NetRider

Network Access Server Getting Started

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Operating System and Version:	Microsoft Windows NT, Version 5.31 Microsoft Windows 95
Software and Version:	NetRider, Version 2.0

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Preface

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Purpose of This Document

This guide describes how to install and configure the components in your NetRider and DECserver product kits. The installation procedure describes how to:

- Install the DECserver Network Access Software (DNAS), the clearVISN Access Server Manager and the NetRider Loader on a PC management station.
- Install the DECserver unit and attached modem.
- Configure the DECserver unit and attached modem using the clearVISN Access Server Manager.
- Prepare for remote PC client software installation.

Additional DECserver Configuration Information

If you do not plan to configure your DECserver unit for remote access, see your DECserver's user documentation and the Digital Network Access Software documentation for configuration information.

Intended Audience

The audience for this guide is the system or network manager responsible for making network access server products available on their Ethernet(s). The network manager is responsible for the Local Area Network (LAN). Readers should be familiar with both Internet network management concepts and the Microsoft Windows NT (or Windows 95) operating system.

Conventions

This guide uses the following conventions:

- Generic term access server instead of using the specific DECserver model name.
- All numbers are decimal unless otherwise noted.
- All Ethernet addresses are hexadecimal.

The following additional conventions also apply:

Convention	Description
lowercase	If a command appears in lowercase letters in a command format or an example, you must enter it in lowercase letters.
italic	Italic type in command syntax or examples indicates variables for which either you or the system supplies a value.
`monospace`	Monospace text indicates system output.
`bold monospace`	Monospace text in bold face type indicates user input, for example, a command you type.
Ctrl/X	Hold down the Control key and simultaneously press the key specified by X. The access server displays this key combination as ^X

Associated Documents

Documentation Location

The Network Product Information Library CD contains the documentation for the DECserver Network Access Software and the Digital Remote Access Security products. See the CD booklet for access instructions. The NetRider client documentation ships in hardcopy format.

Contact your Digital reseller or sales representative to order online documentation in hardcopy format or to order extra copies of any hardcopy documentation that ships with the product.

Table: Associated Documents

The following table lists documents that provide information related to the NetRider and DECserver products:

Component	Documentation
DECserver unit	DECserver owner's manual
DECserver Network Access Software	• DECserver Network Access Software installation guides for OpenVMS, Digital UNIX, UNIX, and ULTRIX systems. • *Network Access Software Management* • *Network Access Software Command Reference* • *Network Access Software Problem Solving* • NetRider Release Notes and the NetRider README.TXT files (included on line in the NetRider kit).
clearVISN Access Server Manager and NetRider Loader	• *NetRider Network Access Server Getting Started*
NetRider client software	• *NetRider Client for Macintosh Installation and Use* • *Remote Office Client for NetRider RCHost Installation and Use* • *Remote Office Client for NetRider Windows Installation and Use* • *Remote Office Client for NetRider MS-DOS Installation and Use* • Client README.TXT and README.1ST files (included on-line in client kit)

Component	Documentation
Digital Remote Access Security	• *Digital Remote Access Security Installation* • *Digital Remote Access Security Use*

Correspondence

Documentation Comments

If you have comments or suggestions about this document, send them to the Network Products Business Organization.

Attn.:	Documentation Project Manager
FAX:	(508) 486-5655
E-MAIL:	doc_quality@lkg.mts.dec.com

Online Services

To locate product specific information, refer to the following online services:

BBS

To read the Bulletin Board System, set your modem to 8 bits, no parity, 1 stop bit and dial 508-486-5766 (U.S.). If calling from outside of the U.S., dial (access code) 1-508-486-5766.

WWW

The Digital Equipment Corporation Network Products Business Home Page on the World Wide Web is at the following addresses:

North America:	http://www.networks.digital.com
Europe:	http://www.networks.europe.digital.com
Australia:	http://www.digital.com.au/networks

Chapter 1

Introduction

Overview

In This Chapter

This chapter describes the components in your NetRider Remote Access or DECserver product kit. The following table lists the topics in this chapter.

