

# **ESKER** *Tun<sup>®</sup> Plus*

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## Getting Started

Pour Démarrer  
Erste Schritte  
Introduzione  
Introducción

Tun Plus 2009  
Issued May 2008

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# Introduction

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**Note:** The online version of this manual may be more up to date than the printed version.

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Tun Plus provides a complete communications package, providing PC access to IBM or Unix hosts, databases, remote file servers, and network printers. Tun Plus offers flexible licensing options and powerful administration tools to simplify host access management, minimize costs, and meet changing needs. Bringing together PC-to-Host, Web-to-Host, and Multi-User Windows clients in a single product, Tun Plus offers a rich set of advanced capabilities ranging from simple terminal emulation to data access and network services across all its client types.

Administrators can create and configure host sessions quickly, and an intuitive user interface delivers easy access to critical IBM or Unix host data via any Tun Plus client. To extend secure access beyond the firewall, Tun Plus provides integrated security encryption for mobile and remote users. Tun Plus licensing offers diverse enterprises a convenient path for migration to high-performance Web-to-Host connectivity with Java and ActiveX support.

Tun Plus offers the following connection methods for users:

- PC-to-Host is a client-server solution that permits networked personal computers (PCs) to access IBM or Unix hosts, databases, and many other network utilities using client applications.
- Multi-User Windows is a thin-client solution that permits PCs using a server-based operating system (like Citrix) and server-based applications to communicate with IBM or Unix hosts, access databases and network utilities.
- Web-to-Host is a web-browser solution that permits PCs to communicate with IBM or Unix hosts, access databases, and network utilities, using a browser. Tun Plus may also be used over intranets, providing a lower total

cost of ownership than pure PC-to-Host systems.

# Tun Plus features

Tun Plus provides access to over 30 IBM and Unix hosts, all widely-used databases, as well as a large suite of network services for PCs and other desktop clients in virtually any network environment. Robust tools allow extensive application and database customization.

## Application resource access

Tun Plus offers a powerful terminal emulation suite, including support for over 30 different asynchronous (to Unix, HP, and Digital hosts) and synchronous (IBM 3270/5250) terminal types. Using Tun Plus customization tools, administrators can create seamless host integration and simplify user access — by adding backgrounds, GUI function key-panels, toolbars, customized mouse support, and hotspots for clickable interactions.

## Network resource access

- **File Transfer Protocol (FTP):** Tun Plus offers a Windows Explorer-like interface for FTP sessions to make file transfers between local PCs and remote hosts more intuitive than ever. Tun Plus offers full-featured FTP settings, including a complete range of conversion methods to permit your local PC to exchange files with a large selection of hosts. Tun now allows you to create a secure connection to an FTP host via SSH. To create a secure connection, check the Secure FTP check box on the FTP Logon dialog for your FTP session.
- **Network File System (NFS):** Tun Plus continues to offer PCs the power to mount remote directories over a network and treat them as local drives on the PC. This allows hosts to act as Windows file servers, providing a common area for storing files, and executing Windows programs in multi-user environments.
- **Line Printer Daemon (LPD) & Line Printer Redirection (LPR):** Tun Plus offers complete remote printing functionality, with LPD and LPR to permit PCs to use host printers, or hosts to access local PC printers.

### Database access

Tun Plus allows its users to access and refine data stored in a wide variety of database programs, including Oracle, Progress, Sybase, and DB2. Database access applications allow Tun Plus users to reconfigure these databases in a common user interface, simplifying data management.

### Tun Plus PC-to-Host connectivity

Tun Plus offers a complete legacy IT solution by integrating host system and network resources into multi-client environments. Administrators install a client-side application (the Esker Viewer) on selected networked PCs. The Esker Viewer then provides those clients with access to a set of resources, configured by the Tun Plus administrator.

Tun Plus administrators can provide their users with additional functionality in any Tun Plus application, like customized mouse usage, buttons, and tool-bars, using a standard Windows interface.

### The Esker Viewer

The Esker Viewer provides and manages an end user's workspace. You can add, remove, and update sessions for the workspace within the Esker Viewer. The Esker Viewer permits users to have multiple sessions open at the same time.

The Esker Viewer is also fully compatible with VBScript and JScript, allowing administrators to customize emulations. Additionally, developers can create new interfaces and tools using development tools that support Microsoft COM architecture, and then integrate those tools with Tun Plus configurations.

