



BEA Tuxedo™ **Mainframe** **Adapter for** **OSI TP**

Installation Guide

Version 8.1
Document Revised: March 19, 2004
Part Number: 870-001048-004

Copyright

Copyright © 2004 BEA Systems, Inc. All Rights Reserved.

Restricted Rights Legend

This software and documentation is subject to and made available only pursuant to the terms of the BEA Systems License Agreement and may be used or copied only in accordance with the terms of that agreement. It is against the law to copy the software except as specifically allowed in the agreement. This document may not, in whole or in part, be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine readable form without prior consent, in writing, from BEA Systems, Inc.

Use, duplication or disclosure by the U.S. Government is subject to restrictions set forth in the BEA Systems License Agreement and in subparagraph (c)(1) of the Commercial Computer Software-Restricted Rights Clause at FAR 52.227-19; subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013, subparagraph (d) of the Commercial Computer Software--Licensing clause at NASA FAR supplement 16-52.227-86; or their equivalent.

Information in this document is subject to change without notice and does not represent a commitment on the part of BEA Systems. THE SOFTWARE AND DOCUMENTATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. FURTHER, BEA Systems DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE, OR THE RESULTS OF THE USE, OF THE SOFTWARE OR WRITTEN MATERIAL IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE.

Trademarks or Service Marks

BEA, Jolt, Tuxedo, and WebLogic are registered trademarks of BEA Systems, Inc. BEA Builder, BEA Campaign Manager for WebLogic, BEA eLink, BEA Liquid Data for WebLogic, BEA Manager, BEA WebLogic Commerce Server, BEA WebLogic Enterprise, BEA WebLogic Enterprise Platform, BEA WebLogic Express, BEA WebLogic Integration, BEA WebLogic Personalization Server, BEA WebLogic Platform, BEA WebLogic Portal, BEA WebLogic Server, BEA WebLogic Workshop and How Business Becomes E-Business are trademarks of BEA Systems, Inc.

All other trademarks are the property of their respective companies.

Contents

About This Document

What You Need to Know	v
e-docs Web Site	v
Related Information	v
Documentation Conventions	vi

Installing the BEA Tuxedo Mainframe Adapter for OSI TP Product

Pre-Installation Considerations	1-1
Configuring the Environment to Install TMA OSI TP	1-2
Upgrading from eLink OSI TP 1.3	1-2
Upgrading from eLink OSI TP 4.0	1-3
Installing BEA TMA OSI TP on a UNIX-Based Operating System	1-3
Distribution Libraries and Executables for AIX	1-7
Distribution Libraries and Executables for HP-UX	1-8
Distribution Libraries and Executables for Solaris	1-9
Installing BEA Tuxedo Mainframe Adapter for OSI TP on Windows 2000 Advanced Server	1-10
Distribution Libraries and Executables for Windows 2000 Advanced Server	1-16
Uninstalling BEA Tuxedo Mainframe Adapter for OSI TP Product on Windows 2000 Advanced Server	1-17

About This Document

BEA Tuxedo Mainframe Adapter for OSI TP (hereafter referred to as TMA OSI TP) is a gateway connectivity product that enables application programs on BEA Tuxedo® systems to perform various transactional and non-transactional tasks with application programs that reside on different kinds of computers.

This document provides information about how to upgrade and install the software for your operating system.

What You Need to Know

This information is intended for system administrators who will install the TMA OSI TP software.

e-docs Web Site

BEA Tuxedo product documentation is available on the BEA corporate Web site. From the BEA Home page, click on Product Documentation or go directly to the “e-docs” Product Documentation page at <http://edocs.bea.com/>.

Related Information

Various other related documentation is available to help you understand TMA OSI TP, Tuxedo, and OLTP technology. Readers of this document may find the following documentation and resources especially useful:

- BEA TMA OSI TP Documentation

The TMA OSI TP documentation consists of the following items:

- *BEA Tuxedo Mainframe Adapter for OSI TP Installation Guide*
- *BEA Tuxedo Mainframe Adapter for OSI TP User Guide*
- *BEA Tuxedo Mainframe Adapter for OSI TP Release Notes*

- BEA Tuxedo Release 8.1 Information

The following BEA Tuxedo information is available on the BEA Tuxedo Online Documentation web site at <http://edocs.bea.com/tuxedo/tux81/index.htm>:

- Installation
- Getting Started
- Administration
- Programming
- Platforms
- Reference
- Messages

- Other Publications

For more information about OLTP technology, refer to the following books:

- *The Tuxedo System* (Andrade, Carges, Dwyer, Felts)
- *Tuxedo: An Open Approach to OLTP* (Primatesta)
- *Building Client/Server Applications Using Tuxedo* (Hall)

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.

