The PPP/SLIP Connect Application

The PPP/SLIP Connect application enables you to establish connections to remote networks using PPP (Point-to-Point Protocol) or SLIP (Serial Line Internet Protocol) through your PCs COM port and a modem. When you dial in to a remote network, your PC becomes a node on that network with the same networking features available to your PC as if it was directly connected to the network.

The PPP/SLIP Connect application contains many features necessary for you or a network administrator to take full advantage of the services offered by a PPP or SLIP connection. Once you, or your administrator, have predefined the required connection settings, you will normally only use a few of the capabilities of PPP/SLIP Connect.

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Getting Started with PPP/SLIP Connect

The PPP/SLIP Connect application contains a wide range of features that help you communicate with a remote network via a modem. The information provided in this section demonstrates the basic features so that you can start using the PPP/SLIP Connect application with the default settings. Once you are familiar with the basic features, you can continue to explore other features with the help of the <u>PPP/SLIP</u> <u>Connect Reference</u>.

This section discusses the following topics:

Starting the PPP/SLIP Connect Application Configuring Modem Information Sites and Sessions Connecting to a Remote Site Disconnecting from a Remote Site Other PPP/SLIP Connect Features

Starting the PPP/SLIP Connect Application

To start the PPP/SLIP Connect application, double-click on the PPP/SLIP Connect icon in the TCP Pro program group.

Configuring Modem Information

Before you can use the PPP/SLIP Connect application to connect to a remote site, you need to provide the following information about your modem.

- The modem type (for example, US Robotics WorldPort 14400)
- The COM port to which your modem is connected

To configure your modem for use with the PPP/SLIP Connect application:

- 1. Select Modem Port Setup from the Options menu to open the Modem Port Setup dialog box.
- 2. Provide the information listed above in the appropriate fields.

Note: If you do not know your modem type, select Default Modem Settings from the drop-down list of the Modem field.

3. Click on the OK button.

All the fields and buttons in the Modem Port Setup dialog box are described in the <u>Modem Port Setup dialog box</u>.

Sites and Sessions

Sites and sessions are used by the Connect application to establish connections to remote networks. Sites describe static information about the network(s) you intend to access, for example, the telephone numbers and protocol to be used. Sessions contain information about a connection that usually changes, for example, your user name and password and the local area code from where you are calling.

Before you can connect to a remote network, you must:

- 1. Define a Site
- 2. Define a Session

Defining a Site

You must provide certain information about the remote sites to which you want to connect before you can establish a connection. Remote site information is created and maintained by the PPP/SLIP Connect application in a file called <code>SITE.INI</code>. Your network administrator may have already provided this information. If a <code>SITE.INI</code> is not provided to you, you must define site information by providing the following information about each remote site to which you want to connect:

- The telephone number
- The protocol being used (PPP or SLIP)
- The handshaking script (if necessary)
- The IP addresses that are assigned to you by the remote site (if they are not included in the handshaking script)

To define a remote site:

- 1. Select Preferences from the Options menu, check the Administrative mode box, and then click on OK to enable Administrative mode.
- 2. Select Site Setup from the Options menu to open the Site Setup dialog box.
- 3. Enter the information listed above in the appropriate fields and click on the OK button.

All the fields in the Site Setup dialog box are described in the Site Setup dialog box.

Defining a Session

To be able to connect to a remote site, you have to associate the remote site with a session. A session consists of the following information:

- Your user name and password for the remote site (by default, a session is configured so that you are prompted for your user name and password at connection time).
- Dialing information specific to your location (your local area code) and any special dialing information needed (the prefix 9 to dial out of a private exchange or additional numbers for a calling card).

To define a session, follow the steps below:

- 1. Select Session Setup from the Options menu to open the Session Setup dialog box.
- 2. Enter a descriptive name for the session you want to define in the Session field.
- 3. Select the site you want to reference from the drop-down list in the Site field.
- 4. Enter the information listed above in the appropriate fields of the Session Setup dialog box.

All the fields and buttons in the Session Setup dialog box are described under the <u>Session Setup dialog box</u>.

5. Click on the OK button to save the information and exit the Session Setup dialog box.

The session name you defined appears in the Connect pulldown menu.

Connecting to a Remote Site

Once you have provided all the necessary information to configure the PPP/SLIP Connect application for use, you can establish a connection to a remote site by selecting the session name from the list of defined sessions in the Connect pulldown menu.

The PPP/SLIP Connect application attempts to establish a connection to the remote site. Once a connection is established, the status area of the status bar indicates On line.

Note: If you provided multiple telephone numbers for the remote site to which you are connecting and the first number you provided is busy, the alternate numbers will be attempted in sequence.

Disconnecting from a Remote Site

To disconnect from the remote site to which you are currently connected, select Disconnect from the Connect menu.

Note: When you exit the PPP/SLIP Connect application, your connection to a remote site is *not* automatically terminated. However, you can configure PPP/SLIP Connect to automatically terminate the connection to a remote site upon exit by selecting Disconnect on PPP/SLIP Connect Exit in the <u>Preferences dialog box</u>. (The Preferences dialog box opens when you select Preferences from the Options menu.)

Other PPP/SLIP Connect Features

Now that you are familiar with the basic features, you can continue to explore the many features that the PPP/SLIP Connect application has to offer. With PPP/SLIP Connect, you can:

- Configure your system to beep when connecting to and/or disconnecting from a remote system by selecting <u>Preferences</u> from the Options menu.
- Disconnect from a remote site automatically when you exit the PPP/SLIP Connect application, or when you exit Windows, by selecting <u>Preferences</u> from the Options menu.
- Display all handshake messages and IP addresses during the handshaking process by selecting <u>Preferences</u> from the Options menu.
- Configure the application to connect to a remote site automatically when the first Windows Sockets related network request is made by selecting <u>Auto</u> <u>Connect Setup</u> from the Options menu.

The PPP/SLIP Connect application lets you perform the following tasks only if you are in Administrative mode, which is accessed by selecting <u>Preferences</u> from the Options menu.

