## **Oracle® Tuxedo Mainframe Adapter for TCP**

Installation Guide 12c Release 2 (12.2.2)

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Oracle Tuxedo Mainframe Adapter for TCP Installation Guide, 12c Release 2 (12.2.2)

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# Preparing to Install the Oracle Tuxedo Mainframe Adapter for TCP

The following sections provide information that you need to know before installing the Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) product software:

- Oracle Universal Installer (OUI)
- Oracle Tuxedo Mainframe Adapter for TCP Components
- Hardware and Software Prerequisites
- Oracle Installation Program
- Installation Road Map

## **Oracle Universal Installer (OUI)**

The Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) product software installer is based on the Oracle Universal Installer (OUI). To install the Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) product software on your host, you must know how to use OUI to install Oracle products. For more information, see Introduction to Oracle Universal Installer.

## **Modes of Installation**

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

• Interactive:

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

### Silent:

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

## **Installation Media**

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

## **Special Instructions for UNIX Users**

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

### Failed to Connect to Server Error

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

- 1. Define the following environment variable on the host computer where you are running OUI: %setenv DISPLAY <machine name>:0.0
- 2. Replace <machine name> with the name of the computer that will display OUI.
- 3. On the computer that will display OUI, enter the following command, which allows other computers to display information on the computer monitor: %xhost +
- 4. Rerun the runInstaller.sh script after you have set the DISPLAY environment variable.

**Note:** You can run OUI without specifying the DISPLAY variable by running in silent mode using a response file.

### Providing a UNIX Installer Location with Root Privileges

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

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

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

To successfully run the required shell script:

- 1. Leave the OUI window open and open another terminal window.
- 2. In the new terminal window, use the substitute user command to log in with root privileges: su -root
- 3. Change directory to the Oracle home into which you are currently installing your Oracle software product.
- 4. Run the shell script ./root.sh.
- 5. When the script is finished and you are returned to the command prompt, exit from the new terminal window and return to OUI to continue installation.

**Note:** Do not exit the installation to run the shell script. Exiting the installation removes this script.

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

### **Providing a UNIX Group Name**

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

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

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

## **About Oracle Universal Installer Log Files**

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

\$ORACLE\_HOME/cfgtoollogs

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

**Note:** The logs used to remove products are different from the installActions<timestamp>.log generated during the install process. The installActions<timestamp>.log is easier to read and can be used to view the operations performed at installation time.

## **Oracle Internationalization**

## **Installation Dialogs Language**

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

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

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

# **Oracle Tuxedo Mainframe Adapter for TCP Components**

Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) contains the following component:

Oracle Tuxedo Mainframe Adapter for TCP
 The component that contains the Oracle Tuxedo Mainframe Adapter for TCP software files.

## **Hardware and Software Prerequisites**

The Oracle Tuxedo Mainframe Adapter for TCP must be installed into an Oracle Home which has already installed Oracle Tuxedo 12c Release 2 (12.2.2) server component, and Rolling Patch 003 or higher releases.

## System Requirements

Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) must be installed on a supported OS version for the given platform. Refer to "Oracle Tuxedo Mainframe Adapter for TCP Supported Platforms" for the supported platforms.

## **Software Requirements**

Java Runtime Environment (JRE) 1.7 or 1.8 is required to install Oracle Tuxedo Mainframe Adapter for TCP. You need to install the required JRE and set the environment variable JAVA\_HOME accordingly before installing Oracle Tuxedo Mainframe Adapter for TCP.

## **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 TCP 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.

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:                                       |
|                  | export IATEMPDIR=tmpdirname  Replace tmpdirname with the name of a temporary directory |
|                  | of your choice.  |

# **Oracle Installation Program**

The Oracle Tuxedo Mainframe Adapter for TCP 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 TCP software on UNIX systems.

## **Cancelling Installation**

Clicking the "Cancel" or the "close' window button in GUI mode creates an incomplete Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) installation. You will have to re-install Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2).

If you installed Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) in a previous Tuxedo product directory, and you want to return to your original configuration, you must re-install your previous Oracle Tuxedo Mainframe Adapter for TCP version.

# **Installation Road Map**

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

- "Installing Oracle Tuxedo Mainframe Adapter for TCP Using GUI-Mode Installation" on page 1-1
- "Installing Oracle Tuxedo Mainframe Adapter for TCP Using Silent Installation" on page 2-1

If you want to uninstall your Oracle Tuxedo Mainframe Adapter for TCP software, see "Post Installation Tasks for Oracle Tuxedo Mainframe Adapter for TCP" on page 6-1.

# Installing Oracle Tuxedo Mainframe Adapter for TCP Using GUI-Mode Installation

The following sections describe how to install Oracle Tuxedo Mainframe Adapter for TCP 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 TCP on a UNIX system with a non-graphics console, use silent install mode.

The Oracle Tuxedo Mainframe Adapter for TCP 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 1-5.
- 2. Log in to the UNIX system as the Oracle Tuxedo Mainframe Adapter for TCP administrator.
- Ensure that you have enough free space for the Oracle Tuxedo Mainframe Adapter for TCP installation.
- 4. Install Oracle Tuxedo Mainframe Adapter for TCP 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 TCP 12c Release 2 (12.2.2) installation file specific to your platform.
  - b. Go to the directory where you downloaded the installer, unzip the installer file, and then go to the Disk1\install directory, run the runInstaller.sh to invoke the installation procedure.

**Note:** GUI mode is the default for Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) 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 1-2.

## Running GUI-Mode Installation

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

Table 1-1 Instructions

| In This Window       | Perform the Following Action  |
|----------------------|---|
| Welcome              | Click <b>Next</b> to proceed with the installation. You may cancel the installation at any time by clicking Cancel.   |
| Specify Home Details | 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. |
|                      | 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 TCP is installed.   |
|                      | If you enter an invalid path for Oracle Home directory, you cannot continue the installation.   |
|                      | If the selected ORACLE_HOME is not empty and does not recorded in inventory, the installer will show a warning.   |
|                      | If the selected ORACLE_HOME does not include Tuxedo Server component, you cannot continue the installation.   |
| Summary              | Click <b>Install</b> to start the installation.   |
|                      | 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:       |
|                      | <pre>./runInstaller.sh -force "DEPENDENCY_LIST={"TMATCP:12.2.2.0.0"}"</pre>   |
| Install              | When this panel appears, files of the selected installation type are being copied to the target installation directory.   |
| End of Installation  | Click <b>Exit</b> to exit the installation program.   |

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

# Assigning File Ownership on a UNIX System

If you installed the Oracle Tuxedo Mainframe Adapter for TCP 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 TCP 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 TCP.

# Installing Oracle Tuxedo Mainframe Adapter for TCP Using Silent Installation

The following sections describe how to install Oracle Tuxedo Mainframe Adapter for TCP using silent installation on UNIX systems:

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

## What Is Silent Installation?

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

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

# **Using Silent Installation: Main Steps**

## **Creating a Response File**

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

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

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

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

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

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

## **Using Record Mode**

To record a new response file:

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

### On UNIX:

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

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

#### On UNIX:

```
./runInstaller.sh -record -destinationFile
/private/temp/tmatcp_linux_silent.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 TCP 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 <code>ORACLE\_HOME</code> for a complete silent installation.

### **ORACLE HOME NAME**

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

### DEPENDENCY\_LIST

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

### Example:

DEPENDENCY\_LIST={"TMATCP:12.2.2.0.0"}

## **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.

### Specifying a Response File

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

#### On UNIX:

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

#### Notes:

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

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

### On UNIX:

./runInstaller.sh -help

### Optional Parameters When Specifying a Response File

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

- -nowelcome Use the -nowelcome flag with the -responseFile flag to suppress the Welcome dialog that appears during installation.
- -silent Use the -silent flag with the -responseFile flag to run OUI in complete silent mode. Note that the Welcome dialog is suppressed automatically.
- -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 the following command:

```
./runInstaller.sh -responseFile /tma/tmatcp_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 2-1 and Listing 2-2 show response file examples that apply to a silent installation of Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2).

### Listing 2-1 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/tuxedo12.2.2.0.0"
```

### Listing 2-2 Example - A Complete Response File

```
## Copyright (c) 1999, 2013 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 o | given as <value required=""> need to be</value> | ##  |
| ##  | specified for a siler | nt installation to be successful.               | ##  |
| ##  |                       |   | ##  |
| ##  |                       |   | ##  |
| ##  | This response file is | s generated by Oracle Software                  | ##  |
| ##  | Packager.             |   | ##  |
| ##: | :################     | *************************************           | ### |

RESPONSEFILE\_VERSION=2.2.1.0.0

| #<br>  |
|--|
| #Name : UNIX_GROUP_NAME  |
| #Datatype : String   |
| $\sharp Description\colon Unix$ group to be set for the inventory directory. Valid only in Unix platforms. |
| #Example: UNIX_GROUP_NAME = "install"<br>#   |
| *<br>  |
| UNIX_GROUP_NAME="oinstall"   |
| #  |
|  |

