

2 Installation Support

The sections that follow contain information about these topics:

- Linux Installation Support
 - Linux Installation Troubleshooting
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 - Windows Installation Troubleshooting
- Update Installation Procedures
- Relocating AppTransaction Xpert System Software
- Running Previous Releases
- Relocating System Software to Another Drive or Directory
- Relocating System Software to Another Computer
- Removing AppTransaction Xpert System Software from Your Workstation

This information is provided for special cases that might arise.

For information about supported platforms, memory usage, and other requirements, contact technical support.

Linux Installation Support

Most sites should follow the installation procedure described on the installation instructions. This procedure uses the installation program to configure your workstation automatically and install AppTransaction Xpert. However, if your workstation has an unusual or incorrect configuration, the installation program may fail.

Linux Installation Troubleshooting

This section provides solutions for problems that may occur during Linux installations. Each problem has a discussion section that explains what is happening and a solution section that explains how to solve the problem. If your problem is not described here, contact Technical Support.

Problem Attempts to run programs that use AppTransaction Xpert libraries result in “No such file or directory” errors.

Discussion The PATH environment variable must be set to include the correct AppTransaction Xpert executable directory. Either the variable does not include the executable directory or it is set for the directory of an earlier release.

Solution Make sure each user has the correct environment path, as follows:

Procedure 2-1 Checking the Environment Path

- 1 Log in to the user’s account.
- 2 Open the user’s shell startup file (`.cshrc` in the C shell).
- 3 Add the following directory to the user’s PATH variable.

```
<install_dir>/<release>/sys/unix/bin
```

End of Procedure 2-1

Windows Installation Support

Most sites should follow the installation procedure described on the Windows Installation sheet. This procedure uses the `setup` program to automatically configure your computer and install AppTransaction Xpert. However, if your computer has an unusual or incorrect configuration, the installation program may fail.

WARNING—Changing file systems on Windows platforms, such as from FAT to NTFS, will invalidate the license file. To maintain the validity of your licenses during a file system change, you should first de-register your licenses, then change the file system, and finally re-register your licenses. See Deregistering Licenses and Manage Licenses from the License Manager GUI for information on how to deregister and re-register licenses.

Windows Services

When you install AppTransaction Xpert, certain Windows services are installed and started. The administrator for the machine on which AppTransaction Xpert is running must have privileges to manage these services. Note that not all of the services listed below apply to every product. See the description for more information.

Table 2-1 Windows Services Installed with AppTransaction Xpert

Service	Description
OPNET License Server	License Server Only: Issues licenses to AppTransaction Xpert applications. Control it with the License Manager. For more information, see License Server.
OPNET Application Capture Agent	AppTransaction Xpert Functionality Only: Collects transaction data for AppTransaction Xpert captures. Control it with the AppTransaction Xpert Capture Manager. For more information, see “Capturing Traffic Using AppTransaction Xpert” in AppTransaction Xpert User Guide.
OPNET Report Server	Report Server Functionality Only: This service runs to support Report Server functionality when you choose to install Report Server as a service.
OPNET OVI-ICO Service	Collects information from HP OpenView for use in the Server Characterization Editor.

Windows Installation Troubleshooting

This section provides solutions for problems that may occur during Windows installations or operation. Each problem has a discussion section that explains what is happening and a solution section that explains how to solve the problem. If your problem is not listed here, contact technical support.

Problem AppTransaction Xpert obtains a license from the OPNET License Server through a Windows XP firewall. Both machines are in the same classful network, however AppTransaction Xpert fails to obtain a license.

Discussion The Windows XP firewall blocks AppTransaction Xpert licensing traffic.

Solution Add the *op_license_server.exe* filename to the exceptions list for the Windows XP firewall. For more information, consult your Windows system administrator.

Problem Trying to run a licensed program results in the message: The licensing system depends on the following nonexistent service: Tcpip.

Discussion There is a problem with the TCP/IP software.

