TestTrack Pro
Installation Guide

Contents

Chapter 1
TestTrack Pro Installation

Let's go!

In minutes, you can install TestTrack Pro and start tracking bugs. Why wait any longer?

About the installation guide

This installation guide provides step-by-step instructions for installing TestTrack Pro. The guide includes three sections: Windows Installation, UNIX Installation, and Mac Installation.

System requirements

Before installing TestTrack Pro, make sure your computer meets the following system requirements.

TestTrack Pro Windows client

- A 486/Pentium PC with at least 32 MB of RAM (64 MB recommended)

- Microsoft Windows (95, 98, ME, XP, NT 4.0, 2000)

- VGA or higher-resolution monitor (super VGA recommended)

TestTrack Pro Web client

- Any computer with a Web browser supporting HTML 3.0 or later

- A Web server with the TestTrack Pro Web components installed

TestTrack Pro Server/CGI on Windows or Linux

- A Pentium PC with at least 64 MB of RAM. The amount of RAM depends on the number of defects the server handles. Contact Seapine support for more information.

- Microsoft Windows (95, 98, ME, XP, NT 4.0, 2000) or Linux (kernel 2.2 or later).

TestTrack Pro Server/CGI on Solaris

- An UltraSparc processor is required with at least 64MB of RAM

- Solaris (version 2.6 or later)

TestTrack Pro Server/CGI on Mac OS X

- Power Mac G3, G4, G4 Cube; iMac; PowerBook G3, G4; or iBook computer with at least 128 MB of RAM.

- Mac OS X (version 10.1 or later)

License Server/CGI on Windows or Linux

- A Pentium PC with at least 64 MB of RAM. The amount of RAM depends on the number of defects the server handles. Contact Seapine support for more information.

- Microsoft Windows (95, 98, ME, XP, NT 4.0, 2000) or Linux (kernel 2.2 or later).

License Server/CGI on Mac OS X

- Power Mac G3, G4, G4 Cube; iMac; PowerBook G3, G4; or iBook computer with at least 128 MB of RAM.

- Mac OS X (version 10.1 or later)

License Server/CGI on Solaris

- An UltraSparc processor is required with at least 64MB of RAM

- Solaris (version 2.6 or later)

Installation scenarios

TestTrack Pro's cross-platform flexibility lets you install the program to best meet your company's needs. The installation scenarios illustrate different ways to install TestTrack Pro.

The following graphic shows an installation of the TestTrack Pro Server on a dedicated server and two Windows clients:
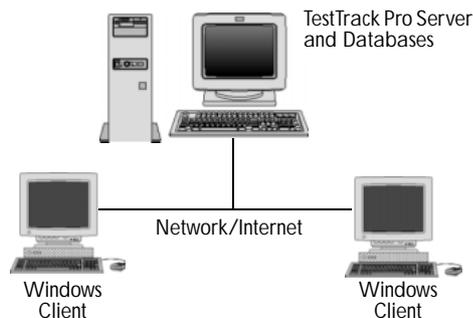
TestTrack Pro Server
and Databases

Network/Internet

Windows
Client

Windows
Client

The following graphic shows an installation of the TestTrack Pro Server on a dedicated server with full Web access, a PC browser client, a Windows client, a Linux browser client, and a Mac browser client:
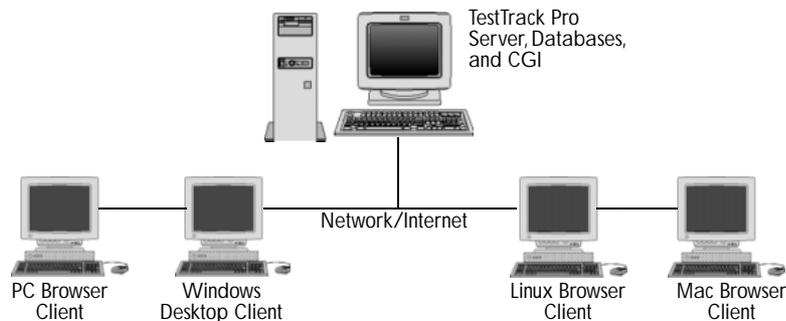
TestTrack Pro
Server, Databases,
and CGI

Network/Internet

PC Browser
Client

Windows
Desktop Client

Linux Browser
Client

Mac Browser
Client

The following graphic shows an installation of the TestTrack Pro Server on a dedicated server with full Web access, the CGI running on a Web server, a PC browser client, a Windows client, a UNIX browser client, and a Mac browser client:
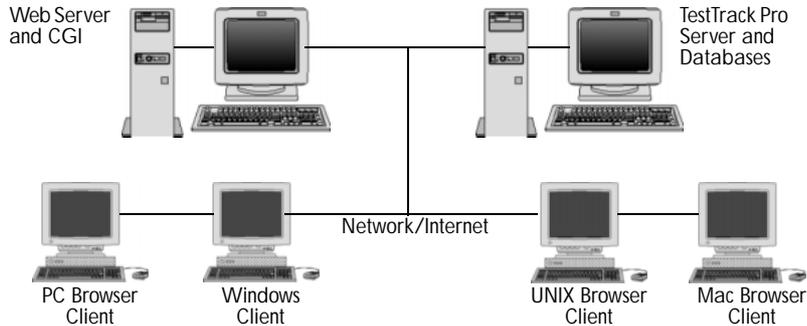
The following graphic shows an installation of TestTrack Pro Server on a dedicated server with full Web access, the CGI running on a Web server, the databases stores in a database server, a PC browser client, a Windows client, a Linux browser client, and a Mac browser client:
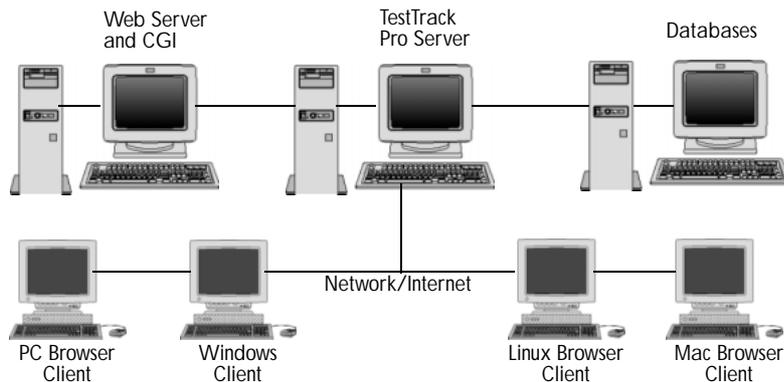
Contacting Seapine support

We offer technical support, 9 AM - 6 PM, EST, Monday - Friday.

Telephone	513-754-1655
Email	support@seapine.com
Web site	www.seapine.com

Note: Check our Web site for the latest TestTrack Pro and SoloBug news, answers to frequently asked questions, and TestTrack Pro and SoloBug updates. You can also find help in our Knowledgebase!

Feedback

Seapine Software welcomes your feedback on the documentation included with this product. If you have comments or suggestions about any of the guides or the online help, please send them to: documentation@seapine.com.

This email address is provided for documentation only. You may not receive a reply to your email. For technical questions or support, contact support@seapine.com.

Chapter 2
Windows Installation

Installing TestTrack Pro for Windows

You can install all the components, options, and products that come with TestTrack Pro or choose to install a few selected components. A sample database is installed the first time you install TestTrack Pro to help you explore all of TestTrack Pro's features. After installation is complete, you'll be ready to start tracking bugs!
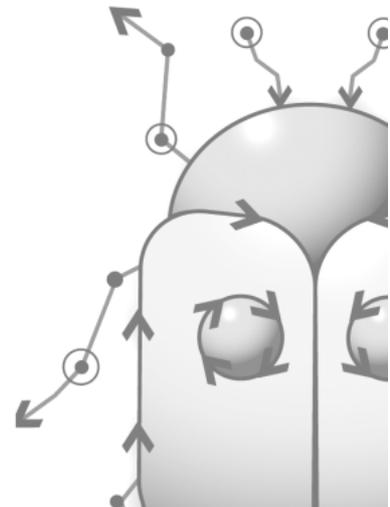
Before installing

- Make sure your computer meets the recommended system requirements. For more information, see **System requirements,** page 2.

- Decide on the type of installation you need to perform.

- If you are using Microsoft Windows NT, Windows 2000, or Windows XP, you must be logged in as a user with full administrative privileges.

- You do not need to uninstall a previous version of TestTrack Pro because the new version is installed over any existing version. However, make sure the TestTrack Pro Server application is shutdown before the new version of the TestTrack Pro Server application is installed.

Windows installation types

- **Client installation** installs the TestTrack Pro Windows client and SoloBug. This installation is recommended for most users.

- **Server installation** installs the TestTrack Pro Windows Server, TestTrack Pro Windows Client, TestTrack Pro Server Admin Utility, License Server, License Server Admin Utility, SoloBug, and a sample database.If you are the administrator, select this installation the first time you install, if you need to reinstall, or if you are upgrading.

- **Server installation with Web components** installs the Track Pro Windows Server, TestTrack Pro Web, TestTrack Pro SDK (SOAP components), TestTrack Pro Windows Client, TestTrack Pro Server Admin Utility, License Server, License Server Admin Utility, SoloBug, and a sample database.

- **Server installation with Web and SOAP components** installs TestTrack Pro Windows Server, TestTrack Pro Web, TestTrack Pro SDK (SOAP components), TestTrack Pro Windows Client, TestTrack Pro Server Admin Utility, License Server, License Server Admin Utility, SoloBug, and a sample database.

- **Custom installation** lets you choose the components you want to install.

> **Note:** If you also use Surround SCM, the license server and the server admin utility may already be installed on your network. Check with the Surround SCM administrator.

Installing TestTrack Pro

> **Note:** The following instructions correspond to a **server installation with Web and SOAP** components. Depending on the components you are installing, you may not be prompted for the same information.

1 Run the installation program.

- If you downloaded the installation program from the Seapine Web site, run **ttprowininstall.exe**. There is also a client only installation program named **ttprowinclientinstall.exe**.

■ If you are installing from CD, insert the TestTrack Pro CD into the CD-ROM drive and click **Install TestTrack Pro.**

2 Review the Welcome Screen. Click **Next**.

3 Read the license agreement and accept the terms. Click **Next**.

> **Note:** You must accept the terms of the license agreement to continue the installation.