| #Name : FROM_LOCATION   |
|---|
| #Datatype : String  |
| #Description: Complete path to the products.xml.  |
| <pre>#Example: FROM_LOCATION = "/stage/products.xml"</pre>  |
| #   |
| FROM_LOCATION="/home/test/tma/stage_tma_linux/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=""></value>  |
| #   |
| #Name : ORACLE_HOME   |
| #Datatype : String  |
| #Description: Complete path of the Oracle Home.   |
| #Example: ORACLE_HOME = "C:\OHOME1"   |
| #   |
| ORACLE_HOME="/home/test/OraHome_1"  |

```
#Name : ORACLE_BASE
#Datatype : String
#Description: Complete path of the Oracle Base.
#Example: ORACLE_BASE = "C:\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="OUIHome1"
#-----
_____
#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   |
|--|
| #<br>  |
| 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  |
| #<br>  |
| 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  |
| #<br>  |
| 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\_tcp","12.2.2.0.0"}

| #  |
|--|
| DEINSTALL_LIST={"tmabase_tcp","12.2.2.0.0"}  |
| #  |
|  |
| #Name : SHOW_DEINSTALL_CONFIRMATION  |
| #Datatype : Boolean  |
| #Description: Set to true if deinstall confirmation is needed during a<br>deinstall session. |
| #Example: SHOW_DEINSTALL_CONFIRMATION = true   |
| #<br><br>SHOW_DEINSTALL_CONFIRMATION=true  |
| #<br>  |
| #Name : SHOW_DEINSTALL_PROGRESS  |
| #Datatype : Boolean  |
| #Description: Set to true if deinstall progress is needed during a deinstall session.        |
| #Example: SHOW_DEINSTALL_PROGRESS = true   |
| #<br>  |
| SHOW_DEINSTALL_PROGRESS=true   |
| #  |
|  |
| #Name : CLUSTER_NODES  |

#Datatype : StringList

| #Description: This variable represents the cluster node names selected by the user for installation.  |
|---|
| <pre>#Example: CLUSTER_NODES = { "node1", "node2"}</pre>  |
| #   |
| 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=""></value>   |
| #   |
| #Name : METALINK_USERNAME   |

| #Datatype :             | String   |
|-------------------------|--|
| #Description:           | This variable represents the Oracle metalink user name.    |
| #                       |  |
|                         |  |
| METALINK_USER           | NAME= <value unspecified=""></value>                       |
| #                       |  |
|                         |  |
| #Name :                 | METALINK_PASSWORD  |
| #Datatype :             | String   |
| #Description: password. | This variable represents the corresponding Oracle metalink |
| #                       |  |
| METALINK_PASS           | WORD= <value unspecified=""></value>                       |
| #                       |  |
|                         |  |
| #Name :                 | PROXY_HOST   |
| #Datatype :             | String   |
| #Description:           | The proxy host used to connect to Oracle metalink.         |
| #Example: PRO           | XY_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_tcp","12.2.2.0.0"}
TOPLEVEL_COMPONENT={"tmabase_tcp","12.2.2.0.0"}
```

```
#------
_____
#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_tcp
SELECTED_LANGUAGES={"en"}
#-----
#Name : COMPONENT_LANGUAGES
#Datatype : StringList
#Description: Languages supported by this component.List of supported
languages : {"en","ja"}
#Component : tmabase_tcp
```

| #   |
|---|
|   |
|   |
| COMPONENT_LANGUAGES={"en"}                        |
|   |
| #   |
|   |
| #Name : INSTALL_TYPE                              |
| #Datatype : String                                |
| #Description: Installation type of the component. |
| #Component : tmabase_tcp                          |
| #   |
|   |
|   |
| INSTALL_TYPE="Full"                               |

# Installing Oracle Tuxedo Mainframe Adapter for TCP (IMS)

Installing Oracle Tuxedo Mainframe Adapter for TCP (IMS) (hereafter referenced as TMA TCP for IMS) consists of the following basic tasks.

- Preparing to Install
- Installing TMA TCP for IMS

**Note:** To upgrade from previous releases of eLink for Mainframe TCP, refer to *Oracle* Tuxedo Mainframe Adapter for TCP *Release Notes*.

# **Preparing to Install**

Complete the following tasks prior to installing the TMA TCP for IMS software:

- Read the Oracle Tuxedo Mainframe Adapter for TCP Release Notes
- Verify the TCP/IP stack software is installed and configured as part of your operating system installation.

# Installing TMA TCP for IMS

To install TMA TCP for IMS, complete the following tasks:

- Task 1: Allocate z/OS Datasets
- Task 2: Unload the Distribution Files
- Task 3: Link-Edit TMA TCP for IMS

- Task 4: Define TMA TCP for IMS to MVS
- Task 5: Create an TMA TCP for IMS Configuration File
- Task 6: Create JCL to Run TMA TCP for IMS
- Task 7: Start Oracle TMA TCP for IMS
- Task 8: Test the Installation

## Task 1: Allocate z/OS Datasets

The directory structures on the TMA TCP for IMS software CD include the following partitioned datasets:

| Partitioned Datasets (PDS)  | Format | Contents  |
|-----------------------------|--------|---|
| CONTROL                     | ASCII  | Sample IMS definitions, sample<br>Oracle TMA TCP for IMS<br>configuration files     |
| INCLUDE                     | ASCII  | C header files, COBOL copybooks for<br>use by IMS Client and Server<br>transactions |
| JCL                         | ASCII  | Job Control Language for linking and executing Oracle TMA TCP for IMS               |
| SOURCE                      | ASCII  | Sample IMS Client and Server<br>transactions for use with Oracle TMA<br>TCP for IMS |
| OBJECT                      | BINARY | Object component files of Oracle<br>TMA TCP for IMS                                 |
| MSGCAT (sequential dataset) | BINARY | File containing runtime messages that TMA TCP for IMS issue                         |

- 1. FTP the JCL file INSTALL from the JCL subdirectory.
- 2. Execute this job to allocate datasets using high-level qualifiers appropriate to your installation (hlq1 and hlq2 are dataset name high-level qualifiers appropriate to your installation).

The following datasets are allocated to receive the Tuxedo Mainframe Adapter for TCP file distribution.

#### Listing 3-1 Allocating z/OS Datasets

```
DSNAME: hlq1.hlq2.CONTROL
DSORG: PO
DIRBLKS: 10
RECFM: FB
LRECL: 80
BLKSIZE: 23440 (or other valid blocksize)
SPACE: 2 tracks
Usage: IMS sample definitions, sample configuration file
DSNAME: h1q1.h1q2.INCLUDE
DSORG: PO
DIRBLKS: 10
RECFM: FB
LRECL: 80
BLKSIZE: 23440 (or other valid blocksize)
SPACE: 2 tracks
Usage: C header file, COBOL copybooks
DSNAME: hlq1.hlq2.JCL
DSORG: PO
DIRBLKS: 10
RECFM: FB
LRECL: 80
BLKSIZE: 23440 (or other valid blocksize)
SPACE: 2 tracks
Usage: Sample LINK and execute JCL
DSNAME: hlq1.hlq2.MSGCAT
DSORG: PS
DIRBLKS: 10
RECFM: FB
LRECL: 100
BLKSIZE: 32000 (or other valid blocksize)
```

SPACE: 2 tracks
Usage: Message text

DSNAME: hlq1.hlq2.OBJECT

DSORG: PO
DIRBLKS: 10
RECFM: FB
LRECL: 80
BLKSIZE: 3200
SPACE: 1 cylinder

Usage: Pre-linked object files

DSNAME: h1q1.h1q2.SOURCE

DSORG: PO
DIRBLKS: 10
RECFM: FB
LRECL: 80

BLKSIZE: 23440 (or other valid blocksize)

SPACE: 1 track

Usage: Sample IMS client and server transactions

The following runtime datasets are also allocated.

| Runtime Datasets | Format | Contents   |
|------------------|--------|--|
| LOAD             | Binary | Load library for Oracle TMA TCP for IMS                              |
| CONFIG           | ASCII  | Configuration file for Oracle TMA<br>TCP for IMS                     |
| MSGLOG           | ASCII  | Message log for Oracle TMA TCP for IMS                               |
| SVRLOG           | ASCII  | A log file containing server responses<br>for Oracle TMA TCP for IMS |

#### Listing 3-2 Allocating Runtime Datasets

```
DSNAME: hlq1.hlq2.LOAD
DSORG: PO
DIRBLKS: 10
RECFM: U
LRECL: 0
BLKSIZE: 6133 (or other valid blocksize)
SPACE: 1 cylinder
Usage: Load library
DSNAME: h1q1.h1q2.CONFIG
DSORG: PS
RECFM: FB
LRECL: 80
BLKSIZE: 23440 (or other valid blocksize)
SPACE: 1 track
Usage: Configuration File
DSNAME: hlg1.hlg2.MSGLOG
DSORG: PS
RECFM: VB
LRECL: 1028
BLKSIZE: 6144 (or other valid blocksize)
SPACE: 1 cylinder
Usage: Message Log
DSNAME: hlq1.hlq2.SVRLOG
DSORG: PS
RECFM: VB
LRECL: 32756
BLKSIZE: 32760 (Note: required blocksize)
SPACE: 1 cylinder
Usage: Server Response Log
```

## Task 2: Unload the Distribution Files

The TMA TCP for IMS product is distributed on a single CD-ROM (with other members of the Tuxedo Mainframe Adapter for TCP product). The TMA TCP for IMS distribution files are grouped under one of the following directory structures:

- For UNIX, the directory is /cdrom/unixmf.
   In this directory structure, /cdrom is the directory where the drive is mounted.
- For Windows, the directory is D: \ntmf.
   In this directory structure, D: is the CD-ROM drive.

Because the distribution files are located on a CD-ROM, you probably use a UNIX-based system or a PC-based system to access the files on the CD-ROM and file transfer them to z/OS.

Transfer the contents of each subdirectory to the corresponding distribution library on the z/OS system. Use a file transfer program (such as FTP) or any other mechanism that allows you to transfer files to your z/OS system. The file transfer program must be able to:

- Properly transfer both text and binary files
- Properly create members in a target library (PDS)

The IBM File Transfer Program (FTP, distributed as part of TCP/IP for z/OS) satisfies both of these requirements.

Each file in each subdirectory on the distribution CD-ROM corresponds to a member of the associated target library. For example, file BEATCPI in the JCL subdirectory corresponds to member BEATCPI in the JCL distribution library.

**Note:** All files in the CONTROL, INCLUDE, JCL, and SOURCE subdirectories are text files; be sure to specify text (or ASCII) mode when you transfer these files from the CD-ROM to their corresponding z/OS distribution library members.

The MSGCAT file and all files in the OBJECT subdirectory are binary files; specify binary (or image) mode when you transfer these files from the CD-ROM to the corresponding z/OS distribution library members.

## Task 3: Link-Edit TMA TCP for IMS

The TMA TCP for IMS program is delivered as a pre-linked object file. Use the LNKBEA34 JCL file for linking with IBM's TCP/IP.

Tailor the JCL as required to match your installation's standards and naming conventions. Review the following items and make the necessary changes before you submit the job.