Solution Try installing TCP/IP again (as described in Procedure 2-2 or Procedure 2-3), then repeat the step that failed. If the problem persists, contact technical support.

Problem The Windows `setup` program reports that TCP/IP is not installed.

Discussion The licensing system requires that the Windows TCP/IP software be installed. The TCP/IP software, in turn, requires the presence of an installed network adapter driver.

Solution Use the following procedures to install and configure the necessary software:

1) Procedure 2-2 Installing TCP/IP for a Network Connection (Windows NT 4.0) on page AG-2-6

or

Procedure 2-3 Installing TCP/IP for a Network Connection (Windows 2000) on page AG-2-7

2) Procedure 2-4 Verifying that a Network Adapter Driver is Installed on page AG-2-8

3) Procedure 2-6 Configuring TCP/IP on page AG-2-9

To install TCP/IP for a network connection on a Windows NT 4.0 computer:

Procedure 2-2 Installing TCP/IP for a Network Connection (Windows NT 4.0)

- 1 Verify that you are logged on as a user with administrator's privileges.
- 2 Insert your Windows CD-ROM into the drive of the install workstation. If a Windows CD-ROM window opens, close it.
- 3 Open the Windows Control Panel and double-click the Network icon.
 - ➡ The Network (Network Settings) dialog box opens.
- 4 In the Network (Network Settings) dialog box, click on the Protocols tab. Then click the Add... (Add Software) button.
 - ➡ The Select Network Protocol (Add Network Software) dialog box opens.
- 5 Select TCP/IP Protocol (TCP/IP Protocol and related components) from the list of available software and click OK.
 - ➡ The TCP/IP Setup dialog box opens.
- 6 If the install workstation is not on a network, answer No to the question about using a DHCP server. If the install workstation is on a network, consult your system administrator for the correct response.
 - ➡ The Windows Setup dialog box opens, showing the path to the software on the CD-ROM.
- 7 Verify that the path is <CD-ROM_drive>:\i386, where <CD-ROM_drive> is the letter of the install workstation CD-ROM drive. Change the path if necessary.
- 8 Click Continue.
 - ➡ The TCP/IP software is installed from the CD-ROM.
- 9 Click OK, then Close to close the Windows Setup dialog box and return to the TCP/IP Setup dialog box.
- 10 Click on the IP Address tab and enter the IP number, subnet mask, and default gateway. (If you do not know these, ask your system administrator.)
- 11 Click on the DNS tab and enter the host name, domain name and DNS service search order. (The latter value is the IP address of your DNS server.)
- 12 Click OK to reboot your computer.

End of Procedure 2-2

To install TCP/IP for a network connection on a Windows 2000 computer:

Procedure 2-3 Installing TCP/IP for a Network Connection (Windows 2000)

- 1 Verify that you are logged on as an administrator or a member of the administrator's group.
- 2 Insert your Windows 2000 CD-ROM into the drive of the install workstation. If a Windows CD-ROM window opens, close it.
- 3 From the Windows Start menu, choose Settings > Network and Dial-up Connections.
 - ➡ The Network and Dialup Connections dialog box appears.
- 4 Double-click on the network connection for which you want install TCP/IP, then click Properties.
- 5 Click the General tab for a LAN connection, or the Networking tab for all other connection types.
- 6 If Internet Protocol (TCP/IP) does not appear in the list of installed components, perform the following steps:
 - 6.1 Click Install, then Protocol, then Add.
 - ➡ The Select Network Protocol dialog appears.
 - 6.2 Select Internet Protocol (TCP/IP) from the protocols list, then click OK.
 - ➡ Internet Protocol (TCP/IP) now appears in the list of supported protocols for the selected connection.
- 7 Double-click on the Internet Protocol (TCP/IP) list item to open the Internet Protocol (TCP/IP) Properties dialog box.
- 8 Specify your machine's IP address.

If your network is run on a DHCP server, choose Obtain IP address automatically.