Convention	Item
UPPERCASE TEXT	<p>Indicates generic file names, device names, environment variables, and logical operators.</p> <p><i>Examples:</i></p> <p>LPT1</p> <p>SIGNON</p> <p>OR</p>
monospace text	<p>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.</p> <p><i>Examples:</i></p> <pre>#include <iostream.h> void main () the pointer psz chmod u+w * \tux\data\ap .doc tux.doc BITMAP float</pre>
monospace boldface text	<p>Identifies significant words in code.</p> <p><i>Example:</i></p> <pre>void xa_commit ()</pre>
{ }	<p>Indicates a set of choices in a syntax line. The braces themselves should never be typed.</p>
[]	<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>

Convention	Item
...	<p>Indicates one of the following in a command line:</p> <ul style="list-style-type: none"> • That an argument can be repeated several times in a command line • That the statement omits additional optional arguments • That you can enter additional parameters, values, or other information <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>
.	Indicates the omission of items from a code example or from a syntax line.
.	The vertical ellipsis itself should never be typed.
.	

Installing the BEA Tuxedo Mainframe Adapter for OSI TP Product

This section covers the following information:

- “Pre-Installation Considerations”
- “Installing BEA TMA OSI TP on a UNIX-Based Operating System”
- “Installing BEA Tuxedo Mainframe Adapter for OSI TP on Windows 2000 Advanced Server”

Pre-Installation Considerations

Complete the following tasks prior to installing the TMA OSI TP product:

- Read the *BEA Tuxedo Mainframe Adapter for OSI TP Release Notes* for supported platform information.
- Install and verify the operation of the BEA Tuxedo product with the most recent patch level.

Warning: If you fail to install the correct patch level of Tuxedo, the application may not work correctly. Refer to the *BEA Tuxedo Mainframe Adapter for OSI TP Release Notes* for information on the correct patch level.

- On a UNIX operating system, if you are upgrading to Tuxedo 8.1 from a previous version of Tuxedo, you must remove the old version of Tuxedo before you install Tuxedo 8.1 or you must install Tuxedo 8.1 in a different directory. Do not overwrite the old version of Tuxedo.

Configuring the Environment to Install TMA OSI TP

Before installing the TMA OSI TP product, you must ensure that the BEA Tuxedo system is installed and configured properly for your environment. Refer to your Tuxedo documentation for more information about setting the Tuxedo environment variables. In addition to the Tuxedo environment variables, the TMA OSI TP system requires an additional environment variable, `OSIRUNDIR`, before you can boot the gateway or run the `osiadmin` utility. Refer to the *BEA Tuxedo Mainframe Adapter for OSI TP User Guide* for more information about the `osiadmin` utility. If you do not set the `OSIRUNDIR` environment variable before you boot the gateway, you will receive a message telling you to set `OSIRUNDIR`. This environment variable specifies the path that the TMA gateway uses for runtime files. You can set the `OSIRUNDIR` environment variable through a script, a command line entry, or, for Windows 2000 operating systems, through the Windows System Properties in the Control Panel. The variable value should include the path and directory as appropriate for your operating system.

Upgrading from eLink OSI TP 1.3

If you are upgrading from eLink OSI TP 1.3 to BEA Tuxedo Mainframe Adapter for OSI TP 8.1, you must modify your existing `dmconfig` file to be compatible with the new format. The `osiadmin` utility performs this upgrade automatically with the `importcfg` command. It is recommended that you use the `osiadmin` utility, but you may also upgrade by manually editing your `dmconfig` file. Refer to the *BEA Tuxedo Mainframe Adapter for OSI TP User Guide* for more information about using the `osiadmin` utility and about manually editing the `dmconfig` file.