- 1. Supply an appropriate Job Card for the job.
- 2. Change the names of product datasets as required to match those in your particular installation, including LE/370 datasets (for example, SYS1.SCEELKED), TCP/IP for z/OS datasets (for example, SYS1.SEZACMTX), and IMS (for example, IMSV5R1.RESLIB).
- 3. Change the names of TMA TCP for IMS datasets as required to match those you allocated in Step 1 (for example, BEATCPI.DIST.OBJECT).
- Change the name of the link-editor (HEWL) as required to match the name used by your installation.

**Note:** The link job references components supplied by LE/370, TCP/IP for z/OS, and IMS.

When the job completes successfully, you receive a return code of 0 from the link-edit steps and an executable load module is placed into the specified target load library. The load module should have attributes of AMODE=31, RMODE=24. There should be no unresolved external references.

## Sample JCL for Linking TMA TCP for IMS

Listing 3-3 is JCL to link the distributed object files into an executable load module.

#### Listing 3-3 Sample JCL for Linking Distributed Object Files

```
//JOBNAME JOB ETC.
//LKED
         EXEC PGM=HEWL, COND=(4,LT),
//
         REGION=2M, PARM='AMODE=31, MAP, XREF'
//SYSLIB DD DSNAME=SYS1.SCEELKED, DISP=SHR
//
         DD DSNAME=SYS1.SEZACMTX, DISP=SHR
//SYSPRINT DD SYSOUT=*
//SYSLMOD DD DISP=SHR, DSNAME=BEATCPI.DIST.LOAD
//SYSUT1 DD UNIT=VIO, SPACE=(TRK, (10,10))
//RESLIB DD DISP=SHR, DSN=IMSV5R1.RESLIB
//SYSLIN DD DISP=OLD, DSN=BEA.HLQ.OBJECT(PREBEA34)
          DD *
INCLUDE RESLIB(DFSLI000)
ENTRY CEESTART
NAME BEATCPI(R)
```

## Task 4: Define TMA TCP for IMS to MVS

To integrate TMA TCP for IMS into your IMS environment, you must properly define it to MVS.

#### **OTMA Definition**

To use OTMA to integrate TMA TCP for IMS into your z/OS environment, you must properly define it in the program property table (PPT). Listing 3-4 is a sample program entry for the Tuxedo Mainframe Adapter for TCP product. Also, you must link the program to an APF authorized library.

Listing 3-4 Sample Program Property Table

```
* /
PPT PGMNAME (BEATCP34)
                            /* PROGRAM NAME = BEATCP34
         CANCEL
                            /* PROGRAM CAN BE CANCELED
                                                                    * /
         KEY (7)
                            /* PROTECT KEY ASSIGNED IS 7
                                                                    * /
                                                                    * /
                            /* PROGRAM IS SWAPPABLE
         SWAP
                            /* PROGRAM IS NOT PRIVILEGED
                                                                    * /
         NOPRIV
                                                                    * /
         DSI
                            /* REQUIRES DATA SET INTEGRITY
         PASS
                            /* CANNOT BYPASS PASSWORD PROTECTION */
                            /* PROGRAM IS A SYSTEM TASK
                                                                    * /
         SYST
                                                                    * /
         AFF (NONE)
                            /* NO CPU AFFINITY
         NOPREF
                            /* NO PREFERRED STORAGE FRAMES
                                                                    * /
```

# Task 5: Create an TMA TCP for IMS Configuration File

Oracle TMA TCP for IMS makes use of a text configuration file which is read and processed during initialization to establish the configuration. Any text editor (such as the ISPF Editor) can be used to create the configuration file. CONFIGOT, the OTMA sample in the CONTROL distribution library is a sample configuration file which you may use as a starting point for creating configuration files tailored to your particular installation.

Place your completed configuration file in the configuration dataset allocated in the "Task 1: Allocate z/OS Datasets" section. A configuration file includes the following basic sections:

- SYSTEM Statement Definition
- Local Gateways Definition
- Remote Gateways Definition
- Remote Services Definition
- Local Services and IMS Host Systems Definition

**Note:** You must define local services and IMS host systems if running OTMA.

For detailed information about syntax and parameter definitions for the configuration file, refer to the Oracle Tuxedo Mainframe Adapter for TCP IMS User Guide.

#### SYSTEM Statement Definition

SYSTEM parameters control the overall operational environment of Oracle TMA TCP for IMS. Because TMA TCP for IMS cannot "wait" on the IMS Message Queue, the queue is periodically interrogated (polled) to determine if any new work has arrived (for example, IMS Client requests or Server responses). Set the SleepTime parameter to specify the amount of time that TMA TCP for IMS "sleeps" (waits) during idle periods before checking the IMS Message Queue for work.

### **Local Gateways Definition**

You must provide at least one GATEWAY TYPE=LOCAL statement to define access to your local (IMS) gateway by remote systems. In this statement, specify the following:

- The IP Address that remote systems use to establish TCP/IP connections with this gateway.
- The IP Address should be that of the z/OS machine on which Oracle TMA TCP for IMS is running.
- The Port Number that remote systems use to establish TCP/IP connections with this gateway.
- You should specify a Port Number that is not a well-known port number and one that is not used by any other TCP/IP application.
- The Account ID and Password (if used) that must be supplied by remote systems to successfully establish an inbound session with this gateway

 The maximum number of concurrent inbound sessions (TCP/IP connections initiated by remote systems) that is accepted via the specified port

Make sure that remote systems are correctly configured with the corresponding IP Address, Port Number, Account ID (if used), and Password (if used). Otherwise, attempts by remote systems to connect to this gateway fail.

### **Remote Gateways Definition**

GATEWAY TYPE=REMOTE statements define access to remote systems by the IMS gateway. In particular, each GATEWAY TYPE=REMOTE statement specifies:

- The IP Address to use to establish a TCP/IP connection (that is, connect) with the remote gateway
- The Port Number to use to establish a TCP/IP connection (that is, connect) with the remote gateway
- The Account ID and Password (if used) that must be supplied to establish an outbound session with the remote gateway
- The minimum and maximum number of concurrent, outbound sessions that are established with the remote gateway
- If you specify a value other than zero for the minimum number of sessions, TMA TCP for IMS attempts to establish the specified number of outbound sessions with the remote system during initialization.

The IP Address, Port Number, Account ID, and Password must match the configuration of the remote system. Otherwise, attempts to establish an outbound session with the remote system fails.

### **Remote Services Definition**

SERVICE TYPE=REMOTE statements define remote services to which TMA TCP for IMS has access. Each statement specifies:

- The corresponding local and remote service names
- The Local Service Name is the name used by an IMS Client transaction to request the service. The Remote Service Name is the name of the service as defined on the remote system. These need not be the same, but note that the Remote Service Name *must* match the configuration of the remote system.
- The remote system (Logical Machine ID) that offers the service

- The remote system offering the service is identified by a Logical Machine ID, which must correspond to the Logical Machine ID specified in a GATEWAY TYPE=REMOTE statement.
- A time limit for processing the request
- The Time Limit (in seconds) specifies how long TMA TCP for IMS "waits" for a response to a request sent to a remote system before assuming that the request has "timed out" and that no response is forthcoming. Specify a value that makes a reasonable allowance for network latency and overall system load. Small values should be avoided because they may result in requests timing out under otherwise normal circumstances.

**Note:** It is permissible to have more than one SERVICE TYPE=REMOTE statement for the same (local) service name. When this is the case, each statement must identify a different remote Logical Machine ID. This allows TMA TCP for IMS to "spread" requests for a particular service among multiple remote systems offering the service, thus balancing the load and improving overall throughput.

## **Local Services and IMS Host Systems Definition**

SERVICE TYPE=LOCAL statements define local services offered by a local IMS host. There can be multiple SERVICE TYPE=LOCAL statements and multiple statements defining the same service, provided each specifies a different local IMSID. Each statement requires the following information:

• The corresponding local and remote service names

The Local Service Name is the name used by an IMS Client transaction to request the service. The Remote Service Name is the name of the service as defined on the remote system.

**Note:** The local and remote service names can be different; however, the Remote Service Name *must* match the configuration of the remote system.

• The IMSID (Logical IMS ID) that offers the service

The IMSID is a symbolic name that uniquely identifies an IMS system definition. This name must match a logical IMS ID (IMSID) specified in a HOST, TYPE=IMS statement.

## Task 6: Create JCL to Run TMA TCP for IMS

You must create JCL to run the Oracle TMA TCP for IMS product. The following section specifies how to create JCL for running as an OTMA client.

#### **JCL for OTMA Clients**

When running the product as an OTMA client, TMA TCP for IMS runs in its own address space under z/OS as a started task or long running job. Member RUNOTM in the JCL distribution library is a sample job for executing TMA TCP for IMS.

When tailoring the JCL for your OTMA installation, pay particular attention to the following:

- You need to supply an appropriate Job Card for the job. The job card should specify TIME=1440, since TMA TCP for IMS executes as a non-ending job.
- TMA TCP for IMS is written in the C language and requires access to the LE/370 runtime environment. Add DD cards to the STEPLIB for the LE/370 runtime datasets, including SYS1.SCEERUN and SYS1.SCEELKED. Use whatever dataset names are appropriate for your installation.
- For diagnostic purposes, you may wish to add DD cards for SYSUDUMP and/or CEEDUMP. In the event of an abnormal termination (ABEND), LE/370 writes a formatted dump to CEEDUMP.
- Add a DD card for SYSTCPD pointing to the TPC/IP Data file (for example, TCPIP.V3R1.DATA – change the dataset name as necessary to conform to your installation). This dataset is used by TCP/IP in the TMA TCP for IMS address space (when using IBM TCP/IP).
- If you want to preserve messages from previous executions of TMA TCP for IMS, code DISP=MOD in the MSGLOG DD statement; new messages are appended to the end of the dataset (existing messages are preserved). If you want the Message Log to be overwritten with each new execution of TMA TCP for IMS, code DISP=OLD (or DISP=SHR) in the MSGLOG DD statement; existing messages are lost.

## Task 7: Start Oracle TMA TCP for IMS

Before you attempt to start TMA TCP for IMS the first time, make sure that the proper IMS definitions are in place.