- Save to a file or print any data displayed in the PPP/SLIP Connect window by selecting the appropriate menu item from the <u>File menu</u>.
- Copy and paste data between the Windows clipboard and the PPP/SLIP Connect window by selecting the appropriate menu item from the Edit menu.
- Experiment with a modem or a remote site by typing characters manually in the PPP/SLIP Connect window by selecting <u>Interactive</u> from the Connect menu.
- Display information about the PPP/SLIP driver or information about the connection that is currently established by selecting the appropriate menu item from the <u>Status menu</u>.
- Customize the colors and fonts used in the PPP/SLIP Connect window by selecting the appropriate menu item from the <u>Options menu</u>.
- Record all interactions with the modem and the remote site as well as any error messages that may occur while the PPP/SLIP Connect application is running. You can save the information to a file by selecting <u>Log to File</u> from the Options menu or display the information in the TCP Pro Console by selecting <u>Log to</u> <u>Console</u> from the Options menu.

The PPP\SLIP Connect Reference

This section introduces you to the main window of the PPP/SLIP Connect application and describes each pulldown menu, menu item, and dialog box in detail.

When you start the PPP/SLIP Connect application, the PPP/SLIP Connect window appears on your screen. The PPP/SLIP Connect window is the main window of the PPP/SLIP Connect application. It contains the following:

<u>The Display area</u> <u>The Status bar</u>

The File menu

The Connect menu

The Stop! Menu

The Options menu

The Display Area

The display area shows any interactions with the modem and the remote site to which you are connecting, and any error messages that may occur while the PPP/SLIP Connect application is running.

Note: The display area only displays the information listed above if you select Log to Screen from the Options menu. Log to Screen is only available in the Options menu if you are in <u>Administrative mode</u>.

The display area is also used to type commands to a modem or a remote site (this is called Interactive mode). To select Interactive mode, select Interactive from the Connect menu. The Interactive menu item is only available when you are in <u>Administrative</u> <u>mode</u>.

The Status Bar

The status bar is located at the bottom of the PPP/SLIP Connect window. It contains five areas, described from left to right:

An information area, which displays error messages and information that helps to explain the task you are performing. This area also displays the changing status of the handshaking and negotiation with a remote site.

An area which displays the remote access mode (PPP or SLIP) when you are online. If you are in Interactive mode, this area indicates whether the keyboard is in insert mode (Ins) or overstrike mode (Ovr).

An area which displays the baud rate of your modem if it can be determined at modem connect time. If a direct connection is being used, this area remains empty.

An area which displays the time in hours, minutes, and seconds since the modem connected. If a direct connection is being used, this area remains empty.

A status area, which indicates the following:

Off Line when you are not connected with a remote site.

On line, when you are online in PPP or SLIP mode with the remote site and applications can communicate over the connection.

Interactive, when the screen is available for typing commands to and displaying responses from the modem or remote site.

The File Menu

The File pulldown menu contains the Exit menu item, which exits the PPP/SLIP Connect application.

IMPORTANT: Selecting Exit does not disconnect the current remote connection upon exiting the application. However, you can configure the PPP/SLIP Connect application to disconnect automatically upon exit by selecting Disconnect on PPP/SLIP Connect Exit in the Preferences dialog box (for more information, refer to <u>Preferences</u>).

The Connect Menu

The Connect pulldown menu contains the menu items listed below as well as a list of session names that have been defined. A session is a collection of information that describes the way you access a particular remote site. Selecting a session name from the list lets you connect to a remote site.

<u>Connect</u> <u>Disconnect</u>

Connect

The Connect menu item lets you select a session and establish a connection to a remote site using the site information defined for the session.

When you select Connect, the <u>Connect dialog box</u> opens.

IMPORTANT: To be able to connect to a remote site, you must first define a session for the remote site by selecting Session Setup from the Options menu.

The Connect Dialog Box

The Connect dialog box lets you select a session name so that you can connect to the remote site it references. The Connect dialog box contains the following fields and buttons:

- Session This field lets you select the session name that identifies the remote site you want to access.
- OK Clicking on this button exits the Connect dialog box and tries to establish a connection with the remote site.
- Cancel Clicking on this button exits the Connect dialog box without trying to establish a connection to the remote site.

Note: The Connect menu item is grayed-out and cannot be selected if a connection is already established or if the application is in Interactive mode (the screen is available for typing commands to, and displaying responses from, the modem or remote site).

Disconnect

The Disconnect menu item disconnects (hangs up) the current connection.

Note: If no connection is currently established, the Disconnect menu item is grayedout and cannot be selected.

The Stop! Menu

Selecting the Stop! menu stops any dialing or connecting in progress. This menu is only enabled when you are in the process of connecting to a remote site.

The Options Menu

The Options pulldown menu contains the following menu items:

Preferences Modem Port Setup Session Setup

Auto Connect Setup

Auto Connect Enable

Preferences

The Preferences menu item lets you select certain options and display additional pulldown menus and menu items that enable you to customize the look and feel of the PPP/SLIP Connect application.

When you select Preferences, the <u>Preferences dialog box</u> opens.

The Preferences Dialog Box

The Preferences dialog box lets you select certain options and display additional pulldown menus and menu items that enable you to customize the look and feel of the PPP/SLIP Connect application. The Preferences dialog box contains the following fields and buttons:

Administrative Mode

If this box is selected, additional menus and menu items are displayed in the PPP/SLIP Connect window that enable you to customize the SLIP/PPP Connect application. For a description of the additional pulldown menus and menu items available, refer to <u>Administrative Mode</u>.

Beep On Connect

If this box is selected, an audible beep sounds when a connection is made to a remote site.

Beep on Disconnect

If this box is selected, an audible beep sounds when a connection to a remote site is terminated.

Disconnect on PPP/SLIP Connect Exit

If this box is selected, any current connection to a remote site will disconnect when you exit the PPP/SLIP Connect application.

Disconnect on Windows Exit

If this box is selected, any current connection to a remote site will disconnect when you exit Windows.