### Tun Plus multi-user Windows connectivity

Tun Plus includes connectivity solutions for most multi-user Windows operating systems, including Windows Terminal Server Edition (TSE), and TSE with Citrix Presentation Server. Multi-user Windows platforms allow organizations to deploy applications across an extended enterprise, regardless of user location, client hardware, operating system, or bandwidth limitations. Tun Plus now allows administrators of such systems to provide full featured host, database, and network connectivity. Administrators using Tun Plus for

this type of connectivity install the server-side Tun Plus application, which is then available for the end users.

# Tun Plus Web-to-Host connectivity

Tun Plus administrators can create and customize sessions on a web server using Web-to-Host connectivity. The administrator then makes the sessions available via URL access, either on a webpage or via the Desktop (a default desktop is automatically installed). Users access the sessions by opening a browser, navigating to the webpage (or Desktop), and clicking a link. The session opens in the browser, and the host communicates with the PC, regardless of its physical location.

End users access the Desktop using a browser. The Desktop may include applications, databases, network resources, and sessions. From this HTML page, users choose which resource they will open and use.

The administrator provides new updates on the server, then Tun Plus automatically downloads the updated version to the client machine via the browser. This simplifies administration, as Tun Plus installation and configuration only has to be done once on the HTTP server.

# Tun Plus Web-to-Host technology

Tun Plus incorporates ActiveX and Java technologies. Using these technologies, Tun Plus provides a complete communications package that incorporates server access functionality into an HTML interface.

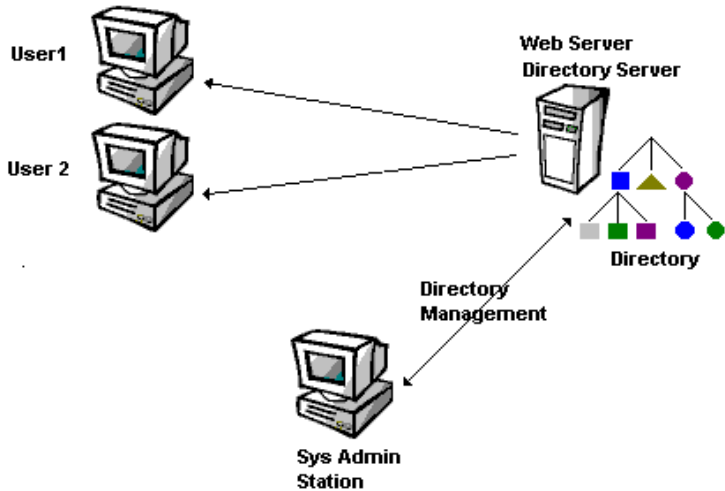
Tun Plus is implemented using standard Internet, intranet, and networking technologies such as HTML and JavaScript. The main advantages of ActiveX and Java technologies are the following:

- You don't need to install anything on the user's client machine since the ActiveX controls and Java applets are downloaded automatically from the HTTP server.
- An ActiveX control or a Java applet can keep a session open and is therefore compatible with the logic of terminal emulation.

# LDAP

Tun Plus uses the LDAP (Lightweight Directory Access Protocol) directory system, which helps administrators:

- Centralize all configuration of emulation sessions, databases, and network resources.
- Centralize user management.
- Customize and then distribute the access functions to each of the corporate users according to their user profile.



The combination of ActiveX/HTML (or Java/HTML) applications and LDAP allows the administrator to optionally define a different profile for each user or user group using the same access components.

The flexibility of the ActiveX/HTML (or Java/HTML) pair, combined with centralized management from a directory system, allows the administrator to provide an HTML page (the Desktop) for end users. Users choose a resource on the Desktop, then click an icon to start the session, preconfigured by the administrator.



# Package Contents

The Tun Plus package contains the following items:

- A CD-ROM.
- The Getting Started Guide (this book).
- Miscellaneous technical or sales bulletins.
- A sealed envelope with the User License Agreement written on it. This envelope contains a registration card with a unique code (in Australia, see below). This code allows you to retrieve both the serial number and the activation key required at installation, by either connecting to Esker's registration web page, mailing the card back to Esker, or faxing the form included in this package to Esker.

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**Important:**

The procedure is different for Australia: both the serial number and the activation key are specified directly on the registration card.

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## Tun Plus manuals

Tun Plus ships with one printed manual, *Getting Started*. This book and other additional books are also available on the Tun Plus CD-ROM in electronic (PDF) format. These books can be accessed through the CD browser.

Use the *PC-to-Host and Multi-User Administrator Guide* to familiarize yourself with the PC-to-Host or multi-user Windows module. Additionally,

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the following reference guides can aid in customizing Tun Plus applications for the end users.

