Setting Up IntragyAccess for Macintosh

Ascend Communications, Inc.

Part Number: 7820-0342-002

1.1

Ascend Customer Service

You can request assistance or additional information via Email, the Web, or using the telephone.

Obtaining Technical Assistance

If you need technical assistance, first gather the information that Ascend Customer Service will need for diagnosing your problem. Then select the most convenient method of contacting Ascend Customer Service.

Information you will need

Before contacting Ascend Customer Service, gather the following information:

- Product name and model
- Software and hardware options
- Software version
- Type of computer you are using
- Description of the problem

How to contact Ascend Customer Service

Ascend's Advantage Online Support (AOS) is available free of charge for access to technical information on IntragyAccess.

Web

Please visit Ascend AOS on the web at:

http://www.ascend.com/aos/

Email

Send an Email to Ascend technical support describing your system and the problem using this address:

Intragyhelp@ascend.com

Phone

Should live technical assistance be required, Ascend offers technical support for IntragyAccess on a per call basis via fee based 900 service provided by AT&T. Should you have the need for technical assistance, please call:

1-900-555-ASND (2763)

The per minute rate for technical assistance is $2.95. Charges for technical assistance do not begin until you are connected to an Ascend Network Support Engineer. All charges will be billed directly to your telephone bill.

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- For the latest information about the Ascend product line, visit our site on the World Wide Web:

  http://www.ascend.com

- For software upgrades, release notes, and addenda to this manual, visit our FTP site:

  ftp.ascend.com

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About this guide

How to use this guide

This manual is organized into the following sections:

Section	Description
Installation	How to install IntragyAccess and choose the various installation options
Terminal Emulation	Terminal emulation including telnet and serial connections
Electronic Messaging	Sending and receiving mail messages and mail management
File Transfer and Sharing	File Transfer Protocol (FTP) server and client as well as Network File sharing (NFS)
Using and Maintaining Hotlists	Using the Hotlists to save frequently used sessions for Mail, Terminal, FTP, and Web.
Miscellaneous Services	Using various network utilities included with IntragyAccess. These utilities include, Ping, Finger, Whois, HostLookup, and TraceRoute.
Network Printing	How to use IntragyAccess in the Windows 95 environment as an LPR Client and LPD Server
Appendixes	Remote Networking How to use DeskDial

This manual also includes a glossary and an index.

What you should know

IntragyAccess includes networking software to perform basic business tasks such as terminal emulation, file sharing, sending and receiving mail, and printing via networks. You should have a basic knowledge of net etiquette and also the basic uses of each of IntragyAccess components.

Documentation conventions

This manual use the following special characters and typographical conventions:

Convention	Meaning
`Monospace text`	Represents text that appears on your computer's screen, or that could appear on your computer's screen.
`Boldface monospace text`	Represents characters that you enter exactly as shown (unless the characters are also in **`italics`**–see *Italics*, below). If you could enter the characters, but are not specifically instructed to, they do not appear in boldface.
Italics	Represent variable information. Do not enter the words themselves in the command. Enter the information they represent. In ordinary text, italics are used for titles of publications, for some terms that would otherwise be in quotation marks, and to show emphasis.
[ ]	Square brackets indicate an optional argument you might add to a command. To include such an argument, type only the information inside the brackets. Do not type the brackets unless they appear in bold type.
|	Separates command choices that are mutually exclusive.
>	Points to the next level in the path to an option. The option that follows the angle bracket is one of the choices that appears when you select the option that precedes the angle bracket.

Convention	Meaning
Key1-Key2	Represents a combination keystroke. To enter a combination keystroke, press the first key and hold it down while you press one or more other keys. Release all the keys at the same time. (For example, Ctrl-H means hold down the Control key and press the H key.)
Press Enter	Means press the Enter, or Return, key or its equivalent on your computer.
Note:	Introduces important additional information.
 **Caution:**	Warns that a failure to follow the recommended procedure could result in loss of data or damage to equipment.
 **Warning:**	Warns that a failure to take appropriate safety precautions could result in physical injury.

Manual set

The documentation set for IntragyAccess includes three manuals.

Setting Up IntragyAccess for Macintosh. (this manual). Provides installation and setup information for IntragyAccess in the Macintosh environment. Also includes basic conceptual and task-oriented information.

Setting Up IntragyAccess for Windows 95 and Windows NT. Provides installation and setup information for IntragyAccess in the Windows 95 and NT environments. Also includes basic conceptual and task-oriented information.

Setting Up IntragyAccess for Windows 3.1 . Provides installation and setup information for IntragyAccess in the Windows 3.1 and 3.11 environments. Also includes basic conceptual and task-oriented information.

Installing IntragyAccess

1

IntragyAccess is distributed on CD-ROM. Follow the instructions in each dialog as you step through the installation process. You can perform a Easy or Custom installation. When finished you can launch and use any of the IntragyAccess programs.

Performing an Easy installation

The Easy installation optionTo install IntragyAccess's standard components:

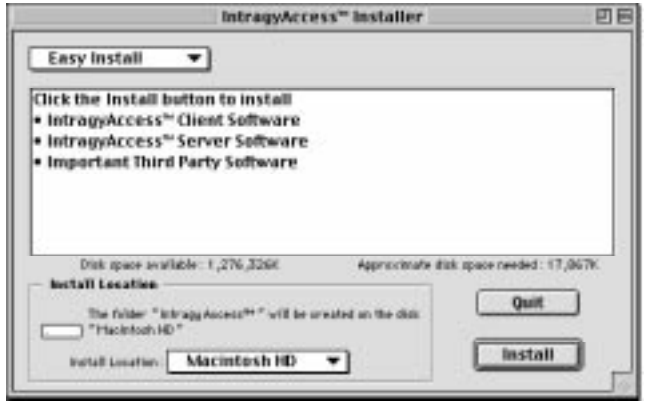
1 Exit from any programs that you have running.

2 Put the IntragyAccess CD-ROM into your computer's CD-ROM drive.
The CD-ROM's directory appears on your screen.

3 In the IntragyAccess folder double- click the install icon.
The main install dialog appears:

4 To install the IntragyAccess, click Continue.
The Ascend Communications, Inc. End-User License agreement appears.

5 Read the agreement thouroughly, and if you accept the terms of use, click Accept.
The main IntragyAccess install window appears:



6 From the pop-up menu, select Easy Install.

7 In the Install Location area, select the folder where you wat to install IntragyAccess.

8 Click Install.

9 When the installer prompts you to restart, select Restart.

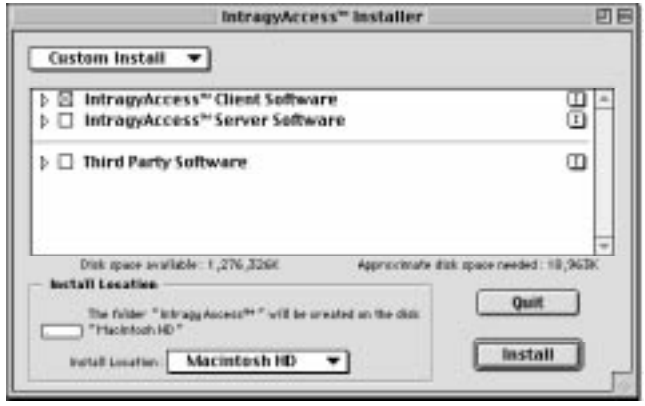
Performing a Custom installation

Performing aCcustom install is similar to performing an Easy install, except you have the option of selecting the components that best fit your personal needs. To perform a custom install:

1 Launch the installer the same as for an Easy installation.

2 In the main IntragyAccess install window, from the pop-up menu select Custom Install.

A dialog appears where you can select the components you want to install:



3 Select each piece of IntragyAccess you want to install.

There are three main groups of software to choose from when performing a Custom Installation:

- The IntragyAccess Client software includes: The FTP Client, Hotlist application, NFS Client. Mail export utility, PPP Client, and the Terminal client.
- The IntragyAccess Server software includes: the FTP Server, the LPR Server, and the TFTP Server.
- Thrid Party software includes: Appearance Manager, Internet Config, and MacTCP Watcher.

Note: Some of the Third Party software is necessary to run other applications within IntragyAccess. Sometimes, even if you have not selected a piece of Third Party software to be installed, it will be installed due to the dependencies of another piece you have chosen to install. To see exactly what the installer has installed on your computer please refer to the IntragyAccess install log installed on your hard drive.

4 Click Install.

5 When the installer prompts you to restart, select Restart.

Installing other software

IntragyAccess also includes Microsoft Internet Explorer for browsing the World-Wide Web and Microsoft Outlook Express for sending and recieving email.

To install Internet Explorer or OutlookExpress:

1 Exit from any programs that you have running.

2 Put the IntragyAccess CD-ROM into the CD-ROM drive.

3 Open the Internet Explorer folder and double click the installer.

4 Follow the Internet Explorer installer to install any of the Microsoft components onto your computer.

Launching IntragyAccess

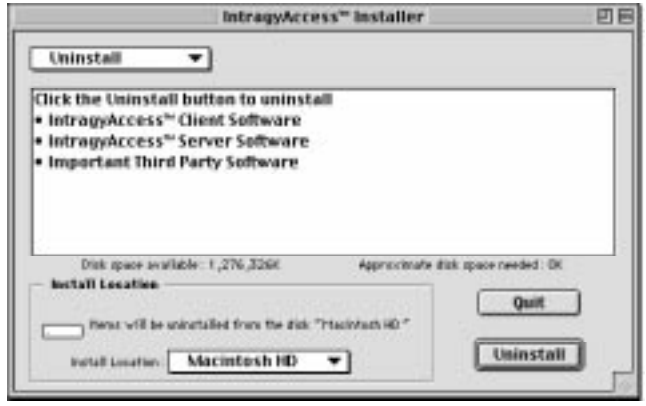
Once you have installed IntragyAccess you are now ready to begin using the program. To launch IntragyAccess double-click any of the IntragyAccess program icons in the IntragyAccess folder.

Unistalling IntragyAccess

To remove the IntragyAccess componets you have istalled on your hard drive:

1 Run the installer again and from the pop-up menu in the main install window, select Uninstall.

The uninstall window appears:



2 Click the Uninstall button.

All of the IntragyAccess componets you installed are removed.

Terminal emulation

2

IntragyAccess Terminal enables your computer to emulate a terminal for connection to a host computer. You can use Telnet to establish a remote connection to the host computer, or you can establish a serial connection to a local host. Once you have established a connection, you can save the host information to the Hotlist, so that you can open future sessions with a mouse click.

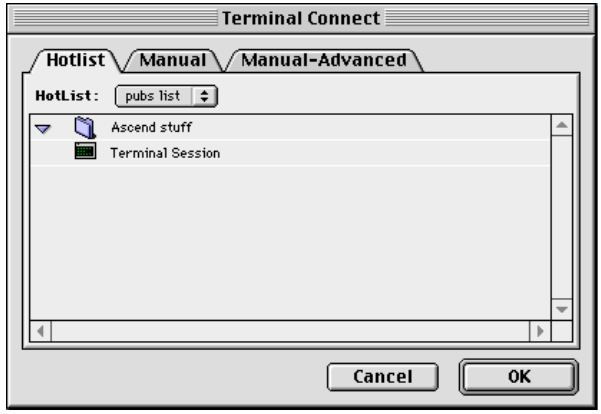
IntragyAccess Terminal provides emulation of the following types of terminals:

- DEC VT52, VT100, VT102, VT220, VT240, VT241, and VT320
- IBM 3278-2–3278-5, 3179g-2–3179g-5
- Tektronix

Terminal options enable you to specify a wide variety of preferences should you want to customize the way your computer emulates a terminal. IntragyAccess also provides a set of commands you can send to your computer or the host during a terminal session.

Establishing a Terminal connection

You must establish a Terminal connection before you can use any features of the Terminal program. First, launch Terminal by double-clicking the IntragyAccess Terminal icon in the IntragyAccess program group. From the IntragyAccess menu, choose Terminal. The Connect dialog appears, with the Hotlist tab frontmost:



Establishing a Telnet connection

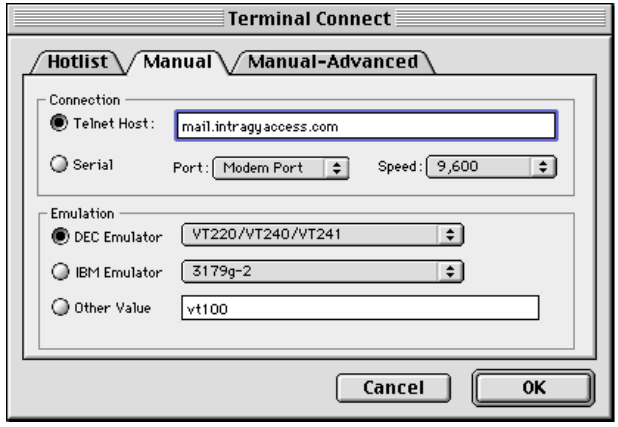
If the Hotlist contains any entries, you can establish a Telnet connection by simply double-clicking an entry, or selecting it and clicking OK. When the Terminal window appears, the remote host will prompt you for your login name and password. When the host accepts them, your session begins.

But the Hotlist does not contain any entries until you put them there, one at a time, by establishing a connection manually, selecting Save As from the File menu, and entering a nickname for the session. (Of course, you probably won't want to create a Hotlist entry for every Telnet site you connect to.)

Establishing a Telnet connection manually

To establish a Telnet connection manually, make sure that your screen is displaying the Connect dialog, then:

1 Click the Manual tab.
Manual options appear:



2 In the Connection area, select Telnet Host as the connection type.

3 In the Telnet Host field, type the name or IP address of the host to connect to.

4 If you prefer to use a different model DEC or IBM terminal than the one shown as the default or if the server you are connecting to requires a particular mode of emulation, in the Emulation area, select the model you want from the DEC or IBM drop-down list. (Table 2-1 and Table 2-2 describe the choices for DEC and IBM models, respectively.)

IntragyAccess will present the selected model to the host when negotiating the parameters for the session (provided that you select either the WILL or DO check box for Terminal Type in the advanced options.)

5 Either click Connect to initiate the session, or click the Manual-Advanced tab to select advanced options.

Table 2-1. DEC Terminal models you can specify

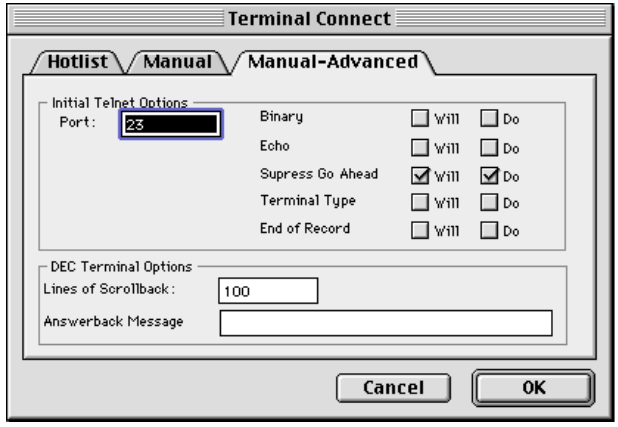
Selection	Specifies
VT52	VT52
VT100/VT102	VT100 or VT102
VT220/VT240/VT241	VT220, VT240, or VT241
VT320+Regis	VT320

Table 2-2. IBM Terminal models and their characteristics

Model	Dimensions (columns x lines)	Graphics Support	Extended Attributes
IBM 3278-2	80 x 24		
IBM 3278-3	80 x 32		
IBM 3278-4	80 x 43		
IBM 3278-5	132 x 32		
IBM 3179g-2	80 x 24	√	√
IBM 3179g-3	80 x 32	√	√
IBM 3179g-4	80 x 43	√	√
IBM 3179g-5	132 x 32	√	√

Selecting advanced options

If you select the Manual-Advanced tab in the Connect dialog, the dialog displays the advanced connection options:



In the Initial Telnet Options area, the default Port setting is 23, which is the port commonly used for Telnet. If the host uses a different port, enter its number in the Port field.

The Initial Telnet Options area also includes options for how IntragyAccess negotiates a session with the host. As with the Port setting, the defaults are usually correct. Table 2-3 explains the options.

Table 2-3. Negotiation options

Option	WILL	DO
Binary	Sender requests permission to begin transmitting 8 bit binary characters.	Sender requests that the recipient begin transmitting 8 bit binary characters.
Echo	Sender requests permission to begin echoing data characters it receives over the Telnet connection.	Sender requests that the recipient begin echoing data characters it receives over the Telnet connection.

Table 2-3. Negotiation options (continued)

Option	WILL	DO
Suppress Go Ahead	Sender requests permission to begin suppressing transmission of the Telnet Go Ahead character when transmitting data characters.	Sender requests that the recipient start suppressing the Telnet Go Ahead character when transmitting data.
Terminal Type	Sender is willing to send terminal type information in a later subnegotiation.	Sender is willing to receive terminal type information in a later subnegotiation.
End of Record	Sender requests permission to begin transmission of the Telnet End-of-Record code when transmitting data characters.	Sender requests that the recipient start transmitting the Telnet End-of-Record code when transmitting data characters.

In the DEC Options area:

- In the Lines of Scrollback field, you can enter the number of lines to be saved in memory after you scroll past the top of the screen, so that you can scroll them back onto the screen if you want. A higher number requires more memory than a lower number.
- In the Answerback Message field, you can enter a text message to be sent automatically when the host requests identification from the terminal.

When you are satisfied with the specified options, click the OK button. When the terminal emulator connects to the host you have specified, a terminal window appears. For example:

Establishing a serial connection

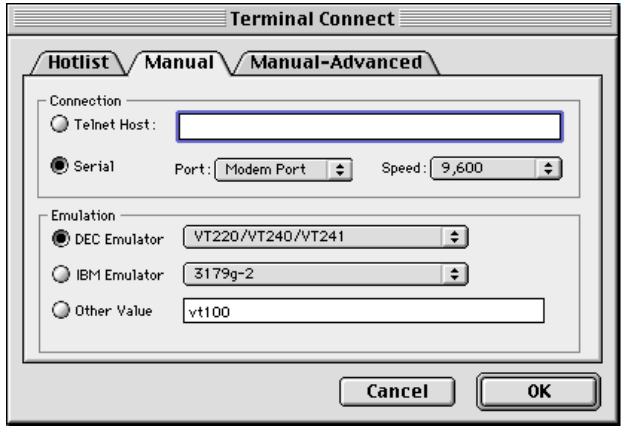
You can use IntragyAccess to communicate with another computer or other device through a serial connection. Use the appropriate serial cable to connect a serial port on your computer to a serial port on the other device.

To establish a serial connection:

1 Open the Connect dialog.

2 Click the Manual tab.

Manual options appear:



3 In the Connection area, select Serial Port as the connection type.

4 From the Port field's drop-down menu, select the port you want to use for connection to the serial device.

5 From the Speed drop-down menu, select the speed at which to transfer data.

6 You can also change either of the fields in the emulation area. For details, see step 4 on page 1-3.

7 Either click Connect to attempt to establish the connection now, or click the Manual-Advanced tab to display advanced options.

When you click the Manual-Advanced tab after selecting serial port, the following screen appears:

8 In the Serial options area, set the three values as specified in the documentation for the serial device you want to connect to.

9 To change one of the fields in the DEC options area, see page 2-6.

10 Click OK.

Your serial session begins

Selecting Terminal options

This section details the procedures for setting preferences for terminal sessions in IntragyAccess. You generally do not have to change the default settings for any of the preferences. But you can:

- Set general emulation options.
- Create macros.
- Reset preferences you have changed during a session.
- Map your keyboard to correspond to the keyboard of the emulation terminal
- Customize or create toolbars.
- Add entries to the Hotlist.

Setting DEC emulation preferences

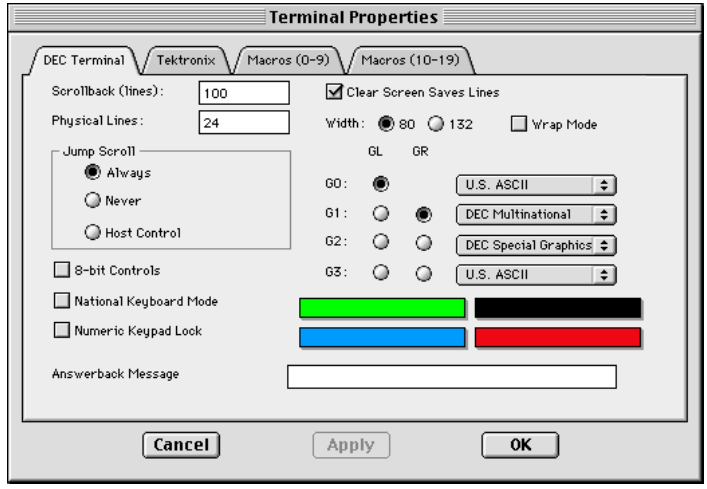
The DEC tab is the tab on which you can choose DEC emulation preferences.

To set general DEC preferences:

1 Open a DEC or Tektronix terminal session by connecting to a DEC or Tektronix site. (To connect to a site, see “Establishing a Terminal connection” on page 2-1).

2 From the Terminal menu, choose Properties.

The Terminal Properties dialog appears with the DEC Terminal tab frontmost:



3 In the Scrollback (lines) field, enter the number of lines of data to save once they scroll past the top of the screen.

If you enter a high value in this field, a large amount of memory is required to store the data.

4 To save a page of text to the scroll back buffer when the host issues a clear screen command select Clear Screen Saves Lines.

