILE_VERSION=2.2.1.0.0
ORACLE_HOME="/home/test/OraHome_1"
ORACLE_HOME_NAME="OUIHome1"
INSTALL_TYPE="Full"
SAMPLES_SELECT=true
CRM_FOLDER="/home/test/OraHome_1/tuxedo12.1.3.0.0"
```

Listing 5-2 Example - A Complete Response File

```
#####
## Copyright (c) 1999, 2014 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
```

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

```
#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="dba"
```

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

```
#Name      : FROM_LOCATION
```

```
#Datatype  : String
```

```
#Description: Complete path to the products.xml.
```

```
#Example: FROM_LOCATION = "../stage/products.xml"
```

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

```
FROM_LOCATION="/home/Disk1/stage/products.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 = "/home/Oracle1"
```

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

```
ORACLE_HOME="/home/OraHome1"
```

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

```
#Name      : ORACLE_BASE
```

```
#Datatype  : String
```

```
#Description: Complete path of the Oracle Base.
```

```
#Example: ORACLE_BASE = "/home/app"
```

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

```
ORACLE_BASE=<Value Unspecified>
```

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

```

#Name      : ORACLE_HOME_NAME
#Datatype  : String
#Description: Oracle Home Name. Used in creating folders and services.
#Example:  ORACLE_HOME_NAME = "OHOME1"
#-----
-----
ORACLE_HOME_NAME="OUIHome2"

#-----
-----

#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 = {"tmabase_sna", "12.1.3.0.0"}
```

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

```
DEINSTALL_LIST={"tmabase_sna", "12.1.3.0.0"}
```

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

```
#Name      : SHOW_DEINSTALL_CONFIRMATION
```

```
#Datatype  : Boolean
```

```
#Description: Set to true if deinstall confirmation 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=" "

#-----
-----
#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 = {"tmabase_sna", "12.1.3.0.0"}
#-----
-----
TOPLEVEL_COMPONENT={"tmabase_sna", "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  : tmabase_sna
#-----
-----

SELECTED_LANGUAGES={"en"}

#-----
-----

#Name       : COMPONENT_LANGUAGES
#Datatype   : StringList
#Description: Languages supported by this component.List of supported
languages   : {"en","ja"}
#Component  : tmabase_sna
#-----
-----

COMPONENT_LANGUAGES={"en"}

#-----
-----

#Name       : INSTALL_TYPE
#Datatype   : String
#Description: Installation type of the component.
#Component  : tmabase_sna
#-----
-----

```

```
INSTALL_TYPE="Full"
```

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

```
#Name      : SAMPLES_SELECT
```

```
#Datatype  : Boolean
```

```
#Description: This variable save the selection whether customer want to  
install samples.
```

```
#Component : TMASNAGateway
```

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

```
SAMPLES_SELECT=<Value Unspecified>
```

Installing Oracle Tuxedo Mainframe Adapter for SNA Communications Resource Manager (CRM) on z/OS MVS Platform

This section explains how to install the CRM component on a z/OS Multiple Virtual Storage (MVS) platform.

Note: The installation process assumes the installer is familiar with Job Control Language (JCL) job operations and File Transfer Protocol (FTP) functions.

Summary of Installation Tasks

The following list is a summary of the tasks detailed in [Installation Procedure](#):

- Put the JCL files in the MVS environment prior to installation using the FTP program.
- Allocate the initial datasets using one of the JCL jobs.
- FTP the product software files (TMACRM.*) to the allocated datasets.
- Run the second JCL job to allocate the final datasets.
- Run the TSO RECEIVE command to unload the data in your product datasets. A third JCL file has been provided to run this procedure in batch.

The installation for this environment is semi-automated. Three JCL files are provided to facilitate prerequisites for allocating datasets in the MVS environment and to unload Tuxedo Mainframe Adapter for SNA product software into the allocated datasets.

The product installer contains the following files relating to this installation procedure:

- README file contains notes on how to install the product in this environment. This is a summary of the procedure in this section.

- `createds.jcl` file is a JCL example for creating MVS datasets to receive the Tuxedo Mainframe Adapter for SNA software.
- `uncmprss.jcl` file is a JCL example to uncompress and unload into the product datasets.
- `TMACRM.LOAD` file contains the Tuxedo Mainframe Adapter for SNA program objects. (Required)
- `TMACRM.DATA` file contains Tuxedo Mainframe Adapter for SNA data files. (Required)
- `TMACRM.SAMPLE` file contains sample JCL files.

Installation Procedure

Perform the following steps to install the CRM component on a z/OS MVS platform:

1. Load the product on a machine that has File Transfer Protocol (FTP) access to the MVS UNIX directory (`/mvs/ftp-unix`) or MVS NT directory (`/mvs.ftp-nt`).
2. Use FTP to put the following JCL files in the MVS destination PDS dataset:

```
createds.jcl
uncmprss.jcl
```

In your MVS environment, change the `CREATEDS` job to suit your environment. This job allocates the initial datasets needed to receive the product software files from the FTP file transfer and the `SNACRM Load Library`, sample and data datasets.

Use the `SET` statements in the `CREATEDS` job to set the high-level qualifiers of the receiving datasets according to the following syntax:

```
SET TMPPDS=[QUALIFIER]
```

In this statement, `[QUALIFIER]` is the high-level qualifier for initial datasets need to receive the product software files.

```
SET HLQPDSE=[QUALIFIER]
```

In this statement, `[QUALIFIER]` is the high-level qualifier for the `SNACRM Load Library`. The load library containing the `TMACRM.LOAD` program objects must be a Partitioned Dataset with Extended attributes (PDSE). The PDSE minimally must have storage class `SMS` declaration for z/OS.

```
SET SCLASS=[CLASS NAME]
```

In this statement, `[CLASS NAME]` is the storage class name of the PDSE. This is required for z/OS.

```
SET HLQPDS=[QUALIFIER]
```

In this statement, [QUALIFIER] is the high-level qualifier for the sample and data datasets. These are standard PDS.

The `CREATEDS` job has the following steps:

DELETE

Deletes any existing datasets previously created so you can run this JCL multiple times, if necessary.

CREATE

Allocates the initial datasets needed to receive the product software files and the SNACRM Load Library, sample and data datasets.

3. Run the `CREATEDS` job.
4. Put the files listed in [Table 6-1](#) into their corresponding datasets. Use the table as a worksheet and fill in the names you created in step Use the worksheet as a guide for transferring the product data to the z/OS platform.

Table 6-1 MVS Installation Product Files and DD Name Datasets

Product File	Set Statement	Your Dataset Name
TMACRM.LOAD	TMPHLQ	.LOAD
TMACRM.DATA	TMPHLQ	.DATA
TMACRM.SAMPLE	TMPHLQ	.SAMPLE

Use [Table 6-2](#) as a worksheet to fill out the names of the datasets created for SNACRM Load Library, sample and data.

Table 6-2 Set Statements and Corresponding Datasets

Set Statement	Your Dataset Name
HLQPDSE	.LOAD
HLQPDS	.DATA
HLQPDS	.SAMPLE

5. From the UNIX/NT command prompt, set binary data transfer mode using the FTP program.

Note the following example of a `put` command:

```
put TMACRM.LOAD 'TMPHLQ.LOAD'
```

Transfer the datasets using the `put` command.

6. In your MVS environment, change the `UNCMPRSS` job to suit your environment.

Modify the following variables in the JCL to the high-level qualifier you listed in the tables according to the following syntax:

```
<PRODHLQ>= [QUALIFIER]
```

Use the qualifier you listed in [Table 6-1](#).

```
<BEAPDSE>= [QUALIFIER]
```

Use the PDSE qualifier you listed in [Table 6-2](#).