<b>Title</b>	<b>This book provides information on...</b>
Application Access ActiveX	Using Tun Plus emulators in ActiveX version.
Application Access 32-bit Executable	Using Tun Plus emulators in 32-bit executable version.
Network Resource Access	Providing users access to network resources in a TCP/IP network (drive/printer sharing, file transfers, etc.).
Tun SQL Database Access	Permitting PCs to operate in a client-server mode with remote databases using ODBC.
Web Administrator Guide	Distributing sessions to your users and groups, as well as additional administration and resource management. Includes info on creating and managing users, groups, resources, tools, and sessions.

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# PC-to-Host Installation

## System requirements for Windows

To use Tun in a Windows environment, you need:

- Computer 133 MHz or higher Pentium-compatible CPU.
- At least 64 megabytes (MB) of RAM
- Windows 2000/XP with the latest Windows updates or Windows 2003/Vista in 32 bits version with the latest Windows updates.
- A network card (unless you only want to install and use serial line emulation).
- To use Tun SQL, you need A UNIX, MVS or AS/400 (for DB2) server with an RDBMS (Oracle, Informix, Sybase, DB2, Progress) or a C-ISAM library.

▶▶ See “Client requirements” on page 30 for a list of supported servers.

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**Notes:** Tun Plus must be installed on a local drive.

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## System requirements for multi-user environment

To use Tun in a multi-user Windows environment, you need:

- A Citrix Presentation server 4.0, or a Windows TSE server or Windows 2000/2003 with the latest Windows updates.

- To use Tun SQL, you need a UNIX, MVS or AS/400 (for DB2) server with an RDBMS (Oracle, Informix, Sybase, DB2, Progress) or a C-ISAM library.

# Installing Tun Plus PC-to-Host

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**General Installation Notes:** If you are installing Tun on a Citrix Presentation Server console or Windows TSE server, you will first need to set the server to Install mode by typing “Change User /Install” in a command prompt window. Esker recommends that you install the MUNTE version of Tun Plus on the console, not remotely.

You must have administrator rights to install Tun Plus.

The Tun toolbar graphics have an updated look and feel in Tun. For systems using 256 colors or less, however, the previous version of the toolbar graphics are installed and used. These older graphics display better on these systems.

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1. Insert the CD-ROM in the server's CD-ROM drive (typically, drive D:). The CD browser appears automatically (Autorun). If this does not work, do one of the following:
  - If Autorun is deactivated, from the Windows Explorer, select the CD-ROM drive\autorun.exe.
2. Click Install to begin. The Tun Plus setup wizard starts and a Welcome screen appears.
3. Click Next. The License agreement screen appears.
4. Click Yes to continue.
5. Enter both the license number and the activation key of the software, and its license string, if necessary (this information is given with the software in the sealed envelope). Click Next to proceed.

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**Note:** If you have already installed this version of Tun Plus, the first dialog box that appears after the welcome prompts you to choose between adding or removing components, or performing a complete installation again. If you select adding or removing components, the serialization box won't be displayed.

---

To install the demonstration version of Tun Plus, just click Next. A serial number and activation key are provided for the demo installation. The demonstration version installs the software with full functionality. It is only valid for 28 days.

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**Note:** Since Tun Plus setup automatically detects Citrix Presentation Server or Windows TSE and automatically selects the MUNTE version of Tun Plus, steps four and five do not apply to the MUNTE version of Tun Plus.

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6. On the Choose Deployment Method dialog, select the PC-to-host option and click Next.
7. On the Installation Type dialog, select the type of installation you want: The Active X version (recommended) or the executable version. Then, click Next.
8. On the Setup Type dialog, choose the type of installation and the destination folder. Click Browse to choose other installation directories if the default doesn't suit your configuration. Click Next to continue.
9. If you chose the custom installation, the Custom Component and sub-component installation dialog opens. Choose the components you want to install, and click More Details to install sub-components. Click Next to continue.
10. On the Start Copying Files dialog, click Next if you're satisfied with the installation options. This will install the program files to your PC.

## Installing RTUNPLUS (EXE version only)

To use RTUNPLUS in a traditional installation:

1. During setup, use the Custom setup option.
2. Choose to install the Samples.

Setup installs the RTUNPLUS binary executable and the source code in the directory C:\Program Files\Tun\Emul\Samples\Sources by default.