5 In the Physical Lines field, enter the number of lines you want displayed on the screen. The default value is 24.

6 In the Columns/Screen area, select 80 for an 80-column display or 132 for a 132-column display.

7 To automatically wrap text to the next line when you reach the right margin, click Auto-wrap lines.

8 In the Jump Scroll area, select Always if you want to jump from one full screen to the next when scrolling text, select Never if you want to scroll text smoothly from the bottom to the top of the window, or select Host Control if you want the host to determine the method of scrolling text.

9 To use 8-bit control characters instead of 7-bit control characters, click 8 bit controls.

The 8-bit mode is normally used with terminal hosts that require international character sets. Unless this option is enabled, each control sequence is sent as two 7-bit codes.This mode can be changed by the host.

10 To send non-ASCII characters from the National Replacement Character Set instead of the DEC Multinational Character Set, click National Keyboard Mode. This setting must match the host software requirements.

11 To keep the keypad in numeric mode, even if the host application tries to switch the keypad into application mode, select Keypad Numeric Lock.

12 From the pop-up menus at the bottom of the panel, you can choose graphic left (GL) and graphic right (GR) character sets.

GL and GR (graphic left and graphic right) define alternate character sets that can be used within other character sets for special characters.

Generally, you should not need to reconfigure these settings. If you are using software that requires the GL and GR sets to be configured, see the documentation that came with the software.

The default setting for GL is U.S. ASCII (in the G0 pop-up menu). However, if you are working in a 7-bit environment, set G0 to GL and National Replacement Character Set for the language you are using (for example, Norwegian). The default setting for GR is DEC Multinational (in the G2 pop-up menu).

13 To use the ISO 8859/1 international character set, click ISO 8859/1 Preferred. ISO 8859/1 handles international characters, such as diacritical marks, differently than does the DEC Multinational Character Set. This setting must match the host software requirements.

14 From the color fields area, choose color values for the display of text.

15 In the Answerback Message Field, enter a text message to send when the host requests identification from the terminal.

16 Click OK to save the changes and close the Properties window, or Apply to have the changes affect the current session and leave the Properties window

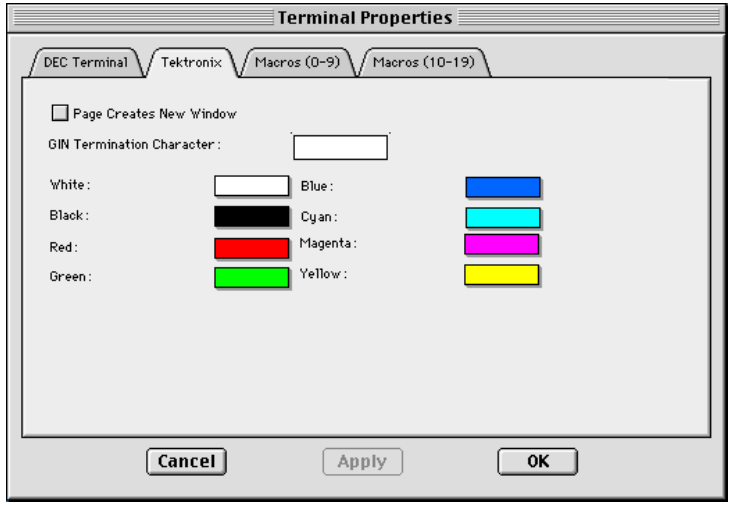
open. Or click Cancel to close the Properties window without making the changes.

Setting Tektronix emulation preferences

To set Tektronix options:

1. Open a DEC or Tektronix terminal session by connecting to a DEC or Tektronix site. (To connect to a site, see “Establishing a Terminal connection” on page 2-1).
2. From the Terminal menu, choose Properties.
3. Click the Tektronix tab.

   Tektronix options appear:



4. To clear the open window and display the graphic when a PAGE and <ESC> <F1-7> is received from the server, click Page Creates New Window.
5. In the GIN Termination Character field, specify a character for IntragyAccess to send as the end of a GIN (Graphic INput) sequence.

   The character is used to define a coordinate location.
6. In the Colors area, choose color values from the drop-down color palettes to change their display.

7 Click OK to save the changes and close the Properties window, or click Apply to have the changes affect the current session and leave the Properties window open. Or click Cancel to close the Properties window without making the changes.

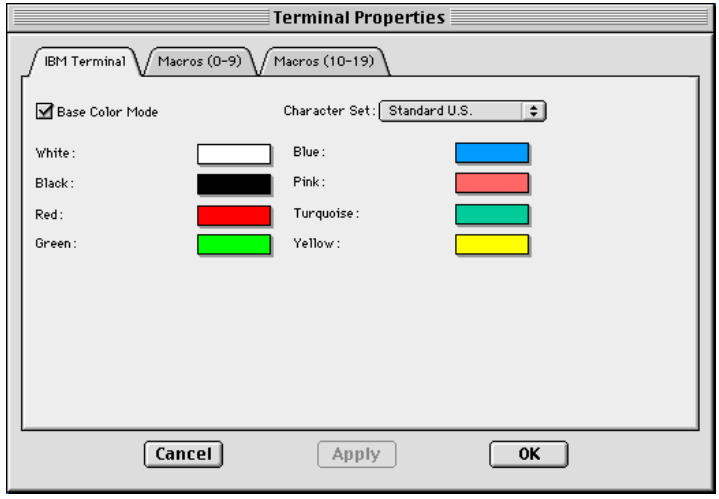
Setting IBM emulation preferences

To set General IBM options:

1 Open an IBM terminal session by connecting to an IBM site. (To connect to a site, see "Establishing a Terminal connection" on page 2-1).

2 From the Terminal menu, choose Properties.

The Terminal Properties appear with the IBM Terminal tab frontmost:



3 To enable base-color mode in 3278 emulation, click Base Color.

This is applicable only on color-capable computers. You can temporarily change colors while the emulator is in operation by choosing Color from the Edit menu.

4 From the Character Set drop-down menu, choose a character set. The default is Standard U.S.

5 In the Colors area, choose color map values from the drop-down color palettes if you want to change the display of one or more colors.

6 Click OK to save the changes and close the Properties window, Or click Apply to have the changes affect the current session and leave the Properties window open. Or click Cancel to close the Properties window without making the changes.

Creating macros for Terminal sessions

A macro is a series of keystrokes and/or commands that have been recorded and assigned a key combination. When you enter the key combination, the macro is executed. Macros can store up to 255 characters. Table 2-4 shows the key combinations you can use as building blocks for macros.

Table 2-4. Special key sequences for macros

Key combination	Result
\nnn (where nnn is a 3-digit octal number)	Sends that octal value. For example, \011 sends a tab (octal 011=decimal 9=^I=tab).
\i	Sends your IP address. For example, 123.4.54.321.
\#	Sends the number of lines currently displayed on your terminal screen.
\t	Sends a tab character.
\n	Sends a CRLF (carriage return + line feed) character.
\m	Sends a CR character (^M).
\j	Sends a LF character (^J).
\\	Sends a \ character.

You can use the Macros tab to create up to twenty macros for each session. The macros are stored in your IntragyAccess Settings file, along with other session information, on a per-session basis. When you switch between session windows, the macros associated with that window become active. When you save session information to the Hotlist, you also save the macros.

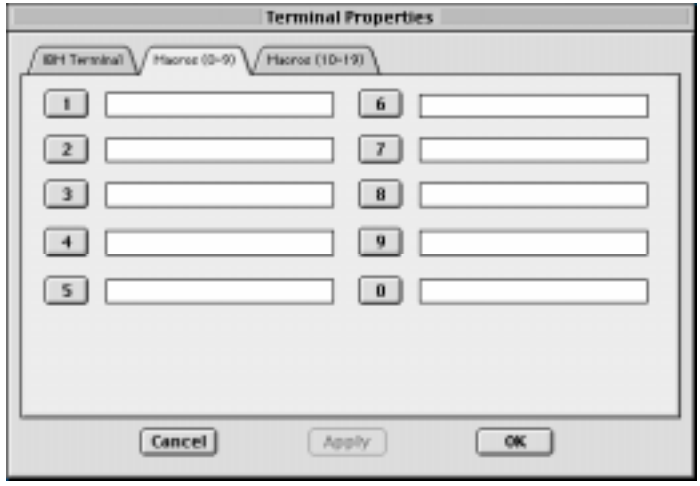
To create a new macro:

1 Open a Terminal session (as described in "Establishing a Terminal connection" on page 2-1).

2 From the Terminal menu, choose Properties.

3 Click the one of the macros tabs (Macros (0-9) or Macros (10-19)).

Macros options appear.



4 In one of the fields, enter the keystroke sequence that you want the macro to execute.

The keystrokes entered in a field will be sent when the number to the left of the field is pressed in combination with the Alt key.

5 Click OK to save the changes and close the Properties window, or click Close to Cancel the Properties window without saving the changes.

Resetting Terminal values

If, during a Terminal session, you change some of the preferences for your session, you can reset the values to what they were at the beginning of the session.

To reset your preferences:

1. Make sure that the Terminal session window you want to reset variables for is frontmost.
2. From the Terminal menu, choose Reset Terminal.
   The variables for the current terminal session are reset.

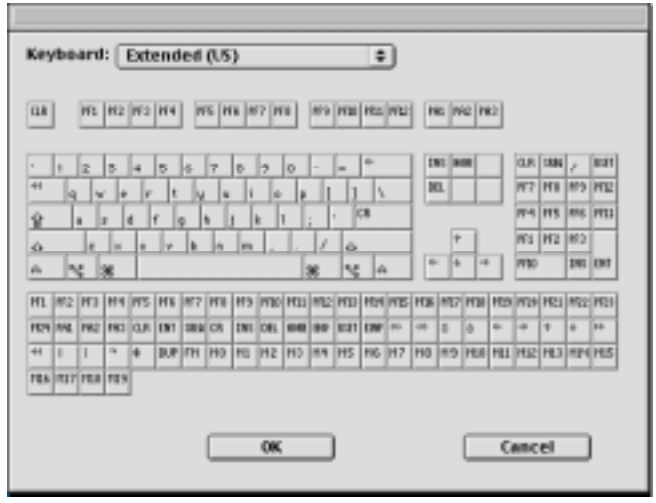
   Note: Although the screen is cleared, this command does not clear the scroll back buffer.

Keyboard mapping

A keyboard map enables your keyboard to mimic keys that exist on other kinds of keyboards When you save session information to the Hotlist, you automatically save the keyboard map you have created for the session. If you later edit the map, you must re-save the session to save the changes you have made.

To edit the keyboard map:

1. Open a Terminal session (as described in “Establishing a Terminal connection” on page 2-1).
2. From the Terminal menu, choose Keyboard.
   The keyboard map appears:



3. Drag a special key from the key palette display at the bottom of the window to the key on the keyboard you want to map it to.

   The keyboard key changes to reflect the special key you dropped on it.

4. To remove a key assignment, drag the key off of the keyboard.

5. Close the map dialog by clicking OK when you are finished mapping or remapping keys.

Saving a Terminal session as a Hotlist item

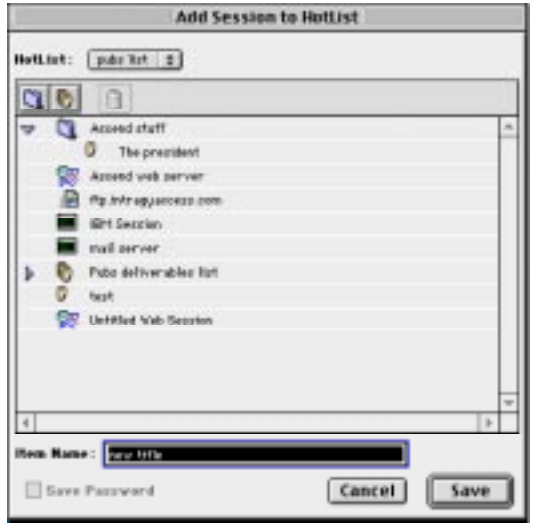
Terminal Hotlist entries make short work of connecting to remote hosts, you simply double-click an icon to establish a connection to a frequently accessed host. A Terminal Hotlist entry contains all of the options and properties information pertaining to a particular Terminal session with a particular host. You can create new Hotlist entries and edit existing ones.

Creating a Terminal Hotlist item

You can create a Hotlist entry for a session after you have established a connection.

To create a Terminal Hotlist entry:

1. Open a Terminal session (as described in "Establishing a Terminal connection" on page 2-1).
2. Define all options you want stored in the hotlist entry.
3. From the IntragyAccess menu, choose Add Session to Hotlist.
   The Add to Hotlist dialog appears:



4. Select a hotlist to save the entry in from the HotList drop-down menu.
5. If you want to save the item in a folder within the Hotlist, select a folder in which to save the hotlist item.
6. In the Item Name field, enter a name for this Terminal Hotlist entry.
7. Click Save.
   The session is saved as a Hotlist item.

Editing Terminal Hotlist entries

To edit a previously saved Hotlist entry:

1. From the IntragyAccess menu, choose Hotlist, then the Hotlist containing the entry you want to edit.
2. Select the item to edit.
3. From the Hotlist menu, choose Edit Properties.

4 Edit preferences as necessary.

5 Click Save.

The changes you have made are saved to the hotlist.

For more information

For more information about Terminal Hotlist entries, see Chapter 4, “Using and maintaining Hotlists.”

Commands in Terminal sessions

IntragyAccess Terminal includes many short cuts to commands commonly used during a session. You can send commands to the host, and other commands to capture data, control your display, and print session data.

Sending commands to the remote host

While in a terminal emulation session, you can send commands to the remote system you are connected to. Simply make sure the Terminal window for the connection you want to send a commands to is frontmost, then choose the command from the Terminal menu.

The Terminal menu includes the following commands:

Command	Description
Backspace sends DEL	Causes the Backspace key on your keyboard to send the Delete character to the terminal instead of the Backspace character. A checkmark appears to the left of this menu item when it is enabled.

Command	Description
Local Echo	Causes IntragyAccess to immediately display characters that you type, instead of waiting for the host to send a copy of the character back to your screen. A checkmark appears to the left of this menu item when it is enabled.
Clear Screen Saves Lines	Saves a page of text to the scroll back buffer when the host issues a clear screen command. A checkmark appears to the left of this menu item when it is enabled.
Send FTP Command	Sends the text ftp followed by the IP address of your computer. This command is useful when you want to transfer files back to your computer via FTP during a Telnet session.
Send IP Number	Sends the IP address of your computer.
Send “Are You There?”	Checks for the presence of the host computer.
Send “Abort Output”	Stops the host from sending data to the terminal display.
Send “Interrupt Process”	Interrupts the program that is currently running.
Send “Erase Character”	Removes the last character you typed.
Send “Erase Line”	Erases the last line you typed before you pressed the Return key.
Send Break	Sends the standard break command on the communications line.

Capturing Session Data

To save data from the DEC current session to a file on your computer:

1 From the Terminal menu, choose Capture.

A standard file dialog appears.

2. Navigate the dialog to select a location to which save the file.
3. In the field provided, enter a name for the file.
4. Click Save.

   A checkmark appears to the left of the Capture option to signify that it is enabled, and data is saved to that file until you disable the option or end the connection.

To disable the capture session data option:

1. Make sure the terminal session window for which you want to disable session capturing is frontmost.
2. From the Terminal menu, choose Capture.

   The checkmark is no longer displayed to the left of the menu option, and data is no longer saved to a file.

Selecting Columns

You have the ability in a terminal session to select columns of text instead of lines of text.To select a column of text, press Ctrl, and drag the mouse to select the column you want. The column is selected.

Copying Tables

You can copy a table from a terminal window and paste it into a spreadsheet or database application without losing the column formatting.

To copy a table:

1. Select the table, or part of the table.
2. From the Edit menu, choose Copy.

   The data is copied to your Clipboard.
3. Open the spreadsheet or database application into which to copy the table.
4. From the Edit menu, choose Paste.

   The data is inserted into its correct columns in the spreadsheet or database application.

Zooming

In Tektronix emulation mode, you can enlarge a portion of a graphic if you want to see it in more detail.Just press the left mouse button, drag a rectangle around the portion you want to enlarge, and release the mouse button. The area you drew the rectangle around is enlarged in the emulation window. To go back to the original display, double-click the zoomed portion of the graphic.

Printing

You can print a terminal session window if your computer is connected to a printer, proceed as follows:

1 Select the information to print.

2 From the File menu, choose Print.
A standard Print dialog appears.

3 Complete the necessary parts of the dialog, and click Print.

File transfer and sharing

3

IntragyAccess enables you to use the File Transfer Protocol (FTP) to transfer files to and from other computers. You can also set up your computer as an FTP server, or as a server that uses the simpler Trivial File Transfer Protocol (TFTP). You can also use Network File Sharing (NFS) to transfer files.

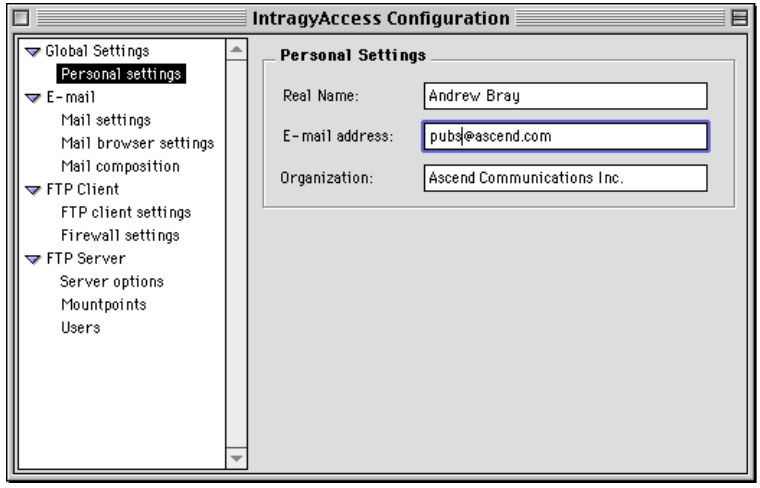
Using FTP to transfer files

To use FTP to transfer files, you must first establish an FTP connection (which you can save to the Hotlist if you wish). Next, you use the FTP window to specify options. You can then download or upload files. You can also customize the FTP window.

Setting FTP options

Opening the IntragyAccess Configuration window

This section provides instructions for opening the IntragyAccess Configuration window. Configuration for most parts of IntragyAccess are set within this dialog. To open the IntragyAccess Configuration window, from the Edit menu, choose Configure. The IntragyAccess Configuration window appears.

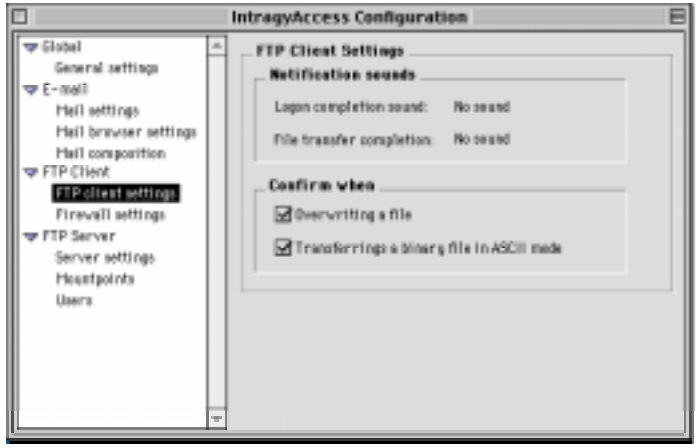


Defining general FTP client settings

To set general FTP client settings:

1 From the left side of the IntragyAccess configuration window, choose FTP client settings.

The FTP client settings dialog appears:



2 In the Notification sounds area, choose the sound you want to hear when you establish a connection from the Logon completion sound drop-down menu.

3 Also in the Notification sounds area, choose the sound you want to hear when you successfully download or upload a file from the File transfer completion drop-down menu.

4 To prompt you for a confirmation dialog when completing certain events select the events in the Confirm when area.

5 Close the IntragyAccess Configuration window.

OR

Click another configuration category.

The configuration options you have specified are saved.

Enabling Firewall support

A firewall is a system or group of systems that enforces an access control policy between two networks.

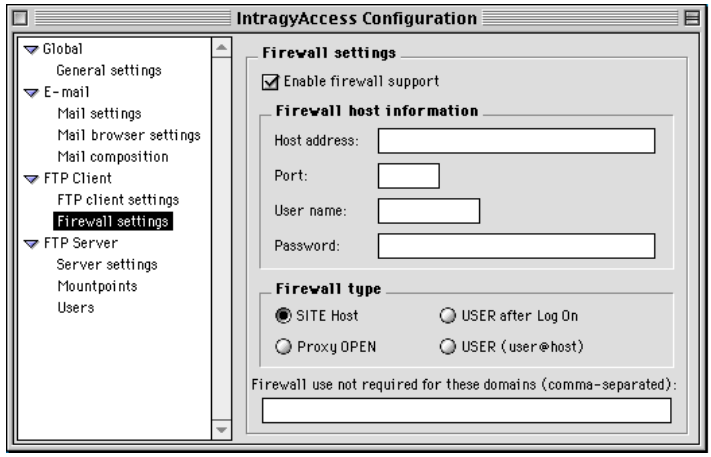
To set FTP client firewall settings:

1 Open the IntragyAccess configuration window.

For information about opening the mail options panel, see “Opening the IntragyAccess Configuration window” on page 3-1

2 From the left side of the window, choose Firewall settings.

The Firewall settings dialog appears.



3 To turn on firewall support, click Enable Firewall Support.

4 In the Firewall Host Information area, enter information about the hosts that you want to have firewall support for.

   – In the Host Address field, enter the address of the host you want to have firewall support for.

   – In the Port field, enter the port for the specified host address.

   – In the User name field, enter a username for the firewall host.

   – In the Password field, enter a password for the specified user and host.