If you are using JOBLIB/STEPLIB with JCL for executing the TMA TCP for IMS, make sure that all the concatenations of it are APF-authorized.

If you are using RACF for security, you must set up a FACILITY Class Profile in RACF of IMSXCF. *group.client*. You can configure the *group* and *client* names for TMA TCP for IMS.

Start TMA TCP for IMS by submitting the JCL prepared in the "Task 6: Create JCL to Run TMA TCP for IMS" section.

For additional information on operating this product, refer to the Oracle Tuxedo Mainframe Adapter for TCP IMS User Guide.

## Task 8: Test the Installation

When you start TMA TCP for IMS for the first time, you should do so in a controlled environment, using a small, simple configuration to methodically test the system to verify your installation and the configuration. For additional information on using this product, refer to the Oracle Tuxedo Mainframe Adapter for TCP IMS User Guide.

## **Distribution Libraries and Executables**

The Tuxedo Mainframe Adapter for TCP CD-ROM contains the following libraries and executable programs. After installing the TMA TCP for IMS software, verify that these libraries and programs are installed on your system.

| Directory | Files   |
|-----------|---|
| (top)     | msgcat  |
| CONTROL   | beacrp01 beacrq01 beacrr01 beasvr01 beatcpi configbp configot |
| INCLUDE   | beatcpi<br>client<br>server                                   |
| JCL       | INSTALL<br>LNKBEA34<br>RUNBMP<br>RUNOTM                       |

| Directory | Files  |
|-----------|--|
| OBJECT    | PREBEA34   |
| SOURCE    | beacrp01 beacrq01 beacrr01 beaotm beasvr01 dfsydru0 dfsyprx0 |

# Installing Oracle Tuxedo Mainframe Adapter for TCP (CICS)

Installing Oracle Tuxedo Mainframe Adapter for TCP (CICS) (hereafter referenced as TMA TCP for CICS) consists of the following basic tasks and topics.

- Preparing for Installation
- Installing TMA TCP for CICS

**Note:** To upgrade from previous releases of eLink for Mainframe TCP, refer to *Oracle* Tuxedo Mainframe Adapter for TCP *Release Notes*.

# **Preparing for Installation**

Before you install TMA TCP for CICS, complete the following tasks.

- Task 1: Verify System Requirements
- Task 2: Check Pre-Installation Considerations

# Task 1: Verify System Requirements

Prior to beginning the installation, verify hardware and software requirements. For system requirements, refer to the *Oracle* Tuxedo Mainframe Adapter for TCP *Release Notes*. Ensure that your installation workstation is connected to z/OS through TCP/IP, and is capable of running FTP.

## Task 2: Check Pre-Installation Considerations

Verify that all block sizes in the supplied JCL are appropriate for the device types being used. By default, 3380 is assumed.

# **Installing TMA TCP for CICS**

Complete the following tasks to install Oracle TMA TCP for CICS

- Task 1: Allocate Temporary Data Sets
- Task 2: Transfer the Installation JCL
- Task 3: Create the PDS Libraries
- Task 4: Upload the Distribution Files
- Task 5: Define the CICS VSAM Files
- Task 6: Verify Contents of PROCS
- Task 7: Change Resource Names (Optional)
- Task 8: Define the CICS Table Entries
- Task 9: Build TMA TCP for CICS Executables
- Task 10: Verify the CICS Setup
- Task 11: Assemble and Link the CICS DCT
- Task 12: Modify the CICS Startup JCL

# Task 1: Allocate Temporary Data Sets

Allocate a temporary data set on z/OS direct access storage device (DASD) for the installation job as shown in the following example.

**Note:** Specify either the Volume Serial parameter or the Generic Unit parameter, but not both.

#### Listing 4-1 Allocating the Install Data Set

```
Data Set Name:YOURHLQ.TEMP.INSTALL

Volume serial:nnnnn (Blank for authorized default volume)
```

```
Generic unit:
                             (Generic group name or unit address)
Space units: TRACK
                             (BLKS, TRKS, CYLS, KB, MB or BYTES)
Primary quantity:1
                             (In above units)
Secondary quantity:1
                             (In above units)
Directory blocks:0
                             (Zero for sequential data set)
Record format:FB
Record length:80
Block size:6160
Expiration date:
                             (YY/MM/DD, YYYY/MM/DD YY.DDD,
                            YYYY.DDD in Julian form DDDD for
                            retention period in days or blank)
Enter "/" to select option
Allocate Multiple Volumes
```

## Task 2: Transfer the Installation JCL

The TMA TCP for CICS product is distributed on a single CD-ROM (with other members of the Oracle TMA TCP product). The TMA TCP for CICS distribution files are grouped under one of the following directory structures:

• To FTP from UNIX to the mainframe, the distribution files are in:

```
/cdrom/unixmf/cics directory,
/cdrom is the directory where the drive is mounted.
```

• To FTP from Windows to the mainframe, the distribution files are in:

```
D: \ntmf\cics
D: is the CD-ROM drive.
```

FTP the file called INSTALL to the temporary data set created in the "Task 1: Allocate Temporary Data Sets" section. Listing 3-2 is the process for downloading the INSTALL file using FTP.

#### **Listing 4-2 Uploading Distribution Files**

```
% ftp zos-machine
Connected to zos-machine.
Name (zos-machine:unix-id): tso-id
331 Send password please.
```

```
Password: tso-password
230 tso-id is logged on.
Remote system type is z/OS.
ftp> quot site rec=fb
ftp> quot site lr=80
ftp> put INSTALL 'data set name allocated'
200 Port request OK.
125 Storing data set 'data set name allocated'
2749 bytes sent in 0.00 seconds (555.12 Kbytes/s)
ftp> quit
221 Quit command received. Goodbye.
```

## Task 3: Create the PDS Libraries

Tailor the JCL as required to match your installation's standards and naming conventions. Review the following items and make the necessary changes before you submit the job.

**Note:** This is an instream PROC; the variables are at the end of the PROC.

- 1. Modify the JOBCARD to your standards.
- 2. Modify the variable "YOURHLQ." If you intend to rename them, modify the variables JCL, OBJECT, and SOURCE.
- 3. Submit the revised INSTALL JCL. This JCL creates six partitioned data sets based on the "high-level-qualifier" you have specified as the value of the JCL parameter (&HLQ) in the JCL.

The INSTALL JCL includes the name BEATCPC as part of the data set name. For example.

#### Listing 4-3 Sample INSTALL JCL

```
//JDOE1 JOB (INSTALL), 'J DOE', NOTIFY=&SYSUID,
//
     CLASS=C, MSGCLASS=X, MSGLEVEL=(1,1), TIME=1440
//*
//INSTALL PROC HLQ=,
                          ** YOUR HIGH LEVEL OUALIFIER
// DASD=,
                          ** DASD DEVICE TYPE
      VOLUME=,
                          ** SERIAL NUMBER OF TARGER VOLUME
//
      BLKFB=6160,
                          ** BLKSIZE FOR FIXED BLOCK FILE
//* THESE JCL WILL CREATE THE PDS FILES REQUIRED FOR
//*
     THE INSTALLATION OF BEA TMA TCP FOR CICS
PDSCNTL='CONTROL', ** 'YOURHLQ'.BEATCPC.CONTROL
      PDSINCL='INCLUDE',
                          ** 'YOURHLQ'.BEATCPC.INCLUDE
//
```

```
PDSJCL='JCL',
//
                                ** 'YOURHLQ'.BEATCPC.JCL
                               ** 'YOURHLQ'.BEATCPC.OBJECT
** 'YOURHLQ'.BEATCPC.PLKED
        PDSOBJS='OBJECT',
//
//
        PDSLKED='PLKED',
        PDSSRCE='SOURCE'
//
                                ** 'YOURHLO'.BEATCPC.SOURCE
        PDSLKED='PLKED',
                                 ** 'YOURHLQ'.BEATCPC.PLKED
//
                           ** 'YOURHLQ'.BEATCPC.SOURCE
//
        PDSSRCE='SOURCE'
//*-----
//* WE RECOMMEND THAT YOU KEEP THE NODE 'BEATCPC' IN THE data set NAMES
//*-----
//EXEC PGM=IEFBR14
//PDSCNTL DD DSNAME=&HLQ..BEATCPC.&PDSCNTL., DISP=(NEW, CATLG, DELETE),
//
            DCB=(DSORG=PO, RECFM=FB, LRECL=80, BLKSIZE=&BLKFB),
//
            UNIT=&DASD, VOL=SER=&VOLUME, SPACE=(CYL, (1,1,5))
//*
//PDSJCL DD DSNAME=&HLQ..BEATCPC.&PDSJCL.,DISP=(NEW,CATLG,DELETE),
//
           DCB=(DSORG=PO, RECFM=FB, LRECL=80, BLKSIZE=&BLKFB),
//
            UNIT=&DASD, VOL=SER=&VOLUME, SPACE=(CYL, (1,1,5))
//*
//PDSINCL DD DSNAME=&HLQ..BEATCPC.&PDSINCL., DISP=(NEW, CATLG, DELETE),
           DCB=(DSORG=PO, RECFM=FB, LRECL=80, BLKSIZE=&BLKFB),
//
            UNIT=&DASD, VOL=SER=&VOLUME, SPACE=(CYL, (1,1,5))
//*
//PDSOBJS DD DSNAME=&HLQ..BEATCPC.&PDSOBJS.,DISP=(NEW,CATLG,DELETE),
            DCB=(DSORG=PO, RECFM=FB, LRECL=80, BLKSIZE=3200),
//
//
            UNIT=&DASD, VOL=SER=&VOLUME, SPACE=(CYL, (3,1,5))
//PDSLKED DD DSNAME=&HLQ..BEATCPC.&PDSLKED.,DISP=(NEW,CATLG,DELETE),
// DCB=(DSORG=PO,RECFM=FB,LRECL=80,BLKSIZE=&BLKFB),
            UNIT=&DASD, VOL=SER=&VOLUME, SPACE=(CYL, (3,1,5))
//
//*
//PDSSRCE DD DSNAME=&HLQ..BEATCPC.&PDSSRCE.,DISP=(NEW,CATLG,DELETE),
           DCB=(DSORG=PO, RECFM=FB, LRECL=80, BLKSIZE=&BLKFB),
//
            UNIT=&DASD, VOL=SER=&VOLUME, SPACE=(CYL, (1,1,5))
//*
//
//* CUSTOMIZE THE PARAMETER ACCORDING TO YOUR INSTALLATION
//*-----
//
         EXEC PROC=INSTALL,
//
            DASD=3390, ** YOUR DEVICE TYPE
//
            VOLUME=MVS201, ** YOUR VOLUME SERIAL NUMBER
//
           HLQ='PRODUCTS.BEA.TMA', ** YOUR HIGH LEVEL QUALIFIER
//
            PDSCNTL='CONTROL', ** BEATCPC CONTROL
//
            PDSINCL='INCLUDE', ** BEATCPC INCLUDE
//
           PDSJCL='JCL', ** BEATCPC JCL
//
            PDSOBJS='OBJECT', ** BEATCPC OBJECT
            PDSLKED='PLKED', ** BEATCPC PLKED
//
//
           PDSSRCE='SOURCE'** BEATCPC SOURCE
```

# Task 4: Upload the Distribution Files

Upload all the files on the distribution medium to the partitioned data sets allocated by the job INSTALL in the "Task 3: Create the PDS Libraries" section.