Product Components List

Introduction

Your DECserver and NetRider product kits contain:

- Hardware components consisting of:
  - — DECserver 90 or 900-series, or DECserver 700 unit
  - — Modem cables and adapters for the DECserver ports, if you purchased a NetRider Remote Access Solution product
  - — DECserver user documentation
- DECserver Network Access Software CD consisting of:
  - — DECserver Network Access Software (DNAS)
  - — NetRider Loader, the BOOTP loader
  - — clearVISN Access Server Manager, the DECserver management utility.
- Digital Remote Access Security (DRAS) CD
- Network Product Information Library CD that contains the *NetRider Network Access Server Getting Started* book (this book) and documentation for the following:
  - — DNAS software (including installation instructions for non-PC platforms)
  - — DRAS software (including installation instructions for non-PC platforms)
  - — Other Digital networking products

Other Options

In addition, your product kit may contain a NetRider client kit consisting of all or some of the following:

- AppleTalk and IP/IPX client kits (software and hardcopy documentation).
- Netscape Navigator kit (software and hardcopy documentation).

Component Descriptions

Hardware Components

The DECserver unit is a network access server that you can use to connect asynchronous devices (terminals, printers, modems, and PCs) to an Ethernet Local Area Network (LAN). You can also use DECserver unit with a modem for remote access connections.

Installation Instructions

Follow the instructions in the DECserver user documentation and the documentation that shipped with the network device that you are connecting to the DECserver.

DECserver Network Access Software CD

The DECserver Network Access Software CD contains software for the DECserver Network Access Software (the operational software for the DECserver unit), the NetRider Loader, and the clearVISN Access Server Manager. Follow the installation instructions in Chapter 2 of this book.

When to Use the Management Software

The following table describes when to use the NetRider Loader and the clearVISN Access Server Manager software:

Use the NetRider Loader Software To:	Use the clearVISN Access Server Manager Software To:
Install the Digital Network Access Software on access servers.	Configure your DECserver unit for remote access
Set Internet addresses and subnet masks for access servers.	Reboot an access server and set IP characteristics

Keep the NetRider Loader running continuously to ensure that the DNAS image downloads when an access server requires it.

Other Configuration Tasks

For all other configuration tasks, use the DNAS console commands. Refer to the DNAS documentation located in the NetRider collection on the Network Product Information Library CD.

Installation Instructions

If you have a PC available, install the software on the DECserver Network Access Software CD and configure the NetRider Loader so it can download the DNAS software to your access server. If you do not have a PC, you can use an OpenVMS, UNIX, Digital UNIX, or ULTRIX system as a load host. Follow the installation instructions in the appropriate installation guide. Install the Network Product Information Library CD and open the NetRider collection to access the installation guides.

Digital Remote Access Security Software CD

The Digital Remote Access Security (DRAS) software allows you to install and configure a RADIUS server for remote access authentication and authorization. It contains the server software and a PC-based management utility.

Installation Instructions

Follow the installation instructions in the *Digital Remote Access Security Installation* book located in the Digital Remote Access Security collection on the Network Product Information Library CD.

Network Product Information Library (NPIL) CD

The Network Product Information Library CD contains the documentation you need to install and configure the DECserver management software. In addition, it contains additional books that describe some of Digital's networking products.

Installation Instructions

Follow the instructions in the CD booklet to install the documentation viewer. After installing the viewer, you can print any of the available documentation or simply read it online. To find the DNAS documentation, open the NetRider collection. To find the DRAS documentation, open the Digital Remote Access Security collection.

Chapter 2

Installation and Configuration

Overview

In This Chapter

This document describes the procedures necessary to install the NetRider management software on a PC management station and configure the access server for remote access. The following table lists the topics in this chapter.

Introduction

What Is Remote Access?

Remote access allows remote PC and Macintosh users to dial into a remote network access server and use all of a network's available resources.

Installation and Configuration Steps

To install and configure a remote access server, you need to:

Step	Action
1	Install the software on the DECserver Network Access Software CD on a PC that runs the Windows NT or Windows 95 operating system. This is the PC management station. **If You Do Not Have A Windows NT or Windows 95 PC** If a PC that runs the Windows NT or Windows 95 operating system is not available, see the DECserver Network Access Software (DNAS) installation and management documentation in the NetRider collection on the Network Product Information Library CD for instructions.
2	Configure the NetRider Loader. The NetRider Loader is a BOOTP server that allows you to download the DNAS software from the PC management station to the access server.
3	Install the access server and network devices.
4	Configure the access server. The *NetRider Network Access Server Getting Started* book (this book) describes how to configure the access server unit for remote access. See the DNAS documentation and your network device documentation for details about other configuration tasks. You can find the documentation in the NetRider collection on the Network Product Information Library CD.
5	Collect and distribute information for remote access client installation. Typically, the remote user installs the client software.

