## Oracle® Tuxedo Mainframe Adapter for SNA

Installation Guide Release 10*g* R3

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Tuxedo Mainframe Adapter for SNA Installation Guide, Release 10g R3

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## Introduction

This document provides instructions for installing Oracle Tuxedo Mainframe Adapter for SNA software (hereafter referenced as TMA SNA.)

This document covers the following topics:

- What You Need to Know
- e-docs Web Site
- How to Print the Document
- Documentation Conventions

## What You Need to Know

This document is intended for system administrators and application programmers who will install and configure the Tuxedo Mainframe Adapter for SNA product.

### e-docs Web Site

Oracle product documentation is available on the Oracle corporate Web site. From the Oracle Home page, click on Documentation or go directly to the Product Documentation page at <a href="http://download.oracle.com/docs/cd/E12531\_01/index.htm">http://download.oracle.com/docs/cd/E12531\_01/index.htm</a>.

## **How to Print the Document**

You can print a copy of this document from a Web browser, one file at a time, by using the File—>Print option on your Web browser.

A PDF version of this document is available on the Tuxedo Mainframe Adapter for SNA documentation Home page on the e-docs Web site (and also on the documentation CD). You can open the PDF in Adobe Acrobat Reader and print the entire document (or a portion of it) in book format. To access the PDFs, open the Tuxedo Mainframe Adapter for SNA documentation Home page, click the PDF files button and select the document you want to print.

If you do not have the Adobe Acrobat Reader, you can get it free of charge from the Adobe Web site at http://www.adobe.com/.

#### **Related Information**

The following documents contain information that is relevant to using Tuxedo Mainframe Adapter for SNA:

- Oracle Tuxedo Mainframe Adapter for SNA Release Notes
- Oracle Tuxedo Mainframe Adapter for SNA Installation Guide
- Oracle Tuxedo Mainframe Adapter for SNA CRM Administration Guide
- Oracle Tuxedo Mainframe Adapter for SNA User Guide
- Oracle Tuxedo Mainframe Adapter for SNA Reference Guide

## **Contact Us**

Your feedback on the Tuxedo Mainframe Adapter for SNA documentation is important to us. Send us e-mail at docsupport@bea.com if you have questions or comments. Your comments will be reviewed directly by the Oracle professionals who create and update the Tuxedo Mainframe Adapter for SNA documentation.

In your e-mail message, please indicate that you are using the documentation for the Tuxedo Mainframe Adapter for SNA 10.0 release.

If you have any questions about this version of Tuxedo Mainframe Adapter for SNA, or if you have problems installing and running Tuxedo Mainframe Adapter for SNA, contact Oracle Customer Support through Oracle Web Support at www.bea.com. You can also contact Customer

Support by using the contact information provided on the Customer Support Card, which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number
- Your company name and company address
- Your machine type and authorization codes
- The name and version of the product you are using
- A description of the problem and the content of pertinent error messages

## **Documentation Conventions**

The following documentation conventions are used throughout this document.

Convention	Item
blue text	Indicates a hypertext link in PDF or HTML
italics	Indicates emphasis or book titles or variables.
"string with quotes"	Indicates a string entry that requires quote marks.
UPPERCASE TEXT	Indicates generic file names, device names, environment variables, and logical operators.  Examples:  LPT1  SIGNON  OR

Convention	Item
monospace text	Indicates code samples, commands and their options, data structures and their members, data types, directories, and file names and their extensions. Monospace text also indicates text that you must enter from the keyboard.
	Examples:
	<pre>#include <iostream.h> void main ( ) the pointer psz</iostream.h></pre>
	chmod u+w *
	\tux\data\ap
	.doc
	tux.doc
	BITMAP
	float
monospace	Identifies significant words in code.
boldface text	Example:
00110	<pre>void xa_commit ( )</pre>
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.
[ ]	Indicates optional items in a syntax line. The brackets themselves should never be typed.
	Example:
	<pre>buildclient [-v] [-o name ] [-f file-list] [-l file-list]</pre>
	Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.

Convention	Item	
	Indicates one of the following in a command line:	
	That an argument can be repeated several times in a command line	
	<ul> <li>That the statement omits additional optional arguments</li> </ul>	
	• That you can enter additional parameters, values, or other information	
	The ellipsis itself should never be typed.	
	Example:	
	<pre>buildclient [-v] [-o name ] [-f file-list] [-l file-list]</pre>	
	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.	

## CHAPTER

# Preparing to Install Tuxedo Mainframe Adapter for SNA

This section contains information to help you prepare to install Oracle Tuxedo Mainframe Adapter for SNA software. To ensure successful installation and operation of the TMA SNA software, complete the tasks described in this section.