4 Choose the installation type. Click **Next**.

For information about installation types, **Windows installation types,** page 8
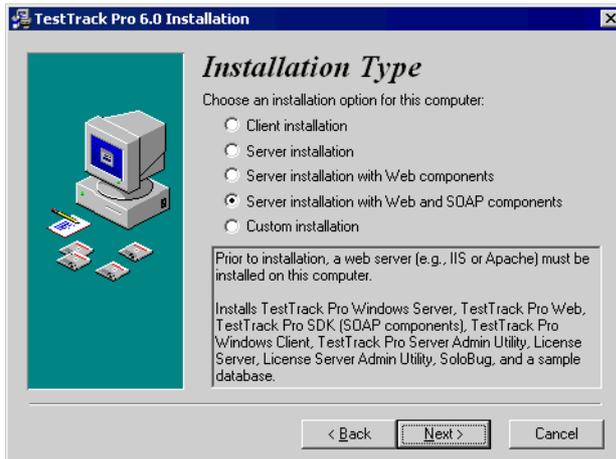
5 If Visual Basic 6.0, Visual Studio .Net, or Visual C++ 6.0 is installed on your computer the TestTrack Pro Add-In is automatically installed. Click **Next**.
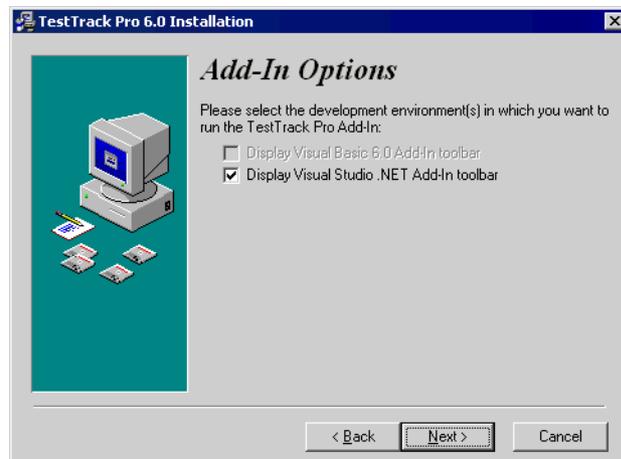
6   Select the TestTrack Pro destination directory. TestTrack Pro applications, documentation, and help files are installed in this directory. Click Browse to select a different directory.

7   Select the server execution mode. Click Next.

The recommended server execution mode is Run as a service. A service is a program that runs in the background. It is started automatically when the system starts and is stopped when the system shuts down. If you run the server as an application, you must manually start the server.

8   Select a Web server. Click Next.

TestTrack Pro's Web pages are served by the Web server. When a user logs in to TestTrack Pro Web, the Web server calls the TestTrack Pro CGI, which in turn communicates with the TestTrack Pro server.

9   Enter the IP address or the domain name of the computer that will be running the TestTrack Pro server. Click Next.

      The IP address is used by the TestTrack Pro Web CGI to communicate with TestTrack Pro server. A static IP address is recommended.
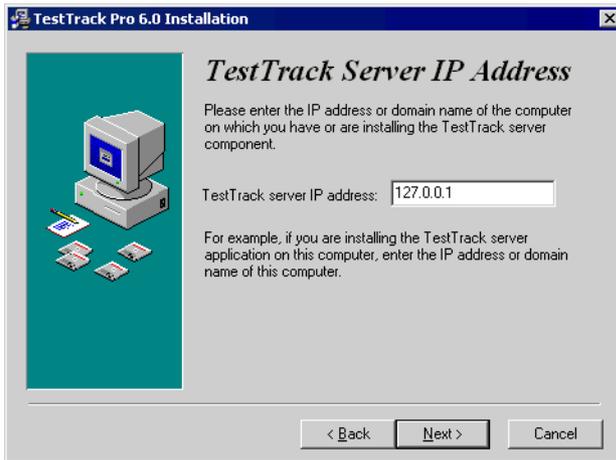
10   Enter the TestTrack Pro server port number. Click Next.

      The server communicates with TestTrack clients on this port.
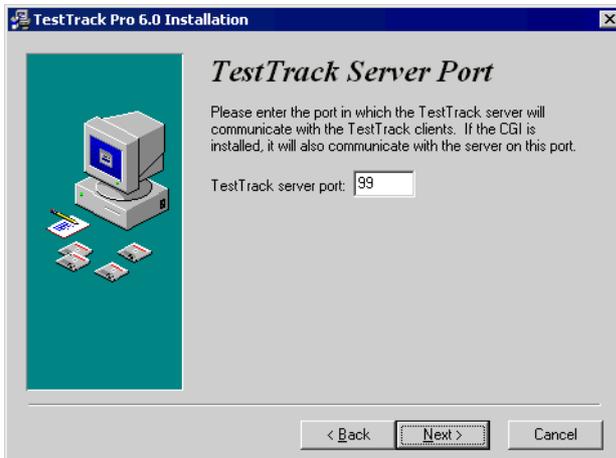
11   Select your Web site's home directory. Click Next.

      TestTrack Pro HTML files are installed in this directory. Following are some default directories:

- **Microsoft IIS and PWSC:** *C:\Inetpub\wwwroot*

- **Apache:** *C:\Program Files\Apache Group\Apache\htdocs*

- **Netscape FastTrack\SuiteSpot:** *C:\Netscape\SuiteSpot\docs*

- **O'Reilly WebSite:** *C:\WebSite\htdocs*

- **Other:** *Web Site Home Directory\htdocs*

12 Enter the logical CGI directory name. Click **Next.**

This directory name follows the **http://yourdomain.com/** portion of each Web request to the TestTrack Pro Web CGI. Following are some default directories:

- **Microsoft IIS and PWSC:** *scripts*

- **Apache:** *cgi-bin*

- **Netscape FastTrack\SuiteSpot:** *cgi-bin*

- **O'Reilly WebSite:** *cgi-shl*

- **Other:** *cgi-bin*

13 Select your Web site's CGI directory location. Click **Next**.

The installer needs to where CGI files are normally installed. In your Web server configuration there is a setting that maps the logical CGI directory to its physical location. Following are some default locations:

- **Microsoft IIS and PWSC:** *C:\Inetpub\scripts*

- **Apache:** *C:\Program Files\Apache Group\Apache\cgi-bin*

- **Netscape FastTrack\SuiteSpot:** *C:\Netscape\SuiteSpot\cgi-bin*

- **O'Reilly WebSite:** *C:\WebSite\htdocs\cgi-shl*

- **Other:** *Web Site Home Directory***cgi-bin**

14 Enter the IP address or the domain name of the computer that is hosting the SOAP CGI. Click **Next**.
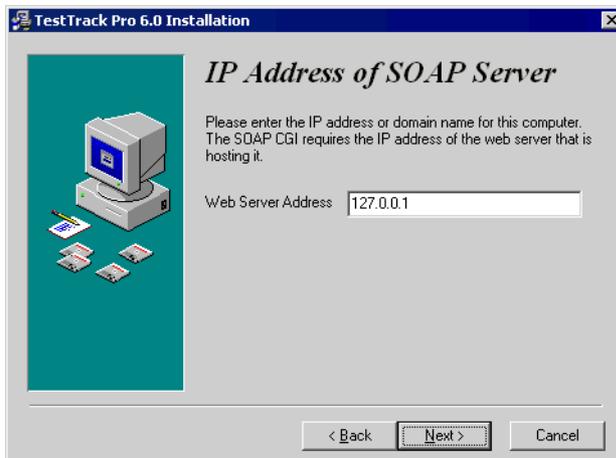
15 Enter the SOAP Server port number. Click **Next**.
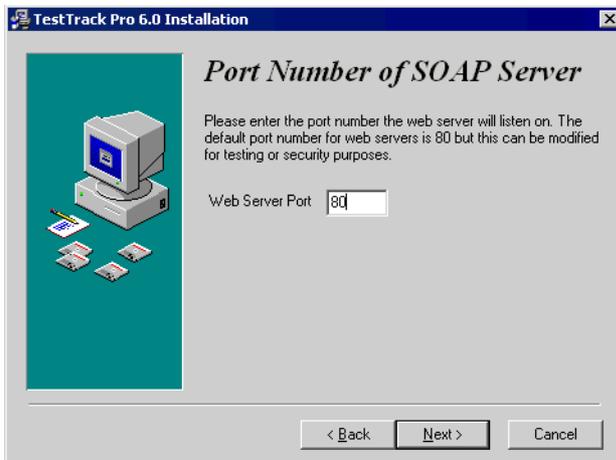
16 Select the License Server destination directory. The license server applications, documentation, and help files are installed in this directory. Click **Browse** to select a different directory.

17 Select a server execution mode. Click **Next**.

The recommended server execution mode is **Run as a service**. If you run the server as an application, you must manually start the server.

18 Enter the license server port number. Click Next.

The license server uses this port to communicate with the TestTrack Pro and Surround SCM servers over TCP/IP. It only sends information as a response to a request; it does not push information.
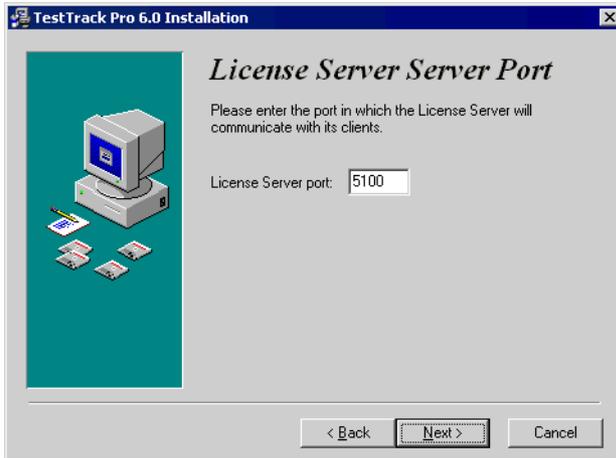
19 The installation begins. A progress indicator opens, showing the location the files are being copied to and the remaining time to complete the installation.
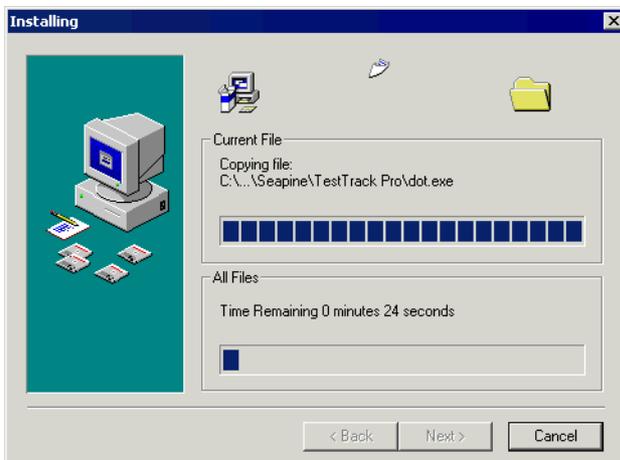
20 If you installed the TestTrack Pro server or the License Server as an application, you are prompted to select a start server option. Select an option and click Next.

