

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

Installation Guide

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# Contents

## Introduction

What You Need to Know . . . . .	1-1
Documentation Conventions . . . . .	1-2

## Preparing to Install Tuxedo Mainframe Adapter for SNA

Determining Your Configuration . . . . .	2-1
Local Configuration . . . . .	2-2
Distributed Configurations . . . . .	2-2
Determining Requirements for Other Components . . . . .	2-4
Mainframe Requirements . . . . .	2-4
Non-Mainframe Requirements . . . . .	2-4
Installing the Prerequisite Software . . . . .	2-5

## Installing Tuxedo Mainframe Adapter for SNA Software in Silent Mode

What Is Silent Installation? . . . . .	3-1
Using Silent Installation . . . . .	3-1
Creating a Template File . . . . .	3-2
UNIX Template File . . . . .	3-2
Invoking the Silent Installation Process on a UNIX System . . . . .	3-3

# Installing the Oracle Tuxedo Mainframe Adapter for SNA Software

Prerequisites for Installation . . . . .	4-2
Installing the CRM on z/OS MVS Platform . . . . .	4-2
Summary of Installation Tasks . . . . .	4-2
Installation Procedure . . . . .	4-3
Installing the Gateway . . . . .	4-5
Installing the Gateway in Console Mode . . . . .	4-6
Installing the Gateway in Graphics Mode . . . . .	4-8

# Post Installation Tasks for Oracle Tuxedo Mainframe Adapter for SNA

Validating the Tuxedo Mainframe Adapter for SNA Software Installation . . . . .	5-1
Verifying Installation Files and Directories . . . . .	5-1
Tuxedo Mainframe Adapter for SNA Gateway Installation Files and Directories	5-2
CRM Installation Files and Directories . . . . .	5-6
Running the Sample Applications . . . . .	5-9
Uninstalling Tuxedo Mainframe Adapter for SNA . . . . .	5-9
Uninstalling on UNIX Platforms in Console Mode . . . . .	5-9
Uninstalling on Windows Platform . . . . .	5-10
Uninstalling on z/OS Platforms . . . . .	5-11

# 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](#)
- [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.

## 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*

# Documentation Conventions

The following documentation conventions are used throughout this document.

Convention	Item
blue text	Indicates a hypertext link in PDF or HTML
<i>italics</i>	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. <i>Examples:</i> LPT1 SIGNON OR
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. <i>Examples:</i> <pre>#include &lt;iostream.h&gt; void main ( ) the pointer psz chmod u+w * \tux\data\ap .doc tux.doc BITMAP float</pre>
<b>monospace boldface text</b>	Identifies significant words in code. <i>Example:</i> void <b>xa_commit</b> ( )
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.

Convention	Item
[ ]	<p>Indicates optional items in a syntax line. The brackets themselves should never be typed.</p> <p><i>Example:</i></p> <pre>buildclient [-v] [-o name ] [-f file-list]... [-l file-list]...</pre>
	<p>Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed.</p>
...	<p>Indicates one of the following in a command line:</p> <ul style="list-style-type: none"> <li>• That an argument can be repeated several times in a command line</li> <li>• That the statement omits additional optional arguments</li> <li>• That you can enter additional parameters, values, or other information</li> </ul> <p>The ellipsis itself should never be typed.</p> <p><i>Example:</i></p> <pre>buildclient [-v] [-o name ] [-f file-list]... [-l file-list]...</pre>
.	<p>Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.</p>









# 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.

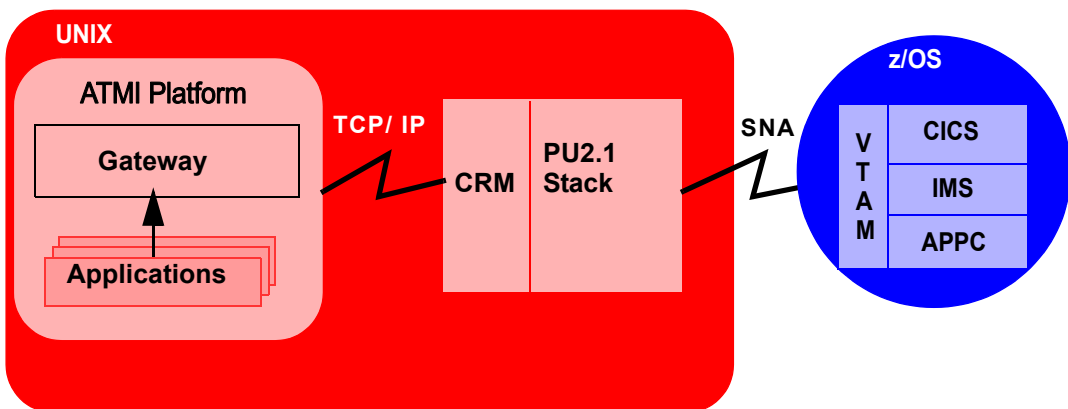
When the Tuxedo Mainframe Adapter for SNA Gateway and CRM are installed on the same machine with the CRM configured as a Tuxedo server, the installation is referred to as a local (combined) configuration. When these components are installed on different UNIX, Windows, or mainframe platforms, the installation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