```
<BEAPDS>= [QUALIFIER]
```

Use the PDS qualifier you listed in [Table 6-2](#).

The `UNCMPRSS` job has the following step:

```
UNLOLD
```

Performs a `TSORECEIVE` to uncompress and unload the data in your installation datasets created in step 8.

To manually perform the `TSO RECEIVE` command to unload the data in your installation datasets created in Step 8, enter a command similar to the following command:

```
TSO RECEIVE INDS ('xxx')
```

When prompted, enter:

```
DA ('yyy')
```

In these statements, the following definitions apply:

xxx

Is the dataset name you listed in [Table 6-1](#).

yyy

Is the corresponding dataset name you listed in [Table 6-2](#).

Post Installation Tasks for Oracle Tuxedo Mainframe Adapter for SNA

This section provides information and step-by-step instructions for post installation tasks for Oracle Tuxedo Mainframe Adapter for SNA software (hereafter referenced as TMA SNA.)

This section includes the following topics:

- [Validating the Tuxedo Mainframe Adapter for SNA Software Installation](#)
- [Uninstalling Tuxedo Mainframe Adapter for SNA](#)

Validating the Tuxedo Mainframe Adapter for SNA Software Installation

You can validate the Tuxedo Mainframe Adapter for SNA software installation in the following ways:

- [Verifying Installation Files and Directories](#)
- [Running the Sample Applications](#)

Verifying Installation Files and Directories

The Tuxedo Mainframe Adapter for SNA software contains libraries and executable programs for each of the supported platforms as described in the tables in the following sections. After installing the Tuxedo Mainframe Adapter for SNA software, verify that these libraries and programs are installed on your system.

All directories are relative to the installation directory. Platform-specific stack abstraction libraries are included in these tables as well.

- [Tuxedo Mainframe Adapter for SNA Gateway Installation Files and Directories](#)
- [CRM Installation Files and Directories](#)

Tuxedo Mainframe Adapter for SNA Gateway Installation Files and Directories

The Tuxedo Mainframe Adapter for SNA Gateway includes the files listed in the following tables.

AIX

Verify that the following files are installed for the Tuxedo Mainframe Adapter for SNA Gateway Installation:

Table 5-1 AIX Installation Files and Directories for Tuxedo Mainframe Adapter for SNA Gateway Installation

Directory	Files
bin	GWSNAX
lib	libcsxcrm.so libctxcp_12.so libctxdebugs_12.so libctxos_12.so libctxplat_12.so libctxprim_12.so libgws.so crmon.jar

Table 5-1 AIX Installation Files and Directories for Tuxedo Mainframe Adapter for SNA Gateway Installation

Directory	Files
locale/C	LIBGWS.text LIBGWS_CAT
udataobj/codepage	00819x00037 00819x00273 00819x00278 00819x00280 00819x00284 00819x00285 00819x00297 00819x00500 00819x00860 00819x01047 00912x00870 none tuxedo

HP-UX

Verify that the following files are installed for the Tuxedo Mainframe Adapter for SNA Gateway Installation:

Table 5-2 HP-UX Installation Files and Directories for Tuxedo Mainframe Adapter for SNA Gateway Installation

Directory	Files
bin	GWSNAX
lib	libcsxcrm.sl libctxcp_12.sl libctxdebugs_12.sl libctxos_12.sl libctxplat_12.sl libctxprim_12.sl libgws.sl crmmmon.jar

Table 5-2 HP-UX Installation Files and Directories for Tuxedo Mainframe Adapter for SNA Gateway Installation

Directory	Files
locale/C	LIBGWS.text LIBGWS_CAT
udataobj/codepage	00819x00037 00819x00273 00819x00278 00819x00280 00819x00284 00819x00285 00819x00297 00819x00500 00819x00860 00819x01047 00912x00870 none tuxedo

Solaris

Verify that the following files are installed for the Tuxedo Mainframe Adapter for SNA Gateway Installation:

Table 5-3 Solaris Installation Files and Directories for Tuxedo Mainframe Adapter for SNA Gateway Installation

Directory	Files
bin	GWSNAX
lib	libcsxcrm.so libctxcp_12.so libctxdebugs_12.so libctxos_12.so libctxplat_12.so libctxprim_12.so libgws.so crmmmon.jar