The TMA TCP for CICS distribution files are grouped under one of the following directory structures:

• To FTP the distribution files from UNIX to the mainframe, the files are in:

/cdrom/unixmf/cics

/cdrom is the directory where the drive is mounted.

• To FTP files from Windows to the mainframe, the files are in:

D:\ntmf\cics

D: is the CD-ROM drive.

The previous directory structures include the following partitioned data sets.

Table 4-1 Partitioned Data Sets

| From      | То  |
|-----------|---|
| ./control | Your PDS for CONTROL (YOURHLQ.BEATCPC.CONTROL) (ASCII mode) |
| ./jcl     | Your PDS for JCL (YOURHLQ.BEATCPC.JCL) (ASCII mode)         |
| ./source  | Your PDS for SOURCE (YOURHLQ.BEATCPC.SOURCE) (ASCII mode)   |
| ./include | Your PDS for INCLUDE (YOURHLQ.BEATCPC.INCLUDE) (ASCII mode) |
| ./object  | Your PDS for OBJECT (YOURHLQ.BEATCPC.OBJECT) (Binary mode)  |
| ./plked   | Your PDS for PLKED (YOURHLQ.BEATCPC.PLKED) (Binary mode)    |

#### Listing 4-4 Uploading Distribution Files Using FTP

```
% ftp zos-machine
Connected to zos-machine.
Name (beavs:tso-id):
331 Send password please.
Password: tso-password
230 tso-id is logged on.
Remote system type is z/OS.
ftp> prompt off
Interactive mode off
ftp> quot site rec=fb
200 SITE command was accepted
ftp> quot site lr=80
200 SITE command was accepted
```

Upload the CONTROL files.

Note: You must set ASCII mode on.

#### Listing 4-5 Upload control Files

```
ftp> lcd /cdrom/unixmf/cics/control
Local directory now /cdrom/unixmf/cics/control
ftp> cd 'YOURHLQ.BEATCPC.CONTROL'
250 "'YOURHLQ.BEATCPC.CONTROL'" partitioned data set is working directory
ftp>ascii
200 Representation type is Ascii
ftp> mput *
local: CSDU remote: CSDU
200 Port request OK.
125 Storing data set "YOURHLQ".BEATCPC.CONTROL(CSDU)
250 Transfer completed successfully.
5740 bytes sent in 0.01 seconds (747.10 Kbytes/s)
.
```

Upload the JCL files.

Note: You must set ASCII mode on.

#### Listing 4-6 Uploading JCL Files

```
ftp> lcd /cdrom/unixmf/cics/jcl
Local directory now /cdrom/unixmf/cics/jcl
ftp> cd 'YOURHLQ.BEATCPC.JCL'
250 "'YOURHLQ.BEATCPC.JCL'" partitioned data set is working directory.
ftp>ascii
200 Representation type is Ascii
ftp> mput *
local: BLDVSAM remote: BLDVSAM
200 Port request OK.
125 Storing data set "YOURHLQ".BEATCPC.JCL(BLDVSAM)
250 Transfer completed successfully.
2214 bytes sent in 0.00 seconds (563.49 Kbytes/s)
.
```

Upload the SOURCE files.

**Note:** You must set ASCII mode on.

#### Listing 4-7 Uploading SOURCE Files

```
ftp> lcd /cdrom/unixmf/cics/source
Local directory now /cdrom/unixmf/cics/source
ftp> cd 'YOURHLQ.BEATCPC.SOURCE'
```

```
250 "'YOURHLQ.BEATCPC.SOURCE'" partitioned data set is working directory.
ftp>ascii
200 Representation type is Ascii
ftp> mput *
local: BEACCLN1 remote: BEACCLN1
200 Port request OK.
125 Storing data set YOURLHQ.BEATCPC.SOURCE(BEACCLN1)
250 Transfer completed successfully.
10578 bytes sent in 0.01 seconds (1013.85 Kbytes/s)
.
.
```

Upload the INCLUDE files.

Note: You must set ASCII mode on.

#### Listing 4-8 Uploading INCLUDE Files

```
ftp> ascii
ftp> lcd /cdrom/unixmf/cics/include
ftp> cd '"YOURHLQ".BEATCPC.INCLUDE'
250 "'YOURHLQ.BEATCPC.INLUDE'" partitioned data set is working directory
ftp>ascii
200 Representation type is Ascii
ftp> mput *
200 Port request OK.
125 Storing data set "YOURHLQ".BEATCPC.INCLUDE'(CLIENT)
250 Transfer completed successfully.
local: CLIENT remote: CLIENT
3736 bytes sent in 0.0081 seconds (4.5e+02 Kbytes/s)
.
```

Upload the OBJECT files.

**Note:** You must set binary mode on.

#### Listing 4-9 Uploading OBJECT Files

Upload the PLKED files.

**Note:** You must set binary mode on.

#### Listing 4-10 Uploading PLKED Files

```
ftp> binary
200 Representation type is Image
ftp> lcd /cdrom/unixmf/plked
```

```
ftp> cd '"YOURHLQ".BEATCPC.PLKED'
250 "'"YOURHLQ.BEATCPC.PLKED'" partitioned data set is working directory
ftp>binary
200 Representation type is Image
ftp> mput *
200 Port request OK.
125 Storing data set "YOURHLQ.BEATCPC.PLKED(BEACICOO)
250 Transfer completed successfully.
local: BEACICOO remote: BEACICOO
64560 bytes sent in 0.7 seconds (90 Kbytes/s)
.
.
```

Verify that the distribution libraries were uploaded. For the listing of files that should be on your system, refer to the "List of Distribution Files and Members" section.

# Task 5: Define the CICS VSAM Files

Define the CICS VSAM files (Connections, Requesters, Service Names, User Connection, Inbound Service).

1. Modify DELETE/DEFINE control cards VCON, VREQ, VSVC, VUSR, and VISN in the PDS "YOURHLQ". BEATCPC. CONTROL. Listing 4-11 is an example of a modified DELETE/DEFINE.

Listing 4-11 Sample DELETE/DEFINE Control Card

```
DELETE YOURHLQ.BEATCPC.BEAVSVC -
CLUSTER PURGE -
DEFINE CLUSTER ( -
NAME (YOURHLQ.BEATCPC.BEAVSVC) -
SHAREOPTIONS (2 3) -
KEYS (16 0) -
CISZ (1024) -
TRACKS (5 1) -
```

```
VOLUMES (CICS01))

DATA (

RECORDSIZE (56, 56)

NAME (YOURHLQ.BEATCPC.BEAVSVC.DATA))

INDEX (

NAME (YOURHLQ.BEATCPC.BEAVSVC.INDEX))
```

Change all instances of YOURHLQ. BEATCPC. BEAVSVC to a physical data set name that meets your standards. Change the TRACKS and VOLUMES parameters to appropriate values for your installation. The provided value for the TRACKS parameter works for most installations, but this value can be increased if necessary.

- 2. For the BLDVSAM JCL, complete the following steps.
  - a. Modify the JOBCARD to your standards.
  - b. Modify Yourhlq. Beatcpc.xxxx, where xxxx is beavcon, beavreq, beavsvc, beavur, and beavisn.
  - c. Submit BLDVSAM.
- 3. Verify the results. There should be three data sets in YOURHLQ. BEATCPC corresponding to each of the five VSAM files. The three data sets are as follows:
  - One data set has no extension
  - One data set has DATA as the extension
  - One data set has INDEX as the extension

**Note:** A condition code of 8 is acceptable on DELETE steps. If you receive condition codes other than zero for DEFINE steps, you should evaluate this for potential problems.

# Task 6: Verify Contents of PROCS

Before you go on to the next step, we recommend that you check the following items in PROCS CMPBC, CMPLMAP, CMPLKED, and LNKIBM in the PDS YOURHLQ. BEATCPC.JCL.

You may need to modify them to meet your standards. You will need to review the following:

• All references to CICS and TCP/IP data set names.

- The data set names associated with the STEPLIB, SYSMSGS, SYSXMSCS, SYSPATH, and SYSLIB DD names.
- Unit = references.

# Task 7: Change Resource Names (Optional)

The default names for Oracle TMA TCP for CICS Mapsets, Programs, Transids, and VSAM data sets are listed in Appendix A, "Changing Resource Names." If you want to use a different naming convention, use the procedure for changing names included after each table.

**Note:** You must have the C 370 compiler to customize resource names.

## Task 8: Define the CICS Table Entries

- 1. Verify the CICS table entry definitions (PCTs, PPTs, FCTs) in CSDU (from the PDS "YOURHLQ".BEATCPC.CONTROL).
- 2. Modify the group and list name in CSDU (from the PDS "YOURHLQ".BEATCPC.CONTROL).
- 3. In the JCL in CSDUPD (from the PDS "YOURHLQ".BEATCPC.JCL), complete the following steps.
  - a. Modify the JOBCARD to your standards.
  - b. Modify the STEPLIB and DFHCSD data set names.
  - c. Modify the SYSIN DSN=YOURHLQ.BEATPC.CONTROL.
  - d. Submit CSDUPD.
  - e. Verify the results.