21 **The Installation Completed dialog box opens.**

To view the Installation Notes and/or the Read Me file, select the corresponding check box.

22 **Click Finish.**

Your installation is complete.

Why am I prompted to reboot my computer?

To complete the installation, you may be prompted to reboot your computer for one of the following reasons:

1. You installed an NT service. In this case, you do not have to reboot the computer. You can start the TestTrack service from the Control Panel.

2. One of the installed files was in use and the installer could not copy the file. The file is copied to the correct location when you reboot.

3. The Visual C++ add-in was installed on your computer.

Getting started - upgrade installations

> **Note:** This section provides an overview of the steps required to upgrade to TestTrack Pro
> 6.0. It is strongly recommended that you read the **TestTrack Pro Database Conversion Utility**
> guide for more detailed information.

After you install TestTrack Pro 6.0, you need to convert the server database to the current format. During the conversion, existing TestTrack Pro users and valid, non-expired licenses are migrated to the license server. If you are prompted to convert the database during the installation, start with step 3.

1   After installing TestTrack Pro 6.0, convert the server database to the current format.

Backup the database files before converting to ensure data can be restored if an error occurs.

2   Stop the license server if it is running.

- If the license server is installed as an application, right-click the server icon in the taskbar and select **Terminate Server**.

- If the license server is installed as a service, use the Services icon in the Control Panel or the Services menu under Administrative Tools to stop the server.

3   Login to the Database Conversion Utility using your existing server admin username and password.

Choose **Programs > Seapine Software > TestTrack Pro > TestTrack Pro DB Conversion**.

4   Select the database you want to convert and click **Upgrade Selected Database**.

During the conversion, existing TestTrack Pro users (with usernames) and valid, non-expired licenses are migrated to the license server. Users that do not have usernames are converted as local users.

> **Note:** You may be prompted about user conflicts during the conversion if you use Surround
> SCM and TestTrack Pro or if you convert multiple TestTrack Pro databases. For example,
> you convert Surround SCM before TestTrack Pro. A few users were setup using their full
> name (e.g., Deborah) in Surround SCM and using their nicknames (e.g., Debbie) in TestTrack
> Pro. If conflicts are detected, you are prompted to use the current user information on the
> license server or the user information from the database. If users have trouble logging in
> after the conversion, ask them to try both username/password combinations.

5   Click **Close** to close the Database Conversion Utility.

6   Start the license server.

- If the server is installed as an application, choose **Programs > Seapine Software > Seapine License Server > Seapine License Server**.

- If the server is installed as a service, use the Services icon in the Control Panel or the Services menu under Administrative Tools to start the server.

7   Start the TestTrack Pro server.

- ■   If the server is installed as an application, choose **Programs > Seapine Software > TestTrack Pro> TestTrack Pro Server**.

- ■   If the TestTrack Pro is installed as a service, use the Services icon in the Control Panel or the Services menu under Administrative Tools to start the server.

- ■   If the TestTrack Pro server won't start, see for troubleshooting information.

8   If you converted dedicated licenses, which are converted as named licenses, you need to select a license for users.

- ■   Login to the License Server Admin Utility as the default administrative user. The username is **Administrator** and there is no password.

- ■   Choose **Programs > Seapine Software > Seapine License Server > Seapine License Server Admin**.

- ■   Click **Users**.

- ■   Select a user and click **Edit**.

- ■   Click the **License** tab. Select **Used named license** and click **OK**.

- ■   Click **Close** to close the Users window.

- ■   Choose **File > Exit** to close the License Server Admin Utility.

9   Your conversion process is now complete. Users can now login, using their existing usernames and passwords, and access TestTrack Pro.

Keep the following in mind:
During installation, an administrative user with full admin security rights is created. To login as the administrative user, enter **Administrator** as the username and leave the password blank. You can delete this user and add a new admin user. If you do not want to delete this user, you should add a password to prevent unauthorized users from logging in to an administrator account.

Getting started - new installations

After TestTrack Pro 6.0 is installed, you need to set up a connection between the license server and TestTrack Pro server, add licenses and users to the license server, and start using TestTrack Pro.

> **Note:** Steps 1-6 may not be necessary if you install the TestTrack Pro server and the license server on the same computer, using the default port configurations.

1   Make sure the license server is running.

- If the server is installed as an application, choose **Programs** > **Seapine Software** > **Seapine License Server** > **Seapine License Server**.

- If the license server is installed as a service, use the Services icon in the Control Panel or the Services menu under Administrative Tools to start the server.

2   Start the License Server Admin Utility to setup a local server connection, add licenses, and add users.

The Seapine License Server Login dialog box opens.

3   Click **Setup** to add a server connection.

The Setup Server List dialog box opens.

4   Click **Add**.

The Add License Server dialog box opens.

5   Enter a **Server Name**, **Server Address**, and **Port Number**. Click **OK**.

The server is added.

6   Click **Close** to return to the License Server Login dialog box.

7   Login as the default administrative user. The username is **Administrator** and there is no password.

By default, Administrator has full admin security rights and uses a TestTrack Pro floating license. It is strongly recommended that you set a password for this user after logging in.

8   Click **Connect**.

The License Server Admin Utility starts. You are now ready to add licenses and users.

Adding licenses

1   Click **Licenses** or choose **View** > **Licenses**.

The Licenses dialog opens.

2   Click **Add**.

The Add License dialog box opens.

3   Enter the serial number.

This field is not case sensitive. Licenses can be entered with or without dashes.

4   Click **OK**.

The license is added. Click **Close** to close the Licenses dialog.

Adding users

The license server is used to globally manager users. Global users can be shared between Seapine products and databases.

1   Click **Users** or choose **View > Users**.

The Users dialog box opens.

2   Click **Add**.

The Add User dialog box opens with the **Info** tab selected. Enter the user information.

3   Optionally, click the **Address** tab to add the company name and address.

4   Optionally, click the **Email/Phone** tab to add contact information.

5   Click the **License** tab to select the license type for the user.

If a license is not selected, the user will not be able to login or access TestTrack Pro.

6   Click the **Notes** tab to add any optional notes about the user.

7   Click the **Security** tab to set the license server security rights for the user.

Most users do not require access to the license server admin utility.

8   Click **OK** to save the information and add the user.

The users you added are global users that can be shared between Seapine products and databases.

9   Click **Close** when you finish adding users.

10   Quit the License Server Admin Utility.

Next, you'll switch to TestTrack Pro and retrieve global users.

Getting starting with TestTrack Pro

1   Start the TestTrack Pro Server Admin Utility and login as the default administrative user.

The username is **Administrator** and there is no password. By default, Administrator has full admin security rights and uses a TestTrack Pro floating license. It is strongly recommended that you set a password for this user.

2   Add a server and create at least one database.

See the **Server Admin Utility Guide** for more information.

3   Next, start TestTrack Pro and login as the default administrative user.

4   To retrieve users from the license server choose **View > Users** then click **Add Global**. Select the users and click **Add**.

The users you added to the license server can now access TestTrack Pro.

5   Your installation and setup process is now complete.

Where to go next...

If you are the TestTrack Pro administrator, make sure the license server and the TestTrack Pro server are both started. After starting TestTrack Pro, take the time to set database options, create security groups, and configure TestTrack Pro to meet your company's business process. See the **TestTrack Pro User Guide** (Windows or Web) for more information.

The servers aren't communicating. Help!

If the servers aren't connecting, you need to start the server admin utility and check the license server information.

1 Make sure the license server and the TestTrack Pro server are both started.

2 Start the TestTrack Pro server admin utility and login using your existing server admin username and password.

If your username and password are not recognized, you can use the local TTPro admin password, leaving the username blank and entering **admin** as the password. This password only provides access to the license server configuration.

> **Note:** It is strongly recommended that you change the local TTPro admin password, which only provides access to the license server configuration. To change this password, login to the TestTrack Pro server admin utility using the Administrator account or your existing admin username/password. Select Server Options then click the Server tab. Enter and confirm a new local TTPro admin password and click OK.

3 Click **Server Options**.

The Options window opens with the License Server tab selected.

4 Make sure the server address and port number are both correct.

5 Click **Test Connection**.

A message opens, letting you know if the connection is successful. If the TestTrack Pro server and the license server are installed on different computers, you may need to check your network and firewall configurations to open the necessary ports.

6 Click **OK** to close the message.

- If the connection was not successful, correct any mistakes and re-test the connection.

- If the connection was successful, click **OK** to close the server options.

> You may need to manually configure the connection for one of the following reasons:
>
> 1. You changed the default TestTrack Pro or license server address or port number.
>
> 2. You installed the TestTrack Pro server and the license server on different computers.

7 Stop and restart the TestTrack Pro server for the changes to take affect.

Chapter 3
Unix Installation

Installing TestTrack Pro for Unix

This section introduces you to the various components of the Unix TestTrack Pro architecture and explains how to install the components. TestTrack Pro can be installed using a graphical installer or a command line Perl installer. TestTrack Pro currently supports the following Unix platforms: Solaris (Sparc) and Linux (Intel).
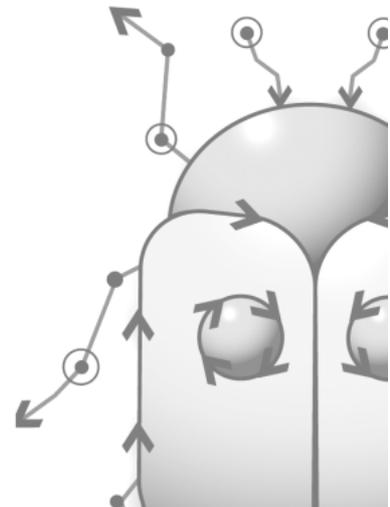
Installation notes

The command line installer is written in Perl and requires Perl version 5 or later. The graphical installer is written in Java and requires JDK (Java Development Kit) or JRE (Java Runtime Environment) 1.3.1.