This section contains the following topics:

- "Determining Your Configuration"
- "Determining Requirements for Other Components"
- "Installing the Prerequisite Software"

**Note:** All references to ATMI files, functions, and documentation apply to Tuxedo files, functions, and documentation.

## **Determining Your Configuration**

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

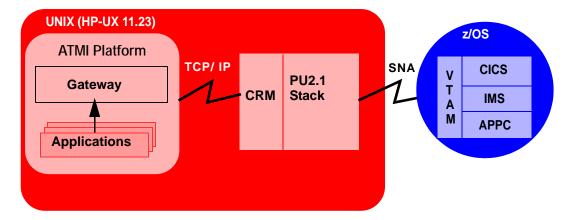
When the Tuxedo Mainframe Adapter for SNA Gateway and CRM are installed on the same machine with the CRM configured as a Tuxedo server, the installation is referred to as a local (combined) configuration. When these components are installed on different UNIX, Windows, or mainframe platforms, the installation is referred to as a distributed (or remote) configuration.

The diagrams in the following sections show examples of the TMA SNA components in three types of configurations.

## **Local Configuration**

Local configuration consists of the application, which is the Tuxedo Mainframe Adapter for SNA Gateway and the CRM with the necessary libraries needed to communicate with the stack on the same UNIX platform. In this case, the UNIX platform is HP-UX 11.23 because this is the only non-mainframe UNIX platform that the CRM supports. This configuration uses the IBM proprietary SNA protocol for transactions with the mainframe via the stack. This configuration requires a one-to-one relationship between the local Tuxedo Mainframe Adapter for SNA Gateway and the CRM.

Figure 2-1 Local Configuration



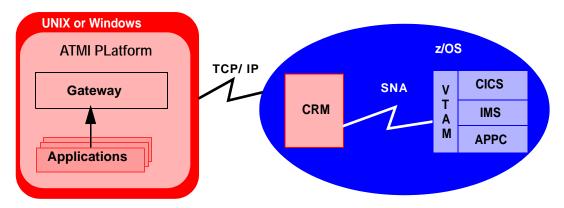
## **Distributed Configurations**

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

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

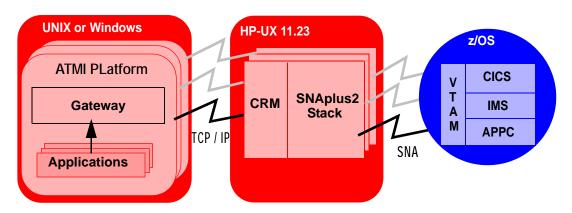
configuration requires a one-to-one relationship between the local Tuxedo Mainframe Adapter for SNA Gateway and the remote CRM.

Figure 2-2 Distributed Configuration



Another type of distributed configuration separates applications and the Tuxedo Mainframe Adapter for SNA Gateway from the CRM on different UNIX or Windows-based platforms. In this case, the platform for the CRM would be HP-UX 11.23 on Itanium because HP-UX 11.23 on Itanium is the only non-mainframe UNIX platform that the CRM supports. This configuration uses Transmission Control Protocol/Internet Protocol (TCP/IP) connectivity between the TMA SNA Gateway and the CRM, as well as the SNA connectivity to the mainframe environment(s). This configuration provides the flexibility to deploy the ATMI platform separately from the CRM in installations that require the ATMI platform on an operating system other than the one on which the SNA stack is running. This configuration also requires a one-to-one relationship between the local Tuxedo Mainframe Adapter for SNA Gateway and the remote CRM.

Figure 2-3 Alternate Distributed Configuration



## **Determining Requirements for Other Components**

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

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

## **Mainframe Requirements**

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

- Establishing the VTAM configuration
- Configuring the CICS TS Logical Unit (LU) by defining proper connections and sessions
- Completing cross-platform definitions for non-mainframe CRM

 Ensuring that APPC and transaction definitions exist for that environment, if using IMS or APPC/MVS

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

## **Non-Mainframe Requirements**

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

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

**Note:** The Tuxedo ATMI platform is not required if you are installing only the CRM on HP-UX 11.23.

## **Installing the Prerequisite Software**

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

- 1. If you are installing the CRM on HP-UX 11.23:
  - a. Install a supported SNA stack on the operating system where the CRM will be installed. Validate the stack software installation, running any sample applications provided by the vendor.
  - b. Configure the supported SNA stack.

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

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

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

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

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

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

- dmadmin
- dmloadcf
- dmunloadcf

Upon completion of these tasks, continue to Installing the Tuxedo Mainframe Adapter for SNA Software for instructions on installing the Tuxedo Mainframe Adapter for SNA software.