Display Modem Status

If this box is selected, the status of the modem is displayed by the Modem Status applet. The Modem applet displays the following status of the modem:

RI (Ring Indicator) CD (Carrier Detect) RS (Request to Send) CS (Clear to Send) RD (Receive Data) SD (Send data)

Handshake Logging

If this box is selected, all handshake messages will be displayed in the display area if Log to Screen is selected in the Options menu, or in the TCP Pro Console window if Log to Console is selected in the Options menu.

Note: Log to Screen and Log to Console are only available from the Options menu if you are in <u>Administrative mode</u>.

Show Connect Time when Minimized

If this box is selected, the elapsed time of the connection is displayed while the PPP/SLIP Connect application is minimized.

Show IP Addresses on Connect

If this box is selected, all current settings for the IP address, Gateway Address, Subnet Mask, and DNS Address will be displayed in the Show IP address dialog box when a connection is being made to a remote site.

Start Minimized

If this box is selected, the PPP/SLIP Connect application appears as an icon on your screen when it is started. If this box is not selected, the PPP/SLIP Connect window is displayed on your screen when the application is started.

- OK Clicking on this button applies the settings, then exits the Preferences dialog box.
- Cancel Clicking on this button exits the Preferences dialog box without applying the settings.

Modem Port Setup

The Modem Port Setup menu item lets you configure your modem for use with the PPP/SLIP Connect application.

When you select the Modem Port Setup menu item, the $\underline{\text{Modem Port Setup dialog box}}$ opens.

The Modem Port Setup Dialog Box

The Modem Port Setup dialog box lets you configure your modem for use with the PPP/SLIP Connect application. It contains the following fields and buttons:

COM Port Port lets you identify the COM port to which your modem is attached. Baud Rate lets you select the baud rate you want to use from the drop-down list.

Port Addresses

Clicking on this button presents the following fields, which let you set non-standard COM port addresses:

IRQ lets you select the IRQ address for the COM port. If you select System, the IRQ value is obtained from the Windows SYSTEM.INI file. If you select Default, the default IRQ address for the COM port specified is used. If you select Custom, you must specify an IRQ address in the Custom field. The other choices are for predefined IRQ addresses.

IO Addr lets you select the IO address for the COM port. If you select System, the IO value is obtained from the Windows SYSTEM.INI file. If you select Default, the default IO address for the COM port specified is used. If you select Custom, you must specify an IO address in the Custom field. The other choices are for predefined IO addresses.

- Modem This field lets you select the type of modem that is attached to your PC. If you are not sure of your modem type, or your modem type does not appear in the list, select Default Modem Settings.
- OK Clicking on this button applies the settings to the PPP/SLIP Connect application and exits the Modem Port Setup dialog box.
- Cancel Clicking on this button exits the Modem Port Setup dialog box without applying the settings.
- Discover Selecting the Discover button attempts to automatically discover the comm port and modem type. This operation takes a few seconds. Pressing the Cancel button while Discover is in progress aborts the discovery operation.
- Help Clicking on this button shows this help information.

Session Setup

The Session Setup menu item lets you define a session. A session is a collection of information that describes the way you access a particular remote site. It consists of the session name, the site name, the COM port where your modem is connected, user authentication information (user name and password), and dialing information. When you select Session Setup, the <u>Session Setup dialog box</u> opens.

IMPORTANT: If your network administrator has not provided you with a SITE.INI file, you must first provide information about the remote site before you define a session by selecting Site Setup from the Options menu. (Site Setup is available only when you are in <u>Administrative Mode</u>.)

The Session Setup Dialog Box

The Session Setup dialog box lets you define a session. A session is a collection of information that describes the way you access a particular remote site. It consists of the session name, the site name, the COM port where your modem is connected, user authentication information (user name and password), and dialing information.

The Session Setup dialog box contains the following fields and buttons:

- Session This field lets you enter a descriptive name for the session you want to define. If you want to edit an existing session, you can select the session from the drop-down list.
- Site This field lets you select the name of the remote site to which the session specified above connects.
- Modem Port This field lets you select the COM port that the session specified above will use to connect to the remote site. Select a COM port from the drop-down list.
- Dialing Phone Nos displays the list of phone numbers defined for the remote site specified in the Site field. The phone numbers are dialed in the order presented in the list. However, numbers beginning with the Local Area Code specified for the session are dialed before other numbers. If a number is busy, the next number in the list is dialed. When all the numbers in the list have been dialed, and if the value for Retries is greater than zero (0), the application waits for the number of seconds specified in the Wait field, described below, then the dialing sequence begins again. If no connection is made after the specified number of retries, the attempt to connect is abandoned.

To add a number to the list, type the number in the Phone Nos box. Enter one phone number on a line and use the Enter key to end a line. You can enter a maximum of ten phone numbers.

Local Area Code lets you enter the local area code where your modem is located. If a telephone number in the remote site dialing list begins with this code, the code is removed from the phone number in the dialing sequence. This allows you to provide full telephone numbers for sites (for example, area code plus local number), however, a session can be in the same or a different area code.

Area Code Prefix lets you enter the string that is sent prior to the area code if the local area code is sent as part of the telephone number. Public telephone systems generally require 1 to precede the area code, however, some local private exchanges do not.

Dialing Options

This button lets you provide a prefix and suffix for the telephone numbers of a remote site. Clicking on this button presents the <u>Session</u> <u>Dialing Options dialog box</u>.

Set Exec Options

Selecting this button will take you to the <u>Set Exec Options dialog box</u>. The Set Exec Options dialog allows specification of applications to be run before and after a remote connection is made and before and after disconnecting from the remote site.

Handshake Login

	This button is only displayed if there is a handshake specified for connecting to the remote site and either a user name or password is required during the handshake. Clicking on this button displays the <u>Handshake Login Setup dialog box</u> .
PPP Options	This button is only displayed if the remote access mode of the site is PPP and there are PPP options that can be associated with the session. Clicking on this button displays the <u>Session PPP Options dialog</u> <u>box</u> .
ОК	Clicking on this button applies the settings and exits the Session Setup dialog box.
Cancel	Clicking on this button exits the Session Setup dialog box without saving the settings.
Reset	Clicking on this button resets all the settings in the Session Setup dialog box to their default values. (The default values are the values that were last saved to the configuration file.)
Remove	Clicking on this button removes the session specified in the Session field together with its settings from the configuration file.