Linux

- Linux kernel 2.0.x is not supported. The TestTrack Pro server requires multiple open file handles and kernel 2.0 automatically limits you to 256 files per process. TestTrack Pro will probably work but you will not be able to open more than a couple of databases.

- Glibc version 2.1.3 and version 2.1.92 are supported

- libstdc++ version 2.9.0 is required

- Mandrake 8.0 is supported

Mandrake (Linux)

- Linux 2.2 kernel

- The following libraries are required: libstdc++-libc6.2-2.so.3, libc.so.6, libm.so.6, libpthread.so.0

Note: Make sure the OS and libraries are compiled with the gcc-2.96 compiler, NOT the egcs based compiler used by Red Hat 6.2.

Solaris

- Sparc requires libstdc++so.2.10.0

Unix installation components

If you choose a custom installation, you can select any or all of the following components:

- TestTrack Pro Server

- TestTrack Pro Web Client

- TestTrack Pro Web Server Admin Utility

- SoloSubmit

- SOAP Server

- Sample database

- Seapine License Server Admin Utility

- Seapine License Server

TestTrack Pro configuration file values

The TestTrack Pro configuration file, ttpro.conf, includes required and optional variables.

ServerPort:	Port the TestTrack Pro server uses to communicate with TestTrack clients.
LogDirectory:	Directory where the startup.log file is written.
ApplicationDirectory:	Directory where TestTrack Pro server database files and SoloBug import directories are stored.
ServerAddress:	IP address the cgi client uses to find the TestTrack Pro server.
FormsPath:	Full path of the TestTrack Pro Web pages.
ShortDateFormat:	Format that date strings should be output in.
AdminFormsPath:	Full path of the TestTrack Pro Admin Web pages.
admin-cgi-bin:	Location and name of the TestTrack *ttadmcgi.exe* script
ShortDateFormat:	TestTrack Pro Web short date format
LicenseServerPort:	The license server uses this port to communicate with the TestTrack Pro and Surround SCM servers over TCP/IP.
LicenseServerAddress:	The license server IP address.

Optional variables

Optional variables are used to define custom web installations, apply security, and allow optional database paths.

HTMLPath:	Relative TestTrack Pro HTML files alias location path. Use the following format: alias/sub-alias/sub-sub-alias. Do not start or end with "/".
AdminHTMLPath:	Relative TestTrack Pro Server Admin files alias location path. Use the following format: alias/sub-alias/sub-sub-alias. Do not start or end with "/".
AllowPathForDB:	Set the value to 1 to create and add databases using full directory paths.
RebootServerPort:	Used by the TestTrack Pro server to determine the reboot port. This value is automatically recorded during the installation process.
SkipWebConnectIPCheck:	Set the value to 1 to skip the security check. If the IP address changes in mid-session, the connection is not dropped.
WebReloginIPCheck:	Set the value to 1 to restrict users from logging in to TestTrack Pro Web from another location. Users can log in from their original location if the session is still active.

License server configuration file values

The license configuration file, splicsvr.conf, includes required variables.

ServerPort:	The TestTrack Pro server uses this port to communicate with TestTrack Pro clients.
LogDirectory:	Directory where the license server log file is written.
ApplicationDirectory:	Directory where the license server database files are stored.
ShortDateFormat:	Format that date strings should be output in.
AllowPathForDB:	Set the value to 1 to create and add databases using full directory paths.

Unix graphical installer

ⓘ

If you are upgrading TestTrack Pro, you may be prompted to overwrite existing HTML, SoloSubmit, and Admin HTML files. If you choose not to overwrite the files, you may not install all bug fixes or new features. Depending on the extent of the changes, choosing not to overwrite may result in TestTrack Pro functioning incorrectly.

Default answers are provided for most questions. You can accept the default or enter another answer.

1 Download the installation program.

- The Linux installation file is named **ttprolinuxjavainstall.bin**.

- The Solaris installation file is named **ttprosolarissparcjavainstall.bin**.

2 Run the corresponding file by logging in as root and double-clicking the file in the Window Manager.

Note: You can also **su** to root and run the file from a terminal application. X-Windows must be running to use the installer.

3 The Introduction dialog opens. Click **Next**.

4 Select the installation folder. Click **Next**.

5 Select the type of installation you want to perform. Click **Next**.

Note: If you are performing an **Easy Install**, the installation starts automatically. Follow the instructions to finish the installation. You may be prompted to enter additional information, such as the path to the CGI directory.

6 If you are performing a **Custom Install**, the Choose Product Components dialog opens.

7   Select the components you want to install. Click **Next**.

8   Enter the location of the TestTrack Pro application directory. Click **Next**.

The TestTrack Pro server stores all of the database files and SoloBug import directories in this directory.

9   Enter the location of the Unix command directory. Click **Next**.

The TestTrack Pro server daemon is installed in this directory.

10   Enter the directory where the startup log file will be written. Click **Next**.

The log file contains messages about any errors that occur when starting the TestTrack Pro server.

11   Enter the TestTrack Pro server port number. Click **Next**.

The TestTrack Pro server uses this port to communicate with TestTrack Pro clients.

12   Enter the maximum number of open files. Click **Next**.

TestTrack Pro requires approximately 200 open files per database.

13   Select the check box to automatically start the TestTrack Pro server during the boot sequence. Click **Next**.

14   Enter the IP address or domain name of the TestTrack server. Click **Next**.

The TestTrack Pro Web CGI uses this address to communicate with the TestTrack Pro server.

15   Enter the HTML files directory. Click **Next**.

The directory must be accessible by your Web server to ensure users can access the pages.

16   Enter the path to the CGI directory. Click **Next**.

When a user logs in to TestTrack Pro from a Web browser, your Web server calls the TestTrack Pro CGI.

17   Enter the IP address or domain name of the computer that is hosting the SOAP CGI. Click **Next**.

Use the IP address or domain name of the computer that you are currently installing TestTrack Pro on, since it will be hosting the SOAP CGI. The SOAP CGI requires this information

18   Enter the port number the Web server hosting the SOAP CGI will listen on. Click **Next**.

19   Enter the short date format you want to use. Click **Next**.

The date format is used for trend reports, email notifications, the startup log file, and any other date string created by the TestTrack Pro server.

Valid date formats include: "*%m/%d/%y*", "*%d/%m/%y*", "*%b/%d/%y*", or "*%d/%b/%y*". Other variations of this date format include substituting *%b* with *%B* or substituting *%y* with *%Y*. The year parameter must be last in the date format (e.g., "*%y/%m/%d*" is invalid).

Valid delimiters between the month, day, and year values include a period, dash, forward slash, backward slash, comma, or a space.

%b	Abbreviated month name
%B	Full month name
%d	Day of the month, 01-31
%m	Month of the year, 01-12
%y	Last two digits of the year number, 00-99
%Y	Year

20   Enter the license server application directory location. Click Next.

The license server database files are stored in this directory.

21   Enter the license server Unix command directory. Click Next.

The license server executables are installed in this directory.

22   Enter the directory where the license server startup log file will be stored. Click Next.

The log file contains messages about any errors that occur when the license server starts.

23   Enter the license server port number. Click Next.

The license server uses this port to communicate with the TestTrack Pro and Surround SCM servers over TCP/IP. It only sends information as a response to a request; it does not push information.

24   Enter the maximum number of open files for the license server. Click Next.

The license server requires approximately 200 open files per database. There are no known negative side effects of leaving this set to the maximum (65535).

25   The Pre-Installation Summary dialog opens. Review the information. Click Next if the information is correct. Click Previous to make changes.

> **Note:** Pre-Installation Summary dialogs open for each component you are installing. For example, the Pre-Installation Summary: Server dialog opens for you to review the server installation information.

26   After reviewing all Pre-Installation Summary information, click Install, on the last Summary dialog that opens, to begin the installation.

27   The Install Complete dialogs opens after TestTrack Pro is installed.

28 Click **Done** to close the Install Complete dialog.

When the installation finishes, you are ready to start using TestTrack Pro. See Getting started - upgrade installations, page 32 and Getting started - new installations, page 34 for information about getting started.

Unix command line installer

The installation script automates the process of installing TestTrack Pro for Unix. You are asked several questions about the installation. Default answers are provided after the question (in square brackets). To accept the default, press **Enter**. You can cancel the installation at any time by pressing **Ctrl+C**.

> **Note:** If you are installing from CD, all you need to do is **cd** into the appropriate directory and run the installer. Begin with **step 2**.

1 Copy the file to a working directory. Then untar and gunzip it.

The de-archiving process installs the appropriate files in subdirectories it creates. The Linux installation file is named **ttprolinuxinstall.tar.gz**. The Solaris installation file is named **ttprosolarissparcinstall.tar.gz**.

Use the following command for a Linux installation:

- **tar -xvf filename**

Use the following commands for a Solaris installation:

- **gunzip filename.tar.gz**

- **tar xvf filename.tar**

2 Change to the TestTrack Pro directory.

The directory changes based on the version of TestTrack Pro you are installing. For example: **cd ttpro-4.X**

3 To run the install script, enter **./ install.pl**

The installation script starts.

> **Note:** The following instructions correspond to a server installation with Web and SOAP components. Depending on the type of installation you are performing, you may not be prompted for the same information.

4 Choose the type of installation you want to perform.

You can select all, or a few, components.

5 Enter the user id the server will run under.

Running any application with an unprivileged account ensures limited exposure in the unlikely event of an exploit in the software. Because the user will only own files related to TestTrack Pro, the rest of you system will be secure if the user id is compromised.

6   Enter the TestTrack Pro application directory.

    The directory is created if it does not exist. TestTrack Pro database files and SoloBug import directories are stored in this directory.

7   Enter the TestTrack Pro server port number.

    The TestTrack Pro server uses this port to communicate with TestTrack Pro clients. If you are installing the TestTrack Pro server and CGI on different computers, make sure you specify the same port number for both installs.

8   Enter the directory where the startup log file will be written. Click Next.

    The log file contains messages about any errors that occur when starting the TestTrack Pro server.

9   You are prompted to choose if you want TestTrack Pro to start at boot time.

    Enter Y (yes) or N (no).

10 Enter the location of the Unix command directory.

    This directory contains public executable Unix programs and shell scripts. The TestTrack Pro server daemon is also installed in this directory.