Installation Requirements

PC Management Station Hardware Requirements

The PC management station is the PC you use to manage the access server. It requires the following hardware to support the PC-based management applications:

- A 386 or better processor.
- A minimum of 6 megabytes of random-access memory (RAM). Additional memory improves performance.
- A CD-ROM drive.
- A minimum of 5 megabytes of available disk space.
- A network interface card (NIC).
- An Ethernet cable connected to the PC.

PC Management Station Software Requirements

You need Microsoft Windows 95 or Windows NT Version 3.51 to install the PC-based management software.

Step I: Installing Management Software

Introduction

Use this step to install the software from the DECserver Network Access Software CD on your PC management station. After you complete this step, you can:

- Configure the NetRider Loader and active the BOOTP server.
- Use the clearVISN Access Server Manager to configure and manage an access server for remote access.

Load Hosts on Other Machines

If you plan to use a different type of load host to download the DNAS software to your access server (for example, OpenVMS, ULTRIX, UNIX, or Digital UNIX load hosts), see the appropriate DECserver Network Access Software installation documentation in the NetRider collection on the Network Product Information Library CD.

Installing the DECserver Network Access Software

The DECserver Network Access Software CD includes:

- DECserver Network Access Software image files
- NetRider Loader application
- clearVISN Access Server Manager application

Do the following:

Step	Action
1	Insert the NetRider CD in your CD-ROM drive.
2	Are you using the Windows NT operating system? • If no, go to step 3. • If yes, do the following: a Choose Run from the File menu of the Program or File Manager. b In the Command Line field of the Run dialog box, enter the letter of your CD-ROM drive followed by /SETUP and click OK. This launches the NetRider Setup program. Click Next in the Welcome dialog box. c Go to step 4.
3	Are you using the Windows 95 operating system? • If no, go to step 2. • If yes, do the following: a Select Start and choose Control Panel from the Settings menu. b Select Add/Remove Programs from the Control Panel. c Click Install in the Add/Remove Programs Properties dialog box. d Click Next in the Install Program From Floppy Disk or CD-ROM dialog box. e Enter the letter of your CD-ROM drive followed by /SETUP in the Run Installation Program dialog box and click Finish. f This launches the NetRider Setup Program. Click Next in the Welcome dialog. g Go to step 4.

Step	Action
4	Select the components you want to install from the Select Components dialog box and click Next. The default is to install all components.
5	Are you installing the NetRider Loader? • If no, go to the step 6. • If yes, do the following: a Choose the target drive and directory in the Choose Destination Location dialog. Click Next to accept the displayed default or click Browse and enter a new destination and click Next. b If running Windows NT, enter the name of the Program Folder where you want the icons installed, or click Next to accept the displayed default.
6	Are you installing the clearVISN Access Server Manager? • If no, go to step 7. • If yes, do the following: a Choose the target drive and directory in the Choose Destination Location dialog. Click Next to accept the displayed default or click Browse, enter a new destination, and click Next. b Choose the target drive and directory for the the data and backup files. Click Next to accept the displayed defaults or click Browse, enter a new destination, and click Next. c If running Windows NT, enter the name of the Program Folder where you want the icons installed, or click Next to accept the displayed default. d Click Yes to open the README.TXT file when prompted to do so.
7	When the installation procedure displays the Installation Complete dialog, click OK. **Restarting Windows:** If files that the installation procedure needs to update are in use, the procedure displays the Restart Windows dialog box instead of the Installation Complete dialog. Select the restart option and click OK.

Step II: Configuring the NetRider Loader

Introduction

Use this step to configure the NetRider Loader and activate the BOOTP server. After you complete this step you can use the NetRider Loader to:

- Load the Digital Network Access Software (DNAS) image on your access server.
- Configure IP characteristics on an access server.