## Adding or removing components

When adding or removing components by re-running setup, the check marks show items that are currently installed. Removing check marks will instruct setup to uninstall these components. Adding check marks will add components. The Add/Remove feature is designed to be both a maintenance and a setup feature. Since setup reinstalls all checked components in case of file corruption, you should back up any files that may have been modified before using the Add/Remove feature.

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### Note:

The SSL server and PDF manual install status may not be properly reported in the Add/Remove dialog.

---

## Upgrading Tun Plus PC-to-Host

If you previously installed a version of Tun Plus version 10.0 or higher, it's possible to upgrade the existing setup with a special upgrade license number. Setup will recognize the license number as an upgrade and will present the user with some additional options.

If you are currently running the traditional (exe) version of Tun Plus, setup will recommend that you choose the ActiveX version for the upgrade. The ActiveX version provides users with more functionality and more recent updates to features. Choosing this option will update the software to use ActiveX-based code.

The second option presented is whether you wish to back up the configuration files. If you choose this option, setup will create a backup copy of all the configuration files contained in the \TUN\EMUL directory and save them in a subdirectory named \TUN\EMUL\SAVE000.

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**Note:** Although Tun Plus backs up your configuration files, it is still recommended that you back up any files that you have created or customized before upgrading.

---

## Upgrading to Windows XP

If, after you have installed Tun, you upgrade your operating system to Windows XP, you must reinstall Tun Plus on the XP machine, or Tun Plus will not function properly.

## Uninstalling Tun Plus

To uninstall Tun Plus, use the "Uninstall Tun Plus" from the Esker Tun start menu.

Alternately, from the control panel, click the Add/Remove Programs icon (from the Start menu, then Settings) and select Tun Plus and click the Add/Remove button.



## PC-to-Host Automated Setup

If you need to install Tun Plus on several PCs, you can automate the various steps by recording them in a configuration file. You can also add your own files and programs to the procedure.

This installation mode is known as “silent mode.”

### Creating the installation configuration file

The installation configuration file in silent mode is an .ini file that contains the information usually entered during a setup. You can create this file by:

- Using the setup wizard (ADMIN);

Or

- Using a text editor to edit Esker’s template.

### Creating the installation configuration file using the setup wizard

Running setup with the ADMIN parameter will not actually install Tun Plus on your computer. Instead, setup records your choices and writes them to the setup configuration file you specify with the SILENT parameter.

1. Select Start>Run.
2. Enter the following:

```
<drive1>:\PC2Host\Setup.exe ADMIN SILENT=<drive2>:\mysilent.ini
```

Where <drive1> is the location of the Tun Plus setup program (usually the CD-ROM drive) and <drive2> is where the configuration file is created. This file should be in a location accessible to all users.

Run through the setup program as you want it to run during silent install.

The installation configuration file is created from this information and stored in the directory specified in the command line. Click Finish to exit the setup wizard.

3. The Welcome screen will confirm that you are recording a setup configuration file. Click Next to continue
4. After the Welcome screen, setup will prompt you on which dialogs you wish to display during the silent mode setup. Click Next to continue.

---

**Note:** If you choose not to display the Installation Path and Components dialog, be sure the location on the Choose Destination Location dialog is a local PC drive and will be valid for all users installing Tun Plus.

---

5. The license number entered in the License Information Dialog will be used for all installations. Leaving this blank will prompt setup to use a demonstration license which is valid for five users and 28 days. Click Next to continue.
6. After the license number dialog, setup will display the same options as a Custom Setup. These options will be recorded in the configuration.ini file.
7. The final dialog in the setup will tell you the name and location of the setup configuration file which contains your choices. Click Finish to quit.

## Creating the installation configuration file using a text editor

The installation configuration file is an .ini file type made of sections containing entries. A template, silent.mod, is provided on the CD-ROM in the D:\PCTOHOST\ directory. You can copy this file and open it with a text editor. You will need to save this file as an .ini file when you are done editing it.

The ShowDlg... entry at the start of each section defines the display of the specified dialog box.

- If the entry value is 1, the dialog box will be displayed (the information used will correspond to the data the user entered in the dialog box).
- If the entry value is 0, the dialog box won't be displayed (the information used will correspond to the entries of the corresponding section).
- Emulation items, such as the 3270, 5250, or asynchronous emulators, will

be installed by default unless they are set to 0. Any other value (including removing the item from the file) will install the files by default.

---

**Note:** By default, error messages always appear during a silent setup. In order to prevent their display, use the “NOERRORMSG” option in the installation command line (See “No error message start” on page 27. for more information on this option.).