The Session Dialing Options Dialog Box

The Session Dialing Options dialog box lets you provide a prefix and suffix for the telephone numbers of a remote site. The Session Dialing Options dialog box contains the following fields and buttons:

Prefix	This field lets you enter the string that is sent before the telephone number in the dialing sequence. For example, the number 9 is required to dial out of many private exchanges.
Suffix	This field lets you enter the string that is sent after the telephone number in the dialing sequence. This could be used to send a calling card number.
Retries	This field lets you specify the number of times the dialing sequence will be retried before abandoning the attempt. The default is 2.
Wait	This field lets you specify the number of seconds between each dialing sequence attempt. The default is 30 seconds.
ОК	Clicking on this button saves the information temporarily and returns you to the Session Setup dialog box where you must click on OK to save the information permanently.
Cancel	Clicking on this button exits the Session Dialing Options dialog box without saving the information and returns you to the Session Setup dialog box.

The Session PPP Options Dialog Box

The Session PPP Options dialog box lets you set PPP options for a session. It contains the following fields and buttons:

Authentication This area is used to specify PPP authentication options.

Note: This area is enabled only if PAP or CHAP authentication and the Get User Name From Session Options box is selected in the <u>Site PPP</u> <u>Options dialog box</u>.

Prompt for User Name If this box is selected, you will be prompted to enter a user name during handshaking with a remote site. If this box is not selected, you must supply a user name in the User Name field, described below.

User Name lets you enter your user name so that it is sent to the remote site automatically during handshaking. This field is disabled if the Prompt for User Name box is selected.

Prompt for Password If this box is selected, you will be prompted to enter a password during handshaking with a remote site. If this box is not selected, you must supply a password in the Password field, described below.

Password lets you enter your password so that it is sent to the remote site automatically during handshaking. This field is disabled if the Prompt for Password box is selected.

Protocols This area is used to select the network protocol(s) to be used with the session. This area is enabled only if Get Protocols From Session Options is selected in the <u>Site PPP Options dialog box</u>.

IP If you select this box, the IP protocol is requested during PPP negotiation with the remote site.

IPX If you select this box, the IPX protocol is requested during PPP negotiation with the remote site.

LCP Options Clicking on this button lets you set the following LCP (Link Control Protocol) options.

Note: This button is enabled only if you select Get LCP Options from Session Options in the <u>Site PPP Options dialog box</u>.

Asynch Control Char Map lets you enter the control characters you want to map so that they can be used on an asynchronous link. The default, expressed in hexadecimal, is *FFFFFFF*. This indicates that all control characters are mapped. For more detailed information about Async-Control-Character Map, refer to RFC 1548.

Protocol Field Compression If this box is selected, Protocol-Field-Compression is enabled (if the first byte of the Protocol field is zero, it is omitted in non-LCP frames).

Address and Control Field Compression If this box is selected, Addressand-Control-Field-Compression is enabled (address and control bytes are omitted in non-LPC frames).

IPCP Options Clicking on this button lets you set the following IPCP option.

Local IP Address lets you enter your IP address.

Note: This button is enabled only if you select Get Local IP Address from Session Options in the <u>Site PPP Options dialog box</u>.

IPXCP Options Clicking on this button lets you set the following IPXCP options:

Machine Address lets you enter your MAC card address so that it is sent to the remote site automatically during handshaking.

Network ID lets you enter your network ID so that it is sent to the remote site automatically during handshaking.

Note: This button is enabled only if the IPX protocol is supported.

- OK Clicking on this button applies the settings temporarily and returns you to the Session Setup dialog box where you must click on OK to save the information permanently.
- Cancel Clicking on this button exits the Session PPP Options dialog box without saving the information and returns you to the Session Setup dialog box.

The Handshake Login Setup Dialog Box

The Handshake Login Setup dialog box is used to set authentication parameters (such as user name and password) needed during handshaking with the remote site. This authentication is independent of any PPP authentication that may be needed.

The Handshake Login Setup dialog box contains the following fields and buttons:

User Name	Prompt for User Name If this box is selected, you will be prompted to enter a user name during handshaking with the remote site (if the site requires a user name). If this box is not selected, you must enter your user name in the User Name field, described below.
	User Name lets you enter your user name so that it is sent to the remote site automatically during handshaking. This field is disabled if the Prompt for User Name field is selected.
Password	Prompt for Password If this box is selected, you will be prompted to enter a password during handshaking with the remote site (if the site requires a password). If this box is not selected, you must enter your password in the Password field, described below.
	Password lets you enter your password so that it is sent to the remote site automatically during handshaking. This field is disabled if the Prompt for Password field is selected.
ОК	Clicking on this button applies the settings temporarily and returns you to the Session Setup dialog box where you must click on OK to save the information permanently.
Cancel	Clicking on this button exits the Handshake Login Setup dialog box without applying the settings and returns you to the Session Setup dialog box.

Auto Connect Setup

The Auto Connect Setup menu item configures the PPP/SLIP Connect application to automatically establish a connection to a remote site when the first Winsock-related network request is made. The connection is maintained for a set period of time after the Winsock-related network activity ceases.

When you select Auto Connect Setup, the Auto Connection Setup dialog box opens.

Note: To enable the auto connect feature, you must select Auto Connect Enable from the Options menu after providing the information in the <u>Auto Connection Setup dialog</u> <u>box</u>. To disable the auto connect feature at any time, deselect Auto Connect Enable from the Options menu.

Auto Connection Setup Dialog Box

The Auto Connection Setup dialog box lets you configure the PPP/SLIP Connect application to automatically establish a connection to a remote site when the first Winsock-related network request is made. The connection is maintained for a set period of time after Winsock-related network activity ceases.

The Auto Connection Setup dialog box contains the following fields and buttons:

Session This field lets you select the session containing the information for the remote site to which you want to automatically connect.

Inactivity Timeout

This field lets you specify the number of seconds after the Winsock-related network activity ceases that the connection is automatically disconnected. The default is 180 seconds. If you specify zero (0), the Inactivity Timeout feature is disabled.