11 Enter the maximum number of open files.

    TestTrack Pro requires approximately 200 open files per database. There are no known negative side effects of leaving this set to the maximum (65535).

12 The installer searches for the Web server configuration file.

    After the search is complete, enter the number that corresponds to the httpd.conf file you are using.

13 Enter the server IP address.

    The cgi client uses this IP address to find the TestTrack Pro server. If the server is running on the same machine as the cgi client, use '127.0.0.1'.

14 Select the server name your Web server responds to.

15 Enter the HTML files directory location.

    The ttweb/ subdirectory, which contains the HTML files the TestTrack Pro Web client uses, is installed in this directory.

16 Enter the Administration HTML files directory location.

    The ttweb/ttadmin subdirectory, which contains the HTML files the TestTrack Pro Web Admin client uses, is installed in this directory.

17 Enter the path to your CGI directory.

18 Enter the path to your CGI Administration directory.

19   Enter the TestTrack Web client URL.

If the suggested URL is correct, press Enter. To use a different URL, press [N] then enter the URL.

20   Enter the TestTrack Web Admin client URL.

If the suggested URL is correct, press Enter. To use a different URL, press [N] then enter the URL.

21   Enter the IP address of the web server that will be hosting SOAP.

22   Enter the port number of the web server that will be hosting SOAP.

23   Enter the short date format you want to use.

The date format is used for trend reports, email notifications, the startup log file, and any other date string created by the TestTrack Pro server.

Valid date formats include: "*%m/%d/%y*", "*%d/%m/%y*", "*%b/%d/%y*", or "*%d/%b/%y*". Other variations of this date format include substituting *%b* with *%B* or substituting *%y* with *%Y*. The year parameter must be last in the date format (e.g., "*%y/%m/%d*" is invalid). Valid delimiters between the month, day, and year values include a period, dash, forward slash, backward slash, comma, or a space.

Elements in the date format have the following functionality:

%b   Abbreviated month name

%B   Full month name

%d   Day of the month, 01-31

%m   Month of the year, 01-12

%y   Last two digits of the year number, 00-99

%Y   Year

24   Enter the license server application directory location. Click Next.

The license server database files are stored in this directory.

25   Enter the license server Unix command directory. Click Next.

The license server executables are installed in this directory.

26   Enter the directory where the license server startup log file will be stored. Click Next.

The log file contains messages about any errors that occur when the license server starts.

27   Enter the license server port number. Click Next.

The license server uses this port to communicate with the TestTrack Pro and Surround SCM servers over TCP/IP. It only sends information as a response to a request; it does not push information.

28 Enter the maximum number of open files for the license server. Click **Next**.

The license server requires approximately 200 open files per database.

29 A summary of the installation options you chose opens.

The summary includes a list of the TestTrack Pro products you are installing and the information you entered.

30 If the information is correct, press **enter**. Press **[N]** to restart the installer.

The installation begins. When the installation finishes, you are ready to start using TestTrack Pro. See Getting started - upgrade installations, page 32 and Getting started - new installations, page 34 for more information.

Getting started - upgrade installations

After you install TestTrack Pro 6.0, you need to convert the server database to the current format. During the conversion, existing TestTrack Pro users and valid, non-expired licenses are migrated to the license server. If you are prompted to convert the database during the installation, start with step 3.

> **Note:** You should backup the database files before converting the database. This ensures data can be restored if an error occurs during the conversion.

1 After installing TestTrack Pro 6.0, convert the server database to the current format.

2 Enter **./spls stop** to stop the license server.

3 To run the database conversion utility, you must be logged in to the server computer as the root user.

> **Note:** The conversion utility must be run from X Windows.

4 Change to the TestTrack Pro application directory

- **cd /var/lib/ttpro** (Linux)

- **cd /opt/ttpro** (Solaris)

5 Enter **./ttdbconversion** to start the database conversion utility.

The conversion utility starts.

6   Select the database you want to convert and click **Upgrade Selected Database**.

During the conversion, TestTrack Pro users with usernames and valid, non-expired licenses are added to the license server. Users that do not have usernames are converted as local users.

> **Note:** You may encounter user conflicts during the conversion if you use Surround SCM and TestTrack Pro or if you convert multiple TestTrack Pro databases. If conflicts are detected, you are prompted to either use the current user information on the license server or the user information from the database you are converting. If users have trouble logging in after the conversion, ask them to try both username/password combinations.

7   Click **Close** to close the Database Conversion Utility.

8   Start the license server. Make sure you are in the directory where startup scripts are located. This is generally either the **/etc/init.d** directory or the **/usr/bin** directory.

- Enter **./spls start** to start the server as a daemon

- Enter **./spls foreground** to start the server in the foreground

9   Start the TestTrack Pro server. Make sure you are in the directory where startup scripts are located. This is generally either the **/etc/init.d** directory or the **/usr/bin** directory.

- Enter **./ttpro start** to start the server as a daemon

- Enter **./ttpro foreground** to start the server in the foreground

10   If you converted dedicated licenses, which are converted as named licenses, you need to select a license for users.

- Enter **./lsadmin &** to start the license server admin utility. Make sure you are in the directory where startup scripts are located. This is generally either the **/etc/init.d** directory or the **/usr/bin** directory.

- Login as the default administrative user. The username is **Administrator** and there is no password.

- Click **Users**.

- Select a user and click **Edit**.

- Click the **License** tab. Select **Used named license** and click **OK**.

- Click **Close** to close the Users window.

- Choose **File > Exit** to close the License Server Admin Utility.

11 Your conversion process is now complete. Users can now login, using their existing usernames and passwords, and access TestTrack Pro.

> **Keep the following in mind:**
> During installation, an administrative user with full admin security rights is created. To login as the administrative user, enter **Administrator** as the username and leave the password blank. You can delete this user and add a new license server admin user. If you do not want to delete this user, you should add a password to prevent unauthorized users from logging in to an administrator account.

Getting started - new installations

After TestTrack Pro 6.0 is installed, you need to set up a connection between the license server and TestTrack Pro server, add licenses and users to the license server, and start using TestTrack Pro.

> **Note:** Steps 1-6 may not be necessary if you install the TestTrack Pro server and the license server on the same computer, using the default port configurations.

1 Start the license server. Make sure you are in the directory where startup scripts are located. This is generally either the **/etc/init.d** directory or the **/usr/bin** directory.

- Enter **./spls start** to start the server as a daemon

- Enter **./spls foreground** to start the server in the foreground

2 Start the license server admin utility. Make sure you are in the directory where startup scripts are located. This is generally either the **/etc/init.d** directory or the **/usr/bin** directory.

- Enter **./lsadmin &** to start the license server admin utility

3 Click **Setup** on the Seapine License Server Login dialog box to add a server connection.

The Setup Server List dialog box opens.

4 Click **Add**.

The Add License Server dialog box opens.

5 Enter a **Server Name**, **Server Address**, and **Port Number**. Click **OK**.

The server is added.

6 Click **Close** to return to the License Server Login dialog box.

7   Login as the default administrative user. The username is **Administrator** and there is no password.

By default, Administrator has full admin security rights and uses a TestTrack Pro floating license. It is strongly recommended that you set a password for this user after logging in.

8   Click **Connect**.

The License Server Admin Utility starts. You are now ready to add licenses and users.

Adding licenses

1   Click **Licenses** or choose **View > Licenses**.

The Licenses dialog opens.

2   Click **Add**.

The Add License dialog box opens.

3   Enter the serial number.

This field is not case sensitive. Licenses can be entered with or without dashes.

4   Click **OK**.

The license is added. Click **Close** to close the Licenses dialog.

Adding users

The license server is used to globally manager users. Global users can be shared between Seapine products and databases.

1   Click **Users** or choose **View > Users**.

The Users dialog box opens.

2   Click **Add**.

The Add User dialog box opens with the **Info** tab selected. Enter the user information.

3   Optionally, click the **Address** tab to add the company name and address.

4   Optionally, click the **Email/Phone** tab to add contact information.

5   Click the **License** tab to select the license type for the user.

If a license is not selected, the user will not be able to login or access TestTrack Pro.

6   Click the **Notes** tab to add any optional notes about the user.

7   Click the **Security** tab to set the license server security rights for the user.

Most users do not require access to the license server admin utility.

8 Click **OK** to save the information and add the user.

The users you added are global users that can be shared between Seapine products and databases.

9 Click **Close** when you finish adding users.

10 Quit the License Server Admin Utility. Do not stop the license server.

Next, you'll start TestTrack Pro and retrieve global users.

Getting starting with TestTrack Pro

1 Start the TestTrack Pro server. Make sure you are in the directory where startup scripts are located. This is generally either the **/etc/init.d** directory or the **/usr/bin** directory.

- Enter **./spls start** to start the server as a daemon

- Enter **./spls foreground** to start the server in the foreground

2 Start a Web browser and enter the URL to access the Server Admin Utility.

Enter the static server address or the IP address and the path to the admin login page.

For example: <http://127.0.0.1/ttweb/ttadmin/adminlogin.htm> or <http://www.yourserver.com/ttweb/ttadmin/adminlogin.htm>

3 The Welcome to TestTrack Pro - Server Admin page opens.

The Login to TestTrack Pro Server Admin dialog should automatically open. If it does not open, click **Go To Login** on the Welcome page.

4 Enter a **Username** and **Password** and click **Login**.

> **Note:** A default administrative user is added to the server admin utility during installation. Login as this user the first time you start the server admin utility. The username is **Administrator** and there is no password. After logging in, you add at least one admin user to the server.

The TestTrack Pro Server Admin Main page open

5 Add a server and create at least one database.

See the **TestTrack Pro Server Admin Utility Guide** for more information.

6 Next, login to TestTrack Pro Web as the default administrative user.

7 Open a web browser and enter the static server address or the IP address and the path to the TestTrack Pro Web login page.

For example: <http://127.0.0.1/ttweb/login.htm> or <http://www.yourserver.com/ttweb/login.htm>

8   Login as the default administrative user. The default administrative username is **Administrator** and there
     is no password.

     You are now logged in and ready to start using TestTrack Pro.

9   To retrieve users from the license server click the **Users** tab then click **Add Global**.

     The Add Global User to Current Database dialog opens.

10   Select the users and click **OK**.

     The users you added to the license server can now access TestTrack Pro.