**Note:** A "COND CODE 0004" may result due to the DELETE commands for non-existent CSD objects.

## Task 9: Build TMA TCP for CICS Executables

To build the executables for Oracle TMA TCP for CICS, you need to complete the following tasks.

1. If there is not a PDS allocated where the executables for your CICS region reside, allocate such a PDS before running any JCL that builds executables.

- 2. Link the CICS Admin maps (MainMenu, Connection, Requester, Outbound Service Name, Inbound Service Name, User Connection Account, Handler Configuration). In the JCL in MAKLMAP (from the PDS "YOURHLQ".BEATCPC.JCL"), complete the following steps.
  - a. Modify the JOBCARD to your standards.
  - b. Modify the PROCS JCLLIB card with the correct HLQ.
  - c. Modify the variables YOURHLQ, PDSOBJS and LNKLIB for your PDS.

**Note:** LNKLIB is where your CICS region executable binary files reside.

- d. Modify the variable PROG, if you renamed mapsets.
- e. Submit MAKLMAP.
- f. Verify the results.
- 3. Complete one of the following procedures depending on your compiler:
  - Pre-Link/Link TMA TCP for CICS
  - Linking without the C 370 Compiler

#### Pre-Link/Link TMA TCP for CICS

The following sections explain the procedures for linking programs and mapsets prior to running the Oracle TMA TCP for CICS product.

**Note:** The following sections apply for a C 370 compiler.

### **Linking the CICS Admin Programs**

Pre-Link/Link the CICS Admin Programs (MainMenu, Connection, Requester, Outbound Service Name, Inbound Service Name, User Connection Account, Handler Configuration). In the JCL in MAKL1 (from the PDS "YOURHLQ".BEATCPC.JCL"), complete the following steps.

- 1. Modify the JOBCARD to your standards.
- 2. Modify the PROCS JCLLIB card with the correct HLQ.
- 3. Modify the variables YOURHLO, PDSOBJS, TCPLIB and LNKLIB for your PDS.

**Note:** LNKLIB is where your CICS region executable binary files reside.

- 4. Modify the LKED. SYSIN program names, if you renamed programs.
- 5. Submit MAKL1.

6. Verify the results.

**Note:** A "COND CODE = 004" is normal.

#### **Linking the CICS Utility Programs**

Pre-Link/Link the CICS utility Programs (Pre-Requester, Application Handler, Shutdown, and Configuration Converter). In the JCL in MAKLO (from the PDS "YOURHLQ".BEATCPC.JCL"), complete the following steps.

- 1. Modify the JOBCARD to your standards.
- 2. Modify the PROCS JCLLIB card with the correct HLQ.
- 3. Modify the variables YOURHLQ, PDSOBJS, TCPLIB and LNKLIB for your PDS.

**Note:** LNKLIB is where your CICS region executable binary files reside.

- 4. Modify the LKED. SYSIN program names, if you renamed programs.
- Submit MAKLO.
- 6. Verify the results.

**Note:** A "COND CODE = 004" is normal.

### **Linking the CICS TCP Programs**

Pre-Link/Link the CICS TCP Programs (Requester and Handler). In the JCL in MAKL3 (from the PDS "YOURHLQ".BEATCPC.JCL"), complete the following steps.

- 1. Modify the JOBCARD to your standards.
- 2. Modify the variables Yourhlo, PDSOBJS, TCPLIB and LNKLIB for your PDS.

**Note:** LNKLIB is where your CICS region executable binary file resides.

- 3. Modify the INCLUDE OBJECT program name, if you renamed programs.
- 4. Modify the LKED. SYSIN program names, if you renamed programs.
- 5. Submit MAKL3.
- 6. Verify the results.

Note: A "COND CODE = 004" is normal.

## Linking without the C 370 Compiler

If you do NOT have the C 370 compiler, use the following procedure to Linkedit the PreLinked objects. Link the Prelinked objects of the following programs.

- CICS TCP Programs (Requester and Handler).
- CICS Utility Programs (Pre-Requester, Application Handler, Shutdown, and Configuration Converter).
- CICS Admin Programs (MainMenu, Connection, Requester, Service Name).

In the JCL in MAKLKED (from the PDS "YOURHLQ. BEATCPC.JCL"), complete the following steps.

- 1. Modify the JOBCARD to your standards.
- 2. Modify the variables YOURHLQ, TCPLIB and LNKLIB for your PDS.

Note: LNKLIB is where your CICS region executable binary file resides.

- 3. Submit MAKLKED.
- 4. Verify the results.

# Task 10: Verify the CICS Setup

Log on to your CICS region to install and verify the components you set up for Oracle TMA TCP for CICS.

| • | CEDA INSTALL GROUP()                    |
|---|---|
|   | This is the group name you used in CSDU |
| • | CEMT INQUIRE PROG()                     |
|   | Verify the mapsets and programs         |
| • | CEMT INQUIRE TRAN ()                    |
|   | Verify the transids                     |
| • | CEMT INQUIRE FILE()                     |
|   | Verify the VSAM files                   |

## Task 11: Assemble and Link the CICS DCT

**Note:** Recent releases of CICS allow this task to be with CSD instead of this method.

1. Add the following entries to the CICS DCT.

| Entry                     |
|---------------------------|
| BEALOG DFHDCT TYPE=SDSCI, |
| DSCNAME=BEALOG,           |
| BLKSIZE=136,              |
| RECSIZE=132,              |
| RECFORM=VARUNB,           |
| TYPEFLE=OUTPUT,           |
| BUFNO=1                   |
| BEAL DFHDCT TYPE=EXTRA,   |
| DESTID=BEAL,              |
| DSCNAME=BEALOG            |

2. Assemble and link the DCT.

# Task 12: Modify the CICS Startup JCL

- Add the Oracle Tuxedo Mainframe Adapter load library (LNKLIB) to the DFHRPL concatenation.
- 2. Add the following DD statement to CICS file concatenation.

```
//BEALOG DD SYSOUT=*, DCB=(DSORG=PS, RECFM=V, BLKSIZE=136)
```

3. Add DD statement to make the connection between the logical names of the VSAM files and the DSN.

**Note:** If DSN statements have already been added to the CSDU, this step is not necessary.

4. Make sure the CICS TCPIP library in DFHRPL concatenations of CICS startup procedure and CICS TCPIP resources had been defined. For defining CICS TCPIP resources, refer to the IBM z/OS Communications Server: IP CICS Sockets Guide.

The following is an example of a CICS startup JCL.