5 In the Firewall type area, select the type of firewall support.These are the firewall types supported by IntragyAccess. To select one of these connections, click its corresponding checkbox.

   – To log into the firewall and then establish the connection to the destination FTP server using the SITE <host> command, click SITE Host.

   – To establish the FTP session with the destination FTP server using the OPEN <host> command, click Proxy OPEN.

   – To establish your connection to the destination FTP server using the USER userid@host command, click USER after Log On.

   – To establish the connection to the destination FTP server using the USER userid@host command, click USER (user@host).

6 In the Firewall use not required for these domains area, enter the domain names that do not require firewall support. Separate multiple domains with commas.

7 Close the IntragyAccess Configuration window.

   OR

   Click another configuration category.

   The configuration options you have specified are saved.

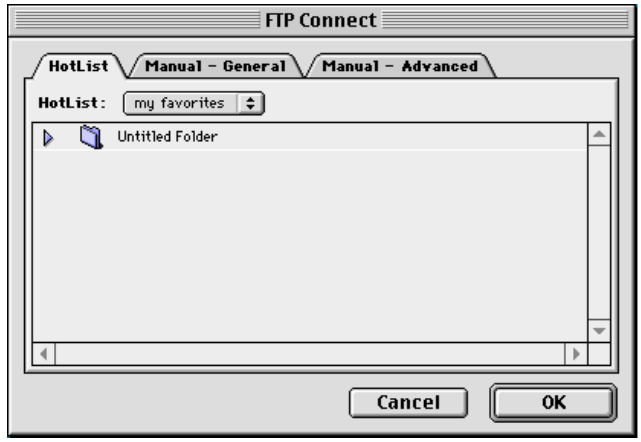
Establishing an FTP connection

The most important part of an FTP transaction is the connection. Without the connection, other tasks are impossible. To establish an FTP connection:

1 Launch IntragyAccess.

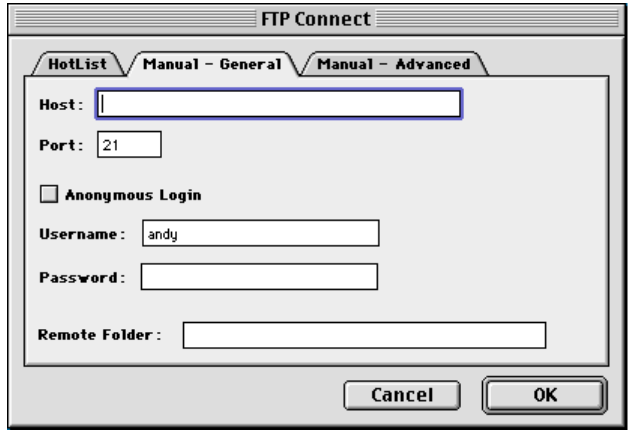
2 From the Service menu, choose FTP.

The FTP Connect dialog appears:



3 If you have previously defined Hotlist entries, you can select an entry and skip to step 16 on page 1-7. To establish a connection manually, click the Manual-General tab.

Manual-General connect options appear:



4 In the Host field, enter a fully- or partially-qualified host name or IP address.

5 Many sites allow visitors to log on anonymously. Typically, they request your email address as the password. If you select the “Anonymous login”

check box, IntragyAccess supplies values for the Username and Password fields, and you can skip steps 6 and 7.

6 In the Username field, enter a username for IntragyAccess to present to the host you want to make a connection to.

7 In the Password field, enter your password.

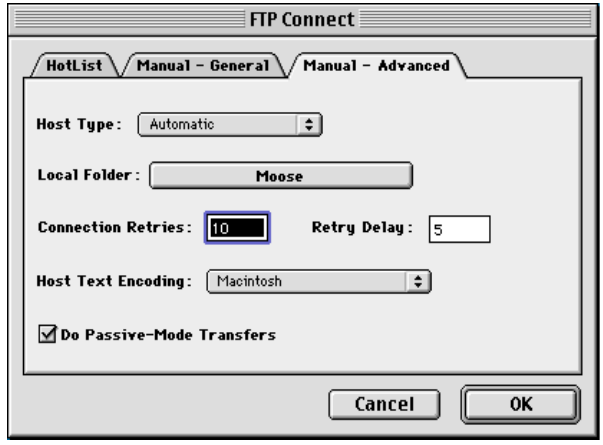
You can leave the Username and Password fields blank if you prefer to be prompted for this information when the FTP connection is made.

8 In the Remote folder field, type a path to the folder you want to connect to on the remote machine.

If you choose to make your FTP connection now, go to step 16. To configure additional options for this connection, proceed with step 9.

9 To specify further connection options, click the Manual-Advanced tab.

The Manual-Advanced tab is displayed:



10 From the Host Type drop-down menu, select a Host type for the FTP Server you are connecting to, or choose Automatic to let IntragyAccess select a host type.

11 Use the Local Folder bar to select a default directory on your computer.

12 In the Connection Retries field, type the number of times you want IntragyAccess to attempt to connect to the server.

13 In the Retry Delay field, type in the number of seconds you want IntragyAccess to wait between connection attempts.

14 If you know the character set of the host you are connecting to, select the correct setting from the “Host text encoding” drop-down menu.

15 To allow for passive mode file transfers, click Do Passive-Mode Transfers.

16 Click Connect.

You are connected to the specified FTP site and the FTP window appears.

Saving an FTP session as a Hotlist item

After you establish a connection by entering the necessary information, you can save the information as a Hotlist entry. FTP Hotlist entries make short work of connecting to an FTP servers. You simply double-click an icon.

Creating an FTP Hotlist item

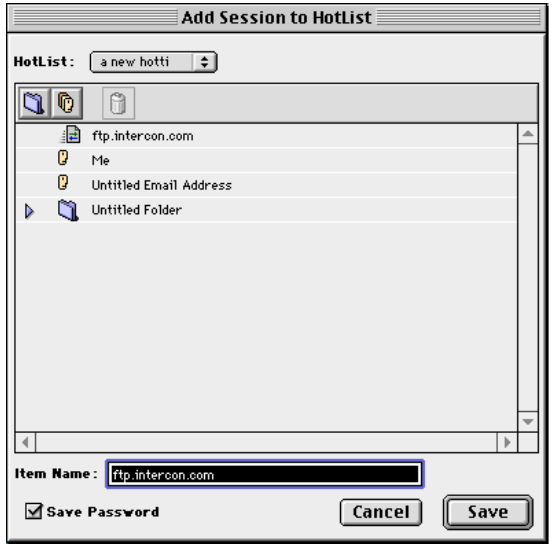
You can create a Hotlist entry for an FTP session. This can be done only after you have already established an FTP connection.

To create an FTP Hotlist entry:

1 Open an FTP session (as described in “Establishing an FTP connection” on page 3-4). Be sure to define all the options you want stored in the Hotlist entry.

2 From the Service menu, choose Add To Hotlist.

The Save Session dialog appears:



3 In the Item Name field, type a name for this FTP hotlist entry.

4 Select the folder in which to save the FTP session.

5 To save the password as part of the hotlist entry, click Save Password.

6 Click Save.

The session is saved as a hotlist item.

Editing FTP Hotlist entries

If you need to change any information, you can edit an FTP Hotlist entry.

To edit an FTP Hotlist entry:

1 From the Service menu, choose Hotlist, then the Hotlist that contains the FTP entry you want to edit.

The hotlist window appears.

2 Select the entry you want to edit.

3 From the Hotlist menu, choose Edit Properties.

The FTP session properties dialog appears.

4 Change whatever information you want to change for this session.

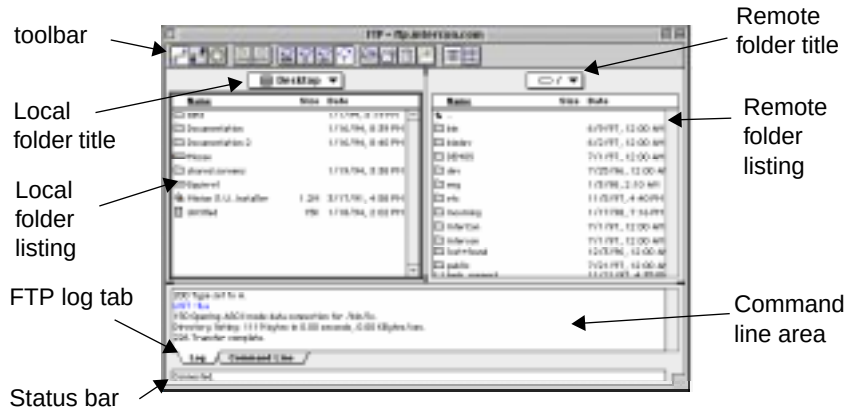
5 Click Save.

The changes you have made are saved to the Hotlist.

For more information about hotlist entries, see Chapter 4, “Using and maintaining Hotlists”.

Using the FTP window

The FTP window contains many features to help you optimize your time and increase productivity while using IntragyAccess FTP. The example below shows an FTP window and identifies some of its main features.



Shortcuts to commonly used commands

The toolbar contains shortcuts to many of the most commonly used FTP commands.When you place the mouse cursor on one of the shortcut buttons, a small pop-up window describes the function each button provides.

Viewing higher directories of the local and remote folders

Click on the local folder title or the remote folder title to see the hierarchy of the directories above it. If you see no higher directories, you have reached the root directory for that location or the root directory you have access to through this mountpoint. (A mountpoint is a location to which you are granted access.)

Checking the status of the FTP connection

To monitor the status of the FTP connection, just check the status bar at the bottom of the window. It displays messages about what is happening with the connection.

Transferring a file

Transferring files is the reason for using FTP. IntragyAccess FTP makes it easy for you to download and upload files, and change transfer modes.

Downloading a file

When you download a file, you transfer (copy) it from a remote host computer (an FTP server) to your local computer (the FTP client). To download a file:

1 Establish an FTP session (as described in “Establishing an FTP connection” on page 3-4).

2 Select one or more files in the remote directory.

To select multiple continuous files, press Shift while highlighting the first and last files you want to select.

To select multiple discontinuous files, press Option while highlighting each file.

3 Drag the selected file(s) to a directory on the local computer.

4 Drop the file(s).

The selected file(s) is(are) copied into the target directory.

Uploading a file

When you upload a file, you transfer (copy) it from your local computer (an FTP client) to a remote host computer (the FTP server).

To upload a file using drag and drop:

1 Establish an FTP session (as described in “Establishing an FTP connection” on page 3-4).

2 From a local directory in the FTP window, select the file or files to upload to the remote host.

To select multiple continuous files, press Shift while highlighting the first and last files you want to select.

To select multiple discontinuous files, press Control while highlighting each file.

3 Drag the selected file(s) to the directory on the remote computer.

4 Drop the file(s).

The selected file(s) is(are) copied into the specified directory.

Changing file transfer modes

Text files should be transferred in ASCII mode. Other files should be transferred in binary mode. To change modes, click one of the following icons on the icon bar:

- the ASCII icon selects ASCII mode.
- the Binary icon selects Binary mode.
- the Auto mode icon automatically selects the mode indicated by the filename. Auto mode displays the file type as unknown or as a type you know to be incorrect, select the correct type by clicking one of the other icons.

Opening a file

You can open a file and view its contents in the FTP window before you download the file.Just select the file and choose View from the FTP menu.

Customizing the FTP window

IntragyAccess allows you to customize the FTP window. Functional views and toolbars with commonly used tasks are set as defaults. You can changes the display of the local window, create and customize toolbars, remove toolbars, and change the function of the Command window to display log information.

Changing the display of the FTP window

You can change the way the FTP window appears by using the Show commands in the FTP menu. An item will appear when there is a checkmark next to its name in the menu. Table 3-1 details the features of the FTP window.

Table 3-1. FTP window features and their functions

FTPwindow feature	Function
Toolbar	Activate the toolbar option to show the toolbar containing shortcuts to commonly used commands.
Local files	If you select local files, the files on your computer appear in the window as well as the files on the remote computer if you have them selected as well. You can select either remote or local, but one of them must be selected at all times.
Remote files	If you select remote files, the files on your computer appear in the window as well as the files on your computer if you have them selected as well. You can select either remote or local, but one of them must be selected at all times.
Status bar	The status bar at the bottom of the window shows the status of the connection to the FTP server. To get rid of this bar (to conserve space for example) turn this option off.
Log	Choose the Log option to toggle between command line and log mode in the command area near the bottom of the FTP window. You can also use the tabs at the bottom of the window to change between these views.
Command Line	Choose the Command Line option to toggle between command line and log mode in the command area near the bottom of the FTP window. You can also use the tabs at the bottom of the window to change between these views.

Changing between command line mode and FTP log mode

At the bottom of the FTP window is the Command window. If you select the Command Line button, you can enter FTP commands in the Command window, and IntragyAccess sends them to the server. If you select the Log tab, the window displays all the messages exchanged by IntragyAccess and the FTP server.

Setting up an FTP server

IntragyAccess enables you to set up your computer as an FTP server, so that you can permit specified remote users to connect to your computer and access files for which you grant permission. The IntragyAccess FTP Server is a system extension that installs into the Extensions folder within the System Folder.

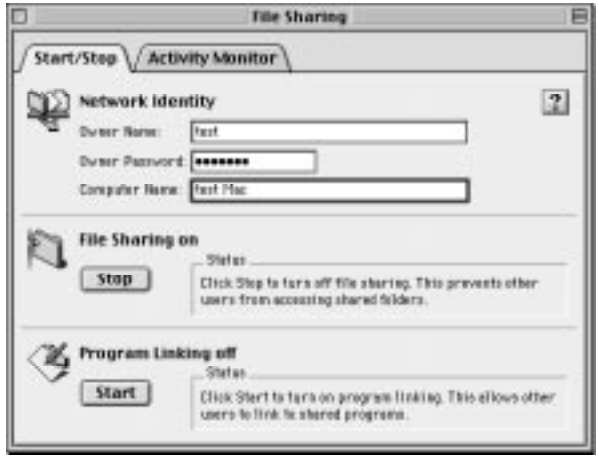
Note: As a system extension, it exhibits the same properties as many of the features of the system software. For example, if you drag the icon on top of the System Folder, the Finder will ask you if you want to put the item in the Extensions folder instead.

Enabling the FTP Server

To use the FTP server, you must enable File Sharing from the File Sharing Control Panel. This is necessary because the features that provide for configuration and use of folder permissions are only active on the Macintosh when File Sharing is enabled.

To enable File Sharing:

1 From the Apple menu, choose Control Panels, and then File Sharing. File Sharing options appear:



2 Fill out the Owner name and password fields in the Network Identity area.

The Owner Name and Owner Password are needed to log into the FTP server as "owner." The owner has special privileges and can modify files anywhere on the disk, and can change permissions. Normal users and anonymous users are configured from the Users & Groups Control Panel and have more restrictive permissions.

3 In the File Sharing on area, click the Start button to begin File Sharing.

When File Sharing is enabled, the IntragyAccess FTP Server is activated.

4 It is not necessary to select any options within the Program Linking area. Program Linking within the File Sharing dialog is not used by the FTP Server, and the setting can be On or Off without affecting the FTP Server.

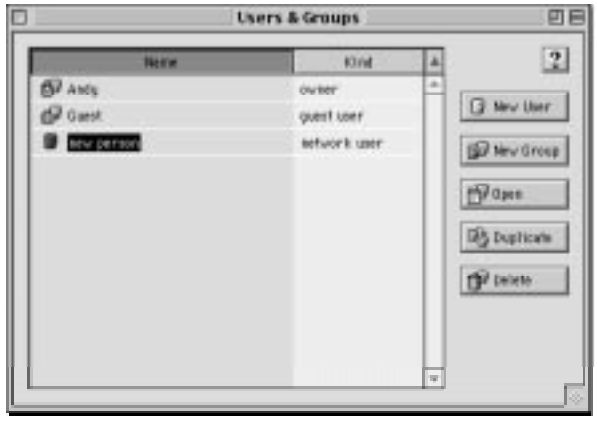
Configuring users for your server

To permit remote users to connect to your FTP server, you create accounts for them. You can also edit or delete an existing user account.

Creating a user account

To create a new user account you must use the Users and Groups Control Panel as part of the Macintosh Operating System. To create a new User or group of users:

1 From the Apple menu, select Control Panels and then Users and Groups.
The Users and Groups Control Panel appears:



2 Click the New User button.
The user properties dialog appears with Identity options frontmost:

3 In the Name field, enter a user name for the new account.
This is the user ID an FTP client uses to log on to your FTP server.

4 In the Password field, enter a password for this user.

5 From the Show menu, select Sharing.
Sharing options for this user appear:

6 Click the Allow user to connect to this computer checkbox.

7 Close the Users and Groups Control Panel.

The user now has the access you have defined and can log on to your FTP server.

To grant access to specific folders, see "Creating mountpoints for your FTP server" on page 3-17.

Editing user accounts

To edit a user account:

1 From the Apple menu, select Control Panels and then Users and Groups.

The Users and Groups Control Panel appears.

2 Select the User profile you want to edit.

3 Click the Open button.

The user properties dialog appears with Identity options frontmost.

4 Edit the information as necessary.

5 Close the window.

The user profile is changed to reflect the changes you have made.

Renaming a user account

To change the name of a user account:

1. From the Apple menu, select Control Panels and then Users and Groups.
   The Users and Groups Control Panel appears.
2. Select the User profile you want to edit.
3. Click the Open button.
   The user properties dialog appears with Identity options frontmost.
4. Type a new name for the user account.
5. Close the window.
   The new user name appears in the User area.

Deleting user accounts

To remove a user account:

1. From the Apple menu, select Control Panels and then Users and Groups.
   The Users and Groups Control Panel appears:
2. Select the User profile you want to remove.
3. Click the Delete button.
   The user is removed from your list of users.

Creating mountpoints for your FTP server

A mountpoint is a configuration containing permissions information and a link to a folder through which a user can access other nested files and folders. You can create different mountpoints for specific users with the IntragyAccess FTP Server.

To create a new mountpoint for users:

1. Select the folder on your computer you want to use as a mountpoint.

   Note: Make sure you have File Sharing turned on in the File Sharing Control Panel.
2. From File Menu, choose Sharing.
   Sharing options for the selected folder appear:

3 Click Share this item and its contents.

4 From the name pop-up menus, select which users you want to have access to this mountpoint.

5 Set the privileges for each user when accessing the folder.

- To allow the user to view lists of all the files in the selected folders, click List.
- To allow the user to alter existing files and create new files within the selected folders, click Write.
- To allow the user to create new folders within the selected folders, click Create Directory.
- To allow the user only to view the contents of files, click Read.
- To allow the user to remove files from the selected folders, click Delete.

6 Close the window.

The mountpoint options you have specified are saved. Users cannot access mountpoints until you grant them permission, as described in “Creating a user account” on page 3-14.

Editing mountpoints

To edit a mountpoint:

1. Select the mountpoint folder on your computer whose options you want to change.
2. From File Menu, choose Sharing.
   Sharing options for the selected folder appear.
3. Edit the information as necessary.
4. Close the window.
   The mountpoint information is changed.

Deleting mountpoints

To remove a mountpoint:

1. Select the mountpoint folder on your computer you want to delete.
2. From File Menu, choose Sharing.
   Sharing options for the selected folder appear.
3. Uncheck the Share this item and its contents checkbox.
   The folder is no longer a mountpoint.

Setting up a TFTP server

This section describes how to set up your computer as a TFTP server. TFTP (Trivial File Transfer Protocol) server is a more simple FTP server with no directory or password capacity. IntragyAccess provides a TFTP Server capability.

To launch the TFTP Server, double- click the TFTP Server icon the IntragyAccess program group.

TFTP Server creates a top level folder on your hard drive called “TFTP Files” where you can store files to access using the TFTP protocol. To quit the TFTP Server select TFTP Server in the Finder and choose quit from the File menu.

Network file sharing

Your IntragyAccess NFS client for Macintosh enables you to use the Network File System (NFS) for transparent, shared access use.

Functionally, NFS is composed of two parts: a client and a server. Your NFS client enables your computer to access, manipulate, and print files on NFS servers as if the files were stored on your computer.

A client is a program or computer that requests services from a network or server. The client provides the user interface and performs some, or most, of the application processing.

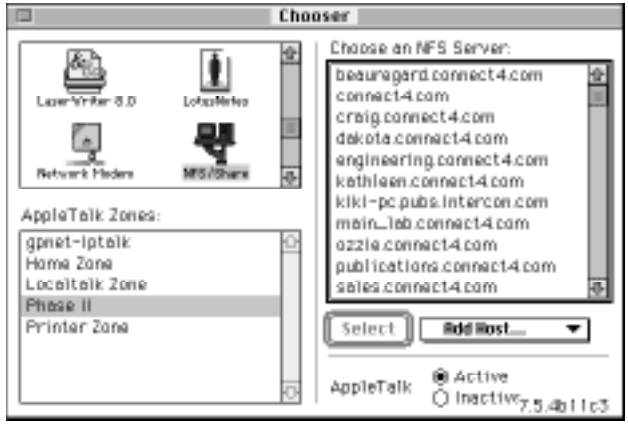
A server is a computer or program designed to provide a service to a network used by multiple users. A server communicates with a client to handle the client's input and output needs.

Setting up your NFS Client

This section details information on adding, editing, and removing servers to the scrolling list of available servers in the Chooser, as well as setting optional preferences.

Adding a server to the scrolling list of servers

If an NFS server is not available on your local network, it is not displayed in the scrolling list of available NFS servers in the Chooser. For example in the window below the right side of the window shows the available servers.