---

The various sections that appear are:

**[Welcome]** Installation welcome screen.

**[OnlineLicense]** Controls whether the license agreement dialog appears.

**[SerNum]** Serial number and activation key.

---

**Note:** In this section, the ShowDlgSerNum flag controls whether the dialog gathering the serial number and activation key will display during a silent installation. While creating the silent.ini file, if the administrator chooses not to display this dialog and enters valid serial number and activation key directly into the .ini file, the automated setup proceeds without prompting for the activation key.

However, if the administrator chooses to display the dialog, the dialog appears with the serial number displayed and the user is forced to provide the activation key in order to continue, despite the activation key being present in the silent.ini file.

---

**[InstallParam]** Installation directory and various components to install (1: Components to install; 0: Components not to install). Please refer to the table below for a list of components which may be installed.

**[InstallTerm]** Predefined terminal configurations to install (1: Configuration to install; 0: Configuration not to install).

**[ConfirmCopy]** Confirmation of selected setup options before copying installation files.

**[RebootEnd]** Confirmation to finish installation and automatically reboot the machine, if necessary.

[**CustomizedFiles**] Custom files the administrator can add to the silent mode setup.

- ▶▶ See “Adding customized files in setup” on page 23. for more information. The [**InstallParam**] section entries are:

<b>Entry</b>	<b>Component</b>
Lpr	Printers redirector
Lpd	Print server
Nis	NIS utility
NfsS	NFS server
NfsC	NFS client
Tar	PC backup
Vt320	VT320 emulator
FtpC	FTP client
FtpS	FTP server
RshC	RSH client (remote commands)
RshS	RSH server (remote command)
Ping	Ping utility
Wall	Wall client and server
Sntp	SNTP/TIME client
Tftp	TFTP client and server
Tiftp	Secure FTP client
Mail	Mail and Sendmail
3270	3270 synchronous emulator
3287	3287 printer emulator
3812	3812 printer emulator
5250	5250 synchronous emulator
Emul	Asynchronous emulator
Panel	Panel Editor
EmulDemo	Customized emulation samples
Odbc	ODBC drivers
Rev	Data redefinition/presentation

Entry	Component
OdbcDm	ODBC driver manager
SqlDemo	Samples of ODBA access
SCP	Secure copy
SSLSer	SSL server
OnlineBooks	Online Manuals

## Adding customized files in setup

You can add customized files to be copied and commands to be run in the installation of Esker products. This can be useful for integrating files or applications with Esker components. Start by placing the files you wish to copy in a central location that can be accessed by the users. Next, add one or more sections like [CustomizedFiles] to the installation configuration file. Set the “Enable Copy” entry to “yes,” and set the parameters as described below.

A section [CustomizedFiles] is made of the following entries:

Entry	Significance
EnableCopy=yes/no	“yes” to copy the files as specified in the settings below.
SrcDIR=STRING1	Path of source directory in which customized files to be copied are located. This will copy all files in the specified directory.
TargetDIR=STRING1	Path of target directory in which customized files will be copied. This will create directories and sub-directories if needed.
CopyFlags=STRING2	Definition of the files copy options. Default value: %INCLUDE_SUBDIR%   %LOCKEDFILE%
EnableRun=yes/no	“yes” to allow a command execution during the installation.
Command= STRING1	Command to run after copying the files.
Params= STRING1	Command parameters.
WaitEndRun=yes/no	“yes” to wait for the end of the command execution before resuming installation.

All pre-defined directory variables listed are automatically converted to the short file name version by the installer.

Due to the way the installer handles command parameters, the “params” entry requires two sets of quotes if it uses a long file name. For example:

```
params=" "%TARGETDIR%\LONG DIR NAME\readme.txt" "
```

However, if the “params” entry also contains additional text, such as a command switch, then it only requires a single set of quotes. For example:

```
params=" "%TARGETDIR%\LONG DIR NAME\readme.txt" /s
```

Short file names do not require quotes. For example:

```
params=C:\README.TXT
```

## Paths initialized by the installation procedure

STRING1 may contain one or more predefined variables that correspond to paths initialized by the installation procedure:

%SRCDIR%: Execution directory path of the setup.exe file.

%TARGETDIR%: Product installation directory path on the PC (“InstDir” entry in “InstallParam” section).

%TEMPDIR%: Temporary directory path on the PC.

%WINDIR%: Operating system directory path on the PC.

%WINSYSDIR%: Windows\System directory path on the PC.

%PROGRAMFILES\_DIR%: Program Files directory path on the PC.