#### Listing 4-12 Sample CICS Startup JCL with TMA TCP additions

```
//CICSREG JOB
//CICSCNTL EXEC PGM=IDCAMS, REGION=1M
//SYSPRINT DD SYSOUT=*
//SYSIN DD DISP=SHR, DSN=CICSTS31.SYSIN(DFHRCYES)
//DTCNTL EXEC PGM=IDCAMS, REGION=1M
//SYSPRINT DD SYSOUT=*
//SYSIN DD DISP=SHR, DSN=CICSTS31.SYSIN(DFHRCNO)
//*
//CICS EXEC PGM=DFHSIP, REGION=32M, TIME=1439, COND=(1,NE,CICSCNTL),
// =START=COLD, SYSIN, SEC=NO, GRPLIST=ETPLIST
//STEPLIB DD DISP=SHR, DSN=CICSTS31.SVTSC.SDFHAUTH
// DD DISP=SHR, DSN=CICSTS31.SDFHAUTH
// DD DISP=SHR, DSN=MASTCAT.MOM112.SCSOAUTH
// DD DISP=SHR, DSN=COB2140.COB2CICS.MODLIB
// DD DISP=SHR, DSN=C370.SEDCLINK
// DD DISP=SHR, DSN=ADLE370.V1R3M0.SCEECICS
// DD DISP=SHR, DSN=ADLE370.V1R3M0.SCEERUN
//DFHRPL DD DISP=SHR, DSN=CICSTS31.SVTSC.SDFHLOAD
// DD DISP=SHR, DSN=CICSTS31.SDFHLOAD
// DD DISP=SHR, DSN=BEA.BEA100.BEALOAD
// DD DISP=SHR, DSN=TCPIP.V3R1.SEZALINK
// DD DISP=SHR, DSN=TCPIP. V3R1. SEZATCP
// DD DISP=SHR, DSN=MQM112.SCSQCICS
// DD DISP=SHR, DSN=MOM112.SCSOLOAD
// DD DISP=SHR, DSN=COB2140.COB2CICS
// DD DISP=SHR, DSN=MASTCAT.COB2140.COB2LIB
// DD DISP=SHR, DSN=MASTCAT.PLI230.PLILINK
// DD DISP=SHR, DSN=C370.SEDCLINK
// DD DISP=SHR, DSN=ERW121.SERWLOAD
// DD DISP=SHR, DSN=ADLE370.V1R3M0.SCEECICS
// DD DISP=SHR, DSN=ADLE370.V1R3M0.SCEERUN
//SYSIN DD DISP=SHR, DSN=CICSTS31.CICS.SYSIN(TCICS)
//DFHCSD DD DISP=SHR, DSN=CICSTS31.DFHCSD
//DFHCMACD DD DISP=SHR, DSN=CICSTS31.DFHCMACD
//DFHJ01A DD DISP=SHR, DSN=CICSTS31.CICS.DFHJ01A
//DFHJ01B DD DISP=SHR, DSN=CICSTS31.CICS.DFHJ01B
//DFHJ01X DD DISP=SHR, DSN=CICSTS31.CICS.DFHJ01X
//DFHAUXT DD DISP=SHR, DSN=CICSTS31.CICS.DFHAUXT,
//DFHBUXT DD DISP=SHR, DSN=CICSTS31.CICS.DFHBUXT,
//DFHDMPA DD DISP=SHR, DSN=CICSTS31.CICS.DFHDMPA
//DFHDMPB DD DISP=SHR, DSN=CICSTS31.CICS.DFHDMPB
//DFHRSD DD DISP=SHR, DSN=CICSTS31.CICS.DFHRSD
//DFHGCD DD DISP=SHR, DSN=CICSTS31.CICS.DFHGCD
//DFHLCD DD DISP=SHR, DSN=CICSTS31.CICS.DFHLCD
//DFHXRMSG DD DISP=SHR, DSN=CICSTS31.CNTL.CICS.DFHXRMSG
//DFHXRCTL DD DISP=SHR, DSN=CICSTS31.CNTL.CICS.DFHXRCTL
```

```
//DFHTEMP DD DISP=SHR, DSN=CICSTS31.CNTL.CICS.DFHTEMP
//DFHINTRA DD DISP=SHR, DSN=CICSTS31.CNTL.CICS.DFHINTRA
//DFHJACD DD DISP=SHR, DSN=CICSTS31.CICS.DFHJACD
//DFHJPDS DD DISP=SHR, DSN=CICSTS31.DFHJPDS
//DFHJOUT DD SYSOUT=(A, INTRDR)
//DFHCXRF DD SYSOUT=X
//MOMMSG DD SYSOUT=*
//LOGUSR DD SYSOUT=*, DCB=(DSORG=PS, RECFM=V, BLKSIZE=136)
//MSGUSR DD SYSOUT=*, DCB=(DSORG=PS,RECFM=V, BLKSIZE=136)
//TCPDATA DD SYSOUT=*, DCB=(DSORG=PS,RECFM=V, BLKSIZE=136)
//BEALOG DD SYSOUT=*, DCB=(DSORG=PS, RECFM=V, BLKSIZE=136) ** BEA Connect
//COUT DD SYSOUT=*, DCB=(DSORG=PS,RECFM=V, BLKSIZE=137)
//PLIMSG DD SYSOUT=*, DCB=(DSORG=PS,RECFM=V, BLKSIZE=137)
//COUT DD SYSOUT=*, DCB=(DSORG=PS,RECFM=V, BLKSIZE=137)
//SYSABEND DD SYSOUT=*
//TRACEOUT DD SYSOUT=*
//PRINTER DD SYSOUT=*, DCB=BLKSIZE=121
//*
//PRTDMPA EXEC PGM=DFHDUP, PARM=SINGLE, REGION=0M, COND=(1,NE,DTCNTL)
//STEPLIB DD DSN=CICSTS31.SDFHLOAD, DISP=SHR
//SYSIN DD DUMMY
//DFHDMPDS DD DISP=SHR, DSN=CICSTS31.CICS.DFHDMPA
//DFHTINDX DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//DFHPRINT DD SYSOUT=*
//PRTDMPB EXEC PGM=DFHDUP, PARM=SINGLE, REGION=0M, COND=(1,NE,DTCNTL)
//STEPLIB DD DSN=CICSTS31.SDFHLOAD, DISP=SHR
//SYSIN DD DUMMY
//DFHDMPDS DD DISP=SHR, DSN=CICSTS31.CICS.DFHDMPB
//DFHTINDX DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//DFHPRINT DD SYSOUT=*
//* PRTAUXT EXEC PGM=DFHTUP, REGION=0M, COND=(1,NE,DTCNTL)
//* STEPLIB DD DSN=CICSTS31.SDFHLOAD, DISP=SHR
//* DFHAUXT DD DISP=OLD, DSN=CICSTS31.CICS.DFHAUXT
//* DFHAXPRT DD SYSOUT=*
//* DFHAXPRM DD DUMMY
//PRTBUXT EXEC PGM=DFHTUP, REGION=0M, COND=(1,NE,DTCNTL)
//STEPLIB DD DSN=CICSTS31.SDFHLOAD, DISP=SHR
//DFHAUXT DD DISP=SHR, DSN=CICSTS31.CICS.DFHBUXT
//DFHAXPRT DD SYSOUT=*
//DFHAXPRM DD DUMMY
```

# **List of Distribution Files and Members**

The following tables list and describe the members that make up each distribution partitioned data set.

# **BEATCPC.DIST.CONTROL**

Verify that the following members are installed by Oracle TMA TCP for CICS.

| Member | Description                                    |
|--------|--|
| CSDU   | Del/Def Parameters for (PCTs, PPTs, FCTs)      |
| VCON   | Del/Def Parameters for (VSAM Connections)      |
| VISN   | Del/Def Parameters for (VSAM Inbound Services) |
| VREQ   | Del/Def Parameters for (VSAM Requesters)       |
| VSVC   | Del/Def Parameters for (VSAM Service Names)    |
| VUSR   | Del/Def Parameters for (VSAM User Connections) |

## BEATCPC.DIST.JCL

Verify that the following members are installed by Oracle TMA TCP for CICS.

| Member  | Description   |
|---------|---|
| BLDVSAM | Jcl to Del/Def VSAM files (BEAVCON, BEAVREQ, BEAVSVC, BEAVUSR, BEAVISN) |
| CMPBC   | Proc to Compile/link C program (Configuration)                          |
| CMPLKED | Proc to Link the PreLinked PLKED  |
| CMPLMAP | Proc to Link CICS Mapsets(TCP Admin)                                    |
| CSDUPD  | Jcl to Del/Def CICS (PCTs, PPTs, FCTs)                                  |
| LNKIBM  | Proc to PreLink/Link Pgm objects  |

| Member  | Description   |
|---------|---|
| MAKBC   | Jcl to Compile/link C program (Configuration)           |
| MAKL0   | Jcl to PreLink/Link Pgm objects(PreRequester, Shutdown) |
| MAKL1   | Jcl to PreLink/Link Pgm objects(TCP Admin)              |
| MAKL3   | Jcl to PreLink/Link Pgm objects(Requester, Handler)     |
| MAKLKED | Jcl to Link the PreLinked PLKED                         |
| MAKLMAP | Jcl to Link CICS Mapsets(TCP Admin)                     |

## **BEATCPC.DIST.SOURCE**

Verify that the following members are installed by Oracle TMA TCP for CICS.

| Member   | Description  |  |
|----------|--|--|
| BEACCLN1 | Program Sample Test Client                               |  |
| BEACSVR1 | Program Sample Test Server                               |  |
| BEACFGSV | Program Name Configuration (Files, Maps, Programs, Trns) |  |

#### BEATCPC.DIST.INCLUDE

Verify that the following members are installed by Oracle TMA TCP for CICS.

| Member   | Description  |
|----------|--|
| BEACFGSV | Include for the name configuration (Files, Maps, Programs, Trns) |
| CLIENT   | Copybook for COBOL CICS Client Request/Response Header           |
| CLIENTH  | Include for C CICS Client Request/Response Header                |

| Member  | Description                                     |  |
|---------|---|--|
| TWACOPY | Copybook for COBOL CICS Server TWA Message size |  |
| TWAINCL | Include for C CICS Server TWA Message size      |  |

## **BEATCPC.DIST.PLKED**

Verify that the following members are installed by Oracle TMA TCP for CICS.

| Member   | Description  |  |
|----------|--|--|
| BEAAPPLC | Prelinked object of Application Handler            |  |
| BEACIC00 | Prelinked object of Handler                        |  |
| BEAPCON  | Prelinked object of Admin Connections              |  |
| BEAPISN  | Prelinked object of Admin(Inbound Service Names)   |  |
| BEAPMNU  | Prelinked object of Admin(Main Menu)               |  |
| BEAPREQ  | Prelinked object of Admin(Requesters)              |  |
| BEAPRERQ | Prelinked object of Pre-Requester                  |  |
| BEAPSVC  | Prelinked object of Admin(Outbound Service Names)  |  |
| BEAPUSR  | Prelinked object of Admin(User Connection Account) |  |
| BEAREQST | Prelinked object of Requester                      |  |
| BEASHUT  | Prelinked object of Shutdown                       |  |
| CNVTISNC | Prelinked object of Configuration Converter        |  |

#### **BEATCPC.DIST.OBJECT**

Verify that the following members are installed by Oracle TMA TCP for CICS:

- BEAAPPLC
- BEACFGSV

- BEACIC00
- BEAERRNO
- BEAEVT2
- BEALOGC
- BEAMCON
- BEAMMNU
- BEAMREQ
- BEAMSUB
- BEAMSVC
- BEAMUSR
- BEAMISN
- BEAPCON
- BEAPMNU
- BEAPREQ
- BEAPRERQ
- BEAPSVC
- BEAPUSR
- BEAPISN
- BEAREQST
- BEARQSUB
- BEASHUT
- EBCASC
- BEASUBS
- BEAGHBN
- BEASKIBM

- BEASKVAR
- CNVTISNC

# Post Installation Tasks for Oracle Tuxedo Mainframe Adapter for TCP

This section includes the following topics:

- Uninstalling Oracle Tuxedo Mainframe Adapter for TCP
- Distribution Libraries and Executables

# Uninstalling Oracle Tuxedo Mainframe Adapter for TCP Uninstalling Oracle Tuxedo Mainframe Adapter for TCP in GUI-Mode

The following steps show uninstallation process in GUI mode.

1. Invoke uninstall TMA introduction panel

Go to  $\colongledge$  Go to  $\colongledge$  Go to  $\colongledge$  Could be described an inframe Adapter for TCP 12c Release 2 (12.2.2) 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 TCP; 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 uninstall successfully.

# Uninstalling Oracle Tuxedo Mainframe Adapter for TCP in Silent Mode

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

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

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

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

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

```
./runInstaller.sh -deinstall -silent
"DEINSTALL_LIST={"tmabase_tcp","12.2.2.0.0"}" ORACLE_HOME_NAME="OUIHome2"
-responseFile <response>
```

**Note:** When uninstalling in silent mode, you need both <code>DEINSTALL\_LIST</code> and response file.

## **Distribution Libraries and Executables**

The Oracle Tuxedo Mainframe Adapter for TCP software contains the following libraries and executable programs. After installing the Tuxedo software, verify that these libraries and programs are installed on your system.