# Installing Tuxedo Mainframe Adapter for SNA Software in Silent Mode

This section provides information and step-by-step instructions for installing Oracle Tuxedo Mainframe Adapter for SNA software (hereafter referenced as TMA SNA) in silent mode.

- What Is Silent Installation?
- Using Silent Installation

## 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 only.

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**

The silent installation process has two primary steps:

- 1. Create a template file that contains the configuration settings, such as BEA Home directory, product directory appropriate for your installation.
- 2. Invoke the installation process using the values specified in the template files.

## **Creating a Template File**

To create a template file for use in the silent installation process, follow these steps:

- 1. Create the template file specific to your platform.
- 2. Copy the contents of the template file and save it as a text file named installer.properties.
- 3. In the installer properties file, modify the values for the keywords shown in the following table to create your desired configuration.

Keyword	Enter the following value
INSTALLER_UI=	The mode of installation. The default is silent. Do not modify this value
BEAHOME=	The full pathname of the BEA Home directory of your choice.
CHOSEN_INSTALL_SET=	Install set name, only for HP-UX, can be "Gateway", "DistCRM" or "FullInstall"(the default).

### **UNIX Template File**

In the template files, comment lines are preceded by hash marks (#). The installer program does not read any line beginning with a hash mark.

This sample UNIX template file (installer.properties) applies to a silent installation of Oracle Tuxedo Mainframe Adapters for SNA 10.0.

#### Listing 3-1 UNIX installer.properties Template File

```
INSTALLER_UI=silent
### Locale ###
USER_LOCALE=en
### BEA Home Directory ###
BEAHOME=/bea/tux100
```

## Invoking the Silent Installation Process on a UNIX System

Installing the software using silent installation takes the same amount of time as a standard installation. During silent installation, a startup message appears followed by an "Installing . . ." message, indicating that the installation has started.

To invoke the silent installation process on a UNIX system, follow these steps:

- 1. Select a UNIX system that meets the hardware and software requirements.
- 2. Log in to the UNIX system as the Oracle Tuxedo administrator.
- 3. Ensure that you have enough free space for the Oracle Tuxedo Mainframe Adapter for SNA installation.
- 4. Go to the directory where you downloaded the installer or your CD-ROM, whichever is applicable, and invoke the installation procedure by entering the following command:

```
prompt> sh filename.bin -f path/installer.properties
```

where filename is the name of the Oracle Tuxedo Mainframe Adapter for SNA installer file, and path is the full or relative pathname of the installer.properties file.

**Note:** If a file named installer properties is present in the same directory as the installer (for example, filename.bin), it will be supplied automatically in silent mode. However, if installer properties is in a different directory, you may use the -f command line option to specify the properties file. For example, sh filename.bin -f path/installer properties

5. To verify that the software installed successfully, see "Validating the Tuxedo Mainframe Adapter for SNA Software Installation" on page 5-1.

# Installing the Tuxedo Mainframe Adapter for SNA Software

This section provides information and step-by-step instructions for installing Oracle Tuxedo Mainframe Adapter for SNA software (hereafter referenced as TMA SNA.) After completing the tasks included in "Preparing to Install Tuxedo Mainframe Adapter for SNA," install the TMA SNA components according to your configuration requirements as described in the following section.

**Notes:** Refer to the *Oracle* Tuxedo Mainframe Adapter for SNA *Release Notes* if you are upgrading from a previous version of eLink Adapter for Mainframe, and for information about hardware and software requirements. For additional operational and administrative information on the CRM, refer to the *Oracle* Tuxedo Mainframe Adapter for SNA *CRM Administration Guide*.

All references to ATMI files, functions, and documentation apply to Tuxedo files, functions, and documentation.

Information topics are grouped by platform and by component (Gateway or CRM) if the component installations differ for particular platforms.

This section includes the following topics:

- "Prerequisites for Installation"
- "Installing the CRM on z/OS MVS Platform"
- "Installing the Gateway on AIX, HP-UX, Solaris or Windows"
- "Installing Tuxedo Mainframe Adapter for SNA Components on HP-UX 11.23"

## **Prerequisites for Installation**

Before you install Oracle Tuxedo Mainframe Adapter for SNA, you should install Tuxedo.10.0

A JDK is required by the InstallAnywhere installation product to install Tuxedo Mainframe Adapter for SNA. A JDK is installed with Tuxedo 10.0. Verify that the system PATH environment variable is set to the correct version of the JDK installed by Tuxedo 10.0.