%SUPPORTDIR%: Temporary installation directory path on the PC, suppressed upon installation completion.

For example, SrcDir=%PROGRAMFILES\_DIR%\Config indicates that C:\Program Files\Config is the directory containing the files to install on the PC.

---

**Note:** to see the locations of these Windows directories, type `Set` at the command prompt.

---

### Installation file copy options

STRING2 may contain one or more variables defining the installation files copy options (these variables must be concatenated with pipes "|"):

**%COMP\_UPDATE\_DATE%:** Compares the date of the file to be copied to the date of the existing file, and replaces existing file only if the file to copy is more recent.

**%COMP\_UPDATE\_VERSION%:** Compares the version of the file to be copied to the version of the existing file, and replaces existing file only if the version of the file to copy is more recent.

**%COMP\_UPDATE\_SAME%:** To be used with **%COMP\_UPDATE\_DATE%** or **%COMP\_UPDATE\_VERSION%**. If a date or version comparison between a file to be copied and an existing file yields an identical date or version, the file to be copied will replace the existing one.

**%LOCKEDFILE%:** Indicates that the files in use during copy (.exe, .dll) will be updated on reboot. If this variable is not used and some files are in use during copy, an error message is generated.

**%EXCLUDE\_SUBDIR%:** Copies only files under the "SrcDir" directory and ignores sub-directories.

**%INCLUDE\_SUBDIR%:** Copies all files under the "SrcDir" directory and sub-directories.

### Example

An administrator creates custom sessions for the end users and wishes to include them in the TunPlus installation. He also creates a "readme.txt" file for the users to read. He then copies the sessions and the readme.txt file to an empty network directory, "H:\Config." One of the CustomizedFiles sections would look like this:

```
[CustomizedFiles1]
```

```
EnableCopy=yes
```

```
SrcDir=H:\Config
```

```
TargetDir= %TARGETDIR%\Config
```

*;CopyFlags=*

*EnableRun=yes*

*Command= %WINDIR%\notepad.exe*

*Params= %TARGETDIR%\ CONFIG\readme.txt*

*WaitEndRun=yes*

*EnableCopy=yes - Tells setup to copy files.*

*SrcDir - Copies all files from the H:\Config directory.*

*TargetDir - Creates “Config” directory on the user’s machine in the Tun program directory and then copies the session files and readme.txt to this directory.*

*;CopyFlags - Administrator chose to comment out this line*

*EnableRun=yes - Setup will run the program specified after copying the files.*

*Command - Setup runs the Notepad program as specified here.*

*Params - Setup attaches these parameters to the command line above. For example:*

*C:\Windows\Notepad C:\Program Files\Tun\config\readme.txt*

*WaitEndRun=yes - Setup is suspended until the Notepad program is closed.*

## Running the automated setup

Two specific modes are available for running the automated setup:

- Silent mode, which does not display the installation procedure’s dialog boxes.
- No-error mode, which does not display error messages that occurred during setup.

Both modes can be combined so that neither dialog boxes nor error messages are displayed.

## Silent start

To start a silent install, follow the following steps:

1. Start>Run.
2. Type the setup command for the PC-to-Host setup program.  
For example:
  - `<drive1>:\PC2Host\Setup.exe SILENT=<drive2>:\mysilent.ini`

Or

- `<drive3>:\shared\tunsetup\setup.exe SILENT=<drive3>:\shared\tunsetup\auto\mysilent.ini`

Where <drive1> is the location of the Tun Plus setup program (usually the CD-ROM drive), and <drive2> is where the silent install configuration file is located. <drive3> is a network drive.

The installation procedure will use the information specified in the installation configuration file (“mysilent.ini” in the examples above).

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**Note:** If a user re-installs TunPlus using a silent ini file, the “OCX=” line will be ignored and setup will re-install TunPlus with the same file type (OCX or EXE) as the original install.

If an installation configuration file named silent.ini is found in the directory that contains the setup.exe executable, the installation procedure is automatically launched in silent mode, so that there will be no need to use the “SILENTFILE” option.

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## No error message start

To run setup with No Error option, follow these steps:

1. Start>Run.
2. Type the setup command for the PC-to-Host setup program.  
For example:

- `<drive1>:\PC2Host\Setup.exe NOERRORMSG`

Or

- `<drive2>:\shared\tunsetup\setup.exe NOERRORMSG SILENT=<drive2>:\shared\tunsetup\auto\mysilent.ini`

## Getting Started

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Where <drive1> is the location of the Tun Plus setup program (usually the CD-ROM drive), and <drive2> is a network drive.