To add a server to the scrolling list of available NFS servers in the Chooser:

1 From the Apple menu, select Chooser.

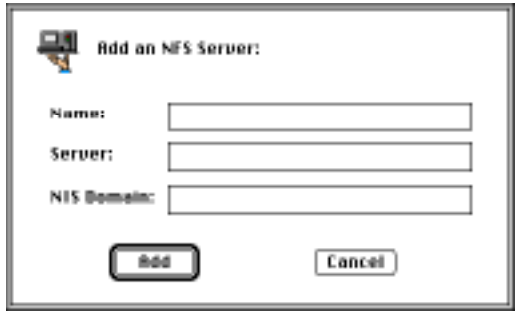
The Chooser window appears.

2 From the scrolling icon list, select the NFS/Share icon.

A scrolling list of available NFS servers appears.

3 From the NFS pop-up menu, choose Add Host.

The following dialog appears:



4 In the Name field, type the name you want displayed for this server in the scrolling list of available NFS servers in the Chooser.

5 In the Server field, type the host name or IP address of the server you are adding.

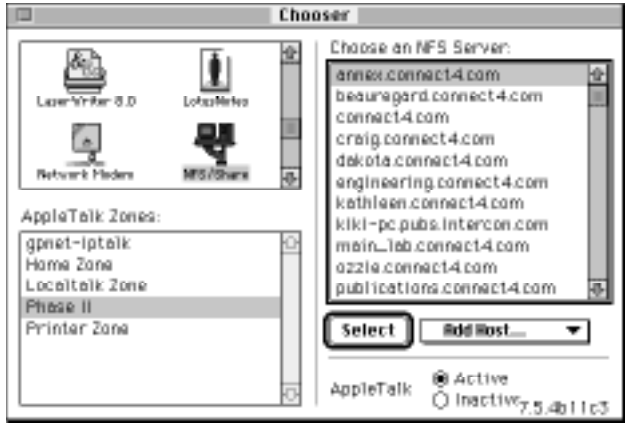
6 In the NIS Domain field, type the NIS Domain name for the server you are adding if it uses NIS (Network Information Service) authentication. If the server you are adding does not use NIS, leave this field empty.

NIS is a user authentication and information service developed by Sun Microsystems.

An example of completed NFS server information is shown below:

7 Click Add.

The Chooser window reappears with the server added to the scrolling list of available NFS servers. For example:



Editing a server in the scrolling list of servers

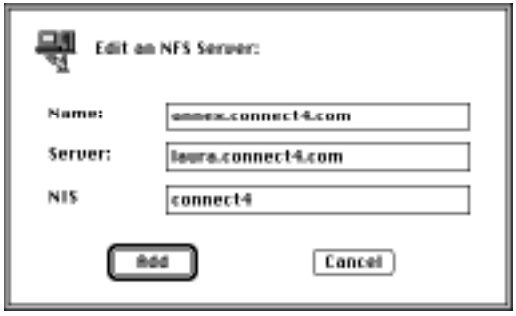
You may find it necessary to change the settings you created for a server in the scrolling list of available NFS servers in the Chooser.

To change the settings for a server in the scrolling list of available NFS servers in the Chooser:

1 From the Apple menu, select Chooser.
The Chooser window appears.

2 From the scrolling icon list, select the NFS/Share icon.
A scrolling list of available NFS servers appears.

3 Select the server you want to edit from the scrolling list of available NFS servers, and choose Edit Host from the NFS pop-up menu.
The Edit an NFS Server dialog appears:



4 Edit the information as necessary.
For information on the fields in this dialog, see “Adding a server to the scrolling list of servers” on page 3-20.

5 To save the changes you have made to this server, click Add.
The Chooser window reappears, and your changes are saved.

Removing a server from the scrolling list of servers

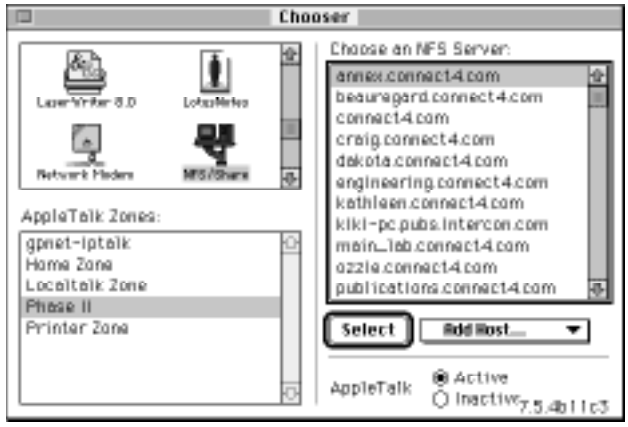
If you find that it is not necessary to have a server listed in the scrolling list of available NFS servers in the Chooser, you can remove the host from the scrolling list. You can only remove servers that you have manually added to the scrolling list.

To remove a server from the scrolling list of available NFS servers in the Chooser:

1 From the Apple menu, select Chooser.
The Chooser window appears.

2 From the scrolling icon list, select the NFS/Share icon.

A scrolling list of available NFS servers appears. For example:



3 Select the server you want to delete from the scrolling list of available NFS servers, and choose Remove Host from the NFS pop-up menu.

The server is removed from the scrolling list of available NFS servers without confirmation.

Setting a default NIS domain name

If you are connecting to NFS servers that use NIS as their authentication method, you must select NIS Domain from the NFS pop-up menu to set your default NIS domain name.

If you have added the server manually to the scrolling list of available NFS servers, you must enter the NIS domain name for that specific server. For information on setting the NIS domain name for hosts you have manually added to the scrolling list of available NFS servers, see Section starting on page 22. For information on setting the NIS domain name for hosts you are adding to the scrolling list of available NFS servers, see “Adding a server to the scrolling list of servers” on page 3-20.

NIS (Network Information Service) is a user authentication and information service developed by Sun Microsystems.

To set a default NIS domain name for all NFS servers automatically listed in the scrolling list of available NFS servers:

1 From the Apple menu, select Chooser.

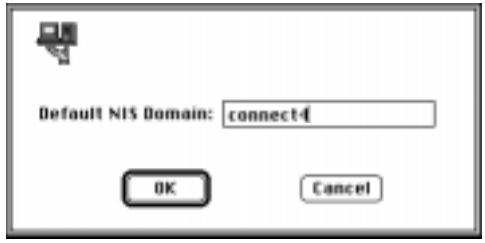
The Chooser window appears.

2 From the scrolling icon list, select the NFS/Share icon.

A scrolling list of available NFS servers appears.

3 From the NFS pop-up menu, choose NIS Domain.

For example:



4 In the field provided, type the domain name for NIS authentication on your network.

5 Click OK.

The dialog closes, and your default NIS domain name is saved.

Setting optional preferences for your NFS Client

There are many optional preferences you can set for your NFS client. Your NFS client functions properly with all the factory defaults assigned to these fields. There will rarely be a time that you need to change any of these settings.

Factory defaults are the values that are automatically installed for your software.

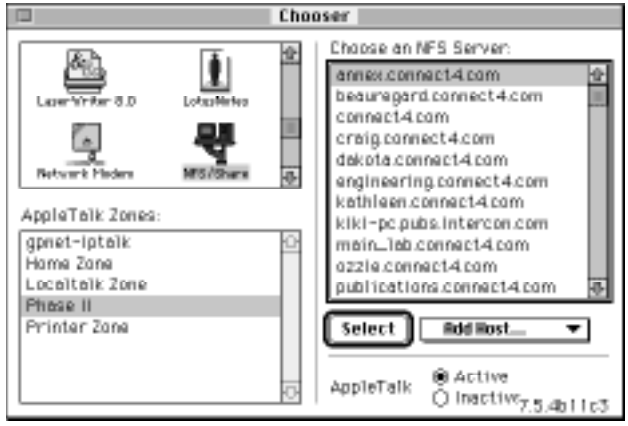
To set optional preferences for all NFS servers automatically listed in the scrolling list of available NFS servers:

1 From the Apple menu, select Chooser.

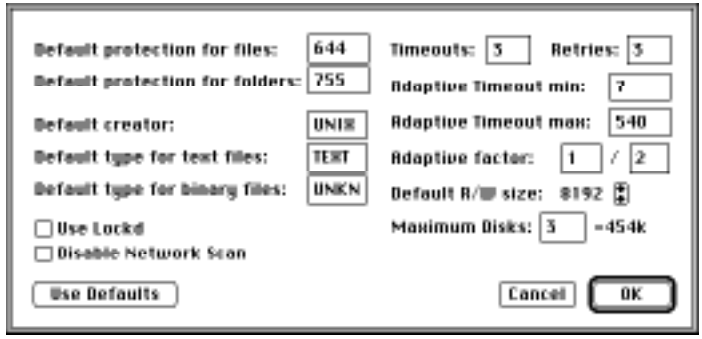
The Chooser window appears.

2 From the scrolling icon list, select the NFS/Share icon.

A scrolling list of available NFS servers appears. For example:



3 From the NFS pop-up menu, choose Preferences.
The following dialog appears:



4 In the Default protection for files field, type a three digit number identifying the access you want to grant to the owner of a file (the first digit), specific users who have access to the file (the second digit), and anyone else who may encounter the file (the third digit). The default for this field is 644, allowing the owner of the file read and write access, allowing users in a particular group read access, and also allowing everyone else read access. Table 3-2 outlines the UNIX access modes and the type of access they grant.

Table 3-2. UNIX Access Modes

UnixAccess Mode	Access Granted
7	read, write, execute
6	read, write
5	read, execute
4	read
3	write, execute
2	write
1	execute

Read access means that you are able to view the contents of the file or directory, but are not able to make changes to the contents of the file or directory.

Write access means that you are able to make changes to the contents of the file or directory, but you are not able to view the contents.

Execute access means that you are able to run a program and access directories.

5 In the Default protection for folders field, type a three digit number identifying the access you want to grant to the owner of the folder (the first digit), specific users who have access to the folder (the second digit), and anyone else who may encounter the folder (the third digit). The default for this field is 755, allowing the owner of the folder full read, write, and execute access, allowing users within a particular group read and execute access, and also allowing everyone else read and execute access. For the specific modes and what access they grant, see Table 3-2.

6 In the Default creator field, type the application-specific, 4-character code identifying the desired file creator for UNIX files you access. The default for this field is UNIX (UNIX).

7 In the Default type for text files field, type the application-specific, 4-character code identifying the desired file type for UNIX text files you access. The default for this field is text (TEXT).

8 In the Default type for binary files field, type the application-specific, 4-character code identifying the desired file type for UNIX binary files you access. The default for this field is unknown (UNKN).

9 If BWNFSD is running on your server but you would like to use LOCKD instead, click Use Lockd.

BWNFSD is a user authentication service, developed by Beame and Whiteside, that includes file locking capabilities.

LOCKD is a file locking program, developed by Sun Microsystems.

File locking is a security measure that lets multiple users simultaneously access and make changes to different parts of the same file, such as different records of the same database.

Check with your System Administrator to see if BWNFSD is running on the NFS servers you connect to.

10 If you want your NFS client to display only NFS servers that you have added using the Add Host option, click Disable Network Scan.

When you select the NFS/Share icon in the Chooser, your NFS client scans your network to create a list of available servers to display in the scrolling list. If you activate the Disable Network Scan option, only the NFS servers you added using the Add Host option appear in the scrolling list. For information on the Add Host option, see “Adding a server to the scrolling list of servers” on page 3-20.

11 In the Timeouts field, type the amount of time, in seconds, that you want your NFS client to wait before retrying a request if the server does not respond to the initial request. The default for this field is 3 seconds. This field only applies to operations other than read and write.

12 In the Retries field, type the maximum number of times you want your NFS client to retry a request if the server does not respond to the initial request. The default for this field is 3 times. This field only applies to operations other than read and write.

If your NFS client retries the maximum number of times entered in the Retries field and the NFS server still does not respond, the volume is dismounted and the icon no longer appears on your desktop.

13 In the Adaptive Timeout min field, type the minimum amount of time, in 60ths of a second, that you want your NFS client to wait before resending information if the server does not respond to the initial request. The default for this field is 7/60 of a second. This field only applies to read and write operations.

The amount of time assigned to the adaptive timeout varies according to the speed of your network, and is influenced by the average amount of time that it takes information to be transferred on your network. By changing the values in the Adaptive Timeout min and Adaptive Timeout max fields, you are specifying the absolute values that should be considered the extremes, no less than this amount of time, no more than that amount of time.

14 In the Adaptive Timeout max field, type the maximum amount of time, in 60ths of a second, that you want your NFS client to wait before resending information if the server does not respond to the initial request. The default for this field is 540/60 of a second (9 seconds). This field only applies to read and write operations.

The Adaptive factor field should not be changed. If you feel that there is a reason to edit this field, please call Technical Support for more information. The default for this field is 1/2.

15 From the Default R/W size field, click the up or down arrow to select the maximum read and write request size for files you have read and write access to. The default for this field is 8192 bytes.

16 In the Maximum Disks field, type the maximum number of volumes that can be mounted on your desktop. The default for this field is 2.

To return all of the settings to their factory defaults, click Use Defaults.

17 Click OK.

The Chooser window reappears, and your preferences are saved.

You must restart your computer for your changes to take effect.

Refreshing your hosts

You can update the scrolling list of available servers in the Chooser, without closing and reopening the Chooser window. This is especially useful if you think that a server is now available that may not have previously been listed.

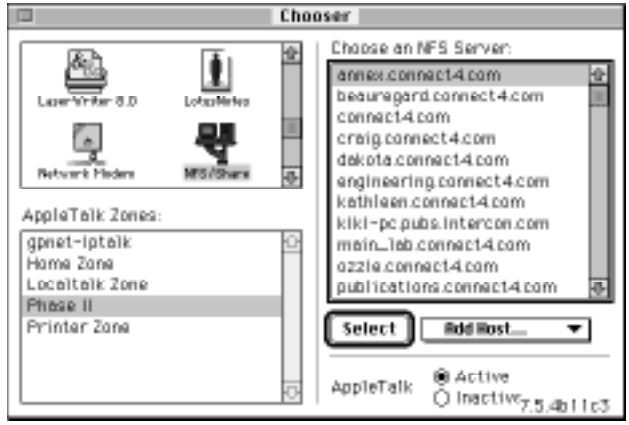
To update the scrolling list of servers:

1 From the Apple menu, select Chooser.

The Chooser window appears.

2 From the scrolling icon list, select the NFS/Share icon.

A scrolling list of available NFS servers appears. For example:

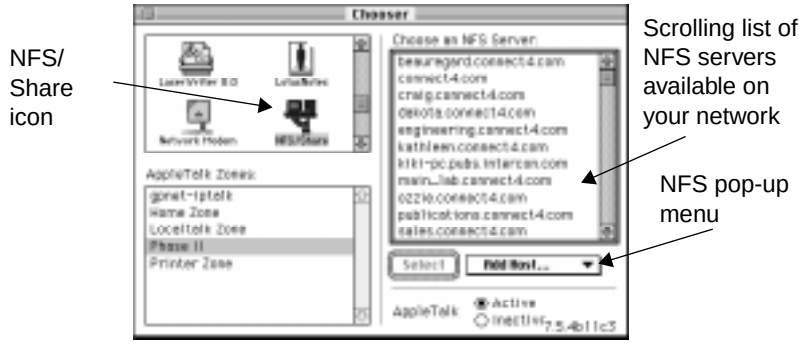


3 From the NFS pop-up menu, choose Refresh Hosts.

The scrolling list of servers in the Chooser is updated, and may display servers that were not previously listed.

Using your NFS Client

Your NFS Client is an extension that is loaded when you start your computer. You can access your NFS client by selecting the NFS/Share icon in the Chooser. When the NFS/Share icon is selected, the Chooser window displays a scrolling list of available NFS servers on your network and the NFS pop-up menu. For example:



Your Chooser window may not be identical to the above example, since you likely have different software loaded on your computer.

Connecting to an NFS Server

Your NFS client enables you to connect to an NFS server that you have access to on your network.

If you are unable to connect to a server, contact your System Administrator. The server may be down, or your System Administrator may not have given you access to that particular server.

To connect to an NFS server:

1 From the Apple menu, select Chooser.

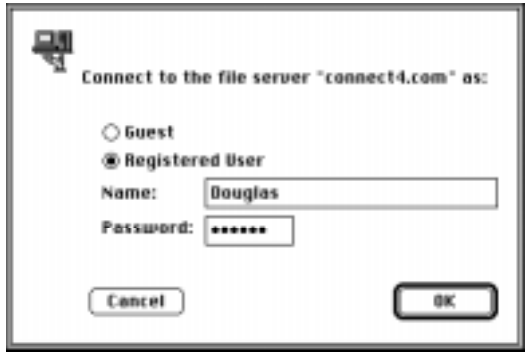
The Chooser window appears.

2 From the scrolling icon list, select the NFS/Share icon.

A scrolling list of available NFS servers appears on the right side of the Chooser window.

3 From the scrolling list of available NFS servers, select the name or IP address of the server you want to connect to, and click Select.

The dialog similar to the one below appears:



The server you want to connect to may not be listed in the scrolling list of available NFS servers. (For information on using the Add Host option to add a server to the scrolling list, see “Adding a server to the scrolling list of servers” on page 3-20.)

4 If you have an account on this server, click Registered User, and type your user name in the Name field and your password in the Password field.

OR

If the server you are connecting to allows guest access, click Guest.

5 Click OK.

You are logged in to the server and the dialog in appears, listing the volumes you can mount on that server.

A volume is a unit of storage, such as a folder or directory, that is located on the NFS server you are connecting to. To mount a volume means to access the volume. Specific to your NFS client, it means having the volume appear as an icon on your desktop.

The scrolling list may be empty or the volume you want to mount may not be listed. In either case, you must add a volume to the scrolling list. For information on using the Other option to add a volume to the scrolling list, see “Adding volumes” on page 3-33.

6 To automatically mount a volume each time you start your computer, click the checkbox to the right of the volume name.

7 To have the volume automatically mounted without prompting you for your user name, click Save My Name Only.

8 To have the volume automatically mounted without prompting you for your user name and password, click Save My Name and Password.

Save My Name Only and Save My Name and Password appear only after you click the checkbox to specify that the volume should be opened at startup.

The maximum number of volumes that you can automatically mount at startup is two by default. For information on changing this setting, see “Setting optional preferences for your NFS Client” on page 3-25.

9 To mount a volume, select the volume from the scrolling list and click OK.

The volume appears as an icon on your desktop. You can open the volume to view the files by double-clicking the icon.

Adding volumes

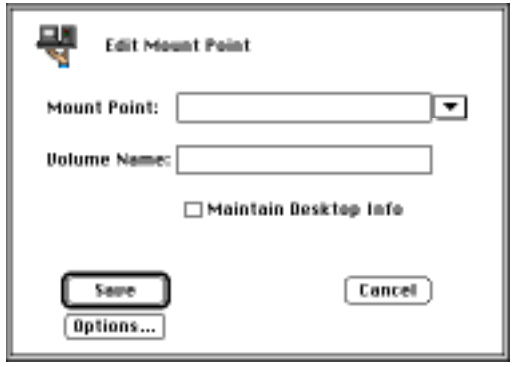
If you have connected to a server, and do not see any volumes listed or do not see the volume you want to mount listed in the dialog shown in , you must add the volume to the scrolling list.

For information on connecting to a server and accessing the scrolling list of available volumes to mount, see “Connecting to an NFS Server” on page 3-31.

To add a volume to the scrolling list of available volumes:

1 In the dialog shown in , click Other.

The Edit Mount Point dialog appears:



2 In the Mount Point field, type the path of the volume on the server. You can also use the pop-up menu to choose a mount point.

3 In the Volume Name field, type the name you want this volume to be identified by in both the scrolling list and when it is mounted on your desktop.

You cannot use the Finder to change the name of a volume when it appears on your desktop. You can only change the icon name by editing the Volume Name field in the Edit Mount Point dialog.

4 To save the placement of icons in the volume window, click Maintain Desktop Info.

5 To specify how your Macintosh filenames are translated when stored on your NFS server, click Options.

The Set Mount Options dialog appears:

6 From the Naming pop-up menu, select a translation other than the default. The default is 8-bit ASCII.

- If the server allows only legal 7-bit ASCII characters to be used in filenames, choose ASCII 7 bit. All other characters, including spaces, are represented by escape sequences.
- If the server allows legal 7-bit ASCII characters and spaces to be used in filenames, choose ASCII 7 bit+. All remaining characters are represented by escape sequences.
- If the server allows any 8-bit value to be used in filenames, choose ASCII 8 bit. No characters are represented by escape sequences.

  Contact your System Administrator if you are unsure about which type of translation you need to select for the NFS server you have connected to.

  An escape sequence is a series of ASCII 7 bit characters that provides an alternate representation of an ASCII 8 bit character. For example, if you have a file on your Macintosh named my stuff, the space character would be replaced by the escape sequence %20 on a UNIX system, since a space is not a character that can be used in ASCII filenames. Your filename would appear as my%20stuff.

  ASCII (American Standard Code for Information Interchange) is a code in which the numbers from 0 to 127 represent text characters to standardize the way text is transmitted between computers.

7 To have the character representing the end of a line of text remain consistent with the platform that the text file was created on, click Disable End of Line Translation.

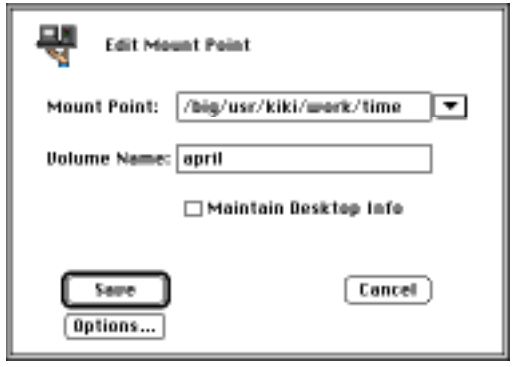
In Macintosh text files, lines of text are separated by carriage returns, but in UNIX text files, they are separated by line feeds. When Disable End of the Line Translation is unchecked, your NFS client automatically translates carriage returns into line feeds and line feeds into carriage returns when transferring text files between your Macintosh and the NFS server. By enabling Disable End of Line Translation you are disabling this feature, and your NFS client no longer automatically translates these characters. Binary files are not translated.