Before You Start

Before beginning this procedure, make sure you have:

- An Internet address for the access server
- The subnet mask for the access server
- The Ethernet address for the access server

Procedure

To configure the NetRider Loader, do the following:

Step	Action
1	Start the NetRider Loader on the PC management station. To learn about all of the NetRider Loader options, click Help on any of the application windows.
2	Select Setup. If a database file does not exist, the application asks if you want to create it. Click Yes.
3	Select the Clients tab and enter the following information for the access server: • The host name for the access server • The Ethernet address • The Internet address • The subnet mask • The gateway Internet address • Image filename for the access server. The default image for the DECserver 90M and 90TL access servers is MNENG2; WWENG2 is the default image for all other DECserver models. Click OK when finished.

Step	Action
4	Select the Files tab and enter the Request and Response file names. The Request File field contains the name of the file you expect to get from the access server in a BOOTP request. The Response File field contains the name of the factory load image you want to load on the access server using TFTP. **Note:** If other access server load hosts exist, you may want to disable them or load the new factory image on the other BOOTP loaders. This ensures that the access server receives the new factory image (WWENG2 or MNENG2) during a load operation.
5	Select the Options tab and check that the displayed PC management station's host name and IP address are correct.
6	Select the Logging tab and select any of the logging options (this step is optional).
7	Click on OK to close the Clients, Files, Options, or Logging dialog box and return to the NetRider Loader main window.
8	Start the BOOTP and TFTP servers by clicking on the server On/Off buttons. If you want the NetRider Loader to start automatically when you start Windows, copy the NetRider Loader icon into the Windows StartUp group. Once activated, the NetRider Loader waits for access servers to send BOOTP and TFTP requests to it. When the NetRider Loader receives requests, it downloads the DNAS image file to the access server.

Step III: Installing the Access Server and Network Device

Introduction

Use this step to:

- Download a new DECserver Network Access Server (DNAS) image to the access server.
- Configure IP characteristics on your access server.

Completing this step sets your access server configuration back to factory defaults. Your current access server configuration is lost.

DECserver Configuration Upgrade

If you want to upgrade your DECserver Network Access Software and preserve your current access server configuration, refer to Appendix A

FLASH RAM Upgrades

If your access server has FLASH RAM and the FLASH RAM contains the image MNENG2 or WWENG2, use the procedure in Appendix A to load the new DNAS image. To permanently save the new DNAS image into FLASH RAM, you must use the procedure defined in Appendix A.

Procedure

To install the access server and network device, do the following:

Step	Action
1	Install the access server hardware (refer to the DECserver user documentation).
2	Connect the Ethernet cable to the Ethernet connector on the access server.
3	Install the network device on the desired access server port using the appropriate cable (refer to the Cable and Adapter Hardware table in this topic or the documentation that shipped with the device).
4	Are you installing a modem? • If no, go to step 5. • If yes, and you did not preconfigure the modem for dial-in operations, reset it to factory defaults.

Step	Action
5	Turn on the power to the network device. If the access server is new from the factory, turn on the power to it. Otherwise, factory-initialize the access server. Once loaded, the BOOTP requester in the access server activates and the BOOTP responder installed on the NetRider Loader or other load host responds with the Internet address for the access server. **Initialization Time:** See your DECserver user documentation for the time required for initialization. The initialization sequence for a DECserver 90M with FLASH takes approximately 10 minutes.

Cable and Adapter Hardware

The NetRider remote access kit contains eight BN25G-03 cables and H8585-AC adapters with which to connect modems to access servers. The Cabling Table in this section shows the recommended cabling hardware for connecting various network devices to your access server.

More Information

For further information, refer to the Site Preparation Guide or User's Guide included with your access server hardware.

Table: Cables and Hardware

The following table lists the hardware you need to connect different network devices to your access server.

To Connect:	To DECserver 90M or 90TL (8 port), DECserver 900TM (32 port), or DECserver 700 (16 port)	To DECserver 700 (8 port)
Terminal/printer with MMJ port	BN24H-xx cable	H8575-A adapter and BC16E-xx cable
Terminal/printer with DB25 male port	H8575-A adapter and BN24H-xx cable	BC17D-xx (10-wire) cable or BC22D-xx (6-wire) cable
Terminal/printer with DB9 male port	H8575-B adapter and BN24H-xx cable	H8575-A and H8571-J adapters and BC16E-xx cable
PC communication interface with DB9 male port	H8585-AA adapter and BN25G-xx cable	H8575-A and H8571-J adapters and BC16E-xx cable
Modem using RI-DCD-DSRS-DTR signals (typically <9600 baud) with DB25 female port	H8585-AB adapter and BN25G-xx cable	BC22E-xx (10-wire) cable or BC22F-xx (25-wire) cable
Modem using CTS-DSR-RTS-DTR signals (typically =>9600 baud) with DB25 female port	H8585-AC adapter and BN25G-xx cable	BC22E-xx (10-wire) cable or BC22F-xx (25-wire) cable
Non-Digital systems with DB25 male ports (reverse-LAT config.)	N/A	BC22R-xx cable