## Installing the CRM on z/OS MVS Platform

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

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

## **Summary of Installation Tasks**

The following list is a summary of the tasks detailed in Installation Procedure:

- Put the JCL files in the MVS environment prior to installation using the FTP program.
- Allocate the initial datasets using one of the JCL jobs.
- FTP the product software files (TMACRM100.xxx) to the allocated datasets.
- Run the second JCL job to allocate the final datasets.
- Run the TSO RECEIVE command to unload the data in your product datasets. A third JCL file has been provided to run this procedure in batch.

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

The product CD-ROM contains the following files relating to this installation procedure:

- README file contains notes on how to install the product in this environment. This is a summary of the procedure in this section.
- dsupload. jcl file is a JCL example for creating MVS datasets to receive the Tuxedo Mainframe Adapter for SNA software.
- install.jcl file is a JCL example creating the unloaded product datasets.

- unemprss.jcl file is a JCL example to uncompress and unload into the product datasets.
- TMACRM100.LOAD file contains the Tuxedo Mainframe Adapter for SNA program objects. (Required)
- TMACRM100.DATA file contains Tuxedo Mainframe Adapter for SNA data files. (Required)
- TMACRM100. SAMPLE file contains sample JCL files.

### **Installation Procedure**

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

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

```
dsupload.jcl
install.jcl
uncmprss.jcl
```

3. In your MVS environment, change the DSUPLOAD job to suit your environment. This job allocates the initial datasets needed to receive the product software files from the FTP file transfer.

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

```
SET PRODHLQ=[QUALIFIER]
```

The DSUPLOAD job has the following steps:

DELOLD

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

CREATE

Allocates the initial datasets needed to receive the product software files.

- 4. Run the DSUPLOAD job.
- 5. Put the files listed in Table 4-1 into their corresponding datasets. Use the table as a worksheet and fill in the names you created in step 3. Use the worksheet as a guide for transferring the product data to the z/OS platform.

Table 4-1 MVS Installation Product Files and DD Name Datasets

Product File	Set Statement	Your Dataset Name
TMACRM100.LOA	PRODHLQ	. LOAD
TMACRM100.DAT	PRODHLQ	. DATA
TMACRM100.SAM PLE	PRODHLQ	.SAMPLE

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

Note the following example of a put command:

put TMACRM100.LOAD 'BEA.TMA100.LOAD'

Transfer the datasets using the put command.

7. In your MVS environment, change the INSTALL job to suit your environment.

Use the SET statements to alter the job for your environment according to the following syntax:

SET BEAPDSE=[QUALIFIER]

In this statement, [QUALIFIER] is the high-level qualifier for the SNACRM Load Library. The load library containing the TMACRM100.LOAD program objects must be a Partitioned Dataset with Extended attributes (PDSE). The PDSE minimally must have storage class SMS declaration for z/OS.

SET SCLASS=[CLASS NAME]

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

SET BEAPDS=[QUALIFIER]

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

The INSTALL job has the following steps:

DELOLD

Deletes any existing datasets created by the INSTALL job so you can run this JCL multiple times, if necessary.

#### CREATE

Creates the MVS datasets for you.

This step includes the minimal JCL needed to create the datasets for z/OS. You may change the JCL to reflect your own environment.

8. Run the INSTALL job.

Use Table 4-2 as a worksheet to fill out the names of the datasets created in this step.

Table 4-2 Set Statements and Corresponding Datasets

Set Statement	Your Dataset Name	
BEAPDSE		.LOAD
BEAPDS		.DATA
BEAPDS		.SAMPLE

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

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

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

Use the qualifier you listed in Table 4-1.

<BEAPDSE>=[QUALIFIER]

Use the PDSE qualifier you listed in Table 4-2.

<BEAPDS>=[QUALIFIER]

Use the PDS qualifier you listed in Table 4-2.

The UNCMPRSS job has the following step:

#### UNLOLD

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

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

```
TSO RECEIVE INDS('xxx')

When prompted, enter:

DA('yyy')

In these statements, the following definitions apply:

xxx

Is the dataset name you listed in Table 4-1.

YYY

Is the corresponding dataset name you listed in Table 4-2.
```

## Installing the Gateway on AIX, HP-UX, Solaris or Windows

In addition to HP-UX 11.23 installation as described in "Installing Tuxedo Mainframe Adapter for SNA Components on HP-UX 11.23", the Tuxedo Mainframe Adapter for SNA Gateway may also be installed on AIX, HP-UX, Solaris or Windows platforms.

**Note:** The CRM is not available on any of these platforms and can only be installed on HP-UX 11.23 non-mainframe UNIX. Refer to the *Oracle* Tuxedo Mainframe Adapter for SNA *Release Notes* for more detailed information about platform support.

AIX, HP-UX and Solaris installations may be performed in Console Mode, Silent Mode, or Graphics Mode, while Windows installations must be performed in Graphics Mode.