11   The installation and setup process is now complete.

> ⓘ ───
>
> After starting TestTrack Pro, take the time to set database options, create security groups,
> and configure TestTrack Pro to meet your company's business process. See the **TestTrack Pro
> User and Admin Guide** for more information.

The servers aren't communicating. Help!

If the servers aren't connecting, you need to start the server admin utility and check the license server
information.

1   Make sure the license server and the TestTrack Pro server are both started.

2   Start the TestTrack Pro server admin utility and login.

     If your username and password are not recognized, you can connect with the local TTPro admin
     password, leaving the username blank and entering **admin** as the password. This password only
     provides access to the license server configuration.

> **Note:** It is strongly recommended that you change the local TTPro admin password, which
> only provides access to the license server configuration. To change this password, login to
> the TestTrack Pro server admin utility using the Administrator account or your existing admin
> username/password. Select Server Options then click the Server tab. Enter and confirm a
> new local TTPro admin password and click OK.

3   Click Server **Options**.

     The Options window opens with the License Server tab selected.

4   Make sure the server address and port number are both correct.

5   **Click Test Connection.**

    A message opens, letting you know if the connection is successful. If the TestTrack Pro server and the license server are installed on different computers, you may need to check your network and firewall configurations to open the necessary ports.

6   **Click OK to close the message.**

    ■   If the connection was not successful, correct any mistakes and re-test the connection.

    ■   If the connection was successful, click **OK** to close the server options.

    You may need to manually configure the connection for one of the following reasons:

    1. You changed the default TestTrack Pro or license server address or port number.

    2. You installed the TestTrack Pro server and the license server on different computers.

7   **Stop and restart the TestTrack Pro server for the changes to take affect.**

Chapter 4
Mac Installation

Installing TestTrack Pro for Mac

You can quickly get up and running with TestTrack Pro. Once installation is complete, you'll be ready to start tracking bugs!

Mac installation components

If you choose a custom installation, you can select any or all of the following components:

- TestTrack Pro Server

- TestTrack Pro Web Client

- TestTrack Pro Web Server Admin Utility

- SoloSubmit

- SOAP Server

- Sample Database

- Seapine License Server Admin Utility

- Seapine License Server

TestTrack Pro configuration file values

The TestTrack Pro configuration file, ttpro.conf, includes required and optional variables.

ServerPort:	Port the TestTrack Pro server uses to communicate with TestTrack clients.
LogDirectory:	Directory where the startup.log file is written.
ApplicationDirectory:	Directory where TestTrack Pro server database files and SoloBug import directories are stored.
ServerAddress:	IP address the cgi client uses to find the TestTrack Pro server.
FormsPath:	Full path of the TestTrack Pro Web pages.
ShortDateFormat:	Format that date strings should be output in.
AdminFormsPath:	Full path of the TestTrack Pro Admin Web pages.
admin-cgi-bin:	Location and name of the TestTrack *ttadmcgi.exe* script
ShortDateFormat:	TestTrack Pro Web short date format
LicenseServerPort:	The license server uses this port to communicate with the TestTrack Pro and Surround SCM servers over TCP/IP.
LicenseServerAddress:	The license server IP address.

Optional variables

Optional variables are used to define custom web installations, apply security, and allow optional database paths.

HTMLPath:	Relative TestTrack Pro HTML files alias location path. Use the following format: alias/sub-alias/sub-sub-alias. Do not start or end with "/".
AdminHTMLPath:	Relative TestTrack Pro Server Admin files alias location path. Use the following format: alias/sub-alias/sub-sub-alias. Do not start or end with "/".
AllowPathForDB:	Set the value to 1 to create and add databases using full directory paths.
RebootServerPort:	Used by the TestTrack Pro server to determine the reboot port. This value is automatically recorded during the installation process.
SkipWebConnectIPCheck:	Set the value to 1 to skip the security check. If the IP address changes in mid-session, the connection is not dropped.
WebReloginIPCheck:	Set the value to 1 to restrict users from logging in to TestTrack Pro Web from another location. Users can log in from their original location if the session is still active.

License server configuration file values

The license configuration file, splicsvr.conf, includes required variables.

ServerPort:	The TestTrack Pro server uses this port to communicate with TestTrack Pro clients.
LogDirectory:	Directory where the license server log file is written.
ApplicationDirectory:	Directory where the license server database files are stored.
ShortDateFormat:	Format that date strings should be output in.
AllowPathForDB:	Set the value to 1 to create and add databases using full directory paths.

Installing TestTrack Pro

ℹ️

If you are performing an upgrade of TestTrack Pro, you may be prompted to overwrite existing files. If you choose not to overwrite the files, you may not install all bug fixes or new features. Depending on the extent of the changes, choosing not to overwrite may result in TestTrack Pro functioning incorrectly.

1   Download the installation program.

After the download is complete, it should automatically unstuff into a disk image file called **ttpromacosxinstall.dmg**.

2   Double-click the **ttpromacosxinstall.dmg** file to mount the image on the desktop.

3   Double-click the **TestTrack Pro** disk image.

4   Double-click the **Install TestTrack Pro** icon.

The Authentication dialog opens.

5   Click the **lock** to make changes.

The Authenticate dialog box opens. Enter your name and password and click **OK**.

Note: The following instructions correspond to an installation of all TestTrack Pro components. Depending on the type of installation you are performing, you may not be prompted for the same information.

6   The Introduction dialog opens. Click **Next**.

7   Select the installation folder. Click **Next**.

8   Select the type of installation you want to perform. Click **Next**.

Note: If you are performing an **Easy Install**, the installation starts automatically. Follow the instructions to finish the installation. You may be prompted to enter additional information, such as the path to the CGI directory.

9   If you are performing a **Custom Install**, the Choose Product Components dialog opens.

10 Select the components you want to install. Click **Next**.

11 Enter the location of the TestTrack Pro application directory. Click **Next**.

The TestTrack Pro server stores all of the database files and SoloBug import directories in this directory.

12   Enter the location of the Unix command directory. Click **Next**.

The TestTrack Pro server daemon is installed in this directory.

13   Enter the directory where the startup log file will be written. Click **Next**.

The log file contains messages about any errors that occur when starting the TestTrack Pro server.

14   Enter the TestTrack Pro server port number. Click **Next**.

The TestTrack Pro server uses this port to communicate with TestTrack Pro clients.

15   Enter the maximum number of open files. Click **Next**.

TestTrack Pro requires approximately 200 open files per database.

16   Enter the IP address or domain name of the TestTrack server. Click **Next**.

The TestTrack Pro Web CGI uses this address to communicate with the TestTrack Pro server.

17   Enter the HTML files directory. Click **Next**.

The directory must be accessible by your Web server to ensure users can access the pages.

18   Enter the path to the CGI directory. Click **Next**.

When a user logs in to TestTrack Pro from a Web browser, your Web server calls the TestTrack Pro CGI.

19   Enter the IP address or domain name of the computer that is hosting the SOAP CGI. Click **Next**.

Use the IP address or domain name of the computer that you are currently installing TestTrack Pro on, since it will be hosting the SOAP CGI. The SOAP CGI requires this information

20   Enter the port number the Web server hosting the SOAP CGI will listen on. Click **Next**.

21   Enter the short date format you want to use. Click **Next**.

The date format is used for trend reports, email notifications, the startup log file, and any other date string created by the TestTrack Pro server.

Valid date formats include: " *%m/%d/%y*", " *%d/%m/%y*", " *%b/%d/%y*", or " *%d/%b/%y*". Other variations of this date format include substituting *%b* with *%B* or substituting *%y* with *%Y*. The year parameter must be last in the date format (e.g., " *%y/%m/%d*" is invalid).

Valid delimiters between the month, day, and year values include a period, dash, forward slash, backward slash, comma, or a space.

%b   Abbreviated month name

%B   Full month name

%d   Day of the month, 01-31

%m	Month of the year, 01-12
%y	Last two digits of the year number, 00-99
%Y	Year

22 Enter the license server application directory location. Click Next.

The license server database files are stored in this directory.

23 Enter the license server Unix command directory. Click Next.

The license server executables are installed in this directory.

24 Enter the directory where the license server startup log file will be stored. Click Next.

The log file contains messages about any errors that occur when the license server starts.

25 Enter the license server port number. Click Next.

The license server uses this port to communicate with the TestTrack Pro and Surround SCM servers over TCP/IP. It only sends information as a response to a request; it does not push information.

26 Enter the maximum number of open files for the license server. Click Next.

The license server requires approximately 200 open files per database. There are no known negative side effects of leaving this set to the maximum number of open files.

27 The Pre-Installation Summary dialog opens. Review the information. Click Next if the information is correct. Click Previous to make changes.

> **Note:** Pre-Installation Summary dialogs open for each component you are installing. For example, the Pre-Installation Summary: Server dialog opens for you to review the server installation information.

28 After reviewing all Pre-Installation Summary information, click Install, on the last Summary dialog that opens, to begin the installation.

29 The Install Complete dialogs opens after TestTrack Pro is installed.

30 The Read Me First file opens.

Be sure to read the information in this file. It helps you en sure TestTrack Pro is installed and working correctly.

31 Click Done to close the Install Complete dialog.

32 The TestTrack Pro preferences dialog opens so you can start the TestTrack Pro server. Click the **lock** to make changes.

Make sure the server is started. You should also select **Start TestTrack Pro Server when this computer starts up** to automatically start the server.

33 Installation is complete. You are ready to start tracking bugs!

See **Getting started - upgrade installations**, page 45 and **Getting started - new installations**, page 47 for information about getting started.

Getting started - upgrade installations

After you install TestTrack Pro 6.0, you need to convert the server database to the current format. During the conversion, existing TestTrack Pro users and valid, non-expired licenses are migrated to the license server. If you are prompted to convert the database during the installation, start with step 3.

> **Note:** You should backup the database files before converting the database. This ensures data can be restored if an error occurs during the conversion.

1 After installing TestTrack Pro 6.0, convert the server database to the current format.

2 Stop the license server if it is running.

3 Logon to the machine as root.

4 In the finder window, go to the TestTrack Pro application directory.

The default location is: **/Applications/TestTrackPro**

5 Double-click the **TestTrack Pro DB Conversion** icon to start the database conversion utility.

The conversion utility starts.

6 Select the database you want to convert and click **Upgrade Selected Database**.

During the conversion, TestTrack Pro users with usernames and valid, non-expired licenses are added to the license server. Users that do not have usernames are converted as local users.