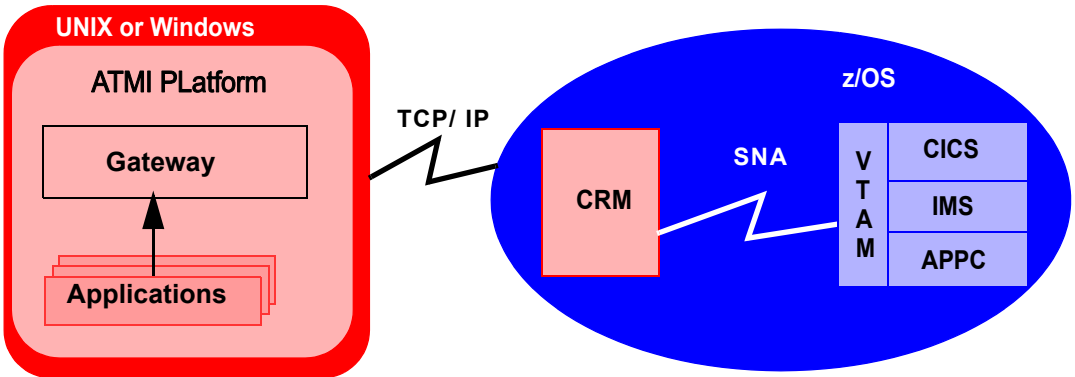


## Distributed Configurations

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

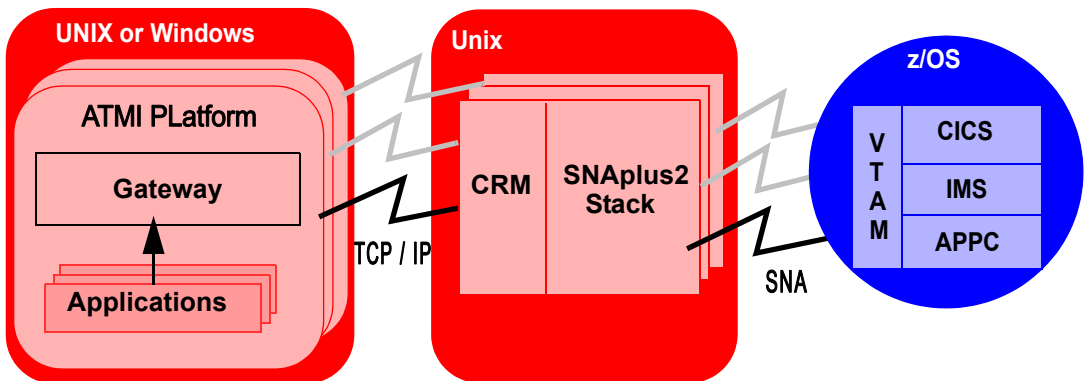
One type of distributed configuration separates applications and the Tuxedo Mainframe Adapter for SNA Gateway from the CRM by installing the CRM to the z/OS mainframe. This configuration eliminates the need for a third-party stack on the UNIX machine. This configuration requires a one-to-one relationship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

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

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

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

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

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

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

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

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

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...
<code>INSTALLER_UI=</code>	The mode of installation. The default is silent. Do not modify this value
<code>ORACLEHOME=</code>	The full pathname of the Oracle Home Directory of your choice.
<code>CHOSEN_INSTALL_SET=</code>	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.

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

```
INSTALLER_UI=silent
### Locale ###
USER_LOCALE=en
### Oracle Home Directory ###
ORACLEHOME=/bea/
```

## 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, and invoke the installation procedure by entering the following command:

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

where `installer` 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 Oracle 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”](#)

# Prerequisites for Installation

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

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

## 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 (TMACRM.\* ) to the allocated datasets.
- Run the second JCL job to allocate the final datasets.
- Run the TSO RECEIVE command to unload the data in your product datasets. A third JCL file has been provided to run this procedure in batch.

