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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](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* (Primatesa)

– *Building Client/Server Applications Using Tuxedo* (Hall)

### Documentation Conventions

The following documentation conventions are used throughout this document.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>blue text</td>
<td>Indicates a hypertext link in PDF or HTML.</td>
</tr>
<tr>
<td><em>italics</em></td>
<td>Indicates emphasis or book titles or variables.</td>
</tr>
<tr>
<td><em>string with quotes</em></td>
<td>Indicates a string entry that requires quote marks.</td>
</tr>
</tbody>
</table>
### Conventions

<table>
<thead>
<tr>
<th>Convention</th>
<th>Item</th>
</tr>
</thead>
</table>
| UPPERCASE TEXT         | Indicates generic file names, device names, environment variables, and logical operators.  
  *Examples:*  
  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.  
  *Examples:*  
  `#include <iostream.h>` void main ( ) the pointer psz chmod u+w *  
  \tux\data\ap .doc  
  tux.doc  
  BITMAP  
  float |
| monospace boldface text| Identifies significant words in code.  
  *Example:*  
  void _xa_commit_ ( ) |
| ( )                   | 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:*  
  buildclient [-v] [-o name ] [-f file-list]...  
  [-l file-list]... |
<p>| |                     | Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed. |</p>
<table>
<thead>
<tr>
<th>Convention</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>. . .</td>
<td>Indicates one of the following in a command line:</td>
</tr>
<tr>
<td></td>
<td>• That an argument can be repeated several times in a command line</td>
</tr>
<tr>
<td></td>
<td>• That the statement omits additional optional arguments</td>
</tr>
<tr>
<td></td>
<td>• That you can enter additional parameters, values, or other information</td>
</tr>
<tr>
<td></td>
<td>The ellipsis itself should never be typed.</td>
</tr>
<tr>
<td>Example:</td>
<td>buildclient [-v] [-o name ] [-f file-list]...</td>
</tr>
<tr>
<td></td>
<td>[-l file-list]...</td>
</tr>
<tr>
<td>. . .</td>
<td>Indicates the omission of items from a code example or from a syntax line.</td>
</tr>
<tr>
<td>.</td>
<td>The vertical ellipsis itself should never be typed.</td>
</tr>
</tbody>
</table>
CHAPTER 1

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

- 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 UDADM 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 c1b0t010
```

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/c1b0t010 /mnt
```

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

```
# mount -r -F cdfs -o cdcase /dev/cdrom/c1b0t010 /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 <del>, <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:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>/bin</td>
<td>getulogfx</td>
</tr>
<tr>
<td></td>
<td>GWOSITP</td>
</tr>
<tr>
<td></td>
<td>osiadmin</td>
</tr>
<tr>
<td></td>
<td>osiltmain</td>
</tr>
<tr>
<td></td>
<td>portproxy</td>
</tr>
<tr>
<td></td>
<td>prdebuginfo</td>
</tr>
<tr>
<td></td>
<td>setPROXYpriv</td>
</tr>
<tr>
<td>/lib</td>
<td>libgwo.so</td>
</tr>
<tr>
<td></td>
<td>libnwunisys.so</td>
</tr>
<tr>
<td></td>
<td>libtasn1.so</td>
</tr>
</tbody>
</table>
The TMA OSI TP CD-ROM contains the following libraries and executable programs for the HP-UX 11 operating system:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Files</th>
</tr>
</thead>
</table>
| /locale/C | LIBGWO.text  
            | LIBGWO_CAT  
            | libnwunisys.cat |
| /udataobj | gebebc2u.fld  
            | jbis82u.fld  
            | ksc2u.fld  
            | u2gebebc.fld  
            | u2jbis8.fld  
            | u2ksc.fld |
| STUXDIR/tma/osi/ samples/simpapp | dmconfig  
                                      | ubbsimple  
                                      | tailor.txt |
| /bin      | getulogfx  
            | GWOSITP  
            | osiadmin  
            | osiltmain  
            | portproxy  
            | prdebuginfo  
            | setPROXYpriv |
| /lib      | libgwo.sl  
            | libnwunisys.sl  
            | libtasn1.sl |
| /locale/C | LIBGWO.text  
            | LIBGWO_CAT  
            | libnwunisys.cat |
The TMA OSI TP CD-ROM contains the following libraries and executable programs for the Solaris 8 operating system:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>/udataobj</td>
<td>gbebc2u.fld</td>
</tr>
<tr>
<td></td>
<td>jbis82u.fld</td>
</tr>
<tr>
<td></td>
<td>ksc2u.fld</td>
</tr>
<tr>
<td></td>
<td>u2gbebc.fld</td>
</tr>
<tr>
<td></td>
<td>u2jbis8.fld</td>
</tr>
<tr>
<td></td>
<td>u2ksc.fld</td>
</tr>
<tr>
<td>STUXDIR/omaosi/</td>
<td>dmconfig</td>
</tr>
<tr>
<td>samples/simpapp</td>
<td>ubbsimple</td>
</tr>
<tr>
<td></td>
<td>tailor.txt</td>
</tr>
</tbody>
</table>

**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:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>/bin</td>
<td>getulogfx</td>
</tr>
<tr>
<td></td>
<td>GWOSITP</td>
</tr>
<tr>
<td></td>
<td>osiadmin</td>
</tr>
<tr>
<td></td>
<td>osiltmain</td>
</tr>
<tr>
<td></td>
<td>portproxy</td>
</tr>
<tr>
<td></td>
<td>prdebuginfo</td>
</tr>
<tr>
<td></td>
<td>setPROXYpriv</td>
</tr>
<tr>
<td>/lib</td>
<td>libgwo.so</td>
</tr>
<tr>
<td></td>
<td>libnwunisys.so</td>
</tr>
<tr>
<td></td>
<td>libtasn1.so</td>
</tr>
<tr>
<td>/locale/C</td>
<td>LIBGWO.text</td>
</tr>
<tr>
<td></td>
<td>LIBGWO_CAT</td>
</tr>
<tr>
<td></td>
<td>libnwunisys.cat</td>
</tr>
</tbody>
</table>
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.

### Directory Files

<table>
<thead>
<tr>
<th>Directory</th>
<th>Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>/udataobj</td>
<td>gbebc2u.fld</td>
</tr>
<tr>
<td></td>
<td>jbis82u.fld</td>
</tr>
<tr>
<td></td>
<td>ksc2u.fld</td>
</tr>
<tr>
<td></td>
<td>u2gbebc.fld</td>
</tr>
<tr>
<td></td>
<td>u2jbis8.fld</td>
</tr>
<tr>
<td></td>
<td>u2ksc.fld</td>
</tr>
<tr>
<td>STUXDIR/mta/osi/samples/simpapp</td>
<td>dmconfig</td>
</tr>
<tr>
<td></td>
<td>ubbsimple</td>
</tr>
<tr>
<td></td>
<td>tailor.txt</td>
</tr>
</tbody>
</table>

1-10   BEA Tuxedo Mainframe Adapter for OSI TP Installation Guide
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**

![Welcome Window](image_url)
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**
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](image)

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.
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.
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.
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**

```
Remove Programs from Your Computer

uninstallShield will remove the software BEA Tuxedo Mainframe Adapter OSI TP 8.1 from your computer. Please wait while each of the following components is removed...

✓ Shared program files...
✓ Standard program files...
✓ Folder items...
✓ Program folders...
✓ Program directories...
✓ Program registry entries...

Uninstall successfully completed.
```

Click **OK** to complete the uninstall process.