BEA Tuxedo Mainframe Adapter for OSI TP 8.1 is a full replacement for eLink OSI TP 1.3 and the Unisys Protocol Stack (OSI TP and ULS). ULS on UNIX-based systems and BEA Tuxedo Mainframe Adapter for OSI TP 8.1 both use port 102 by default. Consider this default setting when configuring the port number of your updated `dmconfig` file. Beginning with eLink OSI TP 4.1, you can configure a port number other than 102. This option allows you to run your eLink OSI TP 1.3 gateway while you are upgrading. If you will be using port 102 in your TMA OSI TP 8.1 `dmconfig` file, you must shutdown ULS before attempting to `tmboot` TMA OSI TP 8.1. If you are running eLink OSI TP 1.3, uninstall eLink OSI TP and the Unisys OSI TP protocol stack including the Unisys Upper Layer Services.

When you are upgrading from a previous release of the eLink OSI TP product, you must shut down all Domain administrative and gateway servers within an application domain, particularly the following:

- GWOSITP

- GWADM
- DMADM

Upgrading from eLink OSI TP 4.0

If you are upgrading from eLink OSI TP 4.0, you do not need to modify your `udmconfig` input file. Perform a `dmloadcf` of the `udmconfig` file to create the `dmconfig` binary file, `BDMCONFIG`. If you are running eLink OSI TP 4.0, uninstall eLink OSI TP 4.0

Note: Beginning with eLink OSI TP 4.1, the version 4.0 `udmloadcf` utility, the `BUDMCONFIG` binary file and the eLink OSI TP Administrative Server `UDADM` no longer exist. The function performed by the version 4.0 `udmloadcf` command is now done by the `dmloadcf` command. The information contained in the version 4.0 `BUDMCONFIG` file is now incorporated within the `BDMCONFIG` file. If your `ubbconfig` contains the `UDMADM` Server, delete it and perform a `tmloadcf` of the modified `ubbconfig` file.

Installing BEA TMA OSI TP on a UNIX-Based Operating System

This section explains how to install the BEA Tuxedo Mainframe Adapter for OSI TP product on the following execution platforms:

- AIX 5.2
- HP-UX 11.00
- Solaris 8

To install the TMA OSI TP product, you run the `install.sh` script. This script installs all the necessary software components.

Warning: For UNIX-based operating systems, if you are installing in silent mode the BEA Tuxedo system should be installed first and the TMA OSI TP product should be installed within the same directory. Use the `mkdir` command to create the directory where you wish to install BEA Tuxedo and the TMA OSI TP product **BEFORE** you perform your installations. If you do not create the directory first, you will receive an Installation Complete message after you install BEA Tuxedo, but Tuxedo will not be installed. Make sure that you have installed the Tuxedo 8.1 license before you install the TMA OSI TP product.

Perform the following steps to install the TMA OSI TP product on a supported UNIX platform:

1. Log on to your UNIX platform and access the CD-ROM device.

```
# ls -l /dev/cdrom
```

```
total 0
```

```
brw-rw-rw-    1 root      sys      22,    0 January 5 10:55 clb0t010
```

2. Mount the CD-ROM with the following mount instruction if you are installing on an AIX operating system. The CD-ROM mounts automatically on Solaris.

```
# mount -r -F cdfs /dev/cdrom/clb0t010 /mnt
```

Use the following mount instruction if you are installing on an HP-UX operating system:

```
# mount -r -F cdfs -o cdcase /dev/cdrom/clb0t010 /mnt
```

3. Change the directory to your CD-ROM device.

```
# cd /mnt
```

4. List the CD-ROM contents.

```
# ls
```

```
install.sh  hp ibm sun5x uw  windows
```

5. Execute the installation script.

```
# sh ./install.sh
```

6. The installation script runs and prompts you for responses.

Listing 1-1 Install.sh Script Prompts for an AIX Installation

```
sh install.sh
```

```
01) hp/hpux11 02) ibm/aix52 03) sun5x/sol8
```

```
Install which platform's files? [01- 3, q to quit, l for list]: 2
```

```
** You have chosen to install from ibm/aix52 **
```

```
BEA Tuxedo Mainframe Adapter for OSI TP 8.1
```

```
This directory contains BEA Tuxedo Mainframe Adapter for OSI TP 8.1 for  
AIX 5.2 on RS/6000.
```

Is this correct? [y,n,q]: **y**

To terminate the installation at any time
press the interrupt key,
typically , <break>, or <ctrl+c>.