## **Installing the Gateway in Console Mode**

To install the Tuxedo Mainframe Adapter for SNA Gateway on non-mainframe UNIX in console mode, you run one of the following .bin programs as appropriate for your operating system:

UNIX Platform	.bin File
AIX 5.3	tmasna100_32_aix_53_ppc.bin
HP-UX 11.23	tmasna100_64_hpux_1123_ia.bin
Solaris	tmasna100_32_sol_9_sp.bin

Perform the following steps to install the Tuxedo Mainframe Adapter for SNA software in console mode:

- 1. Insert the Tuxedo Mainframe Adapter for SNA CD-ROM in your CD device.
- 2. Log on as root.

```
$ su -
Password:
```

3. Mount the CD-ROM. Mount commands vary depending on your system configuration. Refer to your System Administrator for the specific command for your system. Use a command similar to the following example to mount the CD-ROM.

```
# mount -r -F cdfs /dev/cdrom/clb0t0l0 /mnt
```

4. Change the directory to the unix directory on your CD-ROM device. For example,

```
# cd /mnt/
```

5. List the CD-ROM contents.

TMACRM100\_ZOS18.tar

```
# ls
tmasna100_32_aix_53_ppc.bin
tmasna100_64_hpux_1123_ia.bin
tmasna100_32_sol_9_sp.bin
tmasna100_32_win_2k3_x86.exe
```

6. Execute the appropriate installation program for your operating system in character-based mode. For example, execute the AIX 53 program to install only the Tuxedo Mainframe Adapter for SNA Gateway:

```
# sh tmasna100_32_aix_53_ppc.bin -i console
```

7. The installation program runs and prompts you for responses (see Listing 4-1 for an example).

#### Listing 4-1 UNIX Console Mode Installation Example, Gateway on AIX 53

\_\_\_\_\_

InstallAnywhere will guide you through the installation of Tuxedo Mainframe Adapter for SNA  $\,\,$  10.0.

It is strongly recommended that you quit all programs before continuing with this installation.

Respond to each prompt to proceed to the next step in the installation. If you want to change something on a previous step, type 'back'.

You may cancel this installation at any time by typing 'quit'.

PRESS <ENTER> TO CONTINUE: ENTER

-----

Choose BEA Home Directory

\_\_\_\_\_

1- Create a New BEA Home

2- Use Existing BEA Home

Enter a number: 2

1- /bea/

2- /bea/tux100

Existing BEA Home: 2

\_\_\_\_\_\_

Pre-Installation Summary

-----

Please Review the Following Before Continuing:

Product Name:

Tuxedo Mainframe Adapter for SNA

Install Folder:

/bea/tux100

Java VM to be Used by Installed Product:

/bea/tux100/jre

Product Version

10.0

4-8 Oracle Tuxedo Mainframe Adapter for SNA Installation Guide

## **Installing the Gateway in Graphics Mode**

Perform the following steps to install the Tuxedo Mainframe Adapter for SNA Gateway on a Windows or UNIX platform in Graphics Mode:

- 1. Insert the Tuxedo Mainframe Adapter for SNA CD-ROM in your CD device.
- 2. Do one of the following, depending on your platform:

#### On Windows:

- a. Choose Start→Run. The Run dialog displays.
- b. Click Browse to navigate to the CD-ROM drive.
- c. Select the tmasna100\_32\_win\_2k3\_x86.exe program.
- d. Click Open. The selected path and executable appear in the Run dialog.
- e. Click OK to begin the installation. The Introduction screen displays.

**Note:** All screen illustrations in this section are for Windows 2003.

#### On UNIX:

a. Log on as root to install the Tuxedo Mainframe Adapter for SNA software.

```
$ su -
Password:
```

b. Mount the CD-ROM. Mount commands vary depending on your system configuration. Refer to your System Administrator for the specific command for your system. Use a command similar to the following command to mount the CD-ROM on any UNIX system.

```
> mount -r -F cdfs /dev/cdrom/c1b0t010 /mnt
```

c. Change the directory on your CD-ROM device. For example,

```
> cd /mnt/
```

d. List the CD-ROM contents.

```
# ls
```

```
tmasna100_32_aix_53_ppc.bin
tmasna100_64_hpux_1123_pa.bin
tmasna100_32_sol_9_sp.bin
tmasna100_32_win_2k3_x86.exe
TMACRM100_ZOS18.tar
```

e. Execute the appropriate installation program for your operating system. For example, execute the AIX program:

```
/mnt/> sh tmasna100_32_aix_53_ppc.bin
```

The Introduction screen displays.