Disconnect Immediately on Application Exit

If you select this box, the connection to the remote site is terminated immediately after the last application using Windows Sockets exits.

- OK Clicking on this button applies the settings and exits the Auto Connect Setup dialog box.
- Cancel Clicking on this button exits the Auto Connect Setup dialog box without saving the settings.

Auto Connect Enable

The Auto Connect Enable menu item enables the auto connect feature. A check mark next to the Auto Connect Enable menu item indicates that it is selected.

Note: Before you can enable the auto connect feature, you must set it up by selecting <u>Auto Connect Setup</u> from the Options menu.

Administrative Mode

When Administrative Mode is selected in the Preferences dialog box (accessed by selecting Preferences from the Options menu), the following additional pulldown menus and menu items are available.

The File menu contains the following additional menu items:

<u>Clear Screen</u>	Printer Setup
Print Screen	Print Selection
Save Screen	Save Selection

The Edit pulldown menu is displayed only when you are in Administrative mode. The Edit menu contains the following:

<u>Copy</u>

<u>Paste</u>

The Connect menu contains the following additional menu items:

Interactive	Set IP Address
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SLIP Mode

The Status pulldown menu is displayed only when you are in Administrative mode. The Status menu contains the following menu items:

Driver Status

Connection Status

The Options pulldown menu contains the following additional menu items:

<u>Site Setup</u>	Background Color Setup
Text Color Setup	Screen Font Setup
Show Time	Log to Screen
Log to Console	Log to File
Log File Setup	

Clear Screen

The Clear Screen menu item deletes the data displayed in the display area of the $\ensuremath{\mathsf{PPP}}\xspace/\ensuremath{\mathsf{SLIP}}\xspace$ connect window.

Printer Setup

The Printer Setup menu item lets you select a printer from which to print the data currently displayed in the display area. Selecting Printer Setup presents the Print Setup dialog box, which lets you select a printer locally or on the network. You can also select the orientation and size of the paper.

Print Screen

The Print Screen menu item prints all the data currently displayed in the display area to a printer. To specify a printer, select <u>Printer Setup</u>.

Print Selection

The Print Selection menu item prints specific data selected in the display area to a printer. To specify a printer, select <u>Printer Setup</u>.

Note: If no data is selected in the display area, the Print Selection menu item is grayed-out and cannot be selected.

Save Screen

The Save Screen menu item saves to a file all the data currently displayed in the display area. Selecting Save Screen presents the Save Screen Image dialog box, which lets you specify a file name, directory, and drive where you want to save the data.

Save Selection

The Save Selection menu item saves to a file specific data selected in the display area. Selecting Save Selection presents the Save Screen Image dialog box, which lets you specify a file name, directory, and drive where you want to save the selected data.

Note: If no data is selected in the display area, the Save Selection menu item is grayed-out and cannot be selected.

Сору

The Copy menu item copies the data selected in the display area to the Windows clipboard.

Note: If no data is selected in the display area, the Copy menu item is grayed-out and cannot be selected.

Paste

The Paste menu item pastes the data in the Windows clipboard to the cursor position in the display area.

Note: If no data is present in the Windows clipboard, the Paste menu item is grayedout and cannot be selected.

Interactive

The Interactive menu item enters Interactive mode. In Interactive mode, the display area of the PPP/SLIP Connect window is used to type characters to the modem or the remote site. Only characters echoed from the modem or remote site are displayed in the screen area. Interactive mode is typically used when experimenting with a modem or a remote site (for example, working out the handshake sequence).

To exit Interactive mode, type Ctrl Z or deselect the Interactive menu item.

When you select Interactive, the Interactive dialog box opens.

The Interactive Dialog Box

The Interactive dialog box lets you enter Interactive mode so that you can experiment with a modem or a remote site. In Interactive mode, the display area of the PPP/SLIP Connect window is used to type characters to the modem or the remote site.

The Interactive dialog box contains the following fields and buttons:

- Modem Port This field lets you select the COM port to which your modem is attached.
- OK Selecting this button closes the Interactive dialog box and enters Interactive mode.
- Cancel Selecting this button closes the Interactive dialog box without entering Interactive mode.

Set IP Address

The Set IP Address menu item lets you specify various IP address components (for example, the workstation IP address, gateway address, and so on) so that they can be transmitted to the protocol driver. This is typically used when experimenting with a remote site. When you select Set IP Address, the <u>The Set IP Addresses dialog box</u> opens.

The Set IP Address Dialog Box

The Set IP Addresses dialog box lets you identify certain IP addresses that your PC must use when communicating with the remote site. (This is necessary if IP address information is not included in the handshaking sequence.)

The Set IP Address dialog box contains the following fields and buttons:

- IP Address This field lets you enter the IP address assigned to your PC by the remote site. If the remote access mode is PPP or if the IP address is obtained during a handshaking sequence, leave this field empty or enter 0.0.0.0.
- Gateway This field lets you enter the Gateway address that your PC must use to access the remote site. This address should provided to you by the remote site. If the remote access mode is PPP or if the Gateway address is obtained during a handshaking sequence, leave this field empty or enter 0.0.00
- Subnet Mask This field lets you enter the subnet mask that your PC uses to access the remote site. This address should be provided to you by the remote site. If you leave this field blank or type 0.0.0.0, a subnet mask is computed from the IP address.
- DNS Address This field lets you enter the Domain Name Server address that your PC uses to access the remote site. This address should be provided to you by the remote site.
- OK Clicking on this button saves the information temporarily and returns you to the Site Setup dialog box where you must click on OK to save the settings permanently.
- Cancel Clicking on this button disregards any changes you made and returns you to the Site Setup dialog box.

SLIP Mode

The SLIP Mode menu item enters SLIP mode. This is typically used when you are establishing a connection manually in Interactive mode. A check mark appears next to the SLIP Mode menu item when it is selected.

Note: The SLIP Mode menu item can only be selected when you are in Interactive mode and a connection has been established.

Driver Status

The Driver Status menu item displays information in the display area about the PPP/ SLIP driver. A check mark appears next to the Driver Status menu item when it is selected.

Connection Status

The Connection Status menu item displays information about the connection that is currently established to a remote site. A check mark appears next to the Connection Status menu item when it is selected.