8 To make your Macintosh filenames case sensitive, click Case Sensitive Filenames.

For example, if Case Sensitive Filenames is enabled, the files Ascend and ascend are recognized as two different files, and are handled accordingly. If Case Sensitive Filenames is disabled, the files Ascend and ascend are recognized as the same file, and are handled accordingly.

9 To close the Set Mount Options dialog and save your filename options, click Save.

The Edit Mount Point dialog reappears, and your filename options are saved. For example:



10 To add this volume to the scrolling list of available volumes and save the preferences you have assigned to it, click Save.

The dialog shown in appears, and the volume you specified is added to the scrolling list as shown in the following figure:

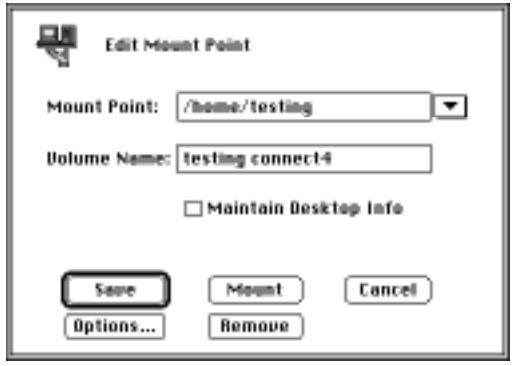
Editing volumes

You may find it necessary to edit the information for a volume in the scrolling list of available volumes to mount.

To edit a volume in the scrolling list:

1 In the dialog below, select a volume and click Edit.

The Edit Mount Point dialog appears:



2 Edit information as necessary.

3 To save the changes you have made to this volume, click Save in the Edit Mount Point dialog.

The following dialog appears, and the changes to the volume you specified are saved.

Removing volumes

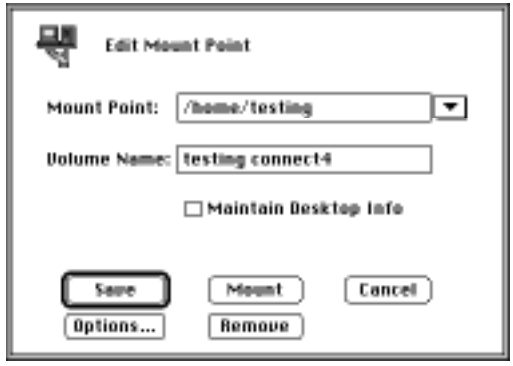
You may find it necessary to delete a volume from the scrolling list of available volumes to mount.

For information on connecting to a server and accessing the scrolling list of available volumes to mount, see “Connecting to an NFS Server” on page 3-31.

To remove a volume from the scrolling list:

1 In the dialog, select the volume you want to remove, and click Edit.

The Edit Mount Point dialog appears. For example:



2 Click Remove.

The dialog shown in reappears, and the volume is removed from the scrolling list without confirmation.

Using and maintaining Hotlists

4

After you save information to the Hotlist, you can quickly and easily make connections and address email. An assortment of tools helps you organize your entries. If you create a lot of Hotlist entries, you might want to create additional Hotlists or add folders to existing Hotlists. After you create a Hotlist entry, you can edit, rename or remove it.

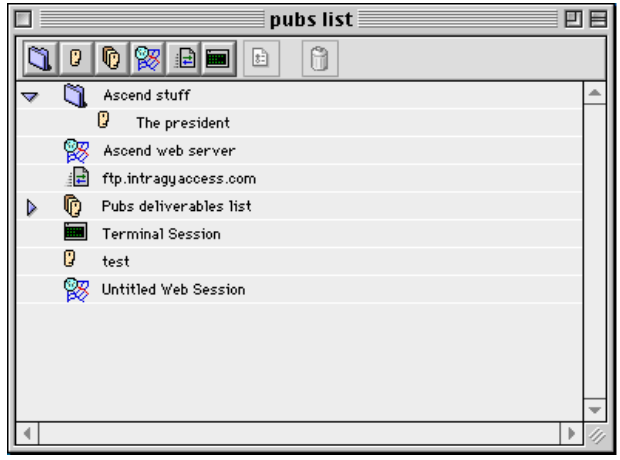
Using Hotlists

To access the Hotlist and display the Hotlist window:

1 Launch IntragyAccess.

2 From the Service menu, choose Hotlist, and then the Hotlist you want to open.

The Hotlist window appears. For example:



The icon at the beginning of each entry corresponds to the entry's type. Depending on the type of entry, you can double-click on it to establish a Terminal, World-Wide Web, or FTP session, or address an email message.

The Hotlist menu includes commands for adding, editing, and sorting entries, and the toolbar provides shortcuts to commonly used functions.

Sorting Hotlist entries

You can sort hotlist entries by name or by type. First, select the folder containing the entries you want to sort. To sort by type, from the Hotlist menu, select Sort by Kind. To sort by name unselect this same option.

Using the Hotlist toolbar

Table 4-1 shows each button on the toolbar, and describes the action the button performs when you click it.

Table 4-1. Hotlist window toolbar button

Button	Action
	Creates a new Hotlist folder.
	Creates a new Email address Hotlist entry.
	Creates a new Email group Hotlist entry.
	Creates a new Web Hotlist entry.
	Creates a new FTP Hotlist entry.
	Creates a new Terminal Hotlist entry.
	Displays the selected items property sheet.
	Deletes the selected item.

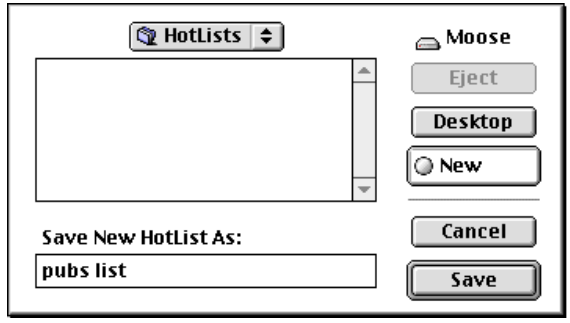
Creating a new Hotlist

IntragyAccess creates a default Hotlist when you install the software. For most users, this main Hotlist will be sufficient. But you might want to create additional Hotlists.

To create a new Hotlist:

1 Launch IntragyAccess.

2 From the Service menu, choose New Hotlist.
The Save New Hotlist As dialog appears:

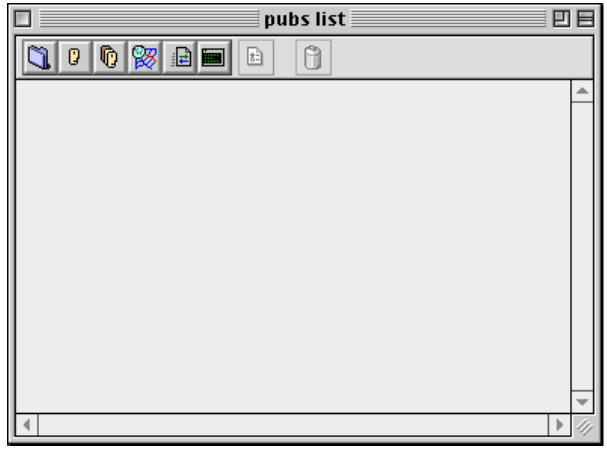


3 Navigate the dialog to choose a location in which to save the Hotlist file.

4 In the "Save New Hotlist As" field, type a name for the new Hotlist.

5 Click Save.

A new Hotlist main window appears for the Hotlist you just created:



Creating Hotlist folders

To help organize and manage data, you can create folders and subfolders within a particular hotlist. To create a new folder:

1 Open a Hotlist.

2 From the Hotlist menu, choose Add Folder.

A new folder appears in the Hotlist window.

3 Type the name for the new folder.

Adding entries to folders

To add an entry to a folder:

1 From the folder list on the left side of the Hotlist window, open the Hotlist that contains the Hotlist entry you want to move.

2 Drag the entry into the destination folder and drop the entry.

The item is moved to the new folder.

Removing entries from folders

To remove an entry from a folder:

1 From the folder list on the left side of the Hotlist window, open the folder that contains the Hotlist entry you want to move.

2 To move the entry to a new folder, drag the entry from the source folder into the main Hotlist window.

The item is removed from the source folder and placed at the location of the cursor when you release the mouse button.

Creating a new Hotlist item

Once you have created a new Hotlist, or if you have decided to use the main hotlist, you will want to add entries to the list. IntragyAccess supports Hotlist entries for Mail addresses, FTP sites, Terminal hosts, and World Wide Web sites.

Creating a new Mail Hotlist entry

Create a Mail Hotlist entry to speed addressing of messages and to address messages to groups of recipients. To create a new Mail Hotlist entry:

1 Open a Hotlist (as described in “Using Hotlists” on page 4-1).

2 From the Hotlist menu, choose Add Email Address.

A new mail Hotlist entry appears in the main Hotlist window.

3 Type a name for the new mail entry.

For information about creating a mail Hotlist entry and mail Hotlist entry properties, see “Using the Hotlist to address messages” on page 3-16.

Creating a new Terminal Hotlist entry

Create a Terminal Hotlist entry to save data about a particular terminal session and to make the connection to the same site quickly using the same properties. To create a new Terminal Hotlist entry:

1 Open a Hotlist (as described in “Using Hotlists” on page 4-1).

2 From the Hotlist menu, choose Add Terminal Session.

A new terminal Hotlist entry appears in the main Hotlist window.

3 Enter a name for the new entry.

For information about creating terminal Hotlist entries, see “Saving a Terminal session as a Hotlist item” on page 2-17.

Creating a new FTP Hotlist entry

Create an FTP Hotlist entry to save data about a particular FTP session and to make the connection to the same FTP site quickly using the same properties. To create a new FTP Hotlist entry:

1 Open a Hotlist (as described in “Using Hotlists” on page 4-1).

2 From the Hotlist menu, choose Add FTP Session.

A new FTP Hotlist entry appears in the main Hotlist window.

3 Type a name for the FTP session Hotlist entry.

For information about creating FTP Hotlist entries, see “Using FTP to transfer files” on page 3-1.

Creating a new Web Hotlist entry

IntragyAccess enables you to create and store shortcuts to sites on the World-Wide Web. To create a Web page Hotlist entry:

1 Open a Hotlist (as described in “Using Hotlists” on page 4-1).

2 From the Hotlist menu, choose Add Web Session.

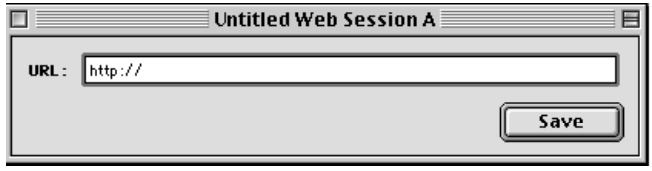
A new Web Hotlist entry appears in the main Hotlist window.

3 Type a name for the Web page Hotlist entry.

4 With the new Web entry selected, from the Hotlist menu, choose Edit Properties.

5 Click OK.

The Web page Properties dialog appears:



6 In the field provided, type the URL for the Web page you want to be a Hotlist entry.

7 Click Save.

The item is added to the Hotlist.

Editing, renaming, and deleting Hotlist entries

The IntragyAccess Hotlist includes functions that enable you to change the information stored in a Hotlist entry, rename a hotlist entry, and remove entries from the Hotlist.

Editing Hotlist entries

Should you find it necessary to change the information stored in a Mail, Terminal, FTP or Web page Hotlist entry, you can access the entry's properties and edit them.

Editing Mail Hotlist entries

To edit the information stored in a mail Hotlist entry:

1 Open a Hotlist (as described in "Using Hotlists" on page 4-1).

2 Select the Mail entry you want to edit.

3 From the Hotlist menu, choose Edit Properties.
The mail entry properties dialog appears:

4 Edit the address as necessary.

5 Click Save.
The changes are saved to the Mail Hotlist entry.

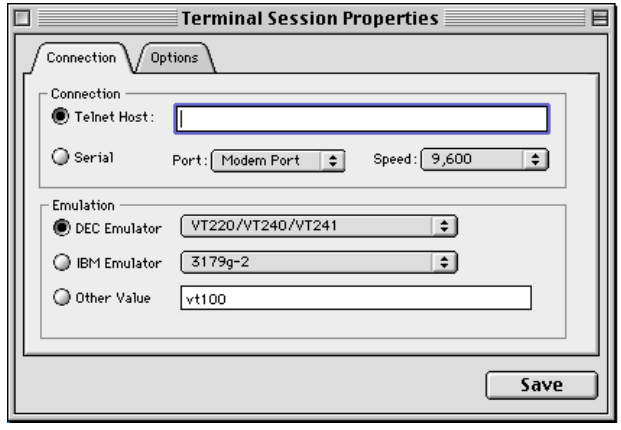
Editing Terminal Hotlist entries

To edit the information stored in a Terminal Hotlist entry:

1 Open a Hotlist.

2 Select the terminal entry you want to edit.

3 From the Hotlist menu, choose Edit Properties.
The Telnet Host properties dialog appears:



4 Edit the information as necessary. (For information about editing Terminal Hotlist entries, see “Editing Terminal Hotlist entries” on page 2-18.)

5 Click Save.
The changes are saved to the Terminal Hotlist entry.

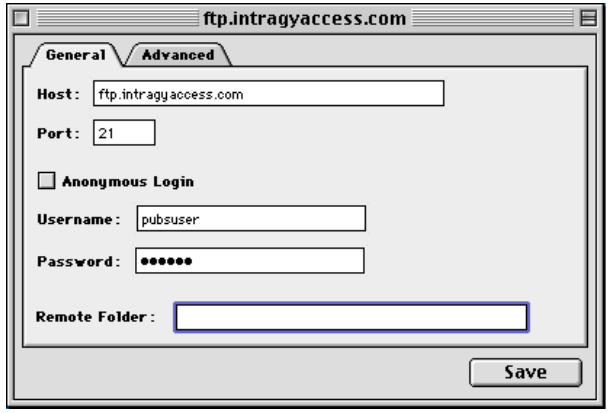
Editing FTP Hotlist entries

To edit the information stored in an FTP Hotlist entry:

1 Open a Hotlist.

2 From the Hotlist, select the FTP entry you want to edit.

3 From the Hotlist menu, choose Edit Properties.
The FTP site properties dialog appears:



4 Edit the information as necessary. (For information about editing FTP Hotlist entries, see “Using FTP to transfer files” on page 3-1.)

5 Click Save.
The changes are saved to the FTP Hotlist entry.

Editing Web page Hotlist entries

To edit the information stored in a Web page Hotlist entry:

1 Open a Hotlist.

2 From the Hotlist, select the web entry you want to edit.

3 From the Hotlist menu, choose Edit Properties.
The Web site properties dialog appears:

4 To change the address of the entry, click in the Uniform Resource Locator field and enter the new address for the site.

5 Click Save.

The changes are saved to the Web page Hotlist entry.

Renaming Hotlist entries

You can change the name of any Hotlist entry without opening the properties page for the entry. To rename a Hotlist entry:

1 Open a Hotlist

2 Select the entry to rename.

3 Click and hold the cursor on the entry until the name becomes an editable text field.

4 Type the new name for the entry.

The entry is renamed.

Removing Hotlist entries

You can remove entries from the Hotlist by selecting the item you want to remove and clicking the Delete button.

Using miscellaneous services

5

IntragyAccess includes the informational utilities Finger, Lookup Host, Lookup User, Ping, and Whois. You can use them to obtain information about remote hosts and their users.

Using Finger

Most Internet servers at educational institutions (that is, servers with URLs ending in .edu) and many Internet servers at other institutions (with URLs ending in .org) provide Finger access. When you are connected to such a server, you can use the Finger utility to obtain information about users with accounts on the server. The information varies from account to account. It usually includes the person's real name and the time of the person's most recent login, and might include a plan file. (Commercial servers rarely provide Finger access)

To use the Finger utility:

1 From the IntragyAccess menu, select Finger.
The Finger dialog appears:

2 In the field provided, type the name of the host you want to obtain information about, or type the name of the user and the name of the host you want to obtain information about (in the format <username@host>).

3 Click OK.

Information is displayed about the specified user or host.

Depending on the data entered in the Finger dialog, different information is displayed.

4 In the Name@host.host or IP address, enter the address you want to finger.

5 Click Finger

A new window containing results of your Finger request appears.

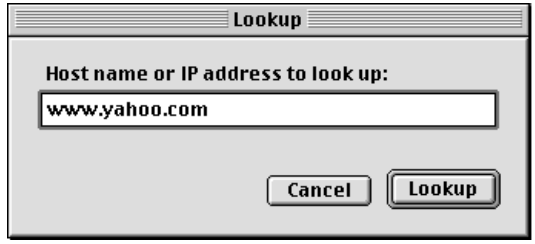
Using Lookup Host

The Lookup Host utility responds to your entry of an IP address by returning the name of the host at that address. Or, you can enter a host name to obtain its IP address.

To use the Lookup Host utility:

1 From the IntragyAccess menu, select Lookup Host.

The Lookup Host dialog appears:



2 In the field provided, enter the name or IP address of the host.
If you enter an IP address in the field provided, Lookup Name changes to Lookup Address.

3 Click Lookup Address or Lookup Name.
A new window appears containing information about the host.

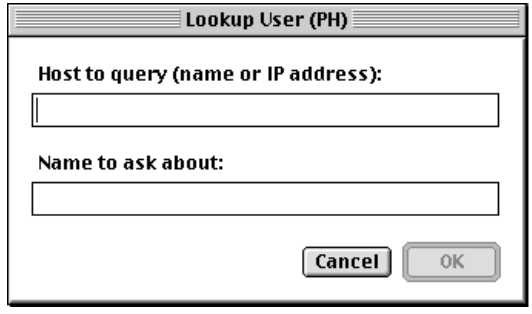
4 Click OK when you are done viewing the information.
The information window is closed.

Using Lookup User

This section explains how to use the Lookup User utility to obtain information about users on a particular server.

To use the Lookup User utility:

1 From the IntragyAccess menu, select Lookup User.
The Lookup User (PH) dialog appears:



2 In the Host to query field, enter the name or IP address of the organization from which you want to obtain information.

3 In the Name to ask about field, enter the name of the user you want to find.

4 Click OK.

If there is one person by this name listed in the phone book of the organization you listed, the information is displayed in the Response field in the resulting Lookup window.

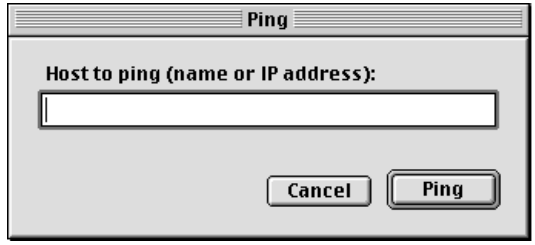
Using Ping

Ping is a utility that sends echo-request packets to a specified IP address. If the host at that address responds, you know that the address is active on the network and its host network is functioning normally.

To use the Ping utility:

1 From the IntragyAccess menu, select Ping.

The Ping dialog appears:



2 In the field provided, enter the name or IP address of the host you want to ping, and click OK.

A new window containing results of your Ping request appears.

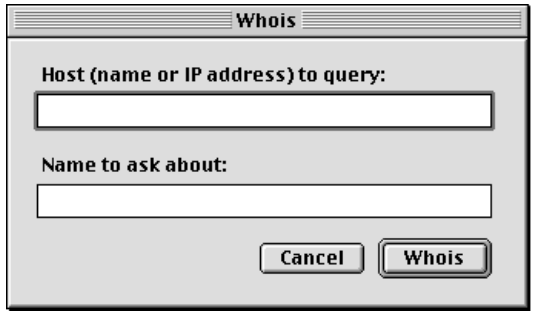
Using Whois

The Whois utility provides another way to obtain directory information about a particular user on a given system.

To use the Whois utility:

1 From the IntragyAccess menu, select Whois.

The Whois dialog appears:



2 Complete the Whois dialog. In the “Host to query field”, type the host name, or enter the IP address of a Whois server. In the “Name to ask about” field, type the name of the person or company you are seeking information about.

3 Click OK.

Information about the specified user is displayed.

Network Printing

6

LPR print client

Your IntragyAccess LPR print client is an extension that allows you to print any file on your Macintosh to any printer connected to a UNIX® print server responding to the LPR command.

LPR is a UNIX command used to print a file to a printer or another output device. It is also the protocol used to address a UNIX printer.

LPR Monitor and LPR Send are two printer utilities that are also included in your IntragyAccess package. LPR Send is a drag-and-drop application you can use to print PostScript or text files. LPR Monitor is an application you can use to view the status of your print jobs, and remove your print jobs, if necessary.

All printers that you want to access using your LPR print client must have an entry in the /etc/printcap file located on your print server. Since your print client accesses these printers remotely, your server must have an entry in the /etc/hosts.equiv or /etc/hosts.lpd file. Contact your System Administrator to be sure that these files are set up properly on the UNIX print server.

Using your LPR print client

You can access your LPR print client by selecting the LPR icon in the Apple menu, in the Control Panels and selecting LPR Client Setup. When the LPR icon is selected, the Chooser window displays the LPR pop-up menu, and a scrolling list of available network printers.