This will suppress error messages and PC reboot notifications. The corresponding information will be stored in the `eskinst.ini` file located in the Windows Temporary directory. Type `set` at the Command prompt to see its location.

The `eskinst.ini` file will contain the following information:

[InstallStatus]

Error= Indicates whether an error was generated (0=no error).

ErrorMsg= Error label, if any.

NeedToReboot= 1 indicates the PC needs to reboot to complete installation.

# Web-to-Host Installation

This chapter explains the requirements for the Web-to-Host portion of Tun Plus and how to install it.

## System requirements

- HTTP server using Windows 2000/XP with the latest Windows updates, or Windows 2003/Vista in 32 bits edition with the latest Windows updates.
- Microsoft Internet Information Services ( IIS 5.0 on Windows 2000 and default version for other operating systems).
- 200 Mhz or faster processor, 64 MB RAM minimum, 128 MB RAM or more recommended.
- 200 MB of free disk space.

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**Note:** Internet Explorer 6.0 does not include Java Virtual Machine (JVM). Java emulation sessions and client help requires the Java Virtual Machine, which is no longer included with Internet Explorer 6.0 or later versions. In order to use the client help or any of the Java emulation sessions, you will be prompted to download and install the JVM. Note that while ActiveX sessions do not require the JVM, the help for such sessions still does.

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**Note:** In Tun Web-to-Host, when opening a help window within a dialog, the help will likely replace the Administrator window, in which case you'll need to use the back key to return to the Administrator. To avoid this issue, in Internet Explorer, select Tools > Internet Options > Advanced uncheck the Reuse windows for launching shortcuts option.

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# Client requirements

- Computer 133 MHz or higher Pentium-compatible CPU.
- At least 64 MB of RAM.
- Windows 2000/XP with the latest Windows updates or Windows 2003/Vista in 32 bits edition with the latest Windows updates.
- Network card.
- Microsoft Internet Explorer 6.0 or 7.0 to use ActiveX components.
- Microsoft Internet Explorer 6.0 or 7.0 or Netscape 7.0 to use Java components
- Tun Plus SQL application requires database software installed on a server to function. Server software is currently available for the following platforms:

	<b>Oracle 7</b>	<b>Informix 5</b>	<b>Informix 7</b>	<b>Sybase</b>	<b>DB2</b>
SCO UNIX 3.2.x v4.2	7.x	5.01		10	
SCO UNIX 3.2.x v5.0	7.x/7.3.2	5.03	7.10	10/11	
Sun OS 4.1.3	7.x/7.1.4	5.03		10	
Solaris 2.5	7.x/7.2.3		7.13	10/11	
AIX 3.2	7.x/7.016	5.03		10	
AIX 4.1	7.x/7.3.2		7.10	11	2.01
HP-UX 10.x	7.x/7.2.3	5.00		10/11	
OSFI c3.2	7.x/7.2.3	5.00		10/11	
IBM MVS					3RI

	<b>Progress 6</b>	<b>Progress 7</b>	<b>Progress 8</b>	<b>C-ISAM/ D-ISAM</b>
SCO UNIX 3.2.x v4.2	6.x/6.3	7.x/7.3	8.x	x.x
SCO UNIX 3.2.x v5.0	6.x/6.3	7.x/7.3	8.x/8.1	x.x
SunOS 4.1.3	6.x/6.3	7.x/7.3		x.x
Solaris 2.5			8.x/8.1	x.x
AIX 3.2	6.x/6.3	7.x/7.3		x.x

	Progress 6	Progress 7	Progress 8	C-ISAM/ D-ISAM
AIX 4.1	6.x/6.3	7.x/7.3	8.x/8.1	x.x
HP-UX 10.x	6.x/6.3		8.x/8.1	x.x
OSFI v3.2	6.x/6.3	7.x/7.3	8.x/8.1	

**Note:** The above list is not exhaustive. If your machine isn't in the list, please consult your distributor to find out if the server software has been ported to your machine.

These servers are included on the Tun Plus CD-ROM in the directory  
 \sql\_svr.

## Tun Plus Web-to-Host installation

You must have administrator rights to install Tun Plus.

To install Tun Plus:

1. Start Windows.
2. Insert the CD-ROM in the server's CD-ROM drive. The CD browser appears automatically (Autorun). Click Install to begin.

If Autorun is deactivated, from the Windows Explorer, select the CD-ROM drive: \WEB2Host\Setup.exe.