Site Setup

The Site Setup menu item lets you define information about a remote site (such as telephone numbers and a handshaking sequence) that generally does not change from session to session. This information may be provided to you by your network administrator in a file called SITE.INI.

Note: If a SITE.INI. file is not provided to you, you must provide information in the <u>Site Setup dialog box</u> about the remote site you want to access. (The SITE.INI file is created automatically by TCP Pro the first time you define a site.)

The Site Setup Dialog Box

The Site Setup dialog box lets you define information about a remote site (such as telephone numbers and a handshaking sequence). This information should be provided to you by your network administrator in a file called SITE.INI.

Note: If a SITE.INI file is not provided to you, you must create your own SITE.INI file by providing information in the Site Setup dialog box. (The SITE.INI file is created automatically by TCP Pro the first time you define a site and click on the OK button.)

The Site Setup dialog box contains the following fields and buttons:

Site This field lets you enter the name of a remote site or select a site from the drop-down list to edit an existing site.

Remote Access Type

This area lets you select the type of protocol used by the remote site (PPP or SLIP):

- PPP Select this option if the remote site uses PPP.
- SLIP Select this option if the remote site uses SLIP.
- Dialing Phone Nos lets you enter a list of phone numbers for the remote site specified in the Site field. The phone numbers are dialed in the order presented in the list. However, numbers beginning with the Local Area Code specified for the session are dialed before other numbers. If a number is busy, the next number in the list is dialed. When all the numbers in the list have been dialed, and if the value for Retries is greater than zero (0), the application waits for the number of seconds specified in the Wait field, described below, then the dialing sequence begins again. If no connection is made after the specified number of retries, the attempt to connect is abandoned.

To add a number to the list, type the number in the Phone Nos box. Enter one phone number on a line and use the Enter key to end a line. You can enter a maximum of ten phone numbers.

Retries specifies the number of times the dialing sequence will be retried before abandoning the attempt. The default is 2.

Wait specifies the number of seconds between each dialing sequence attempt. The default is 30 seconds.

Note: Many of the above fields also appear in the Session Setup dialog box, where they can be changed for individual dial-up sessions.

- Handshake This button lets you define the handshaking sequence required by the remote site. Clicking on this button displays the <u>Handshake Setup</u> <u>dialog box</u>.
- PPP Options This button lets you define PPP options for a remote site. Clicking on this button displays the <u>Site PPP Options dialog box</u>.

Note: This button is displayed only if the remote access type for the site is PPP.

IP Addresses	This button lets you set certain IP addresses that your PC must use when communicating with the remote site. (This is necessary if IP address information is not included in the handshaking sequence.) Clicking on this button displays the <u>Set IP Addresses dialog box</u> .
ОК	Clicking on this button applies the settings and exits the Site Setup dialog box.
Cancel	Clicking on this button exits the Site Setup dialog box without saving the settings.
Reset	Clicking on this button resets all the site options (including the site name) to their default values. (The default values are those specified in the $site.ini$ file.)
Remove	Clicking on this button deletes the site specified in the Site field.

The Handshake Setup Dialog Box

The Handshake Setup dialog box lets you define the handshaking sequence required by the remote site. A handshaking sequence consists of an exchange of messages between the remote site and your PC. This exchange is usually required to login to the remote site. The Handshake Setup dialog box contains the following fields and buttons:

Handshake Kind

Auto Handshake - Select this option if you want to create a handshaking sequence that is sent automatically to the remote site. See Auto Handshake below.

Interactive Handshake - Select this option if you want to interact directly with the remote site. The display area is used for conversing with the remote site. See Interactive Handshake below.

Auto Handshake

CR on Connect specifies which character sequence is sent to the remote site to begin the handshaking sequence. The options are CR (Carriage Return), CRLF (Carriage Return and Line Feed), LF (Line Feed), or NONE. The default is NONE.

Delay specifies the number of seconds the PPP/SLIP Connect application must wait after the modem connects before sending the character sequence specified in CR on Connect, described above. The default is 0 (zero) seconds.

Handshake Event

This is the area where the handshake script is entered. You can scroll through the script using the scroll bar to the right. This title indicates the handshake event that is currently displayed as well as the total number of events. A maximum of ten events can be specified.

Recv specifies the string received from the remote site that signals the beginning of the handshake event.

Kind specifies the type of data being received from the remote site. The following data types can be selected. The default is DONTCARE.

DNSADDRESS Indicates that the string contains the Domain Name Server (DNS) address to be used by your PC.

DONTCARE Indicates that there is no special processing associated with this string.

ERRORSTR Indicates that the string is paired with, and is an alternative to, the event that immediately precedes it. The receipt of this string from the remote site indicates that an error occurred. If the error string is received, the string in the Send field is displayed in a message box.

GWADDRESS Indicates that the string contains the Gateway address to be used by your PC.

IPADDRESS Indicates that the string contains the IP address that is assigned to your PC.

PASSWORD Indicates that the string is a prompt for a password to be sent back to the remote site.

PROMPT (HIDE) Indicates that the string is a prompt to the end user. HIDE indicates that the data entry field is in password mode (characters in the field appear as asterisks). For a description of the prompt strings, refer to PROMPT (SHOW) below.

PROMPT (SHOW) Indicates that the string is a prompt to the end user. SHOW indicates that the data entry field is in normal mode (characters in the field appear normally). The prompt strings are described below:

[(title string)[(prompt string)]]recv string

Brackets ([]) indicate optional parts.

title string, if present, provides the title for the prompting dialog box.

prompt string, if present, provides prompting text in the prompting dialog box. If omitted, the recv string is used as the prompting text.

recv string is the string expected from the remote site.

Examples:

In the following example, MVS Login is used as the title in the prompting dialog box, Please enter.... is used as the prompting text. enter account is the receive string.

(MVS Login) (Please enter your Account Name, User Name, and Password:)enter account name, username, and password:

In the following example, MVS Login is used as the title in the prompting dialog box, enter account..... is used as the prompting text and the receive string.