Step IV: Configuring the Access Server for Remote Access

Introduction

Use this step to configure your access server for remote access. To configure the access server, you:

- Use the clearVISN Access Server Manager to configure your access server and modems for remote access. The following sections describe how to configure an access server using this application.
- Use the access server console commands to configure your access server for terminal server or remote access use.

After you complete this step, you can use your dialup clients to make remote connections to the network.

For More Information

If using the clearVISN Access Server Manager, see the application's How To... online help topics for step-by-step instructions for each step in the configuration process.

If using the access server console commands, see the *Network Access Server Management* book in the NetRider collection on the Network Product Information Library CD.

Before You Start

You need the following information:

- Access server type (DECserver 90M, 700 w/8 ports, 700 w/16 ports, 900TM and 900GM).
- Internet address currently assigned to the access server.
- For IPX, unique internal network number (optional).
- For IP remote client dial-in, unique Internet address for each port (optional).
- Modem manual for each modem that you want to configure. In some cases, the clearVISN Access Server Manager prompts you to enter some modem commands to properly initialize the modem.
- New login and privilege passwords, if ports use login passwords for security. (optional).
- If port is to use Kerberos security, realm and domain name or Internet address of the Kerberos server.

- If port is to use RADIUS security, realm, client secret, and domain name or Internet address of the RADIUS authentication and accounting hosts.
- If port is to use SecurID security, realm, client secret, and domain name or Internet address of the SecurID server.
- Telnet enabled on the access server.

A: Start the Configuration Process

See the clearVISN Access Server Manager's How To... online help topics to read step-by-step instructions for all of the configuration procedures. The application leads you through the configuration process by displaying the appropriate dialogs where you enter the required information.

The first step in the configuration process is to add your access server to the Browser. Do the following:

Step	Action
1	Start the clearVISN Access Server Manager on the PC management station.
2	Add the access server to the Browser. This step opens a new configuration data file for the access server.
3	Verify the access server's remote console connection using the Test Connection option on the Utilities Tab.
4	Save the access server's Internet address and subnet mask in NVRAM (nonvolatile random access memory) using the Configuration tab. Click Write to apply your settings. See the online help for step-by-step instructions.

B: Configure Protocols

The next step is configuring the access server protocols. To configure the protocols:

Step	Action
1	Configure the access server's Internet gateway address using the Gateway tab. Click Write to apply the configuration.
2	Configure the access server's Domain Name Service using the DNS tab. Click Write to apply the configuration.

Step	Action
3	Configure the server protocols by selecting the appropriate server protocol option (Server IP, Server IPX, or Server AppleTalk). Depending on the protocol you select, you may need to select tabs to configure all protocol properties.
4	Click Write to apply the server protocol settings on the access server.

C: Configure Ports

After configuring the access server protocols, configure the port properties. Do the following:

Step	Action
1	Configure the port that has the modem attached for PPP dial-up service by selecting the Port Dial-Up Service option. The application prompts you to specify modem data and network protocols for the port (IP, IPX, or AppleTalk). Initially, configure the port without security or dialback properties. You configure these properties *after* you configure the port protocols. **Use Your Modem Manual:** If you add a modem that does not appear in the list of Digital-tested modems that the clearVISN Access Server Manager displays, use your modem manual to find the modem commands required to configure the modem.
2	Click Write to apply the port settings on the access server.
3	Test the PPP dial-up service on the port you just configured by using a remote dial-up client, such as Microsoft's Windows 95 Dial-Up Networking or one of the NetRider dial-up clients.
4	Were you able to successfully connect to the access server? • If yes, go to the next step in the configuration process, D: Configure Dial-Back Services. • If no, refer to your modem manual and check that the modem commands are correct. Check that you configured the correct server protocols. Refer to the *Network Access Server Problem Solving* book for more details.