Table 5-3 Solaris Installation Files and Directories for Tuxedo Mainframe Adapter for SNA Gateway Installation

Directory	Files
locale/C	L1BGWS.text L1BGWS_CAT
udataobj/codepage	00819x00037 00819x00273 00819x00278 00819x00280 00819x00284 00819x00285 00819x00297 00819x00500 00819x00860 00819x01047 00912x00870 none tuxedo

Linux

Verify that the following files are installed for the Tuxedo Mainframe Adapter for SNA Gateway Installation:

Table 5-4 Linux Installation Files and Directories for Tuxedo Mainframe Adapter for SNA Gateway Installation

Directory	Files
bin	GWSNAX
lib	libcsxcrm.so libctxcp_12.so libctxdebugs_12.so libctxos_12.so libctxplat_12.so libctxprim_12.so libgws.so crmmmon.jar

Table 5-4 Linux Installation Files and Directories for Tuxedo Mainframe Adapter for SNA Gateway Installation

Directory	Files
locale/C	LIBGWS.text LIBGWS_CAT
udataobj/codepage	00819x00037 00819x00273 00819x00278 00819x00280 00819x00284 00819x00285 00819x00297 00819x00500 00819x00860 00819x01047 00912x00870 none tuxedo

CRM Installation Files and Directories

The CRM includes the files listed in the following tables.

HP-UX

Verify that the following files are installed for the Tuxedo Mainframe Adapter for SNA Distributed CRM Installation:

Table 5-5 HP-UX 11.23 Installation Files and Directories for Distributed CRM Installation

Directory	Files
bin	CRM CRMLOGS crmlkon crmlkoff crmdown hpux.env
lib	libcsxappc.sl libcsxcrm.sl libcsxgpw.sl libcsxhp62.sl libcsxscrm.sl libcsxxfm.sl libctxdebugs_12.sl libctxos_12.sl libctxplat_12.sl libctxprim_12.sl libengine.sl libgpnet.sl

z/OS

Verify that the following files are installed for the CRM Installation:

Table 5-6 z/OS MVS Installation Files and Directories for CRM Installation

Directory	Files
DATA	ENV
LOAD	CRM CRMDOWN CRMLKOFF CRMLKON CRMLOGS CSXAPPC CSXCRM CSXGPW CSXSCRM CSXVT210 CSXXFM DEBUGS LIBGP LIBGP40 LIBGPNET OS PLAT PRIM SNACRM
SAMPLE	CRMSTART CRMDOWN CRMLOGS CRMLKON CRMLKOFF

Running the Sample Applications

After you install Tuxedo Mainframe Adapter for SNA, you can verify your Tuxedo Mainframe Adapter for SNA installation by running the following sample applications:

- `toupclt.c` for platforms based on UNIX

Refer to the “Verifying the Software” section of the *Oracle Tuxedo Mainframe Adapter for SNA User Guide* for more detailed information about verifying your software.

Uninstalling Tuxedo Mainframe Adapter for SNA

This section provides instructions for uninstalling Tuxedo Mainframe Adapter for SNA. The following topics are discussed:

- [Uninstalling Oracle Tuxedo Mainframe Adapter for SNA in GUI-Mode](#)
- [Uninstalling Oracle Tuxedo Mainframe Adapter for SNA in Silent Mode](#)
- [Uninstalling on z/OS Platforms](#)

Uninstalling Oracle Tuxedo Mainframe Adapter for SNA in GUI-Mode

The following steps show uninstallation process in GUI mode.

1. Invoke uninstall TMA introduction panel

Go to `<ORACLE_HOME>/oui/bin`, run `runInstaller` on Unix/Linux platform. You can completely remove Oracle Tuxedo Mainframe Adapter for SNA 12c Release 2 (12.1.3) just by clicking "**Deinstall Products**".

2. Inventory panel

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

At the beginning, you may not see any product from Inventory panel. That is because your central inventory pointer (`/etc/oraInst.loc` or) is not set up. You will not get the installed product list unless you navigate to a couple of pages where you select the central inventory location and come back to the first page and then select **Installed products**.

Note: Do not choose "Oracle Universal Installer 12.1.0.1.0" if you just want to uninstall Oracle Tuxedo Mainframe Adapter for SNA; otherwise, all the Tuxedo components are uninstalled.

3. Confirm panel

To remove the products, click **Yes** in the 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 Mainframe Adapter for SNA 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={ "tmabase_sna", "12.1.3.0.0"}" ORACLE_HOME_NAME="OUIHome2"  
-responseFile <response>
```