- 3. Click Next to proceed with the installation. The Choose BEA Home Directory screen displays
- 4. Select a New or Existing BEA Home option to specify the BEA Home directory (the default is c:\bea). The BEA Home directory is the root directory in which you install all Oracle products. This directory was set up when you installed Tuxedo.

If you want to create a new BEA Home directory, follow these steps:

a. Select the Create a New BEA Home option.

- b. Accept the default location for your BEA Home directory or click Browse to specify a different location. If you accept the default location, your BEA Home directory will be c:\bea, and your Tuxedo Mainframe Adapter for SNA software default installation directory will be the Tuxedo 10.0 Home directory.
- c. Click Next to proceed with the installation.

If you already have one or more BEA Home directories on your system, you can use one of those directories as follows:

- a. Select the Use Existing BEA Home option.
- b. Select a BEA Home directory from the list displayed to the right of the options. All valid BEA Home directories are displayed in this list. Valid BEA Home directories are directories where Oracle products have been installed using the standard installation program.
- c. Click Next to proceed with the installation.
- If the installation program encounters a previous version of Tuxedo Mainframe Adapter for SNA in the selected BEA Home directory, the Previous Installation Found message box displays.

From this message box, do one of the following:

- Click Continue to install over the previous version.
- Click Cancel to return to the Choose BEA Home Directory Screen and select another directory.
- Click Exit to exit the installation program.
- 6. If you do not have a successful installation of Tuxedo 10.0 in the BEA Home directory, the Tuxedo 10.0 Not Found! message box displays

From this message box, do one of the following:

- Click Exit to exit the installation program so you can install Tuxedo 10.0.
- Click Previous to return to the Choose BEA Home Directory Screen and select another directory.
- 7. If you have a successful installation of Tuxedo 10..0, the pre-installaton Summary screen displays,

From this message box, do one of the following:

- Click Next to begin installing

- Click Previous to return to the Choose BEA Home Directory Screen and select another directory.
- 8. Then Installing Tuxedo Mainframe Adapter message srceen displays
- 9. After the product is installed, the Install Complete screen displays
- 10. Click Done to exit the installation program.

## Installing Tuxedo Mainframe Adapter for SNA Components on HP-UX 11.23

The TMA SNA Gateway, the CRM, or both the Gateway and CRM may be installed on HP-UX 11.23.

## **Installing the Software in Console Mode**

To install the TMA SNA software on HP-UX 11.23 in console mode, you will run the tmasnal00\_64\_hpux\_1123\_ia.bin program. If you choose the Full Installation set, this program installs both the Gateway and the CRM on HP-UX 11.23. You may also choose to install only the Gateway or only the CRM on HP-UX 11.23.

Perform the following steps to install the TMA SNA software in console mode on HP-UX 11.23:

- 1. Insert the TMA SNA CD-ROM in your CD device.
- 2. Log on as root.

```
$ su -
Password:
```

3. Mount the CD-ROM. Mount commands vary depending on your system configuration. Refer to your System Administrator for the specific command for your system. Use a command similar to the following command to mount the CD-ROM.

```
# mount -r -F cdfs /dev/cdrom/c1b0t010 /mnt
```

4. Change the directory to the unix directory on your CD-ROM device. For example,

```
# cd /mnt/
```

5. List the CD-ROM contents.

```
# ls
```

```
tmasna100_32_aix_53_ppc.bin
tmasna100_64_hpux_1123_ia.bin
tmasna100_32_sol_9_sp.bin
tmasna100_32_win_2k3_x86.exe
TMACRM100_ZOS18.tar
```

6. Execute the HP-UX 11.23 program to install both the TMA SNA Gateway and CRM on HP-UX 11.23:

```
# sh tmasna100_64_hpux_1123_ia.bin -i console
```

7. The installation program runs and prompts you for responses (see Listing 4-2 for an example). When you are asked to choose the Install Set, enter the number for the type of installation you want to perform:

1	Gateway Only
2	Distributed CRM
3	Full Install

If you choose the Gateway Only or Full Install, the software will be installed in your Tuxedo 10.0 directory. If you choose to install the Distributed CRM, the software will be installed in the tmasna directory.

Listing 4-2 UNIX Console Mode Installation Example, Full Installation on HP-UX 11.23

InstallAnywhere will guide you through the installation of Tuxedo Mainframe Adapter for SNA 10.0.

It is strongly recommended that you quit all programs before continuing with this installation.

Respond to each prompt to proceed to the next step in the installation. If you want to change something on a previous step, type 'back'.

You may cancel this installation at any time by typing 'quit'.

PRESS <ENTER> TO CONTINUE: <ENTER>

-----

Choose Install Set

-----

Please Choose the Install Set to be installed by this installer.