The Tun Plus setup wizard starts and a Welcome screen appears.

3. Click Next. The License agreement screen appears.
4. Click Yes to continue.
5. On the License Information dialog, do one of the following:
  - Enter the serial number and the activation key of the software (the Package contents section describes how to obtain this information). Then, click Next.

Or

- Click Next to install the demonstration version of Tun Plus. A serial num-

ber and activation key are provided for the demo installation. The demonstration version installs the software with full functionality. It is only valid for 28 days.

6. Select Web-to-host, and click Next to proceed.
7. If a Netscape Directory Server version 3 or 4.0 is installed on your PC, you can choose between two LDAP server types. To use the Netscape Directory Server LDAP server, click Yes. To use Tun Plus' LDAP server, click No.
8. Choose the type of installation.

Typical: installs all components of Tun Plus.

Custom: lets you choose the components you want to install. If you choose custom installation, select from the following Tun Plus components:

- LDAP server: files and programs required by the LDAP server.
- HTML pages and components: files and programs required by Tun Plus.
- SSL Server: files and programs that allow the use of the SSL protocol.

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**Note:** If load-balancing, the SSL component must be installed on the same server as the LDAP server component.

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- Online Books: a complete set of the Tun Plus manuals in PDF format.

In case of an installation with the Netscape Directory Server LDAP server, the LDAP files for Netscape Directory Server component appear in the place of the LDAP server component. It contains the Tun Plus files that will be installed with Netscape's LDAP server. Once you've chosen the components you want to install, click Next.

9. On the Choose destination directories dialog, click Next. To choose other installation directories, click Browse.

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**Note:** If Tun is currently installed, you will be asked to stop the LDAP server. Select Yes, otherwise the upgrade will not complete successfully.

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10. On the Language dialog, choose the default language for the Web-to-Host user interface. This also sets the language of the help system. Click Next.

11. On the Company information dialog, complete the information fields to identify your LDAP database (Organization and Country are required; the Street Address, Zip/Postal Code, and City fields are optional). Click Next.
12. On the Administrator information dialog, enter the user name that will be used by the LDAP server administrator in the Login field. This user name will give the administrator full access to the whole server's directory tree. Other user names will have to be created in order to limit access to the server, according to the users' rights. Click Next.

In case of an installation with the Netscape Directory Server LDAP server, you must enter both name and password for this server's super-user. If there is a server connection failure, an error message will prompt you to reenter the login information. Enter the information required for LDAP server identification, then click Next.

13. On the Server Information dialog, enter the information required for LDAP server identification, then click Next.

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**Note:** If your users will access the Tun Desktop through the Internet, you must use an IP address, rather than a domain name, for the HTTP Server host name.

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14. In case of an installation with the Netscape Directory Server LDAP server, enter the user name (existing or not) that will be used for the anonymous login, then click Next.
15. On the Start copying files dialog, click Next if you're satisfied with the installation options. Tun Plus installs the components. The installation is now finished.
16. On the Setup finish dialog, select the options you want.

## Starting the LDAP server

To use Tun Plus, you must first check that the LDAP server is running on the server. If not, start the Esker LDAP Server from the Windows Services.

# Accessing Tun Plus' administration tool

To access the Administrator, select Start menu>Tun Plus>Getting Started and click Administrator, or start your Internet browser (from the HTTP server or from any client PC) at the following URL:

`http://<server_name>/eskPlus/webadm.htm`

# Accessing host applications

To access the end user's desktop, select Start menu>Tun Plus>Getting Started and click Users, or start your Internet browser (from the HTTP server or from any client PC) at the following URL:

`http://<server_name>/eskPlus/desktop.htm`

# Running the Tun Plus Web-to-host upgrade

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**Note:** Although Tun Plus backs up your users and sessions, it will not back up customized tools objects in the LDAP tree. We recommend that you export LDAP objects (toolbars, buttons, and panels) you have created or customized before upgrading.

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1. Run the install program from the Tun Plus CD-ROM.

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**Note:** If Tun is currently installed, you will be asked to stop the LDAP server. Select Yes, otherwise the upgrade will not complete successfully.

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2. To preserve the LDAP objects, reply yes when asked if you want to keep configurations created with this version.
3. Complete the installation. This process will backup the LDAP database, copy the new files and rebuild the LDAP database and may take 15-30 minutes to complete.
4. When the installation is complete, select Yes to start the LDAP server.
5. The first time you open the Tun Plus administrator page, a conversion process occurs which converts multi-session configurations to workspaces and regenerates Active X and Java sessions.