(MVS Login)enter account name, username, and password:

In the following example, the current session name is used as the title, <code>enter account....</code> is used as the prompting text and the receive string.

enter account name, username, and password:

SUBNETMASK Indicates that the string contains the Subnet mask to be used by your PC.

TIMEOUT Indicates that the string is a customized message to the user if a timeout occurs while waiting for a handshake string from the remote site. The string in the Send field is presented in a message box.

USERNAME Indicates that the string is a prompt for a user name to be sent back to the remote site.

Wait specifies the number of seconds to wait for the receipt of the string specified in the Recv field. If the string is not received within this time period, the connection is abandoned. The default is 0 (zero) seconds.

Send specifies the string that is sent in response to the receipt of the Recv string. It is normal to leave For PASSWORD and USERNAME empty. The password and user name are then taken from the session information. If a string is present for PASSWORD or USERNAME, the string is sent and any password or user name in the associated session is ignored. If the string is for a password, it is *not* encrypted in the SITE.INI file.

Append CR on Send specifies that a Carriage Return is appended to the Send string when it is sent to the remote site.

Append Clicking on this button appends an empty handshake event to the end of the handshake sequence.

Insert Clicking on this button inserts an empty handshake event before the one currently displayed.

Remove Clicking on this button deletes the currently displayed handshake event.

Interactive Handshake

Prompt for Phone Number - Select this option if you want to be prompted to enter the telephone number of the remote site. If this option is not selected, the telephone number is obtained from Session options.

Prompt for IP Address - Select this option if you want to be prompted to enter the IP addresses related to the remote site. If this option is not selected, the IP addresses are obtained from Site options or PPP negotiation.

- OK Clicking on this button saves the settings temporarily and returns you to the Site Setup dialog box where you must click on OK to save the settings permanently.
- Cancel Clicking on this button disregards any changes you made and returns you to the Site Setup dialog box.

The Site PPP Options Dialog Box

The Site PPP Options dialog box lets you set options for a remote site using PPP. The Site PPP Options dialog box contains the following fields and buttons:

Authentication This area is used to specify PPP authentication options.

PAP If you select this box, PAP (PPP Authentication Protocol) authentication is requested.

CHAP If you select this box, CHAP authentication is requested.

PAP/CHAP Options

Get User Name From Session Options If this box is selected, the user name must be specified in the <u>Session PPP Options dialog box</u>. If this box is not selected, you must specify your user name in the User Name field, described below.

User Name lets you enter your user name so that it will be sent to the remote site automatically during PAP/CHAP authentication. This field is disabled if the Get User Name From Session Options box is selected.

Get Password From Session Options If this box is selected, you must specify your password in the <u>Session PPP Options dialog box</u>. If this box is not selected, you must specify your password in the Password field, described below.

Password lets you enter your password so that it will be sent to the remote site automatically during PAP/CHAP authentication. This field is disabled if the Get Password From Session Options box is selected.

Protocols This area is used to select the network protocols to be used during negotiation with the remote site.

Get Protocols From Session Parameters If you select this box, you must select the network protocols to be used during negotiation with the remote site in the <u>Session PPP Options dialog box</u>.

IP If you select this box, the IP protocol is requested during PPP negotiation with the remote site.

IPX If you select this box, the IPX protocol is requested during PPP negotiation with the remote site.

LCP Options Clicking on this button lets you set the following LCP (Link Control Protocol) options:

Get LCP Options From Session Parameters If you select this box, you must specify LCP options in the <u>Session PPP Options dialog box</u>. If this box is not selected, you must specify values for the fields described below:

Asynch Control Char Map lets you enter the control characters you want to map so that they can be used on an asynchronous link. The default, expressed in hexadecimal, is FFFFFFFF. This indicates that all control characters are mapped. For more detailed information about Async-Control-Character Map, refer to RFC 1548.

Protocol Field Compression If this box is selected, Protocol-Field-Compression is enabled (if the first byte of the Protocol field is zero, it is omitted in non-LCP frames).

Address and Control Field Compression If this box is selected, Address-and-Control-Field-Compression is enabled (address and control bytes are omitted in non-LCP frames).

IPCP Options Clicking on this button lets you set the following IPCP options:

Get Local IP Address From Session Options If this box is selected, you must specify the IP address of your PC in the <u>Session PPP Options</u> <u>dialog box</u>.

Local IP Address lets you enter your IP address so that it will be sent to the remote site automatically. This field is disabled if the Get Local IP Address From Session Options box is selected.

IPXCP Options Clicking on this button lets you set the following IPXCP options:

Get Machine Address From Session Options If this box is selected, you must specify your MAC card address in the <u>Session PPP Options dialog</u> box.

Machine Address lets you enter your MAC card address so that it is sent to the remote site automatically during handshaking.

Get Network ID From Session Options If this box is selected, you must specify your network ID in the <u>Session PPP Options dialog box</u>.

Network ID lets you enter your network ID so that it is sent to the remote site automatically during handshaking.

Note: The IPXCP Options button is displayed only if the IPX protocol is supported.

OK Clicking on this button applies the settings temporarily and returns you to the Site Setup dialog box where you must click on OK to save the settings permanently.

Cancel Clicking on this button exits the Site PPP Options dialog box without applying the settings and returns you to the Site Setup dialog box.

The Set IP Addresses Dialog Box

The Set IP Addresses dialog box lets you identify certain IP addresses that your PC must use when communicating with the remote site. (This is necessary if IP address information is not included in the handshaking sequence.)

Note: The IP addresses set here override those specified in the <u>Handshake Setup</u> <u>dialog box</u> (accessed by selecting the Handshake button in the Site Setup dialog box).

The Set IP Address dialog box contains the following fields and buttons:

- IP Address This field lets you enter the IP address assigned to your PC by the remote site. If the remote access mode is PPP or if the IP address is obtained during a handshaking sequence, leave this field empty or enter 0.0.0.0.
- Gateway This field lets you enter the Gateway address that your PC must use to access the remote site. This address should be provided to you by a network administrator at the remote site. If the remote access mode is PPP or if the Gateway address is obtained during a handshaking sequence, leave this field empty or enter 0.0.0.0
- Subnet Mask This field lets you enter the subnet mask that your PC uses to access the remote site. This address should be provided to you by a network administrator at the remote site. If you leave this field blank or type 0.0.0.0, a subnet mask is computed from the IP address.
- DNS Address This field lets you enter the Domain Name Server address that your PC uses to access the remote site. This address should be provided to you by a network administrator at the remote site.
- OK Clicking on this button saves the information temporarily and returns you to the Site Setup dialog box where you must click on OK to save the settings permanently.
- Cancel Clicking on this button disregards any changes you made and returns you to the Site Setup dialog box.