- ->1- Gateway Only
  - 2- Distributed CRM
  - 3- Full Install

-----

- 1- Create a New BEA Home
- 2- Use Existing BEA Home

Enter a number: 2

- 1- /bea
- 2- /bea/tux100

Existing BEA Home: 1

-----

A previous installation of Tuxedo Mainframe Adapter for SNA 10.0 has been detected at /bea/tux100.

The following options are available:

- 1- Continue to install over /bea/loads/tux91
- 2- Cancel to select another BEA Home Directory
- 3- Exit the installation

Choose a number: 1

#### 4-14 Oracle Tuxedo Mainframe Adapter for SNA Installation Guide



Congratulations. 'Tuxedo Mainframe Adapter for SNA 10.0' has been successfully installed to:

/bea/tux100

PRESS <ENTER> TO EXIT THE INSTALLER: <ENTER>

## **Installing the Software in Graphics Mode**

Perform the following steps to install the TMA SNA software in graphics mode on HP-UX 11.23:

- 1. Insert the TMA SNA CD-ROM in your CD device.
- 2. Log on as root to install the TMA SNA software.

```
$ su -
Password:
```

3. Mount the CD-ROM. Mount commands vary depending on your system configuration. Refer to your System Administrator for the specific command for your system. Use a command similar to the following command to mount the CD-ROM on any UNIX system.

```
> mount -r -F cdfs /dev/cdrom/c1b0t010 /mnt
```

4. Change the directory on your CD-ROM device. For example,

```
> cd /mnt/
```

5. List the CD-ROM contents.

```
# ls
tmasna100_32_aix_53_ppc.bin
tmasna100_64_hpux_1123_ia.bin
tmasna100_32_sol_9_sp.bin
TMACRM100_ZOS18.tar
```

6. Execute the HP-UX 11.23 program:

```
/mnt/> sh tmasna100_64_hpux_1123_ia.bin
```

The Introduction screen displays.

- 7. Click Next to proceed with the installation. The Choose Install Set screen displays
- 8. Select one of the Install Set options depending on whether you want to install the Gateway only, the CRM, or both on HP-UX.

Note: If you choose the Gateway Only or Full Install, the software will be installed in your Tuxedo 10.0 directory. If you choose to install the Distributed CRM, the software will be installed in the tmasna directory.

- 9. Click Next to proceed with the installation. The Choose BEA Home Directory screen displays .
- 10. The BEA Home directory is the root directory in which you install all Oracle products. This directory was set up when you installed Tuxedo.

If you want to create a new BEA Home directory, follow these steps:

- a. Select the Create a New BEA Home option.
- b. Click Browse to specify a different location.
- c. Click Next to proceed with the installation.

If you already have one or more BEA Home directories on your system, you can use one of those directories as follows:

- a. Select the Use Existing BEA Home option.
- b. Select a BEA Home directory from the list displayed to the right of the options. All valid BEA Home directories are displayed in this list. Valid BEA Home directories are directories where Oracle products have been installed using the standard installation program.
- c. Click Next to proceed with the installation.
- 11. If the installation program encounters a previous installation of the same version of Tuxedo Mainframe Adapter for SNA in the selected BEA Home directory, the Previous Installation Found message box displays.

From this message box, do one of the following:

- Click Continue to install over the previous version.
- Click Cancel to return to the Choose BEA Home Directory Screen and select another directory.
- Click Exit to exit the installation program.
- 12. If you do not have a successful installation of Tuxedo 10.0 in the BEA Home directory, the Tuxedo Not Found! message box displays

From this message box, do one of the following:

- Click Exit to exit the installation program so you can install Tuxedo 10.0.
- Click Previous to return to the Choose BEA Home Directory Screen and select another directory.

Click Next to finish installation.

13. If you have a successful installation of Tuxedo 10..0, the pre-installaton Summary screen displays,

From this message box, do one of the following:

- Click Next to begin installing
- Click Previous to return to the Choose BEA Home Directory Screen and select another directory.
- 14. Then Installing Tuxedo Mainframe Adapter message srceen displays
- 15. After the product is installed, the Install Complete screen displays
- 16. Click Done to exit the installation program.