Setting up your print client

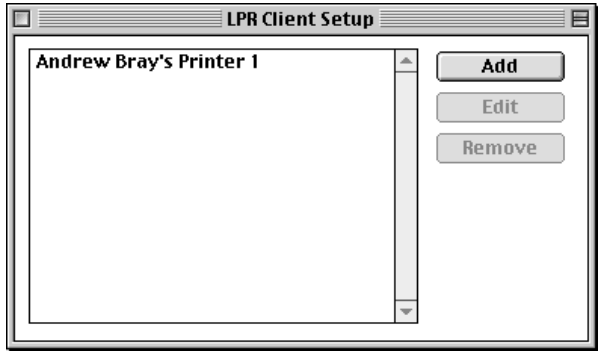
You need to set overall preferences for all printers you connect to, and add printers to the scrolling list of printers in the Chooser.

Adding printers

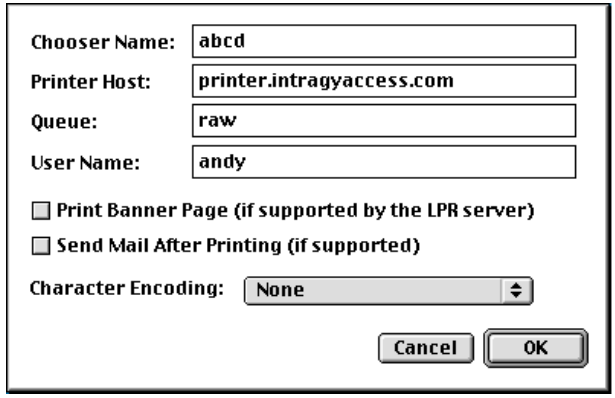
When you use your LPR print client for the first time, the scrolling list of available printers in the Chooser window is empty. If the scrolling list is empty or if the printer you want to print to is not listed, you need to add printers using the Add Queue option in the LPR pop-up menu.

To add a printer to the scrolling list of available printers in the Chooser:

1 From the Apple menu, select Control Panels, then LPR Client Setup.
The LPR Client Setup dialog appears:



2 Click Add.
The add printer dialog appears:



3 In the Chooser Name field, type the name for this printer as you would like it to appear in the Chooser.

4 In the Printer Host field, type the host name or IP address of the printer or print server to which you want to print.

5 In the Queue field, type the printer's official print queue name.

A print queue is a directory that holds output designated for the printer until the printer can receive it. It is also the name by which you access a printer. In most references in this manual, the term printer is used to include the print queue.

The print queue for your IntragyAccess print server can be found in the Print Queues folder, in the LPR Server Data folder, in the Extensions folder in the System Folder on the server. If you do not know the name of the print queue for the printer you want to add, ask your System Administrator for the official print queue name.

6 In the User Name field type your user name for this print server.

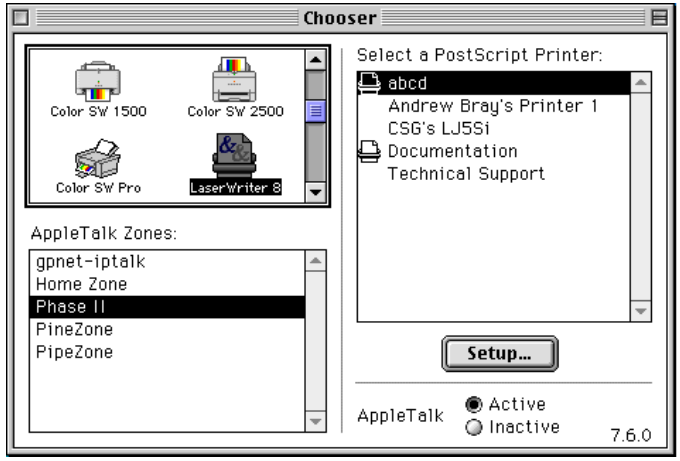
7 If you want a descriptive introductory page to be printed along with your document, click Print Banner Pages. The contents of this page depend on the server software installed on your print server.

8 If you want to receive a mail message notifying you when your document has been printed or if printing has failed, click Send Mail When Printed. Mail is sent to <user name>@<host name>.

Ask your System Administrator if the Print Banner Pages and Send Mail When Printed options are available on your server and are enabled.

9 Click OK.

The printer you added (printer “abcd”) appears in the scrolling list of available printers in the Chooser when you select the Laser Writer icon. For example:



Removing printers

You may find it necessary to remove a printer from the scrolling list of available printers in the Chooser.

To remove a printer from the scrolling list of available printers:

1 From the Apple menu, select Control Panels, then LPR Client Setup.
The LPR Client Setup dialog appears.

2 Select the printer you want to delete.

3 Click the Remove button.
The printer is removed from the scrolling list of available printers.

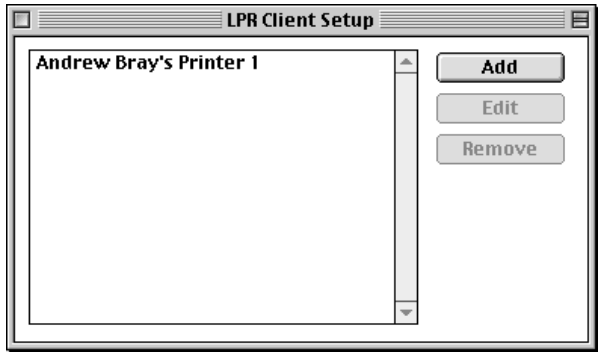
Editing printer information

You may find it necessary to change the information about a printer in the scrolling list of available printers in the Chooser.

To modify information for a printer:

1 From the Apple menu, select Control Panels, then LPR Client Setup.

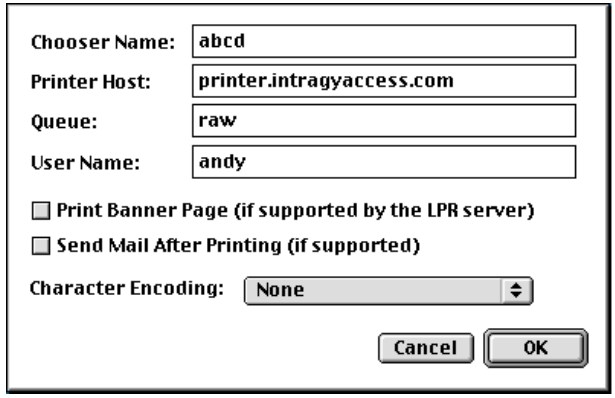
The LPR Client Setup dialog appears:



2 Select the printer you want to edit.

3 Click the Add button.

The edit printer dialog appears:



4 Edit the information as necessary. (For information about the fields in this dialog, see “Adding printers” on page 6-2.)

5 Click OK.

The changes you made to the selected printer are saved.

Printing using the LPR print client

Once you have properly set up your print client, you can select one of the printers to print to. For information about setting up your print client, including defining user preferences and adding printers, see Section starting on page 2.

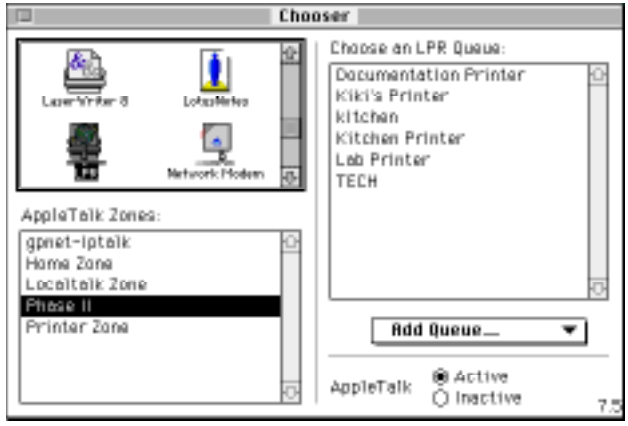
To select a printer to print to:

1 From the Apple menu, select Chooser.

The Chooser window appears.

2 From the scrolling icon list, select the Laser Writer 8 icon.

A scrolling list of available printers appears. for example:



3 From the scrolling list of available printers, select the LPR printer you want to print to.

4 Click the close box to close the Chooser window.

5 When you select Print from the File menu of any application, the document is printed to the printer you selected.

When you select your print client in the Chooser, the memory allocation of PrintMonitor is automatically adjusted to 150K. If you have a larger memory partition than 150K for PrintMonitor, your print client makes no adjustments.

LPD print server

Your IntragyAccess print server lets your Macintosh accept requests from LPR print clients, and send them to printers on your AppleTalk network.

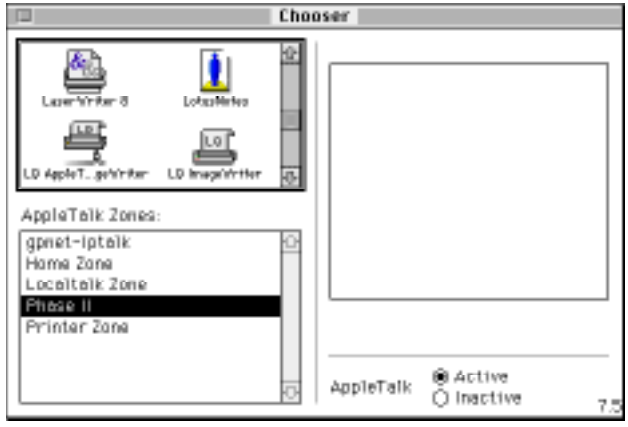
Setting up your LPD print server

Your print server requires that you have MacTCP or Open Transport properly configured, and that you have selected a PostScript printer in the Chooser.

To set up your print server:

1 From the Apple menu, select Chooser.

The Chooser window appears. For example:



2 From the scrolling icon list, select icon for the postscript printer you want to use in this case Laser Writer 8.

A scrolling list of available printers appears on the right side of the Chooser window.

3 Select a printer.

4 Click the close box to close the Chooser window.

Your print server is set up to direct print jobs it receives to the selected printer.

5 From the Apple menu, choose Control Panels.

The Control Panels window appears.

6 Double-click the MacTCP or TCP/IP icon.

7 Check to be sure that MacTCP or Open Transport are properly configured.

Your print server is set up to accept and process print requests.

You must start your print server before it can accept and process print requests. (For information about starting your print server, see "Starting and stopping your print server" on page 6-8.)

Starting and stopping your print server

Your print server is an extension that is started each time you restart your Macintosh. It remains running in the background, and shuts down when you shut down your computer.

Your IntragyAccess package contains a utility called LPR Server Monitor that lets you start and stop the LPR Server Extension without shutting down and restarting your Macintosh.

To start the LPR Server Extension:

1 Open your IntragyAccess folder, and double-click the LPR Server Monitor icon.

The LPR Server Monitor application launches, and the Log window appears.

2 From the Server menu, choose Start Server.

Your LPR Server Extension is started, and three status windows appear.

If the Start Server option is unavailable, your LPR Server Extension is already running. It was probably started when you last restarted your Macintosh. (For information on the status windows, see "Viewing the status of print requests and print jobs" on page 6-9.)

To stop the LPR Server Extension:

1 Open your Extensions folder, and double-click the LPR Server Monitor icon.

The LPR Server Monitor application launches and the Log window and status windows appear.

2 From the Server menu, choose Shut Down Server.

Your LPR Server Extension is shut down, and the three status windows are no longer displayed.

If the Shut Down Server option is unavailable, your LPR Server Extension is not running.

Information for print clients connecting to your print server

This section details the information necessary for print clients connecting to your print server.

- For users to send print requests to your print server, they must have appropriate LPR printing software on their computers. Under UNIX systems, users need the Berkeley-style LPR remote printing software.
- The queue name for your print server is always lp.
- For UNIX clients to print to your print server, their system administrators must make an appropriate entry in the etc/printcap file for their systems. This includes the valid names for your host, printer, and print queue.

  The following is an example of a possible printcap file, where the printer name is printer, the host name is host.intragyaccess.com, and the queue name is lp:

  ```
  printer:\
  :lp=lp;rm=host.intragyaccess.com:sd=/usr/spool/lpd/
  printer:\
  :lf=/usr/adm/lpr:
  ```

Viewing the status of print requests and print jobs

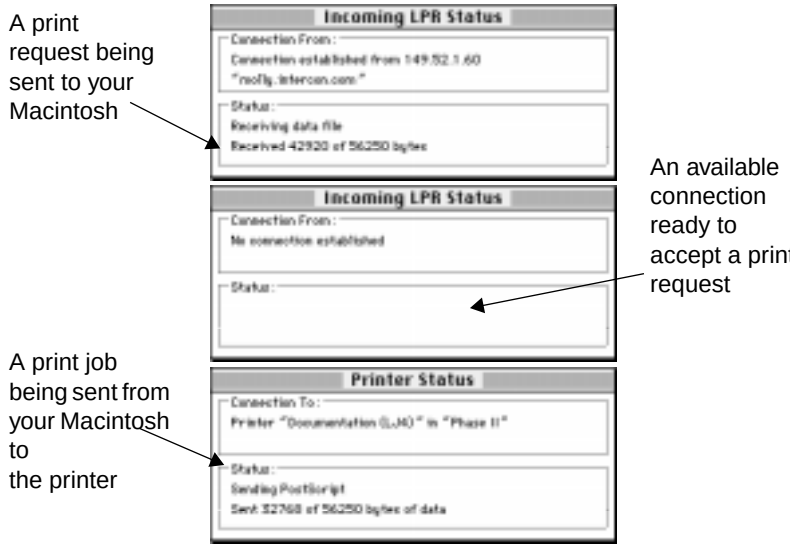
Your IntragyAccess package contains a utility called LPR Server Monitor that lets you monitor the status of print requests that clients send to your Macintosh, and print jobs that your Macintosh sends to the printer.

If you want to monitor your print server from a remote Macintosh, see “Setting up your print server for remote monitoring” on page 6-10.

To use the LPR Server Monitor application to monitor the status of print requests and print jobs:

1 Open your Extensions folder, and double-click the LPR Server Monitor icon.

The LPR Server Monitor application launches, and three status windows appear. For example:



If the status windows are not displayed when you launch the LPR Server Monitor application, the LPR Server Extension is not running. (For information on starting the extension, see "Starting and stopping your print server" on page 6-8.)

1 Monitor the Incoming LPR Status windows for information on print requests that are being sent to your Macintosh.

2 Monitor the Printer Status window for information on print jobs that are being sent from your Macintosh to the printer selected in the Chooser.

3 To close the status windows, choose Quit from the File menu.

The LPR Server Monitor application quits, and the status windows are closed. Quitting the LPR Server Monitor application does not stop the print server, and print clients are still able to print to your server.

Setting up your print server for remote monitoring

You can allow users to connect to your Macintosh and monitor your print server remotely by enabling the Program Linking option in the Sharing Setup Control Panel:

To set up your print server to be monitored remotely you must be sure of the following:

- Your print server is running on your Macintosh, and you have started Program Linking in the Sharing Setup Control Panel of your Macintosh
- The Print Server Monitor application is installed on the computer that is going to monitor your print server
- You have defined users in the Users & Groups Control Panel if you want to allow only specific users to be able to monitor your print server remotely (otherwise anyone is granted access)

  For information on accessing the Sharing Setup Control Panel from the Apple menu, see the documentation that came with your Macintosh. For information on configuring the Users & Groups Control Panel to allow only specific users to monitor your server remotely, see the documentation that came with your Macintosh.

Monitoring a print server remotely

You can monitor your print server remotely, or monitor other print servers on your network using the Print Server Monitor application.

To use the Print Server Monitor application to monitor the status of remote print requests and print jobs:

1 Open your IntragyAccess folder, and double-click the LPR Server Monitor icon.

The Print Server Monitor application launches.

2 From the Server menu, select Choose Server.

The dialog similar to the one below appears:

3 From the AppleTalk Zones scrolling list, select the AppleTalk zone where the Macintosh running the print server you want to monitor is located, if you are connected to an AppleTalk network.

The computers located in the selected AppleTalk zone appear in the Macintoshes scrolling list.

4 From the Macintoshes scrolling list, select the Macintosh that runs the print server you want to monitor.

The print servers running on the selected Macintosh appear in the Servers scrolling list.

If the Macintosh you want to connect to is not listed in the Macintoshes scrolling list, it may be shut down. If the Macintosh is listed, but no server is listed in the Servers scrolling list, the print server may not be turned on. To find out more information, contact the person responsible for the Macintosh you are trying to connect to.

5 From the Servers scrolling list, select the print server you want to monitor, and click OK.

The dialog similar to the one below appears:

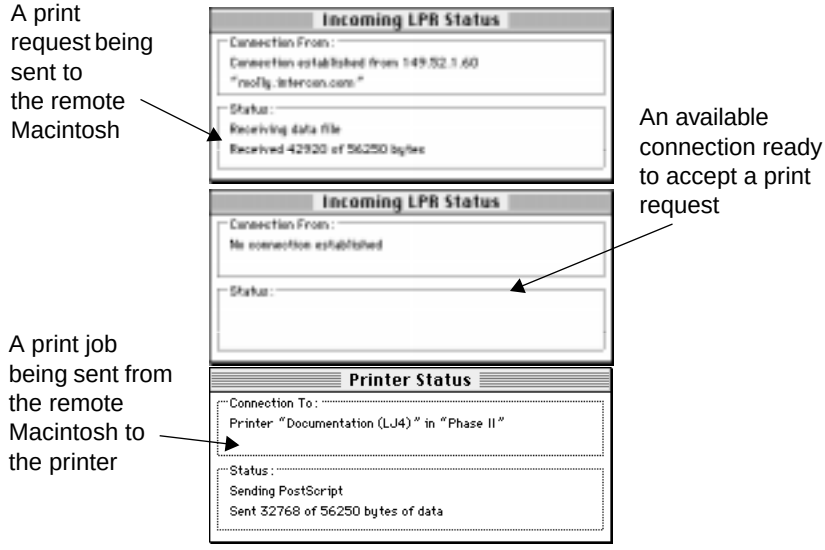
6 If no specific user account has been set up for you, click Guest.

OR

If a user account has been set up for you, click Registered User and type your user name and password in the fields provided.

7 Click OK.

Three status windows appear. For example:



8 Monitor the Incoming LPR Status windows for information on print requests that are being sent to your Macintosh.

9 Monitor the Printer Status window for information on print jobs that are being sent from your Macintosh to the printer selected in the Chooser.

10 To close the status windows, choose Quit from the File menu.

The LPR Server Monitor application quits, and the status windows are closed.

You cannot shut down or restart a remote print server, since the Start Server and Shut Down Server options of the Server menu only affect the print server running on your Macintosh. If you choose these options while monitoring a remote print server, you are starting or shutting down your own print server.

If the LPR Server Monitor application loses contact with the print server it is monitoring for more than 60 seconds, the status windows disappear, and the LPR Server Monitor application attempts to reconnect. The status windows reappear when a connection is reestablished.

Using your print server log

Your print server automatically keeps information detailing the activities of your print server. You can view the information in a log file, or in the Log window. The log file can be opened in any text editor, such as SimpleText™, and contains up to 16K of information. The Log window can be opened using the LPR Server Monitor application, and contains the last 200 lines of the most recent log file.

Using the log file

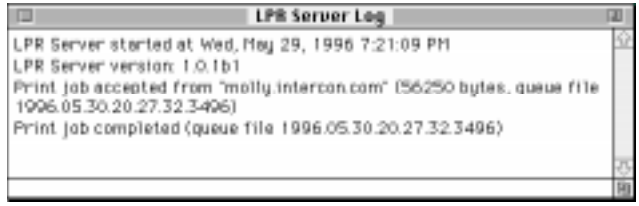
A log file, detailing the history of the activities of your server, is automatically generated and maintained by your print server. The current log file is always named LPR Server Log. When the size of the current log file reaches 16K, the log is renamed LPR Server Log - 1, and a new current log is created.

When this current log reaches 16K, it is renamed LPR Server Log - 1, and the previous log is renamed LPR Server Log - 2, and a new current log is created. A log is renamed four times, and then deleted.

If you want to ensure that a log file is never deleted, manually rename it something other than LPR Server Log, so that your print server does not recognize it, and will not rename or delete it.

To open an print server log file:

1. Open the System Folder.
   The contents of the System Folder appear.
2. Open your Extensions folder.
   The contents of your Extensions folder appear.
3. Open the LPR Server Data folder.
   The contents of the LPR Server Data folder appear.
4. Open the LPR Server Logs folder.
   Your print server log files appear.
5. Double-click the log file you want to view.
   The log file is opened in a standard text editor, such as SimpleText. For example:

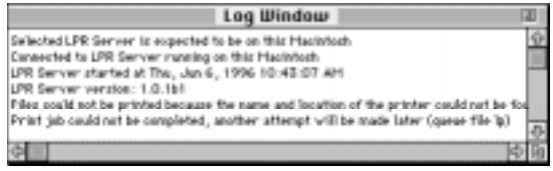


Using the log window

The LPR Server Monitor application lets you view the Log window, which displays the last 10 lines of the most recent log information generated by your server, and can store up to 200 lines of current log information. You can also print and save the contents of the Log window.

To view the Log window:

1. Open your IntragyAccess folder, and double-click the LPR Server Monitor icon.
   The LPR Server Monitor application launches, and the Log window is automatically displayed. For example:



2 To close the Log window, choose Quit from the File menu.

The LPR Server Monitor application quits, and the Log window is closed.

The Log window is constantly displayed while the LPR Server Monitor application is running, even if your LPR Server Extension is shut down.

To print the entire contents of the Log window, choose Print from the File menu.

To save the entire contents of the Log window as a file, choose Save from the File menu.

To copy the entire contents of the Log window to the Clipboard, choose Copy Log from the Edit menu.

You cannot select text in the Log window, and therefore cannot print, save, or copy partial information from the Log window.