Background Color Setup

The Background Color Setup menu item lets you change the background color of the display area. When you select Background Color Setup, the Color dialog box opens displaying an array of colors. You can select one of the colors displayed or define your own custom colors.

Text Color Setup

The Text Color Setup menu item lets you change the color of the text displayed in the display area. When you select Text Color Setup, the Color dialog box opens displaying an array of colors. You can select one of the colors displayed or define your own custom colors.

Screen Font Setup

The Screen Font Setup menu item lets you select the font you want to use for text in the display area. When you select Screen Font Setup, the Font dialog box opens. In this dialog box, you can select the font type (for example, courier), the font style, (for example, bold), and the font size. The Sample area provides an example of how the text will appear.

Show Time

The Show Time menu item lets you display the data in the display area with the date and time it was generated. A check mark appears to the left of the Show Time menu item when it is selected.

Log to Screen

The Log to Screen menu item lets you display in the display area all interactions with the modem and the remote site as well as any error messages that may occur during the time that the PPP/SLIP Connect application is running. A check mark appears to the left of the Log to Screen menu item when it is selected.

Log to Console

The Log to Console menu item lets you display in the TCP Pro Console window all interactions with the modem and the remote site as well as any error messages that may occur while the PPP/SLIP Connect application is running. A check mark appears to the left of the Log to Console menu item when it is selected.

Log to File

The Log to File menu item saves to a file all interactions with the modem and the remote site as well as any error messages that are being generated while the PPP/SLIP Connect application is running. A check mark appears to the left of the Log to File menu item when it is selected.

Note: If you have not specified a file name, the Log to File menu item is grayed-out and cannot be selected. You must specify a file name by selecting the <u>Log File Setup</u> menu item.

Log File Setup

The Log File Setup menu item lets you specify a file name where you want to save all the information that is being generated while Log to File is selected.

When you select Log File Setup, the Log File Setup dialog box opens.

The Log File Setup Dialog Box

The Log File Setup dialog box contains the following fields and buttons:

File Name	This field lets you specify the name of the file where you want to save the information.
Open Mode	Append adds new information to the end of the log file each time you start the PPP/SLIP Connect application.
	Truncate deletes all old information from the log file each time you start the PPP/SLIP Connect application.
OK	Clicking on this button saves the specified file name and exits the PPP/SLIP Connect application.
Cancel	Clicking on this button exits the Log File Setup dialog box without saving the file name.
Files	Clicking on this button opens a dialog box that allows you to select a file on your PC or on the network where you want to save the information.

The Show IP address Dialog Box

The Show IP Address dialog box displays all the IP addresses that were set for the current session so that you can make note of them if necessary. The dialog box contains the following fields and buttons:

IP Address	This field displays the IP address for the current session.
Gateway	This field displays the Gateway address for the current session.
Subnet Mask	This field displays the Subnet Mask address for the current session.
DNS Address	This field displays the DNS (Domain Name Server) address for the current session.
ОК	Clicking on this button exits the dialog box.

The IP Address Dialog Box

The IP Address Dialog Box appears if one or more IP address has not been set for the session. The dialog box contains a message explaining that one or more address is missing and asks you to enter the address in the appropriate field. (The field with the missing address is indicated with the word (missing).) The dialog box contains the following fields and buttons:

- IP Address This field should contain the IP address assigned to your PC by the remote site. If you do know this address, you must contact the remote site to obtain it.
- Gateway Address This field should contain the Gateway address assigned to your PC by the remote site. If you do know this address, you must contact the remote site to obtain it.
- Subnet Mask This field should contain the Subnet Mask address assigned to your PC by the remote site. If you do know this address, you must contact the remote site to obtain it.
- DNS Address This field should contain the Domain Name Server address that your PC must use to access the remote site. If you do know this address, you must contact the remote site to obtain it.
- OK Clicking on this button closes the dialog box.

The Authentication Dialog Box

If you selected to be prompted for your user name and/or password during the handshaking sequence, the authentication dialog box opens allowing you to enter your user name and/or password.

The dialog box contains the following fields and buttons:

- User Name This field lets you enter your user name for the current session.
- Password This field lets you enter your password for the current session.
- OK Clicking on this button confirms your entries and exits the dialog box.
- Cancel Clicking on this box exits the dialog box without confirming your entries.

Set Exec Options dialog box.

The Set Exec Options dialog box contains the following fields and buttons:

The Set Exec Options dialog box contains the following fields and buttons.		
	ОК	Clicking on this button saves the information entered in the fields of the Set Exec Options dialog box and returns to the Session Setup dialog box.
	Cancel	Clicking on this button returns to the Session Setup dialog box without saving any changes.
	Help	Clicking on this button displays help for the Set Exec Options dialog box.
	Get Exec Options	from Session Options If this box is checked, a Set Exec Options button is displayed when this site is referenced by a Session. A dialog box similar to this one is displayed. If this is not checked, the other fields in this dialog box are enabled.
	Before Connect	This field should be filled in with the complete path, name, and parameters for an application to be executed when a connection is initiated.
	After Connect	This field should be filled in with the complete path, name, and parameters for an application to be executed after a successful connection is made.
	Before Disconnec	This field should be filled in with the complete path, name, and parameters for an application to be executed when disconnection is initiated.
	After Disconnect	This field should be filled in with the complete path, name, and parameters for an application to be executed after disconnection has been completed.
	Wait	The Wait check box associated with each parameter specifies whether or not the PPP/SLIP Connect application waits for the application to terminate before proceeding. If checked, the Connect application waits; if not checked, the Connect application starts the specified application then immediately proceeds.