The following packages are available:

1 ositp BEA Tuxedo Mainframe Adapter for OSI TP 8.1

Select the package(s) you wish to install (default: 1) [?,??,q]: **1**

BEA Tuxedo Mainframe Adapter for OSI TP 8.1
(rs6000) Release 8.1
Copyright (c) 2004 BEA Systems, Inc.
All Rights Reserved.
Distributed under license by BEA Systems, Inc.
BEA is a registered trademark of BEA Systems, Inc.

Directory where OSI TP files are to be installed
(Enter your Tuxedo directory path) [?,q]: **/work/cmadm/tux81**

Using /work/cmadm/tux81 as the OSI TP base directory

Determining if sufficient space is available ...
9904 blocks are required
1865988 blocks are available to /work/cmadm/tux81
Unloading /mnt/sun5x/sol8/ositp/OSITPT80.Z ...
TMA/osi/samples/simpapp/dmconfig
TMA/osi/samples/simpapp/tailor.txt
TMA/osi/samples/simpapp/ubbsimple
bin/GWOSITP
bin/getulogpfx
bin/lic.sh
bin/osiadmin
bin/osiltmain
bin/portproxy

```
bin/prdebuginfo
bin/setPROXYpriv
lib/libgwo.so
lib/libnwunisys.so
lib/libtasn1.so
locale/C/LIBGWO.text
locale/C/LIBGWO_CAT
locale/C/libnwunisys.cat
udataobj/gbebc2u.fld
udataobj/jbis82u.fld
udataobj/ksc2u.fld
udataobj/u2gbebc.fld
udataobj/u2jbis8.fld
udataobj/u2ksc.fld
9760 blocks
... finished
```

The \$TUXDIR/bin/portproxy executable listens on privileged ports (< 1024) on behalf of GWOSI TP. The script \$TUXDIR/bin/setPROXYpriv is used to set the appropriate permissions.

If you know the root password, you may run setPROXYpriv now.

Run the setPROXYpriv script? [y/n]: **y**

root's Password:

Owner for /work/cmadm/tux81/bin/portproxy changed to root.

Mode for /work/cmadm/tux81/bin/portproxy changed to 4555.

Changing file permissions...

... finished

If your license file is accessible, you may install it now.

Install license file? [y/n]: **n**

Please don't forget to use lic.sh located in your product bin directory to install the license file from the enclosed floppy.

Refer to your product Release Notes for details on how to do this.

Installation of BEA Tuxedo Mainframe Adapter for OSI TP 8.1 was successful

Please don't forget to fill out and send in your registration card

Note: The following message may also appear during installation on HP machines:

Listing 1-2 Warning Message

```
=====
You do NOT HAVE required HP Patches for Tuxedo 8.1
Please refer to the Tuxedo 8.1 Installation Guide
or http://edocs.bea.com/tuxedo/tux81/install/inspds.htm#1318335
for more information.
```

Continue Installation? [y/n]:

If you receive this warning, enter **n** to exit installation and refer to your *Tuxedo 8.1 Installation Guide* for more information.

Distribution Libraries and Executables for AIX

The TMA OSI TP CD-ROM contains the following libraries and executable programs for the AIX 5.2 operating system:

Directory	Files
/bin	getulogfx GWOSITP osiadmin osiltmain portproxy prdebuginfo setPROXYpriv
/lib	libgwo.so libnwunisys.so libtasn1.so

Directory	Files
/locale/C	LIBGWO.text LIBGWO_CAT libnwunisys.cat
/udataobj	gbebc2u.fld jbis82u.fld ksc2u.fld u2gbebc.fld u2jbis8.fld u2ksc.fld
\$TUXDIR/tma/osi/ samples/simpapp	dmconfig ubbsimple tailor.txt

Distribution Libraries and Executables for HP-UX

The TMA OSI TP CD-ROM contains the following libraries and executable programs for the HP-UX 11 operating system:

Directory	Files
/bin	getulogfx GWOSITP osiadmin osiltmain portproxy prdebuginfo setPROXYpriv
/lib	libgwo.sl libnwunisys.sl libtasn1.sl
/locale/C	LIBGWO.text LIBGWO_CAT libnwunisys.cat