Remote access

7

Connecting to a network from a remote location

Today, protocols provide you with a convenient way to connect your computer to a network, and have access to the same services that would be available if you were directly connected to the local area network (LAN). The protocol you select depends on the protocols your software supports, and on your needs.

Using IntragyAccess, you must dial in to your Local Area Network (LAN) to gain remote access.

Using Ascend PPP

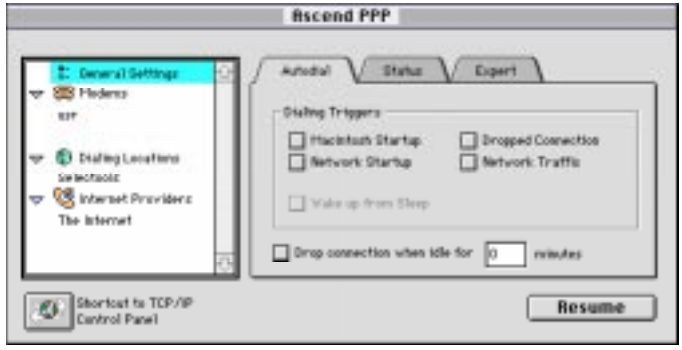
Ascend PPP is a Point-to Point Protocol (PPP) client. PPP is the way your Macintosh connects directly to the Internet over a telephone or ISDN line.

PPP is also a standard that allows multiple LAN protocols to be used simultaneously over a modem line or other serial line connection.

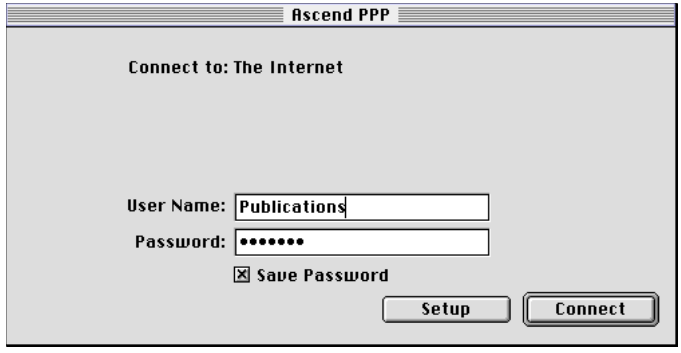
To start Ascend PPP:

In the IntragyAccess folder, double-click the Ascend PPP icon ().

Ascend PPP starts and the main window appears:



Or if you have never configured Ascend PPP, The ascend PPP Setup window appears:



Connecting to the Internet

This section describes how to connect to the Internet through a PPP connection. First, start Ascend PPP. In the Ascend PPP window:

1. In the User Name field, type your user name for the Internet Service.
2. In the Password field, type the password for your user name.
3. If you want to save the password as part of this configuration, click Save Password.
4. Click Connect.

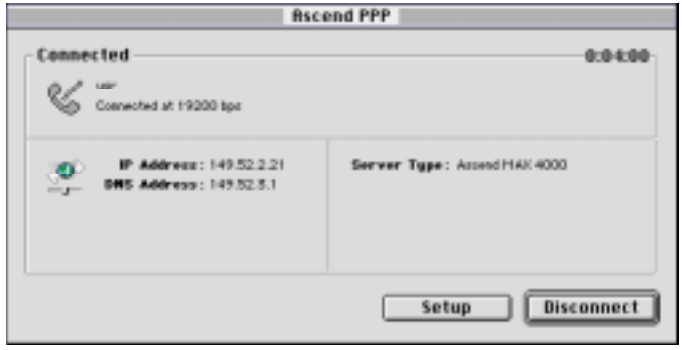
   Ascend PPP connects to your Internet service.

Disconnecting from the Internet

To disconnect from the Internet:

1 Click the Ascend PPP icon ( ).

If a connection is active, the Ascend PPP connection window appears:



2 Click Disconnect.

Ascend PPP disconnects from your Internet service and hangs up your modem.

Changing Ascend PPP setup information

Ascend PPP can create modem, dialing location, and Internet provider configurations for you, if you choose Automatic in each of the items in the scrolling list on the left side of the main Ascend PPP window.

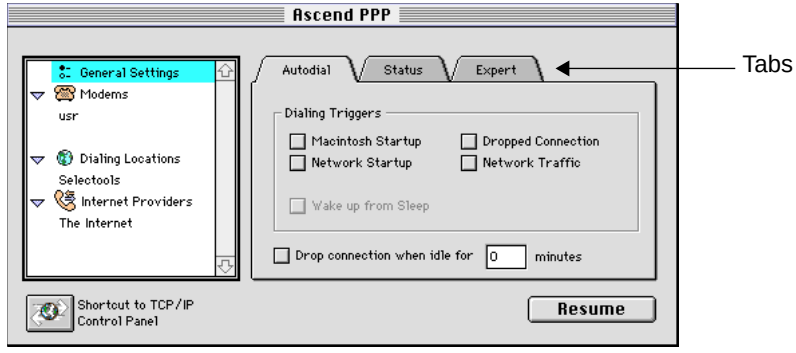
To begin setup of Ascend PPP:

1 In the IntragyAccess folder, double-click the Ascend PPP icon ( ).

A window similar to the window below appears:

2 Click Setup.

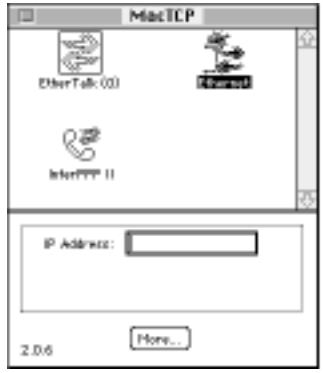
The right side of the resulting dialog displays different tabs depending on which service you select in the scrolling list at the left of the window. For example:



To set up MacTCP:

1 Click the MacTCP/OT button ( ).

A MacTCP window appears. For example:



2 Configure your MacTCP/OT connection per the system documentation.

3 Close the MacTCP window.
Your configuration is saved.

To set up Open Transport:

1 Click the OT button ( ).
A TCP/IP Default window appears. for example”

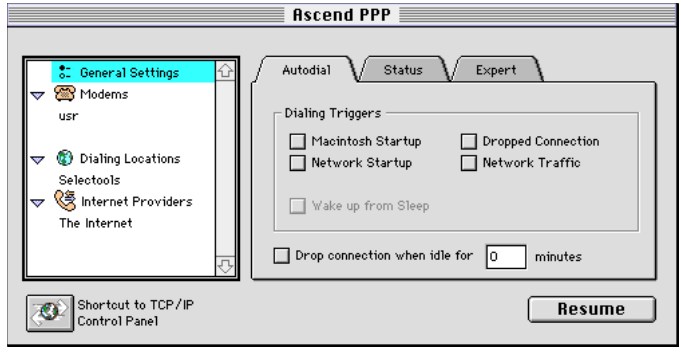
2 Configure your Open Transport connection per you system documentation.

3 Close the OT window.

Your configuration is saved.

Setting General preferences

To set general autodial, status, and expert preferences, click the General Settings icon in the scrolling list at the left of the Ascend PPP window. The General Settings Autodial tab is frontmost by default. Autodial preferences tell Ascend PPP when to dial automatically or when to automatically drop the connection. Status preferences tell Ascend PPP which windows to display to show the connection status. Expert settings are settings that allow Ascend PPP to launch programs after a connection is made or after a connection is dropped.



Autodial preferences

Autodial preference allow you to choose when Ascend PPP creates or drops a network connection. For example, if you want you to make your Internet connection as soon as you start your Mac, then click the Macintosh Startup checkbox and Ascend PPP will make your Internet connection upon startup.

To set Autodial preferences:

1 In the Dialing Triggers Area, select which events you want to trigger the dialing sequence.

2 If you want Ascend PPP to terminate your connection after a set amount of time, click Drop connection when idle for. In the field provided, type the number of minutes you want to pass before Ascend PPP terminates the connection.

3 To make your connection now, click Resume, or to configure other general settings, click another tab (Status or Expert). Or, to set more preferences, click one of the other choices in the scrolling list.

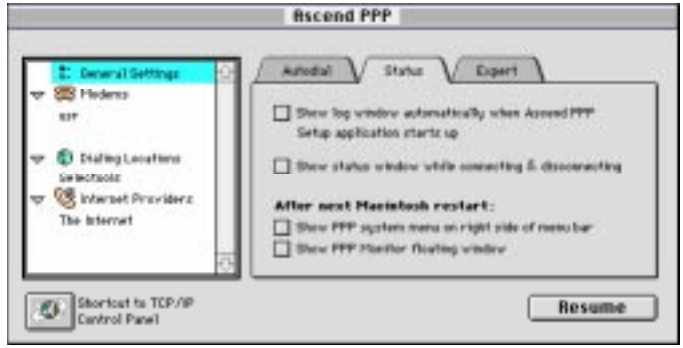
Status options

Status options allow you to customize what windows appear when Ascend PPP is active. The status windows gives short descriptions of PPP activity during connection and disconnection. The system menu displays the pull-down Ascend PPP menu and allows you to execute the command in the Ascend PPP menus. The PPP Monitor floating window is a small box displaying connection information and the current address of your connection. The log window gives detailed information of all activity over the PPP connection.

To set Status options:

1 Click the Status tab.

Status options appear:



2 Choose the status items you want Ascend PPP to display by clicking their corresponding checkboxes.

The changes do not take effect until you quit and restart Ascend PPP.

3 To make your connection now, click Resume, or to configure other general settings, click another tab (Autodial or Expert). Or, to set more preferences, click one of the other choices in the scrolling list.

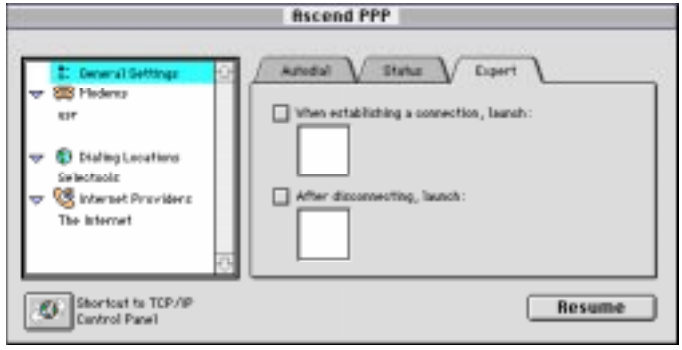
Expert options

The Expert options allow you to tell Ascend PPP to launch programs on connection or disconnection.

To set Expert options:

1 Click the Expert tab.

Expert options appear:



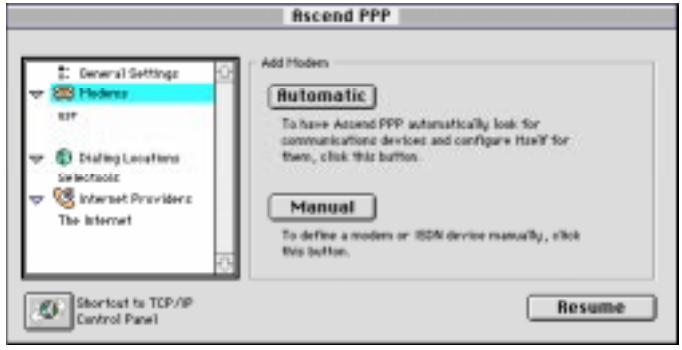
2 To choose an application to launch when you establish a connection, click When establishing a connection, launch, and drag an application icon into the box below.

3 To choose an application to launch after disconnecting, click the “After disconnecting, launch”, and drag an application icon into the box below.

4 To make your connection now, click Resume, or to configure other general settings, click another tab (Autodial or Status). Or, to set more preferences, click one of the other choices in the scrolling list.

Setting Modem preferences

To set modem preferences, click the Modem Preferences icon ( ) in the scrolling list at the left of the Ascend PPP window. The main modem preferences appear:



To have Ascend PPP seek the modems installed on your computer and automatically configure them for you, click Automatic. Then click Resume to make your connection now, or click one of the other choices in the scrolling list to set more preferences.

OR

To create a new modem preferences configuration manually:

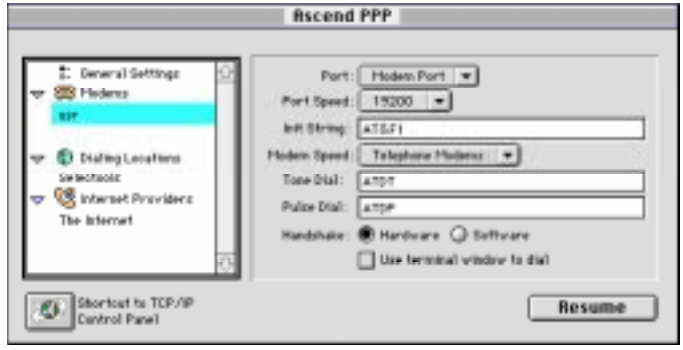
1 Click Manual.

The New Modem dialog appears:

2 In the field provided, type a name for the new modem configuration.

3 Click OK.

The new modem configuration options appear:



4 Select the options for this modem configuration:

- From the Port pop-up menu, select the connection Port for your modem.
- From the Port Speed select the speed of the port you are using to connect to the Internet.
- In the Init String field, type the connection command.
- From the Modem Speed pop-up menu select the speed of your modem.
- In the Tone Dial and Pulse dial fields, type the commands for each of these types of connections.
- In the Handshake area, select whether the connection to your network is made using either hardware or software protocols.
- If you prefer to use a terminal window to dial, click Use terminal window to dial.

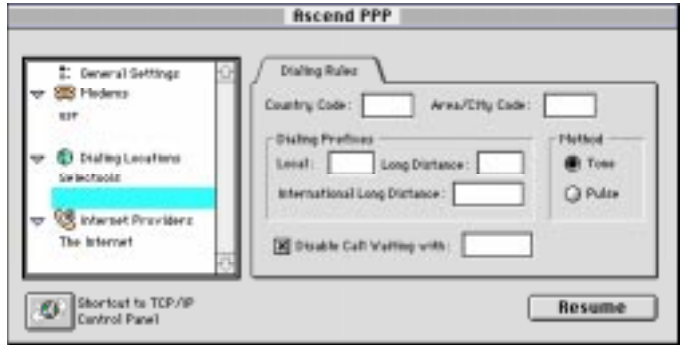
5 To make your connection now, click Resume.

OR

To set more preferences, click one of the other choices in the scrolling list.

Setting Dialing Location preferences

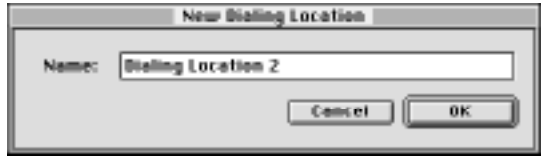
To set dialing locations preferences, click the Dialing Locations icon ( ) in the scrolling list at the left of the Ascend PPP window. The dialing location setup window appears:



To create a new dialing location configuration manually:

1 Click Manual.

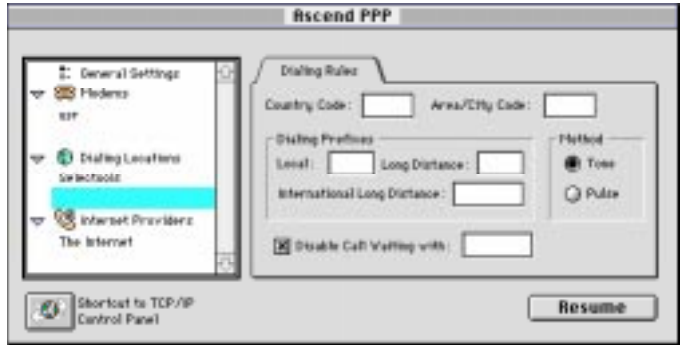
The New Dialing Location dialog appears:



2 In the field provided, type a name for the new configuration.

3 Click OK.

The Dialing Locations Dialing Rules tab appears:



4 In the appropriate fields, type your country code and area/city code.

5 In the Dialing Prefixes area, type any necessary prefixes for local, long distance, or international long distance phone calls.

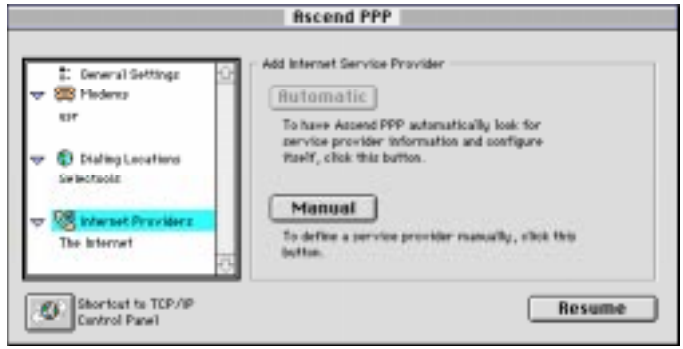
6 In the Method area, click either Pulse or Tone dialing.

7 If you want to disable call waiting, click Disable Call-Waiting with, and in the field provided, type the phone command for disabling call waiting.

8 To make your connection now, click Resume or to set more preferences, click one of the other choices in the scrolling list.

Setting Internet Provider preferences

To set Internet provider preferences, click the Internet Providers icon ( ) in the scrolling list at the left of the Ascend PPP window. The dialing location setup window appears:



To create a new modem preferences configuration manually:

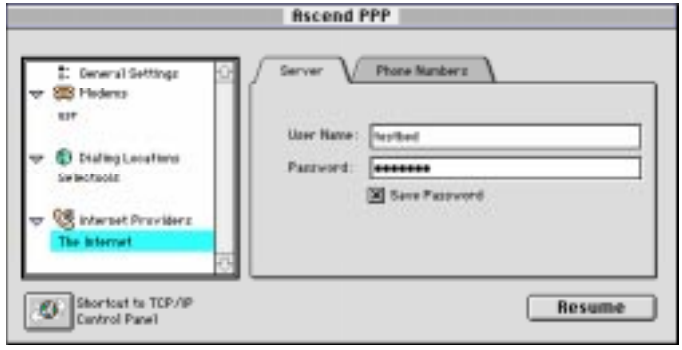
1 Click Manual.

The New Internet Provider dialog appears:

2 In the field provided, type a name for the new configuration.

3 Click OK.

Internet provider server options appear:



Server options

By setting Server options you tell Ascend PPP what type of server your network uses.

To configure server options for your network:

1 If server options are not already displayed, click the Server tab.
Internet provider server options appear.

2 In the User Name field, type your username for this particular Internet Provider.

3 In the Password field, type the password associated with the username entered in Step 2.

4 To store the password as part of this configuration, click Save Password.

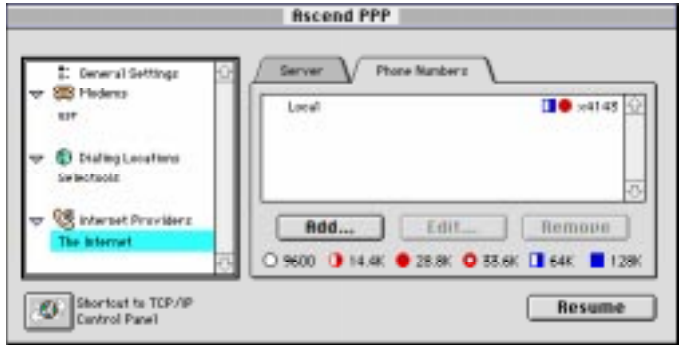
5 To make your connection now, click Resume or to set more preferences, click one of the other choices in the scrolling list. Or, to configure other items, click the another tab (Phone Numbers or Expert).

Phone numbers

The Phone numbers tab allows you to set specifics for dialing into your network and to disable call waiting if necessary.

To set Phone Numbers options:

1 Click the Phone Numbers tab.
Phone number options appear:



2 To add a new phone number configuration, click Add.

The New Phone Number dialog appears:

3 In the City field, type the city that you are connecting to.

4 In the Phone field, type the phone number for the connection.

5 From the pop-up menus, select the type of calls accepted by this phone number and the maximum speed for each type of connection.

6 To add the configuration to the list, click OK.

The configuration is added to the list.

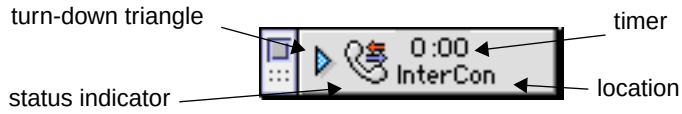
7 To make your connection now, click Resume or to set more preferences, click one of the other choices in the scrolling list. Or, to configure other items, click the another tab (Server or Expert).

Using the PPP Monitor window

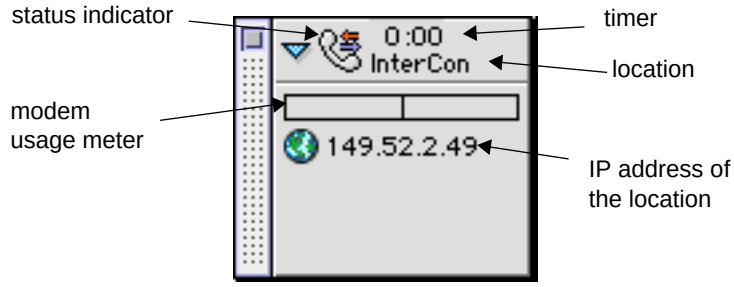
Ascend PPP has a PPP Monitor window that you can activate to track activity happening over the PPP connection.

To activate the PPP Monitor window, choose PPP Monitor window from the View menu.

The basic monitor window (shown below) shows status (connected or disconnected), how long you have been connected, and the location you are connected to.



To see an expanded version of the PPP Monitor window, click the turn-down triangle. The Expanded PPP Monitor window appears:



The Modem usage meter shows the speed of data moving over the connection. The bar indicates the speed of the connection.The connection speed can sometimes exceed the maximum when the data travelling over the connection is highly compressed.