> **Note:** You may encounter user conflicts during the conversion if you use Surround SCM and TestTrack Pro or if you convert multiple TestTrack Pro databases. If conflicts are detected, you are prompted to use the current user information on the license server or the user information from the database you are converting. If users have trouble logging in after the conversion, ask them to try both username/password combinations.

7 Click **Close** to close the Database Conversion Utility.

8   Start the license server.

- Start the System Preferences and click **Seapine License Server**.

- Click the **lock** on the Start/Stop tab to make changes.

- Make sure the server is started. Select **Start Seapine License Server when this computer starts up** to automatically start the server.

- Click **Save**.

9   Start the TestTrack Pro server.

- Start the System Preferences and click **TestTrack Pro Server**.

- Click the **lock** on the Start/Stop tab to make changes.

- Make sure the server is started. Select **Start TestTrack Pro Server when this computer starts up** to automatically start the server.

10   Start the License Server Admin Utility.

- Go to the TestTrack Pro application directory. The default location is: **/Applications/TestTrackPro**.

- Double-click **Seapine License Server Admin Utility**. The license server admin utility starts.

11   Login to the License Server Admin Utility as the default administrative user.

The username is **Administrator** and there is no password.

12   If you converted dedicated licenses, which are converted as named licenses, you need to select a license for users.

- Click **Users**.

- Select a user and click **Edit**.

- Click the **License** tab. Select **Used named license** and click **OK**.

- Click **Close** to close the Users window.

13   Choose **File > Exit** to close the License Server Admin Utility.

14   The conversion process is complete. Users can login, using their existing usernames and passwords, and access TestTrack Pro.

Getting started - new installations

After TestTrack Pro 6.0 is installed, you need to set up a connection between the license server and TestTrack Pro server, add licenses and users to the license server, and start using TestTrack Pro.

> **Note:** Steps 1-6 may not be necessary if you install the TestTrack Pro server and the license server on the same computer, using the default port configurations.

1   Start the license server. Make sure you are in the directory where startup scripts are located.

- Start the System Preferences and click **Seapine License Server**.

- Click the **lock** on the Start/Stop tab to make changes.

- Make sure the server is started. You should also select **Start Seapine License Server when this computer starts up** to automatically start the server.

- Click **Save**.

2   Start the TestTrack Pro server.

- Start the System Preferences and click **TestTrack Pro**.

- Click the **lock** on the Start/Stop tab to make changes.

- Make sure the server is started. You should also select **Start TestTrack Pro Server when this computer starts up** to automatically start the server.

3   Start the License Server Admin Utility.

- In the finder window, go to the License Server application directory. The default location is: **/Applications/SeapineLicenseServer**.

- Double-click **Seapine License Server Admin Utility**. The license server admin utility starts.

4   Click **Setup** on the Seapine License Server Login dialog box to add a server connection.

The Setup Server List dialog box opens.

5   Click **Add**.

The Add License Server dialog box opens.

6   Enter a **Server Name**, **Server Address**, and **Port Number**. Click **OK**.

The server is added.

7   Click **Close** to return to the License Server Login dialog box.

8   Login as the default administrative user. The username is **Administrator** and there is no password.

By default, Administrator has full admin security rights and uses a TestTrack Pro floating license. It is strongly recommended that you set a password for this user after logging in.

9   Click **Connect**.

The License Server Admin Utility starts. You are now ready to add licenses and users.

Adding licenses

1   Click **Licenses** or choose **View > Licenses**.

The Licenses dialog opens.

2   Click **Add**.

The Add License dialog box opens.

3   Enter the serial number.

This field is not case sensitive. Licenses can be entered with or without dashes.

4   Click **OK**.

The license is added. Click **Close** to close the Licenses dialog.

Adding users

The license server is used to globally manager users. Global users can be shared between Seapine products and databases.

1   Click **Users** or choose **View > Users**.

The Users dialog box opens.

2   Click **Add**.

The Add User dialog box opens with the **Info** tab selected. Enter the user information.

3   Optionally, click the **Address** tab to add the company name and address.

4   Optionally, click the **Email/Phone** tab to add contact information.

5   Click the **License** tab to select the license type for the user.

If a license is not selected, the user will not be able to login or access TestTrack Pro.

6   Click the **Notes** tab to add any optional notes about the user.

7   Click the **Security** tab to set the license server security rights for the user.

Most users do not require access to the license server admin utility.

8   Click **OK** to save the information and add the user.

The users you added are global users that can be shared between Seapine products and databases.

9   Click **Close** when you finish adding users.

10   Quit the License Server Admin Utility but do not stop the license server.

Next, you'll switch to TestTrack Pro and retrieve global users.

Getting starting with TestTrack Pro

1   Start the TestTrack Pro server.

■   Start the System Preferences and click **TestTrack Pro.**

■   Click the **lock** on the Start/Stop tab to make changes.

■   Make sure the server is started. You should also select **Start TestTrack Pro Server when this computer starts up** to automatically start the server.

2   Start a Web browser and enter the URL to access the Server Admin Utility.

Enter the static server address or the IP address and the path to the admin login page.

For example: <http://127.0.0.1/ttweb/ttadmin/adminlogin.htm> or
<http://www.yourserver.com/ttweb/ttadmin/adminlogin.htm>

3   The Welcome to TestTrack Pro - Server Admin page opens.

The Login to TestTrack Pro Server Admin dialog should automatically open. If it does not open, click **Go To Login** on the Welcome page.

4   Enter a **Username** and **Password** and click **Login.**

Note: A default administrative user is added to the server admin utility during installation. Login as this user the first time you start the server admin utility. The username is **Administrator** and there is no password. After logging in, you add at least one admin user to the server.

The TestTrack Pro Server Admin Main page open

5   Add a server and create at least one database.

See the **TestTrack Pro Server Admin Utility Guide** for more information.

6   Next, open a web browser and enter the static server address or the IP address and the path to the TestTrack Pro Web login page.

For example: <http://127.0.0.1/ttweb/login.htm> or <http://www.yourserver.com/ttweb/login.htm>

7 Login as the default administrative user. The default administrative username is **Administrator** and there is no password.

You are now logged in and ready to start using TestTrack Pro.

8 To retrieve users from the license server click the **Users** tab then click **Add Global**.

The Add Global User to Current Database dialog opens.

9 Select the users and click **OK**.

The users you added to the license server can now access TestTrack Pro.

10 The installation and setup process is now complete.

> ⓘ
>
> After starting TestTrack Pro, take the time to set database options, create security groups, and configure TestTrack Pro to meet your company's business process. See the **TestTrack Pro User Guide** for more information.

The servers aren't communicating. Help!

If the servers aren't connecting, you need to start the server admin utility and check the license server information.

1 Make sure the license server and the TestTrack Pro server are both running.

2 Start the TestTrack Pro server admin utility and login.

If your username and password are not recognized, you can connect with the local TTPro admin password, leaving the username blank and entering **admin** as the password. This password only provides access to the license server configuration.

> **Note:** It is strongly recommended that you change the local TTPro admin password, which only provides access to the license server configuration. To change this password, login to the TestTrack Pro server admin utility using the Administrator account or your existing admin username/password. Select Server Options then click the Server tab. Enter and confirm a new local TTPro admin password and click OK.

3 Click **Server Options**.

The Options window opens with the License Server tab selected.

4 Make sure the server address and port number are both correct.

5   Click **Test Connection.**

     A message opens, letting you know if the connection is successful. If the TestTrack Pro server and the license server are installed on different computers, you may need to check your network and firewall configurations to open the necessary ports.

6   Click **OK** to close the message.

     ■   If the connection was not successful, correct any mistakes and re-test the connection.

     ■   If the connection was successful, click **OK** to close the server options.

     ⓘ ───

     You may need to manually configure the connection if you changed the default TestTrack Pro or license server address or port number or you installed the TestTrack Pro server and the license server on different computers.

     ───

7   Stop and restart the TestTrack Pro server for the changes to take affect.

Configuring the license server

1   Start the System Preferences and click **Seapine License Server.**

2   Click the **lock** on the Start/Stop tab to make changes.

     Select **Start Seapine License Server when this computer starts up** to make sure the server starts automatically.

3   Click the **Access Options** tab to configure access options.
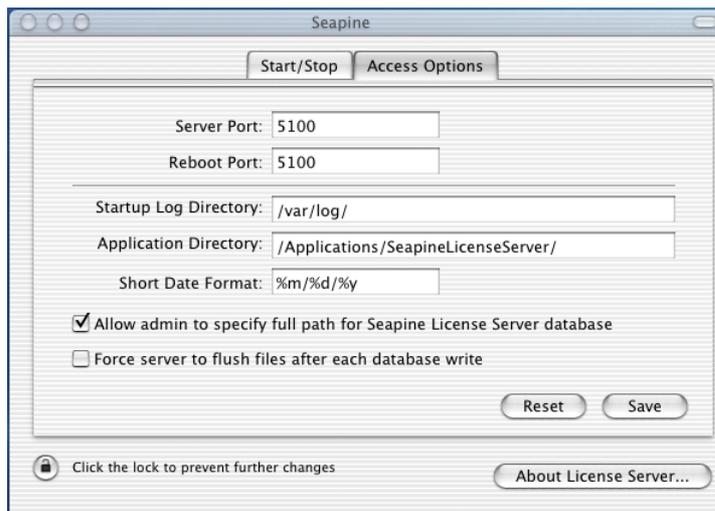
4   **Server Port** specifies the port the license server uses to communicate with all clients. The license server reads this value when the server is first started.

5 **Reboot Port** specifies the port the license server uses the next time the server is started.

6 **Startup Log Directory** specifies the directory where the license server startup log file is saved.

7 **Application Directory** specifies the full pathname of the directory where the application is installed.

8 **Short Date Format** specifies the short date format you want to use. Valid date formats include: "*%m/%d/%y*", "*%d/%m/%y*", "*%b/%d/%y*", or "*%d/%b/%y*".

9 Select **Allow administrator to specify full path for Seapine License Server databases** to allow databases to be created in any existing directory on the server computer's local hard drive or on any mapped network drive on the server computer.

10 **Force server to flush files after each database write** flushes files after each database write. Selecting this option may slow down performance. If data is important to you, select this option to make sure you lose as little data as possible if the server crashes. If speed is important to you, do not select this option.