Directory	Files
/udataobj	gbebc2u.fld jbis82u.fld ksc2u.fld u2gbebc.fld u2jbis8.fld u2ksc.fld
\$TUXDIR/tma/osi/ samples/simpapp	dmconfig ubbsimple tailor.txt

Distribution Libraries and Executables for Solaris

The TMA OSI TP CD-ROM contains the following libraries and executable programs for the Solaris 8 operating system:

Directory	Files
/bin	getulogfx GWOSITP osiadmin osiltmain portproxy prdebuginfo setPROXYpriv
/lib	libgwo.so libnwunisys.so libtasn1.so
/locale/C	LIBGWO.text LIBGWO_CAT libnwunisys.cat

Directory	Files
/udataobj	gbebc2u.fld jbis82u.fld ksc2u.fld u2gbebc.fld u2jbis8.fld u2ksc.fld
\$TUXDIR/tma/osi/ samples/simpapp	dmconfig ubbsimple tailor.txt

Installing BEA Tuxedo Mainframe Adapter for OSI TP on Windows 2000 Advanced Server

Caution: Be sure to review the “Pre-Installation Considerations” section before you start your installation of the BEA Tuxedo Mainframe Adapter for OSI TP Version 8.1 product.

Perform the following steps to install the TMA OSI TP product on a Windows NT or Windows 2000 operating system:

Warning: For Windows operating systems, the BEA Tuxedo system should be installed first and the TMA OSI TP product should be installed within the same directory.

1. Insert the TMA OSI TP product CD-ROM in your CD-ROM drive. The Installation program should automatically start. If it does not start automatically, perform the following steps to begin the installation:
 - a. Click the **Start** button, and select the **Run** option. The **Run** window displays.
 - b. Click the **Browse** button to select the CD-ROM drive.
 - c. Select the `windows` directory and select the `Setup.exe` program.
 - d. Click **OK** to run the executable and begin the installation. Setup searches to make sure the Tuxedo product is installed on your system.

Note: If the Tuxedo product is NOT already installed on your system, an **Error** pop-up window displays. Click **OK** on the pop-up window to terminate the installation process. Install the Tuxedo product on your system and reinitiate the installation process.

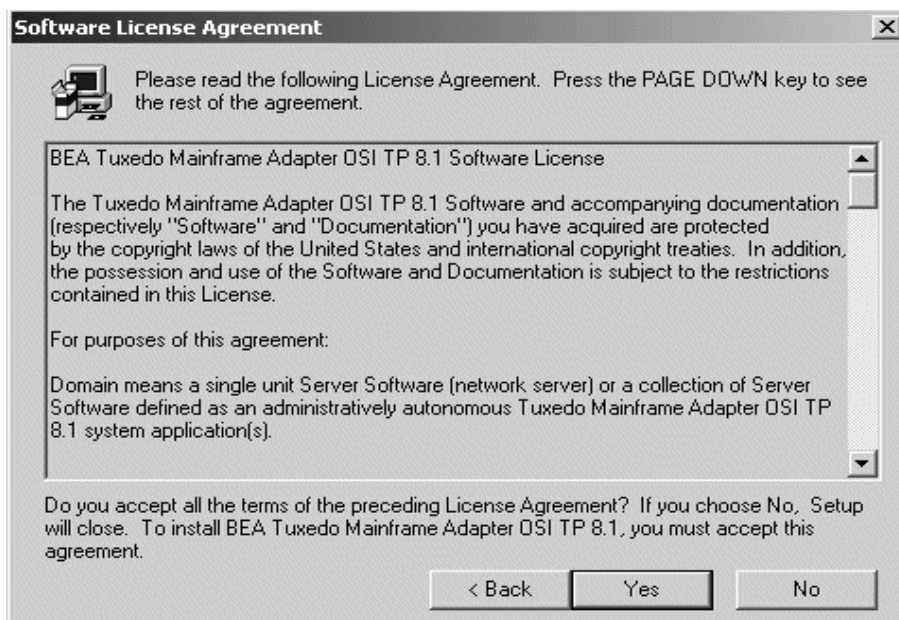
2. Setup also notifies you if a prior version of the TMA OSI TP product is installed. If a prior version is detected, you are asked if you want to continue with Setup. Click **Yes** and the **Welcome** window displays as shown in Figure 1-1.