If your network is not run on an DHCP server, click Use the following IP address... and enter the IP address, subnet mask, default gateway, preferred DNS server, and alternate DNS server.
- 9 Click Advanced... to open the Advanced TCP/IP Settings dialog box, then click the DNS tab.
- 10 Enter the DNS suffix in the DNS suffix for this connection field.
- 11 Click OK to close the Advanced TCP/IP Settings dialog box and return to the Internet Protocol (TCP/IP) Properties dialog box.
- 12 Click OK to close the Internet Protocol (TCP/IP) Properties dialog box.

End of Procedure 2-3

Confirm that a network adapter driver is installed. If not, install a dummy driver. To verify that a network adapter driver is installed, perform the following procedure.

Procedure 2-4 Verifying that a Network Adapter Driver is Installed

- 1 If it is not already available, open the Network dialog box.
- 2 Click the Adapters tab to see if there is at least one adapter in the Network Adapters list.
 - If there is at least one adapter in the list, continue with Procedure 2-6.
 - If there are no adapters in the list, you must install a “dummy” driver. Continue with Procedure 2-5.

End of Procedure 2-4

To install a network adapter driver, do the following procedure.

Procedure 2-5 Installing a Network Adapter Driver

- 1 In the Network (Network Settings) dialog box, click the Add... (Add Adapter) button.
 - ➡ The Select Network Adapter (Add Network Adapter) dialog box opens.
- 2 Select MS Loopback Adapter from the list of available drivers.
- 3 Click OK (Continue) button.
 - ➡ The MS Loopback Adapter Card Setup dialog box opens.
- 4 Click OK.
 - ➡ The standard 802.3 frame type is selected.
- 5 If prompted, enter the path to the software:

`<CD-ROM_drive>:\i386`
 - ➡ The software is installed from the CD-ROM.

End of Procedure 2-5

To configure TCP/IP to work with AppTransaction Xpert, use the following procedure.

Procedure 2-6 Configuring TCP/IP

Note—This procedure may result in numerous error messages about various network services. You can ignore these messages.

- 1 In the Network dialog box, click the Protocols tab.
- 2 Click the Properties... (Configure) button.
 - ➡ The Microsoft TCP/IP Properties (TCP/IP Configuration) dialog box opens.
- 3 Enter the following configuration information for the workstation. Your network administrator can provide appropriate values for your network.
 - IP Address—Enter the network address of the install workstation. If the workstation is not connected to a network, you can enter any value (1.1.1.1, for example).
 - Subnet Mask—Enter a value appropriate for the install workstation, if one is not entered automatically. (With the example IP Address in step 3a, the Subnet Mask would be 255.0.0.0.)
 - Default Gateway—Enter the address of the gateway used by the install workstation. Again, if the workstation is not connected to a network, you can enter any value (1.1.1.1, for example).
- 4 Click OK.
- 5 If an alert dialog about adapter cards with an empty primary WINS address appears, you can generally continue by clicking Yes. If a problem occurs, consult your network administrator.
- 6 Close the Network (Network Settings) dialog box. Restart the install workstation if a dialog box suggesting this appears.

End of Procedure 2-6

The necessary TCP/IP software is now ready for use with the Floating License System.

Update Installation Procedures

You must do an *update system installation* to install AppTransaction Xpert on a server workstation where an earlier release is installed. A server workstation with AppTransaction Xpert already installed normally has a directory called the installation directory. This directory has a subdirectory for each installed release of AppTransaction Xpert.

The update installation will add a new release subdirectory to ...*<install_dir>* that corresponds to the new release. The new release will continue to use the existing license file and AppTransaction Xpert execution permits will remain usable after installation.

To update from the previous Linux release, do the following procedure:

Procedure 2-7 Updating from a Previous Release (Linux)

Note—If you are prompted during installation to shut down license servers running on this host, answer Yes. If you did not shut down the license servers during installation, do the following steps:

- 1 Shut down the floating license supervisor by typing the following command at the command prompt:

```
op_license_util -license_server_kill -license_server <hostname>  
-license_port <port>
```

- 2 Install the new release.