D: Configure Dial-Back Services

Dial-back services enable the access server to terminate a user's session and dial the user with a specified telephone number. If you want to provide dial-back services to your users, do the following:

Step	Action
1	Configure dial-back services by selecting the Port Dial-Up Service option and enabling dial-back on a port configured for PPP dial-up service.
2	Click Write to apply the dial-back settings on the access server.
3	Test your dial-back configuration by using your dial-up client to make a network connection.
4	Did the access server respond properly to the remote access attempt? • If yes, go to the next step in the configuration process, E: Configure Security. • If no, see the clearVISN Access Server Manager's online help or the DNAS documentation for information about configuring dial-back services.

E: Configure Security

The next step is configuring security for the access server. If you configure security settings on the access server, you also need to have the appropriate security server on the network. Your security methods include:

- PAP or CHAP with login password (no network security server required)
- The access server's local user accounts (no network security server required)
- RADIUS security
- Kerberos security
- SecurID security

The clearVISN Access Server Manager's online help provides step-by-step instructions for configuring security. If you do not want to use any of these security methods, go to the next step.

Step IV: Configuring the Access Server for Remote Access

To configure security on your access server:

Step	Action
1	Select the Port Dial-Up service option, enable port security, and select a security method.
2	Click Write to apply the port security commands.
3	Configure security properties by selecting the Server Security option, selecting the type of security you want to configure, and entering the required information. **References:** Refer to the online help and the *Network Access Server Management* book for more details about configuring security on the access server.
4	Click Write to apply the security settings on the access server.
5	Test your security configuration by using your dialup client to make a network connection. If using a remote server for authentication, make sure you install and configure the security server before you perform this test. Do the following: a Log in using incorrect security information. If the access server rejects the access request, the test is successful. Go to the next test. b Log in using correct security information. If the access server accepts the access request, the test is successful. Go to the next step.
6	Did the access server respond properly to the remote access attempts? • If yes, go to the next step in the configuration process, F: Save the Configuration File. • If no, re-configure the security settings and check that your security server is properly installed, configured, and active.

F: Save the Configuration File

To save all of the configuration settings, select Save from the File menu.

Step V: Preparing for Client Installation

Introduction

Use this step to prepare for client installation. If you are not configuring your access server for remote access, you can skip this step.

- If you plan to use the Windows 95 Dial-Up Networking client, see the Dial-Up Networking for NetRider Users Quick Start card in your client software kit or your Windows 95 documentation.
- If you plan to use a client other than the one in your NetRider client kit, refer to the documentation that shipped with it.

Distribute Software and Information

The NetRider client kit contains documentation describing the client installation and operation. As the network administrator, you need to provide each user with one or more of the following:

- Macintosh Client for NetRider or Remote Office Client for NetRider kit (includes client software and documentation)
- Netscape Navigator kit (including media and documentation)
- The access server's telephone number for dial-in
- Port authentication login username and password consistent with method used during the access server configuration
- Type of modem to specify during the installation
- IRQ and I/O port settings for the modem
- The type of LAN operating system to select
- PPP IP address for port dial-in (optional)
- PC's IP address (optional)
- IP name server address and local domain name (optional)

For More Information

For additional information, refer to the client documentation.

Remote Office Client for NetRider Installation Automation

You can automate the Remote Office Client for NetRider installation by creating an answer file that contains the required installation parameters. This is useful if you plan to install the Remote Office Client for NetRider software on multiple machines. Appendix B explains how to create the answer file.

Appendix A

Upgrading Access Server Software

Overview

In This Appendix

The appendix describes how to upgrade your access server (with or without FLASH RAM) with the latest DECserver Network Access Software. This procedure:

- Turns on power to the access server and loads the latest software upgrade while preserving your current access server configuration. This can also upgrade your FLASH RAM.
- Assigns an Internet address to the access server if necessary.
- Prepares the access server's default Telnet remote console for connection.