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

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

- README file contains notes on how to install the product in this environment. This is a summary of the procedure in this section.
- `createds.jcl` file is a JCL example for creating MVS datasets to receive the Tuxedo Mainframe Adapter for SNA software.
- `uncmprss.jcl` file is a JCL example to uncompress and unload into the product datasets.

- `TMACRM.LOAD` file contains the Tuxedo Mainframe Adapter for SNA program objects. (Required)
- `TMACRM.DATA` file contains Tuxedo Mainframe Adapter for SNA data files. (Required)
- `TMACRM.SAMPLE` file contains sample JCL files.

## Installation Procedure

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

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

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

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

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

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

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

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

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

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

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

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

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

The `CREATEDS` job has the following steps:

`DELETE`

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

`CREATE`

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

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

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

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

Use [Table 4-2](#) as a worksheet to fill out the names of the datasets created for SNACRM Load Library, sample and data.

**Table 4-2 Set Statements and Corresponding Datasets**

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

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

Note the following example of a `put` command:

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



Transfer the datasets using the `put` command.

6. In your MVS environment, change the `UNCMRPS` 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 `UNCMRPS` job has the following step:

```
UNLOAD
```

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

Unix 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

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

1. Log on as root.

```
$ su -  
Password:
```

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

```
# sh <installer>.bin -i console
```

3. 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

---

```
Preparing to install...  
Preparing CONSOLE Mode Installation...
```

```
=====  
Oracle Tuxedo Mainframe Adapter SNA  
-----  
=====  
Introduction  
-----
```

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

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/tuxedo
```

```
Existing BEA Home: 2
```

```
=====
Pre-Installation Summary
-----
```

Please Review the Following Before Continuing:

```
Product Name:
    Tuxedo Mainframe Adapter for SNA
```

```
Install Folder:
    /bea/tuxedo
```

```
Java VM to be Used by Installed Product:

    /bea/tuxedo/jre
```

```
Product Version
    xxx
```

```
Disk Space Information (for Installation Target):
    Required: 4,095,715 bytes
    Available: 531,012,902,912 bytes
```

```
PRESS <ENTER> TO CONTINUE: ENTER
```

```
=====
Installing...
-----
```

```
[=====|=====|=====|=====]
[-----|-----|-----|-----]
```

```
Press <ENTER> to continue.:
```

```
=====
Install Complete
-----
```

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

```
/bea/tux100  
PRESS <ENTER> TO EXIT THE INSTALLER: ENTER
```

---

## 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. Do one of the following, depending on your platform:

**On Windows:**

- a. Double click the installer program in File Explorer.

**On UNIX:**

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

```
$ su -  
Password:
```

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

```
/mnt/> sh <installer>.bin
```

The Introduction screen displays.

2. Click Next to proceed with the installation. The Choose BEA Home Directory screen displays .
3. 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 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.
4. 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.
5. If you do not have a successful installation of Oracle Tuxedo in the BEA Home directory, the Oracle 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 Oracle Tuxedo.
  - Click Previous to return to the Choose BEA Home Directory Screen and select another directory.
6. If you have a successful installation of Oracle Tuxedo, the pre-installation 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.
7. Then Installing Tuxedo Mainframe Adapter message screen displays
  8. After the product is installed, the Install Complete screen displays
  9. Click Done to exit the installation program.

# Post Installation Tasks for Oracle Tuxedo Mainframe Adapter for SNA

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

This section includes the following topics:

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

## Validating the Tuxedo Mainframe Adapter for SNA Software Installation

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

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

### Verifying Installation Files and Directories

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

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

## Tuxedo Mainframe Adapter for SNA Gateway Installation Files and Directories

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

### AIX

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

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

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

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

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

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

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

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

## Solaris

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

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

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

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

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

## Windows

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

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

<b>Directory</b>	<b>Files</b>
bin	csxcrm.dll ctxcp_12.dll ctxdebugs_12.dll ctxos_12.dll ctxplat_12.dll ctxprim_12.dll gws.dll gwsnax.exe
lib	crmmmon.bat crmmmon.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**

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**

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

**z/OS**

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

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

<b>Directory</b>	<b>Files</b>
\	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

## 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 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 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/tuxedo/uninstaller_TMASNA
```

2. Start the uninstall program with the following command:

```
/bea/tuxedo/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
-----
About to uninstall...

    BEA Tuxedo Mainframe Adapter for SNA

This will remove features installed by InstallAnywhere.  It will not remove files
and folders created after the installation.

PRESS <ENTER> TO CONTINUE:  <ENTER>

=====
Uninstalling...
-----

[=====|=====|=====|=====]
[-----|-----|-----|-----]

=====
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→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.