# Post Installation Tasks for Tuxedo Mainframe Adapter for SNA

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

This section includes the following topics:

- "Validating the Tuxedo Mainframe Adapter for SNA Software Installation"
- "Uninstalling Tuxedo Mainframe Adapter for SNA"

# Validating the Tuxedo Mainframe Adapter for SNA Software Installation

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

- "Verifying Installation Files and Directories"
- "Running the Sample Applications"

# **Verifying Installation Files and Directories**

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

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

# Tuxedo Mainframe Adapter for SNA Gateway Installation Files and Directories

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

#### **AIX 5.3**

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

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

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

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

#### **HP-UX 11.23**

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

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

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

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

#### **Solaris**

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

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

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

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

#### Windows 2003 Advanced Server

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

Directory	Files
bin	csxcrm.dll
	ctxcp_12.dl1
	ctxdebugs_12.dll
	ctxos_12.dll
	ctxplat_12.dll
	ctxprim_12.dll
	gws.dll
	gwsnax.exe
lib	crmmon.bat
	crmmon.jar
locale/C	LIBGWS.text
	LIBGWS_CAT
udataobj/codepage	00819x00037
	00819x00273
	00819x00278
	00819x00284
	00819x00285
	00819x00297
	00819x00500
	00819x00860
	00819x01047
	00912x00870
	none
	tuxedo

#### **CRM Installation Files and Directories**

The CRM includes the files listed in the following tables.

#### **HP-UX 11.23**

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

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

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

#### z/OS V1R8

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

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

Directory	Files
\	LIBGPNET
misc	README dsupload.jcl install.jcl uncmprss.jcl
load library	CRM
	CRMLOGS
	CRMLKON
	CRMLKOFF
	CRMDOWN
	CSXAPPC
	CSXXFM
	CSXXMW
	CSXGPW
	CSXCRM
	CSXXCRM
	CSXSCRM
	CSXVT210
	DEBUGS
	LIBGP
	LIBGPNET
	LIBGP40
	OS
	PRIM
	PLAT
data library	ENV
sample library	CRMLOGS
	CRMLKON
	CRMLKOFF
	CRMSTART
	CRMDOWN

#### **HP-UX 11.23 Full Installation Files and Directories**

Verify that the following files are installed for the Full Installation of the Tuxedo Mainframe Adapter for SNA Gateway and CRM on HP-UX 11.23:

Table 5-7 HP-UX Full Installation Files and Directories

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

Table 5-7 HP-UX Full Installation Files and Directories

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

## **Running the Sample Applications**

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

- toupclt.c for platforms based on UNIX
- winenv.bat for platforms based on Windows

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

# **Uninstalling Tuxedo Mainframe Adapter for SNA**

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

• "Uninstalling on Non-mainframe UNIX Platforms in Console Mode"

**Note:** Uninstall on non-mainframe UNIX platforms can only be done in Console Mode. Graphic Mode is not available.

• "Uninstalling on Windows Platform"

• "Uninstalling on z/OS Platforms"

# Uninstalling on Non-mainframe UNIX Platforms in Console Mode

To remove Tuxedo Mainframe Adapter for SNA from a UNIX platform:

- 1. Change directories to your uninstaller\_TMASNA directory with a command similar to the following example:
  - > cd /bea/tux100/uninstaller\_TMASNA
- 2. Start the uninstall program with the following command:

```
/bea/tux100/uninstaller_TMASNA> sh UninstallTMASNA -i console
```

Listing 5-1 displays an Tuxedo Mainframe Adapter for SNA uninstallation.

**Note:** The single-dash bar just beneath the double-dash bar in Listing 5-1 is a progress indicator. When the single-dash bar becomes the same length as the double-dash bar, uninstallation is complete.

#### Listing 5-1 UNIX Console Mode Uninstall Example

Preparing CONSOLE Uninstall
BEA Tuxedo Mainframe Adapter for SNA (InstallAnywhere Uninstaller by Zero G)
Uninstall Tuxedo Mainframe Adapter for SNA 10.0
About to uninstall
BEA Tuxedo Mainframe Adapter for SNA 10.0
This will remove features installed by InstallAnywhere. It will not remove files and folders created after the installation.
PRESS <enter> TO CONTINUE: <enter></enter></enter>
======================================
[======================================

-----

Uninstall Complete

All items were successfully uninstalled.

PRESS <ENTER> TO EXIT THE UNINSTALLER: <ENTER>

## **Uninstalling on Windows Platform**

Perform the following steps to remove the Tuxedo Mainframe Adapter for SNA software from a Windows platform:

- 1. Choose Start→Programs→BEA WebLogic E-Business Platform→Tuxedo Mainframe Adapter for SNA 10.0→Uninstall BEA Tuxedo Mainframe Adapter for SNA from the Start menu. The Tuxedo Mainframe Adapter for SNA Uninstaller screen displays
- 2. Click Uninstall to start removing Tuxedo Mainframe Adapter for SNA. When the process is complete, the Uninstall complete screen displays.
- 3. Click Exit to complete the uninstallation.

**Note:** Some files may not be removed because they are required for another Oracle product.

## **Uninstalling on z/OS Platforms**

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