The install process is described in the Installation Instructions that come with the software.

End of Procedure 2-7

Running Previous Releases

If you have installed the latest version of the software, you can still run earlier releases by creating batch files to set the appropriate system variables (Windows) or by updating your PATH (Linux), as described in the following procedures.

To run a previous Windows release, do the following procedure:

Procedure 2-8 Running Previous Releases of AppTransaction Xpert (Windows)

- 1 Use a batch file to set the opnet_dir, Lib, Path, and Include system variables (a batch file is any file with a .bat extension).

For example, the following batch file could be used to set up an environment for version 11.0:

```
@echo off
set opnet_dir = c:\OPNET
set path = c:\opnet\11.0.A\sys\pc_intel_win32\bin;%path%
set lib = c:\opnet\11.0.A\sys\pc_intel_win32\lib;%lib%
set include = c:\opnet\11.0.A\sys\include;%include%
echo OPNET 11.0.A environment has been set up
```

When you want to run version 11.0, first run the above batch file in a command window (by typing the name of the batch file, including the extension), then issue the standard AppTransaction Xpert start-up commands from the same window (such as ...>atx).

Note—The latest version of the license server (`op_license_server`) should be running on your machine, regardless of the AppTransaction Xpert version you are running. For example, if you run both a current release and a previous release, you should be running the current release license server. If you selected the “serve licenses from this computer” option during the license configuration portion of the installation, the new license server was automatically installed in place of any existing servers.

End of Procedure 2-8

To run a previous Linux release, do the following procedure:

Procedure 2-9 Running Previous Releases of AppTransaction Xpert (Linux)

- 1 Reset your PATH variable for the release directory of the AppTransaction Xpert version you want to run.

For example, to run version 12.0, you would reset your PATH as follows:

```
set path=(<install_dir>/12.0.A/sys/unix/bin $path)
```

Note—The latest version of the license server (`op_license_server`) should be running on your machine, regardless of the AppTransaction Xpert version you are running. For example, if you run both a *current* release and a *previous* release, you should be running the *current* release license server. If you selected the “serve licenses from this computer” option during the license configuration portion of the installation, the new license server was automatically installed in place of any existing servers.

End of Procedure 2-9

Removing AppTransaction Xpert System Software from Your Workstation

Typically, you want to free up the disk space used by an old release when it is no longer needed.

Note—If you are removing release 10.0, make sure you have converted your license file to a format that is compatible with releases beginning with 11.0 or greater. See the installation information packaged with the CD or the Technical Support area of the OPNET website for instructions.

To remove system software from a Windows workstation, do the following procedure:

Procedure 2-10 Removing System Software from a Windows Workstation

- 1 Log in as Administrator to the machine where AppTransaction Xpert software is located.
- 2 Use the Add/Remove Programs utility in the Windows Control Panel.
- 3 Select each item that you want to remove, and then click on the Add/Remove button.
- 4 If you do not want to keep your models and other data, delete the contents of directories `<user_home>/<op_admin>` and `<user_home>/<op_models>` and remove the directories.

End of Procedure 2-10

To remove system software from a Linux workstation, do the following procedure:

Procedure 2-11 Removing System Software from a Linux Workstation

- 1 Log in as root to the machine where AppTransaction Xpert software is located.
- 2 Stop the OPNET License Server using the steps described in Procedure 3-39 on page AG-3-63.
- 3 Delete the `<release>` directory containing the software to be removed.
Note—For more information on the `<release>` directory, see Terminology.
- 4 Delete the `/etc/rc3.d/S999_opnet_lic_server` file that is described in Procedure 3-36 on page AG-3-62.

- 5 If you do not want to keep your models and other data, delete the contents of directories `<user_home>/<op_admin>` and `<user_home>/<op_models>` and remove the directories.