The IP address shows the IP address of the location.

DeskDial

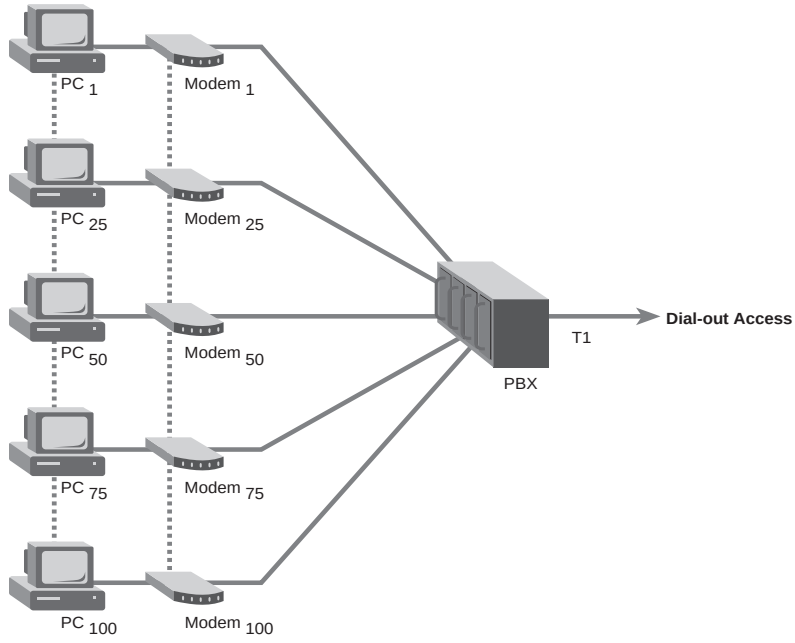
A

DeskDial makes it possible for data-communications programs, such as terminal emulators and fax programs, to use a modem in a MAX as though it were a modem connected directly to the computer.

Most products in the Ascend MAX family can include modems. These modems can accept incoming calls, such as calls from telecommuters connecting to a corporate network or calls from Internet users connecting to an Internet service provider. In addition, modems in a MAX 200 Plus, 1800, 2000, or 4000 series unit can make outgoing calls. DeskDial is software that lets terminal emulators, fax programs, and other data-communications programs use MAX modems for outgoing connections. It makes MAX modems look and work as though they were connected directly to a computer running a data-communications program.

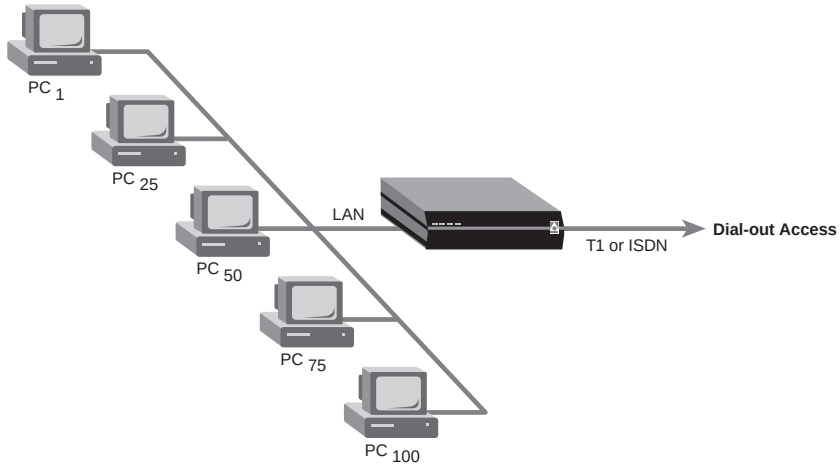
How DeskDial works

DeskDial creates a new COM port that a data-communications program can connect to. For almost all of the operations the program performs, this COM port behaves just like one of the computer's built-in COM ports with a modem attached. When the program sends data to or gets data from this COM port, DeskDial uses a TCP/IP local-area network to transport the data to or from the MAX modem. The MAX and the computer running the program must be on the same local-area network.



An alternative is to provide an analog modem pool that is shared by many users. Although this is normally much better than using individual modems, there is a better solution: using DeskDial with modems in a MAX, as shown in the next illustration. This solution has many advantages:

- Using digital modems in the MAX rather than analog modems eliminates problems with line noise and the slower throughput that results.
- You can use a single network connection to the MAX for outgoing calls rather than allocating an analog line from a PBX for each modem.
- You can centralize administration of modems using console-based management tools.
- Fewer wires and connections simplify troubleshooting.
- The MAX includes security features that let you control access to modems and your network.



Limitations of DeskDial

You can use DeskDial only for outgoing modem connections. You cannot use it for incoming connections to a data-communications program, such as incoming faxes.

You cannot use communications programs written for MS-DOS with DeskDial.

What you need to use DeskDial

Hardware requirements

Each computer that uses DeskDial requires an Ethernet connection to a local-area network. The network must use TCP/IP network protocols.

There must one or more of the following MAX units on the same local-area network:

- A MAX 1800, 2000, or 4000 series unit with a digital modem card and TCP/IP support.

- A MAX 200 Plus with one or more PC Card (PCMCIA) modems.

  Note: If a MAX 200 Plus has more than one modem, all the modems should be the same type.

  Note: DeskDial cannot specify which of the MAX 200 Plus modems to use, and using identical modems ensures that any modem initialization that is required will work for any of the modems.

See the Read Me file included with your version of DeskDial to find out what version of the MAX software is required.

To use fax software, the modems must have Class 2 fax capability. For a list of currently supported modems and their capabilities, see the Ascend World Wide Web site at

`http://www.ascend.com/`

DeskDial works best when the computers and MAX are on the same segment of the local-area network (that is, with no bridges or routers between them) and when network traffic on the segment is not unusually high. The performance of DeskDial is often acceptable when there are one or more intervening bridges or routers, provided that the bridges or routers or heavy network traffic do not significantly delay the transmission of data. Delays in the transmission of data can reduce the maximum speed of a communications program. If the delays are severe, a communications program can lose its connection to the MAX modem.

Software requirements

Caution: Using the wrong version of DeskDial for your operating system can cause serious problems, including damage to your system software.

To use DeskDial, your computer must be properly configured for connecting to a TCP/IP network.

Data-communications programs you use with DeskDial must communicate with a COM port (such as COM1 or COM2) rather than directly with your computer's serial communications hardware. Nearly all communications programs written for any version of Microsoft Windows communicate with a COM port;

communications programs written for MS-DOS, which are not supported by DeskDial, do not.

Data-communications programs you use with DeskDial must also use hardware flow control (RTS/CTS) when communicating with a MAX modem. Most fax programs use software flow control (XON/XOFF) by default, and you must change this setting before using any of these programs with DeskDial.

Getting information from your system administrator

Before configuring DeskDial or any communications programs, get the following information from your system administrator:

- The numbers of the COM ports on your computer and whether they are currently being used.

  Most computers have at least two COM ports, normally COM1 and COM2, and many have four. There is a COM port for each external serial connector that is currently enabled (most computers have two of these). There can also be COM ports for internal serial devices, such as an internal modem card or a bus mouse controller card.
- If there is more than one MAX on your local network, the name of the MAX to connect to.
- If the MAX is not in the same subnet as your computer, the IP address of the MAX.
- The immediate modem port to use on the MAX.
- Your user name, if a user name is required to use the MAX modem.
- A password, if one is required to use the MAX modem.
- If you are using modems in a MAX 200 Plus unit, the brand and model of the PC Card modems installed in it.

Configuring the DeskDial COM port

DeskDial for the Macintosh is a system extension that installs into the Extensions folder within the System Folder.

Note: As a system extension, DeskDial exhibits the same properties as many of the features of the system software. For example, if you drag the icon on top of

the System Folder, the Finder will ask you if you want to put the item in the Extensions folder instead.

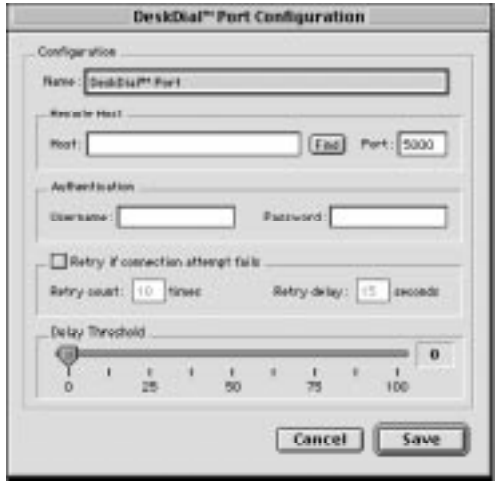
To add and configure the COM port DeskDial will use for MAX modems:

1 From the Apple menu, choose Control Panels and then DeskDial.

The DeskDial configuration dialog appears:

2 Click New.

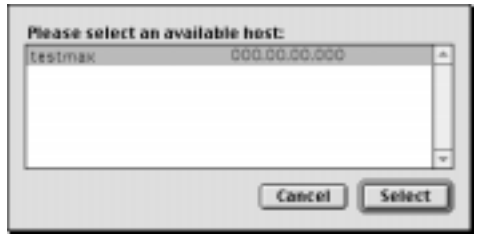
The DeskDial Port Configuration dialog appears:



3 In the Name field, enter a name for this particular port configuration.

4 In the Remote Host area, in the Host field enter the IP address of the MAX you want to connect to. Or to search for any MAX that may be on your

subnet, click the Find button. If there is a MAX on your subnet, the name of the MAX appears in the following dialog:



To use a MAX from this dialog, select the MAX, and click the Select button.

The DeskDial Port Configuration dialog reappears.

5 In the Remote Host area, in the Port field, type the enter the number of the immediate modem port to use.

If you do not have or do not know the configured modem port, see your system administrator.

6 In the Authentication area, in the User Name and Password fields, enter a user name and password if they are required.

7 If the connection to the MAX fails on the first attempt, you can select options to make DeskDial continue to attempt to connect at a given interval.

Select “Retry if connection attempt fails” to make more than one attempt at connection.

Enter the number of connection attempts you want DeskDial to make in the Retry count field.

Enter the number of seconds between when DeskDial attempts to make a connection and when DeskDial tries again, in the “Retry delay” field.

8 In the Delay threshhold area, set a threshold value for faxing.

Note: If you are creating this particular DeskDial specifically for faxing you will need to set this value. Unless you are using DeskDial to send or recieve faxes this value should always be zero. Some fax packages require that we slow down the speed of the packets being sent to the remote access server to remain within T.30 fax standards regarding timeouts. See the README file for suggested values for commonly used fax packages.

9 Click Save to Save the port configuration.

The DeskDial configuration dialog appears with the port you have created in the port list.Your DeskDial configuration is active and you are now able to use the MAX as a COM port.

Testing a DeskDial COM port

To test the virtual COM port you have created:

1. From the Apple menu, choose Control Panels and then DeskDial.
   The DeskDial configuration dialog appears.
2. Select the COM port you want to test.
3. Click the Test button to make sure DeskDial is able to make a connection to the MAX you have selected.

Editing a DeskDial COM port

To edit a virtual COM port you have created:

1. From the Apple menu, choose Control Panels and then DeskDial.
   The DeskDial configuration dialog appears.
2. Select the COM port you want to edit.
3. Click the Edit button.
   The DeskDial Port Configuration window appears.
4. Change the information as necessary.
5. Click Save to save the changes you have made to the configuration.

Deleting a DeskDial COM port

To remove a virtual COM port you have created:

1. From the Apple menu, choose Control Panels and then DeskDial.
   The DeskDial configuration dialog appears.
2. Select the COM port you want to remove.
3. Click the Delete button.
   The DeskDial COM port you have selected is removed from the port list.

Configuring a MAX for DeskDial

All MAX 200 Plus and MAX 800 units support both DeskDial. To make the modems in a MAX available to DeskDial:

1. In the Edit window of the VT100 interface, open the Ethernet > Mod Config > TServ Options menu.
2. Set Immediate Modem to Yes.
3. Set Imm. Modem Port to a value between 5000 and 65535 that is not already used to specify a TCP/IP port.

   This can be any value in this range. When users configure DeskDial, this is the value they enter for Immediate Modem Port.
4. Set Imm. Modem Access to the type of authentication required for using the modems.

   Choose None if no authentication is needed, Global to use the same password for all users (no user name is required), or User to require both a user name and a password. If you choose User, DeskDial uses either a local connection profile or a RADIUS profile for authentication. If it uses a connection profile, it uses the value of the Recv PW parameter as the password rather than the Send PW parameter.

   Note: Not all these authentication modes are available in MAX software earlier than version 4.6Ci17. See the Read Me file included with your version of DeskDial to find out what version of the MAX software is recommended.
5. If a password is required for either Global or User authentication, set Imm. Modem Pwd to Yes.
6. If you chose User as the value of Imm. Modem Access, you must enable modem dialout in the profile for each user to whom you grant modem access:
   - In a Connection profile for the user, set Dialout OK to Yes.
   - In a RADIUS profile for the user, set Ascend-Dialout-Allowed to Yes.

Glossary

alias— An additional and optional name used to refer to the host.

ARP— Address Resolution Protocol. Address Resolution Protocol. This portion of the TCP/IP protocol maps an IP address to the physical address (Ethernet Address) of the PC that it is on, helping to identify PCs on an Ethernet LAN. See also Ethernet, TCP/IP, and proxy ARP.

ASI— Asynchronous SCSI Interface. A type of driver commonly used in LAN environments. See also SCSI.

baud— The signalling rate of a line. It is the number of transitions that are made per second. Not the same as bps.

baud rate— The speed at which information is transferred through a serial port.

boot— To start or restart your computer.

BOOTP— BOOTstrap Protocol. A protocol that provides a way for a host to find its IP address. It also provides the address of a bootserver, of an intervening gateway (if present), the subnet mask, and addresses of domain name servers. Compare with RARP server.

bps— Bits per second. A measure of the rate of data transmission. Not the same as baud.

character— Any symbol that has a widely understood meaning and can convey information. Some characters (such as letters, numbers, and punctuation) can be displayed on the monitor screen and printed on a printer. Compare with *control character.*

character set— A group of unique symbols and codes.

client— A program or computer that requests services from a network or server. The client provides the user interface and performs some or most of the application processing. See also *server.*

client-server— The methodology of interaction between hosts in a distributed system in which one host sends a request to another host and waits for a response. The client is the originator of the request, the server is the responder.

command prompt— The characters displayed at the beginning of the command line that indicate your computer is ready to receive input. Also known as an MS-DOS prompt.

connection— A path that provides reliable delivery stream service between two protocol modules.

control character— A non-printing character used to control or modify the way information is printed or displayed. Also called *control code*.

data bit— The number of bits used to represent a single character.

dialing— Connecting to a network by using a modem, which dials over a standard telephone line.

DDP-IP— An AppleTalk-to-Ethernet (or other network) gateway that supports TCP/IP and AppleTalk protocols, and can understand IP packets encapsulated inside AppleTalk packets. This is the only way to run TCP/IP over LocalTalk, which is where DDP-IP gateways are generally used.

default— A standard setting or action taken by hardware or software if you have not specified otherwise.

domain— A part of the Internet naming hierarchy, consisting of a series of names separated by periods. For example, in the host name `abcd.intragyaccess.com`, `abcd` is in the domain `intragyaccess`, and intragyaccess is in the domain `com`.

DNS server— Domain Name Service Server. An online distributed database responsible for mapping host names to their respective IP addresses. Also refers to Domain Name Server.

driver— Software that connects a standard operating system interface to a peripheral device.

expect string— A string that your script waits to receive before sending a response. See also *send string*.

flow control— The process that determines the rate at which information is transferred from one device to another. Also called hardware handshaking.

gateway— A computer that interconnects two different types of networks by performing the protocol conversion . See also *network*.

group— A collection of applications, accessories, or documents within Windows Program Manager. Used for organizing your system.

hardware handshaking— Theprocessofnegotiationsbetweentwodevicesin preparing for data transfer. Compare with *flow control*.

host— A computer that participates in a data communication network.

host name— The name of a computer that participates in a data communications network.

ICMP— Internet Control Message Protocol. The part of IP that handles error and control messages. It is used by gateways and hosts to report problems with datagrams and their source. ICMP includes an echo request/reply to test the availability and status of a destination.

initialization files— Files that contain information defining your Windows environment. Their names end with the .INI extension.

interface— A configured driver that is used by the TCP/IP stack in Windows.

internet— A collection of interconnected packet switched networks that function as one large virtual network by adhering to common protocols.

Internet— The collection of gateways and networks that use the TCP/IP protocol suite and operate as a single, virtual network.

intranet— The operations within a particular network.

IP— Internet Protocol. The DARPA Internet standard protocol that defines the Internet datagram as the unit of information passed across the Internet, and provides the basis for connectionless, best-effort delivery service.

IP address— The 32-bit address assigned to a host using TCP/IP to communicate over the Internet. See also *TCP* and *IP.*

kernel— The portion of an operating system that performs such functions as allocating hardware resources.

LAN— Local Area Network. Any physical network technology operating at high speed over a short distance. Operational speed ranges from a few Mbps to several Gbps.

local echo— In terminal emulation, local echo is the act by the computer or terminal of displaying a typed character at the same time that the computer or terminal sends the character to the host computer.

loopback local host— A host that performs loopback testing. It is a host that transmits a signal that passes through the network and returns to the sending device. It is used for testing purposes only.

machine name— A string of characters that serves as the unique name of your PC (not the fully-qualified domain name). Also known as host name.

macro— A series of keystrokes and/or commands that have been recorded and assigned a name or key combination. When the name is called or the key combination is pressed, the macro is executed. Macros can store up to 255 characters.

MacTCP ®—An ethernet driver for networked Macintosh computers.

MIB— Management Information dataBase. A network data management standard used by SNMP databases.

modem— A device that converts serial digital data from a transmitting terminal to a signal suitable for transmission over telephone lines. The modem will also convert the telephone signal (analog) into a serial digital signal for use by another computer or terminal.

NDIS— Network Driver Interface Specification. A driver commonly used in LAN environments.

netiquette— (Network etiquette) The unwritten rules of politeness on the Internet.

network— A system of computers and peripherals connected by transition media and capable of communication.

NIS— Network Information Service. Server software that provides centralized user authentication and information services.

ODI— Open Data link Interface. A driver commonly used in LAN environments.

operating system— A program that organizes the actions of the parts of the computer and its peripheral devices.

OT— Open Transport. A multipurpose network ethernet driver for Macintosh computers.

parameter— A value that customizes an application.

parity— An error-checking method that makes one bit of each byte unavailable for data transmission.

password— A combination of alphanumeric characters used as a security measure against unauthorized access to data.

peripheral device— A hardware device (such as a video monitor, disk drive, printer, or modem) used in conjunction with a computer and under the computer's control. Peripheral devices are often, but not necessarily, physically separate from the computer and connected to it by wires, cables, or some other form of interface.

PPP— Point-to-Point Protocol. A standard that allows multiple LAN protocols to be used simultaneously over a modem line or other serial connection.

protocols— Rules governing transmission and reception of data.

RARP server— Reverse Address Resolution Protocol server. A server that runs the Reverse Address Resolution Protocol, which is the Internet Protocol used by a diskless computer to find its IP address at startup. The diskless computer broadcasts its physical hardware address. The RARP server then responds to it by sending the machine its network address.

RIF— Routing Information Field. An interior gateway protocol used by some UNIX systems to exchange routing information among a small number of hosts.

RIP— Routing Information Protocol. A protocol that allows your computer to determine what route a message follows to arrive at its final destination.

RFC— Request for Comments. A series of notes that contain information about the Internet, including proposed and accepted TCP/IP protocol standards.

RTT— Round Trip Time. The amount of time it takes a single datagram to leave a machine, reach its destination, and return to the source machine.

script— A type of program that consists of a set of instructions to an application or utility program.

script file— A file used for automating your sessions with remote hosts.

SCSI— Small Computer System Interface. A specification of mechanical, electrical, and functional standards for connecting peripheral devices (such as certain kinds of hard disks, printers, network devices, and optical disks) to small computers.

send string— A string that your script transmits after receiving the expect string. The send string, in turn, prompts the next expect string. See also *expect string.*

serial port— A connector used to attach a modem, mouse, scanner, or other serial interface device to the computer.

server— A computer on a network that is used by multiple users. Compare with *client*.

session— An active connection between your computer and a remote host.

SLIP— Serial Line Interface Protocol. A specification for using the Internet Protocol over a low-speed asynchronous serial line.

SNMP— Simple Network Management Protocol. A network protocol used to monitor and control networks and hosts.

stop bit— A bit transmitted after each character in asynchronous communications.

string— A data structure consisting of a sequence of characters, usually forming user-readable text.

subnet— A LAN that resides within another network.

system software— See operating system.

TCP— Transmission Control Protocol. The Internet transport-level protocol that provides reliable, full-duplex stream service upon which many application protocols rely.

TCP/IP— Transmission Control Protocol/Internet Protocol. Two communication protocols used to connect dissimilar systems. The IP protocol controls routing data, and the TCP protocol controls transferring data. See also IP and TCP.

Telnet— The virtual terminal protocol in the Internet suite of protocols. Telnet enables you to log into a remote host from your local computer and interact as a local user of the remote host.

terminal emulator— Software used to simulate a mainframe or minicomputer terminal.

timeout— The amount of time software waits for a response from a local or remote host before giving up.

Token Ring— A 4Mbps or 16Mbps LAN developed by IBM and used primarily with IBM PCs and workstations. Token Ring networks have a circular topology and pass a token around the circle, giving each machine permission to transmit in turn.

WAN— Wide Area Network. A communications network that connects geographically separated areas.

Windows DLL— The dynamic link library compatible with Windows.

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