11 Click **Save** to save the options.

Configuring the TestTrack Pro server

1 Start the System Preferences and click **TestTrack Pro**.

2 Click the **lock** on the Start/Stop tab to make changes.

Select **Start TestTrack Pro Server when this computer starts up** to make sure the server starts automatically.

3 Click the **Access Options** tab to configure access options.

4   **Server Address** specifies the TestTrack Pro server IP address, which the CGI client uses to find the server.

5   **Server Port** specifies the port the TestTrack Pro server uses to communicate with all clients, including the TTCGI application. The TestTrack Pro server reads this value when the server is first started. **Note:** It is recommended that you change the reboot port value instead of the server port value. When the TestTrack Pro server is shutdown and restarted, it copies the reboot port value to the server port field.

6   **Reboot Port** specifies the port the TestTrack Pro server uses to communicate with all TestTrack clients, including the TTCGI application, the next time the TestTrack Pro server is started.

7   **CGI Binary Path** specifies the relative path and filename of the TestTrack CGI application.

8   **Forms Path** specifies the full pathname of the directory where the TestTrack Pro HTML files are installed.

9   **HTML Forms Path** specifies the TestTrack Pro HTML files virtual directory. If the files are moved to a different URL location, the new location must be specified in the HTML forms path field.

10 **Admin CGI Binary Path** specifies the relative path and filename of the TestTrack Admin CGI application. This path is relative to the root directory of your web server.

11 **Admin Forms Path** specifies the full pathname of the directory where the TestTrack Pro Admin HTML files are installed.

12 **Admin HTML Forms Path** specifies the TestTrack Pro Admin HTML files virtual directory. If the files are moved to a different URL location, the new location must be entered in this field.

13 **Startup Log Directory** specifies the directory where the TestTrack Pro server startup log file is written.

14 **Application Directory** specifies the full pathname of the directory where the application is installed.

15 **Short Date Format** specifies the short date format you want to use. Valid date formats include: "*%m/%d/%y*", "*%d/%m/%y*", "*%b/%d/%y*", or "*%d/%b/%y*".

16 Select **Allow administrator to specify full path for TestTrack databases** to allow databases to be created in any existing directory on the server computer's local hard drive or on any mapped network drive on the server computer.

17 Select **Perform IP address check if Web user attempts to login a second time** determines what action should be taken if a second login attempt is made via the Web interface, with the same username, from a different IP address. TestTrack users can only log into a database from one location at a time. If a second login attempt is made, the TestTrack Pro server can either deny the second login attempt or disconnect the first connection so the second login attempt can be accepted.

> **Note:** You may not want to select this option if users connect to TestTrack via the Web, using an ISP. The ISP will often quickly re-assign an IP address. TestTrack sees this as a security threat and ends the user session. The user may lose work and will need to re-login. In addition, you may not want to select this option if you use NAT (Network Address Translation) because the external IP dress may change depending on your firewall settings. If it does, TestTrack ends the user session. The user may lose work and will have to re-login.

18 Select **Perform security check to insure a consistent IP address during a Web session** to verify that all requests come from the same IP address as the original login information. TestTrack Pro server performs a security check to insure Web sessions are not hijacked from a different IP address. Someone may attempt to determine the unique session ID of a logged in user, instead of cracking a username and password.

> **Note:** You may not want to select this option if users connect to TestTrack via the Web, using an ISP. If the ISP connection is dropped, the user may be assigned a new IP address when a connection is re-established. If the security check is skipped, the user can continue using TestTrack via the current browser window. The user does not have to login again and will not lose any work. If this security check is performed, the user is required to login again and will lose any current work.

19 Click **Save** to save the options.

Appendix A
Microsoft Windows Security Issues
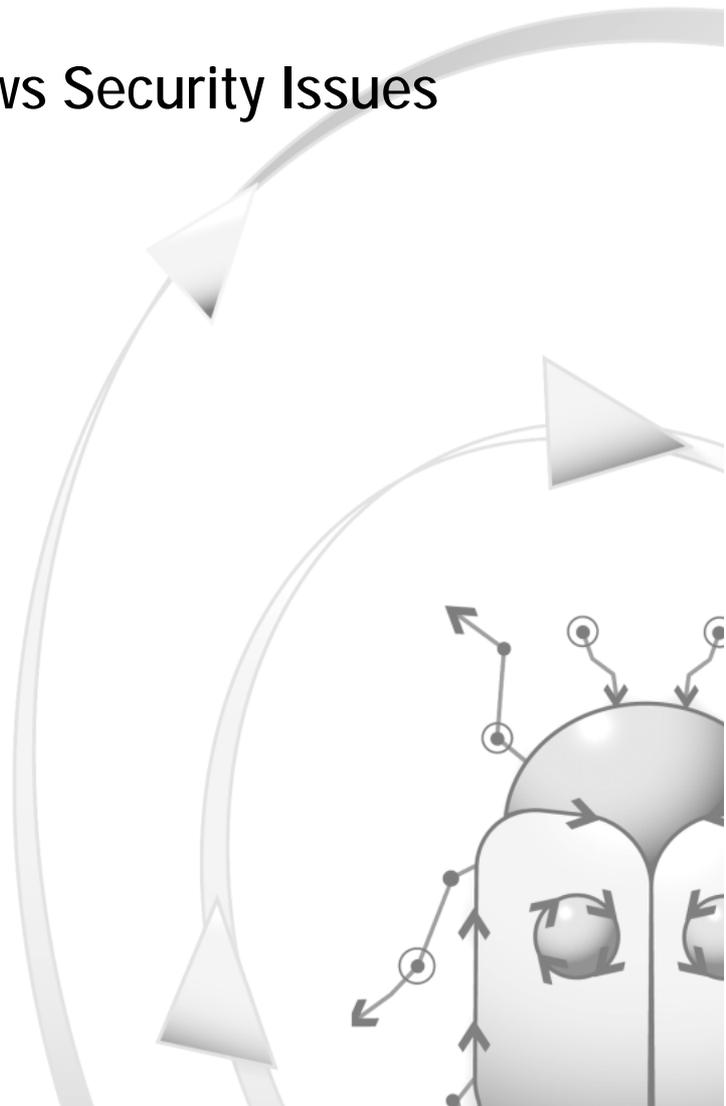
File level security issues

- TestTrack Pro can only restrict security access through the application. This does not replace the need for file and directory security at the operating system level.

- If security is a concern, use Windows NT/2000 with NTFS to provide increased security. You can restrict access to the TestTrack Pro directory through NTFS security settings. You can also restrict access for most users to read-only permission. TestTrack Pro users do not need write access because the server application does the actual writing to the database files.

- The following example illustrates what can happen if users have full access:

  A drive is accessible through the network and there is no file-level security on the drive. Any user can open and look at data/files using a program such as Notepad. Data is stored in both binary format and plain text. Usernames and passwords are encrypted so the user cannot access that information. In addition to viewing the data/files, it is possible for a user to vandalize your system by deleting files or even deleting the entire database.

  > **Note:** Windows 2000 with FAT does support some security permissions. Windows NT/2000 with NTFS is recommended if security is a concern.

Directory sharing issues

- The TestTrack Pro application does **not** require that database files reside on a shared drive. The TestTrack Pro ODBC driver **does** require the database to be accessible via a network shared drive. There is no need to share the TestTrack Pro database directory if you are not planning to use the TestTrack Pro ODBC driver.

- If you grant ODBC access to a database, users can view all TestTrack Pro data with the exception of encrypted usernames and passwords.

- The need for file-level security is increased if you place the TestTrack Pro database on a network shared drive.

  > **Note:** Windows 95/98/ME/XP does not provide file-level security because it uses the FAT file system.
  >
  > Windows NT security is only available if you're using the NTFS file system. It is not available if you're using the FAT file system. If your PC is configured with the FAT file system, you can convert to NTFS through Windows commands. Refer to your Windows Help or contact your system administrator for more information.

Appendix B
Third-Party Software Licenses
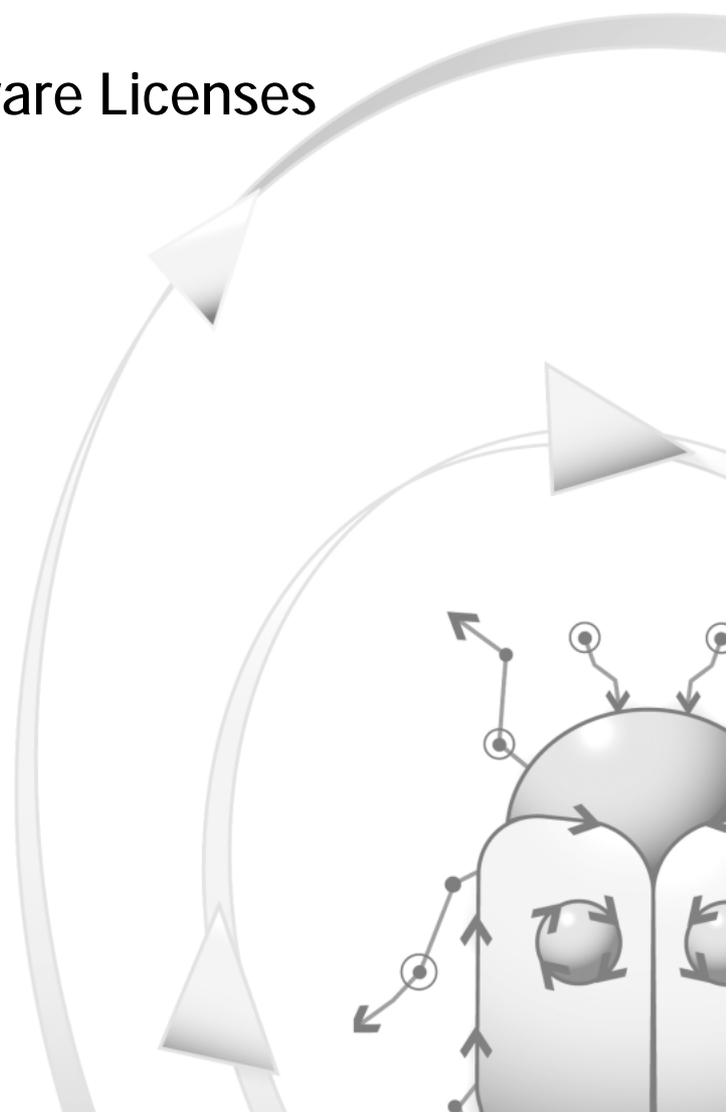
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