Note: When uninstalling in silent mode, you need both `DEINSTALL_LIST` and response file.

Uninstalling on z/OS Platforms

To remove the Tuxedo Mainframe Adapter for SNA product from your z/OS platform, consult with your system administrator. The process for removing applications from these platforms varies, depending on your particular system setup.

Oracle Tuxedo Mainframe Adapter for SNA Supported Platforms

The following sections list the supported platforms for each of the Oracle Tuxedo Mainframe Adapter for SNA components.

- [Supported Oracle Tuxedo Mainframe Adapter for SNA Gateway Platforms](#)
- [Supported Communications Resource Manager \(CRM\) Platforms and Required Stacks](#)

Supported Oracle Tuxedo Mainframe Adapter for SNA Gateway Platforms

[Table 1](#) provides a list of Oracle Tuxedo Mainframe Adapter for SNA Gateway supported platforms.

Table 1 Oracle Tuxedo Mainframe Adapter for SNA Gateway Supported Platforms

Operating System
HP-UX 11i v3 (64-bit) Itanium
IBM AIX 6.1 (64-bit) on IBM PowerPC
Novell SUSE Linux Enterprise Server 10 (32-bit) x86
Red Hat Enterprise Linux 6.3 (64-bit) on s390x
Oracle Linux 5.6 (64-bit) on x86-64

Table 1 Oracle Tuxedo Mainframe Adapter for SNA Gateway Supported Platforms

Operating System
Oracle Linux 6.7 (64-bit) on x86-64
Oracle Linux 5.9 (64-bit) on Exalogsic 2.0
Oracle Solaris 10 (64-bit) SPARC

Notes:

- On the following platforms, Oracle Tuxedo 12c Release 2 (12.1.3) Rolling Patch 003 or above is required.
 - HP-UX 11i v3 (64-bit) Itanium
 - IBM AIX 6.1 (64-bit) on IBM PowerPC
 - Oracle Linux 5.6 (64-bit) on x86-64
 - Oracle Linux 5.9 (64-bit) on Exalogsic 2.0
 - Oracle Solaris 10 (64-bit) SPARC
- On the following platforms, Oracle Tuxedo 12c Release 2 (12.1.3) Rolling Patch 008 or above is required.
 - Novell SUSE Linux Enterprise Server 10 (32-bit) x86

For more information, see [Oracle Tuxedo Mainframe Adapter for SNA Certified Platform Tables](#).

Supported Communications Resource Manager (CRM) Platforms and Required Stacks

[Table 2](#) provides a list of CRM supported platforms and stacks.

Table 2 CRM Supported Platforms

Platform	Stack
HP-UX 11i v3 (64-bit OS) Itanium	SNAPLUS2 v7
z/OS V1R11 (31 and 64 bit) (MVS)	VTAM V1R11

Table 2 CRM Supported Platforms

Platform	Stack
z/OS V1R12 (31 and 64 bit) (MVS)	VTAM V1R12
z/OS V1R13 (31 and 64-bit OS) (MVS)	VTAM V1R13
z/OS V2R1 (31 and 64-bit OS) (MVS)	VTAM V2R1

For more information, see [Oracle Tuxedo Mainframe Adapter for SNA Certified Platform Tables](#).