Figure 1-1 Welcome Window



3. Click **Next** to continue with the installation. The **License Agreement** window displays as shown in Figure 1-2.


Figure 1-2 License Agreement Window



4. Read the license agreement information, and click **Yes** to continue with the installation.

5. The **User Information** window displays as shown in Figure 1-3. Enter your name in the **Name** field. Enter the name of your company in the **Company** field. Click **Next** to continue with the installation.

Figure 1-3 User Information Window

The image shows a Windows-style dialog box titled "User Information". On the left side of the dialog is a graphic depicting a desktop computer with a monitor, keyboard, and mouse, with two CD-ROMs and a globe in front of it. To the right of the graphic, the text "Please enter your name and the name of the company for whom you work." is displayed. Below this text are two text input fields. The first field is labeled "Name:" and contains the text "User1". The second field is labeled "Company:" and contains the text "BEA Systems Inc". At the bottom of the dialog box are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a darker border.

User Information

Please enter your name and the name of the company for whom you work.

Name:

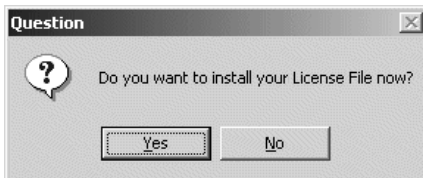
Company:

< Back Next > Cancel

6. The install license file **Question** pop-up window displays as shown in Figure 1-4. Click **Yes** to install your License File now.

Note: If you click **Yes**, the BEA Tuxedo Mainframe Adapter for OSI TP license file is appended to the existing Tuxedo license file, `$TUXDIR\udataobj\lic.txt`. If you click **No**, you will need to manually add the TMA OSI TP license to the end of the `lic.txt` file.

Figure 1-4 Install License File Question



7. When you click **Yes** to install the License File, the **Select License File Source Directory** window displays as shown in Figure 1-5.
 - a. Enter the Directory and Path or click the Browse button to display the Choose Folder pop-up window.

Figure 1-5 Select License File Source Directory Window



- b. If you clicked **Browse**, locate the License file and click **OK** to return to the **Select License File Source Directory** window. Then click **Next** to continue with the installation process.
8. The installation begins and a progress bar displays the status. The TMA OSI TP components install into the Tuxedo directory. You may abort the installation process anytime prior to completion by clicking **Cancel**.

Note: During the TMA OSI TP installation, the `$TUXDIR\udataobj\DMTYPE` file is updated to include an OSITPX entry if one is not already there.
9. The **Setup Complete** window, as shown in Figure 1-6 notifies you that the TMA OSI TP product is installed on your system. Click **Finish** to complete the setup process.

Figure 1-6 Setup Complete



Distribution Libraries and Executables for Windows 2000 Advanced Server

The TMA OSI TP CD-ROM contains the following libraries and executable programs for Windows operating systems. After installing the TMA OSI TP product, verify that these files and programs are installed on your system.

Directory	Files
/bin	DbgHelp.dll gwo.dll GWOSITP.exe nwunisys.dll osiadmin.exe osilt.dll osiltmain.exe osiltpp.dll osiltppmain.exe osimsg.dll Psapi.dll tasn1.dll
/locale/C	LIBGWO.text LIBGWO_CAT
/udataobj	gbebc2u.fld jbis82u.fld ksc2u.fld u2gbebc.fld u2jbis8.fld u2ksc.fld
\$TUXDIR/tma/osi/ samples/simpapp	dmconfig ubbsimple tailor.txt

Uninstalling BEA Tuxedo Mainframe Adapter for OSI TP Product on Windows 2000 Advanced Server

Perform the following steps to uninstall TMA OSI TP on a Windows NT system:

Note: Make sure that TMA OSI TP is shut down before you uninstall.

1. Click the **Start** button, and then point to **Settings**. Point to the folder that contains **Control Panel**, and then click **Control Panel**.
2. Double click on the **Add/Remove Programs** option from the **Control Panel** listings to access the **Add/Remove Programs** properties window.

3. In the **Add/Remove Programs Properties** window, select BEA Tuxedo Mainframe Adapter for OSI TP from the program list and click the **Add/Remove** button.
4. The uninstall process for TMA OSI TP begins. The **Remove Programs From Your Computer** screen displays. Click **OK** to complete the uninstall process.

Figure 1-7 Remove Programs From Your Computer Screen