End of Procedure 2-11

Relocating AppTransaction Xpert System Software

For any of a variety of reasons, you may want to relocate your AppTransaction Xpert system files. This may involve moving the files to another drive on the same computer or onto another computer. This section describes the following procedures:

- Relocating System Software to Another Drive or Directory
- Relocating System Software to Another Computer

WARNING—AppTransaction Xpert is unavailable during these procedures. To minimize disruption, do the relocation operation during a low-use period and warn users in advance.

Relocating System Software to Another Drive or Directory

Moving files within the same computer is a simple process, described in the following procedure. There is no need to deregister and reregister the license file in this procedure, because the license file is always installed on the primary drive of your computer.

Procedure 2-12 Relocating System Software within the Same Computer

- 1 Log in to the machine where the AppTransaction Xpert system software is located.
 - 1.1 On Windows, log in as Administrator.
 - 1.2 On Linux, log in as root.

- 2 Uninstall the system software from the original location:

Windows: Follow Procedure 2-10.

Linux: Follow Procedure 2-11.

- 3 Reinstall AppTransaction Xpert in the new location, using the CDs or installers that were used for the previous installation. Follow the installation procedures outlined on the Installation instructions. If you no longer have the installers or installation instructions, you may obtain them from technical support.

- 4 Create a new preference file.

Note—The first time a user runs the software in its new installation, a new preference file must be created. For more information about preference files, see "Preferences" in the *Reference Guide*.

- 4.1 Open a Console.

Windows: Open an AppTransaction Xpert Console, using Start > Programs > AppTransaction Xpert 17.0 > Console 17.0.

Linux: Log in as the user of AppTransaction Xpert.

- 4.2 Create the new preference file by issuing the command:

atx -new_prefs_file

End of Procedure 2-12

For more information, see OPNET Licenses.

Relocating System Software to Another Computer

To move AppTransaction Xpert system files from one computer to another, the simplest method is to uninstall the system software from the old location and reinstall it in the new location using the original installation CDs.

- To do this for a system on which both the license file and the software are installed, perform the following procedures in order: Procedure 2-13 and Procedure 2-14. Then add licenses, as described in Manage Licenses from the License Manager GUI.
- To do this for a system that is referencing an external license server, follow only Procedure 2-14.

To deregister licenses, perform the following procedure.

Procedure 2-13 Deregistering Licenses

- 1 (Windows only) Log in to the machine where the AppTransaction Xpert system software is located.

- 2 Launch the License Manager:

Windows:

Select License Manager (Start > Programs > AppTransaction Xpert 17.0 > License Manager).

Linux:

Enter the following command:

```
op_license_manager
```

➡ The License Manager opens in one window. The AppTransaction Xpert program opens in another window, but has limited functionality.

- 3 Revoke any licenses that are still in use by selecting the licenses and clicking on the Revoke License button.
- 4 In the License Manager treeview, choose the server where the AppTransaction Xpert system software is located (it should be the machine you are logged into).
- 5 Deregister the licenses in that server's license file:
 - 5.1 Expand the license file icon.

- 5.2 Select and deregister all of the licenses in the license file by clicking on the Deregister License button and following the on-screen prompts.

- 6 Exit AppTransaction Xpert.

End of Procedure 2-13

To relocate the system software, perform the following procedure.

Procedure 2-14 Relocating System Software to Another Computer

- 1 Log in to the machine where the AppTransaction Xpert system software is located.
 - 1.1 On Windows, log in as Administrator.
 - 1.2 On Linux, log in as root.
- 2 Uninstall the system software from the original location:
Windows: Follow Procedure 2-10.
Linux: Follow Procedure 2-11.
- 3 Reinstall AppTransaction Xpert in the new location, using the CDs or installers that were used for the previous installation. Follow the installation procedures outlined by the Installation instructions. If you no longer have the installers or installation instructions, you may obtain them from technical support.

End of Procedure 2-14

To reregister licenses after moving the system software, see Manage Licenses from the License Manager GUI.