#### **Solaris**

Verify that the following files are installed by TMA TCP Gateway.

| Directory          | Files   |
|--------------------|---|
| /bin               | GWIDOMAIN   |
| /lib               | ConvMVS.so.60 ConvMVSC.so.60 libctxcp_10.so WrapTPS.so.60 WrapTPSD.so.60  |
| /locale/C          | LIBGWI_CAT<br>LIBGWI.text   |
| /udataobj/codepage | 00819x00037<br>00819x00278<br>00819x00284<br>00819x00285<br>00819x00297<br>00819x00500<br>00819x00860<br>00819x01047<br>00912x00870<br>none<br>tuxedo |

#### **AIX**

Verify that the following files are installed by TMA TCP Gateway.

| Directory          | Files   |
|--------------------|---|
| /bin               | GWIDOMAIN   |
| /lib               | ConvMVS.so.60 ConvMVSC.so.60 libctxcp_10.so WrapTPS.so.60 WrapTPSD.so.60  |
| /locale/C          | LIBGWI_CAT<br>LIBGWI.text   |
| /udataobj/codepage | 00819x00037<br>00819x00278<br>00819x00284<br>00819x00285<br>00819x00297<br>00819x00500<br>00819x00860<br>00819x01047<br>00912x00870<br>none<br>tuxedo |

## Linux

Verify that the following files are installed by TMA TCP Gateway.

| Directory | Files  |
|-----------|--|
| /bin      | GWIDOMAIN  |
| /lib      | ConvMVS.so.60 ConvMVSC.so.60 libctxcp_10.so WrapTPS.so.60 WrapTPSD.so.60 |

| Directory          | Files  |
|--------------------|--|
| /locale/C          | LIBGWI_CAT<br>LIBGWI.text  |
| /udataobj/codepage | 00819x00037<br>00819x00273<br>00819x00278<br>00819x00284<br>00819x00285<br>00819x00297<br>00819x00500<br>00819x00860<br>00819x01047<br>00912x00870<br>none<br>tuxedo |

# Changing Resource Names

The default names for Oracle TMA TCP for CICS Mapsets, Programs, Transids, and VSAMs are listed in the following sections. If you want to use a different naming convention, use the procedure for changing names included after each table.

**Note:** You must have the C 370 compiler to customize resource names.

## **Contents of SOURCE(BEACFGSV)**

The names in the following table are located in PDS "YOURHLQ".BEATCPC.SOURCE(BEACFGSV)

| Name    | Туре    | Description               |
|---------|---------|---------------------------|
| BEAM    | Transid | Main Menu                 |
| BEAPMNU | Program | Main Menu                 |
| BEAMMNU | Mapset  | Main Menu                 |
| BEAC    | Transid | Connection Administration |
| BEAPCON | Program | Connection Administration |
| BEAMCON | Mapset  | Connection Administration |
| BEAR    | Transid | Requester Administration  |
| BEAPREQ | Program | Requester Administration  |

| Name     | Туре    | Description                    |
|----------|---------|--------------------------------|
| BEAMREQ  | Mapset  | Requester Administration       |
| BEAS     | Transid | Service Name Administration    |
| BEAPSVC  | Program | Service Name Administration    |
| BEAMSVC  | Mapset  | Service Name Administration    |
| BEAU     | Transid | User Connection Administration |
| BEAPUSR  | Program | User Connection Administration |
| BEAMUSR  | Mapset  | User Connection Administration |
| BEAI     | Transid | Inbound Service Administration |
| BEAPISN  | Program | Inbound Service Administration |
| BEAMISN  | Mapset  | Inbound Service Administration |
| BEAVCON  | VSAM    | Connection Table               |
| BEAVREQ  | VSAM    | Requester Table                |
| BEAVSVC  | VSAM    | Service Name Table             |
| BEAVUSR  | VSAM    | User Connection Table          |
| BEAVISN  | VSAM    | Inbound Service Table          |
| BEAPRERQ | Program | Pre-requester                  |
| BREQ     | Transid | To start Requester             |
| BEAL     | TDQid   | Log Message TD Queue           |
| BEAA     | Transid | Application Handler Transid    |
| BEAHBDWN | TSQid   | Handler Shutdown TS Queue      |

# **Changing Resource Names for SOURCE(BEACFGSV)**

To change any of the default names shown in the previous table, complete the following steps.

1. Modify Program (BEACFGSV) located in PDS "YOURHLQ".BEATCPC.SOURCE

- 2. For the JCL (MAKBC) located in PDS "YOURHLQ" . BEATCPC . JCL, complete the following steps.
  - a. Modify the JOBCARD to your standards.
  - b. Modify "YOURHLQ.BEATCPC.SOURCE" and "YOURHLQ.BEATCPC.OBJECT".
  - c. Submit MAKBC.
- 3. Verify the results.

## **Contents of CONTROL(CSDU)**

The names in the following table are located in PDS "YOURHLQ" . BEATCPC . CONTROL (CSDU)

| Name     | Туре        | Description                     |
|----------|-------------|---------------------------------|
| BEAPCON  | Program     | Connection administration       |
| BEAPMNU  | Program     | Main menu                       |
| BEAPREQ  | Program     | Requester administration        |
| BEAPSVC  | Program     | Outbound service administration |
| BEAPUSR  | Program     | User connection administration  |
| BEAPISN  | Program     | Inbound service administration  |
| BEASHUT  | Program     | Shutdown                        |
| BEAPRERQ | Program     | Pre-Requester                   |
| BEAREQST | Program     | Requester                       |
| BEACIC00 | Program     | Handler                         |
| BEAAPPLC | Program     | Application Handler             |
| BEAC     | Transaction | Connection administration       |
| BEAM     | Transaction | Main menu                       |
| BEAR     | Transaction | Requester administration        |
| BEAS     | Transaction | Outbound service administration |

| Name    | Туре        | Description                     |
|---------|-------------|---------------------------------|
| BEAU    | Transaction | User connection administration  |
| BEAI    | Transaction | Inbound service administration  |
| BDWN    | Transaction | Shutdown                        |
| BREQ    | Transaction | Requester                       |
| ВЕАН    | Transaction | Handler                         |
| BEAA    | Transaction | Application Handler             |
| BEAMCON | Mapset      | Connection administration       |
| BEAMMNU | Mapset      | Main menu                       |
| BEAMREQ | Mapset      | Requester administration        |
| BEAMSVC | Mapset      | Outbound service administration |
| BEAMUSR | Mapset      | User connection administration  |
| BEAMISN | Mapset      | Inbound service administration  |
| BEAVCON | File        | Connection table                |
| BEAVREQ | File        | Requester table                 |
| BEAVSVC | File        | Outbound service table          |
| BEAVUSR | File        | User connection table           |
| BEAVISN | File        | Inbound service table           |

## **Changing Resource Names for CONTROL(CSDU)**

After changing resource names in BEACFGSV, you need to modify the file (CSDU) located in PDS "YOURHLQ".BEATCPC.CONTROL.

Changes to the CSDU member must correspond to changes in the  ${\tt BEACFGSV}$  member.

You can also change the names of the BDWN and BEAH transactions. If the name of the BEAH transaction changes, the CICSHAND parameter in the GWICONFIG file of the Oracle TMA TCP Gateway must also reflect the change.

# Oracle Tuxedo Mainframe Adapter for TCP Supported Platforms, Hardware Requirements, and Software Requirements

The following sections provide you with information about supported platforms, hardware requirements, and software requirements.

- Oracle Tuxedo Mainframe Adapter for TCP Supported Platforms
- Oracle Tuxedo Mainframe Adapter for TCP Hardware Requirements
- Oracle Tuxedo Mainframe Adapter for TCP Software Requirements

# Oracle Tuxedo Mainframe Adapter for TCP Supported Platforms

Oracle Tuxedo Mainframe Adapter for TCP 12c Release 2 (12.2.2) is supported for the following platforms.

**Note:** Oracle Tuxedo 12c Release 2 (12.2.2) Rolling Patch 003 is required for all the platforms in Table 1.

#### **Table 1 TMA for TCP Supported Platforms**

| Platform                            |  |
|-------------------------------------|--|
| HP-UX 11.31 (64-bit) on Itanium     |  |
| IBM AIX 7.1 (64-bit) on IBM PowerPC |  |

#### **Table 1 TMA for TCP Supported Platforms**

| Platform                            |
|-------------------------------------|
| Oracle Linux 6.4 (64-bit) on x86-64 |
| Oracle Solaris 11 (64-bit) SPARC    |

For more information, see Oracle Tuxedo Mainframe Adapter for TCP Certified Platform Tables.

# Oracle Tuxedo Mainframe Adapter for TCP Hardware Requirements

This section describes the minimum hardware requirements.

- An S/390 processor capable of supporting the required software products listed in the section "Oracle Tuxedo Mainframe Adapter for TCP Software Requirements".
- TCP/IP network connectivity

# Oracle Tuxedo Mainframe Adapter for TCP Software Requirements

This section describes the minimum software requirements for the Oracle TMA TCP 12cR2.

**Note:** Support of TMA on higher releases of z/OS and its subsystems depends on IBM's warranty for the specific upper release's backward compatibility to the release that TMA formally supports. If IBM warrants such backward compatibility to the formally supported release, then the new release can be considered supported.

For more information, see Oracle Tuxedo Mainframe Adapter for TCP Certified Platform Tables.

### Oracle Tuxedo Mainframe Adapter for TCP Supported Stacks

Oracle Tuxedo Mainframe Adapter for TCP is designed to work with IBM TCP for MVS stack product.

#### **Oracle TMA TCP for IMS**

The following software runs with Oracle TMA TCP for IMS:

- IBM IMS/TM 9, 10, 11, 12, 13
- IBM z/OS 1.11, 1.12, 1.13, 2.1

#### **Oracle TMA TCP for CICS**

The following software runs with Oracle TMA TCP for CICS:

- IBM CICS TS 3.2, 4.1, 4.2
- TCP/IP for MVS Version 3.2, 4.1, 4.2 with CICS Socket Interface
- C/370 Runtime Library Version 2.1 or higher
- IBM z/OS 1.11, 1.12, 1.13, 2.1