Upgrade Procedure

Procedure

Do the following to upgrade your access server:

Step	Action
1	Start the NetRider Loader utility on the PC management station.
2	Click on Setup and enter the host name, Ethernet address, Internet address, subnet mask, gateway Internet address, and image file name for the access server in the Clients dialog box. If the access server already has an Internet address assigned, you do not need to change it. If you decide to change the Internet address, enter the new IP address in the Clients dialog box and manually change the address on the access server before issuing the INIT command described in step 11.
3	Click on the Files tab and verify that one of the Request File names (default is MNENG2 and WWENG2) corresponds to the Request File name that the access server requests. The access server default Request File names are MNENG2 for the DECserver 90M and 90TL, WWENG2 for others. If the file names do not match, add an entry on the Files dialog box with a Request file name that matches the file the access server requests.
4	Disable other network load hosts that could load the access server (this is optional). This ensures that the NetRider Loader loads the access server with the latest image. Alternatively, you may want to load the access server upgrade image on the other load hosts.
5	Start the NetRider Loader BOOTP and TFTP servers by clicking on the server On/Off buttons. When on, the button lights are green.
6	If necessary, install the modem(s) on the desired access server ports using the appropriate modem cable (see the table in the Cable and Adapter Hardware section in Chapter 2 or the documentation included with your modem).
7	If you did not pre-configure your modem for dial-in previously, reset it to factory defaults.
8	Turn on the power to the modem. If power to the the access server is off, turn on the power and wait for it to finish rebooting.
9	Connect to the server console by means of a direct attached terminal, MOP, or Telnet.

Step	Action
10	Make sure that the default Telnet remote console is enabled in the permanent database by issuing the following command: `Local>` **`PURGE TELNET LISTENER 23`**
11	To load the access server with the upgraded image, use one of the following commands: **To update an access server with FLASH RAM:** `Local>`**`INIT FROM ETHERNET UPDATE FLASHRAM DELAY 0`** For an access server without FLASH RAM or an access server with FLASH RAM that you do not want to permanently upgrade: `Local>` **`INIT FROM ETHERNET DELAY 0`** To continue installation and configuration, refer to Step IV: Configuring the Access Server for Remote Access in Chapter 2.

Appendix B

Remote Office Client Install Automation

Overview

In This Appendix

This appendix describes how to automate the Remote Office Client for NetRider software installation. The following table lists the topics in this appendix.

Customization

Customization Options

You can customize the Remote Office Client for NetRider (referred to as Remote Office) in the following ways:

- Automate the installation by creating an answer file(s) that contains values for the installation procedure prompts.
- Include configuration parameters in the answer file to pre-configure the user's application operation.
- Supply a message text file that displays customized text at the beginning of the installation procedure.
- Supply script files that automate a tty connection.

Read the Remote Office Client Documentation

Before creating an answer file, read the Remote Office Client documentation to familiarize yourself with the installation procedure and the connection settings.

Answer File Description

Introduction

When you start a Remote Office Client installation, the procedure looks for a file in the root directory of the installation disk named ANSWER. If it cannot find this file, it looks for files with a.ANS extension in an ADMIN subdirectory on the installation disk. If the procedure finds at least one file with a.ANS extension in the ADMIN subdirectory, it displays a list box listing these files. You can select the file that you want to use for your installation.

If the installation procedure cannot find any answer file, the installation procedure prompts the user for all the required information.

When you supply values in an answer file, the screens that prompt the user for that information do not display during the installation, except for the following:

- Welcome screen
- Communications port screen
- Host Access screen

Users must confirm the information displayed on these screens to continue with the installation.

What You Put in an Answer File

You can put any or all of the following parameters in an answer file:

- Welcome screen - contains general user information.
- Modems screen - selects the modem the PC uses.
- Ports screen - selects the COM port that the modem uses, the port IRQ and address.
- LAN Operating System screen - selects the LAN operating system.
- Host Access screen - defines usernames, passwords and the access server telephone number.
- Phonebook record - defines the connection settings for the HOST phonebook record.
- Windows install directory - specifies where Windows is installed.
- Configuration file - controls the application's operation.

Creating an Answer File

Procedure

Do the following to create an answer file:

Step	Action
1	Copy the following files from the Remote Office installation disk to the directory where you are creating the answer file: • ro.exe • lanos • modems
2	Create an ascii text file using any text editor.
3	Enter the following as the first line in the answer file: id=rocinstall
4	Enter the keywords and values you want to use (see the following sections in this appendix for details). The following rules apply: • Each line contains one keyword, an equal sign (=) and a value. • You can enter the keywords in any order. • Keywords are not case sensitive. • The values for the user, company, login, password, pserver, and plogin keywords are case sensitive. • Remote Office interprets any text following an equal sign as a value; there are no delimiters for comments. • You can enter all or some of the keywords.
5	Save the file and copy it to the installation disk as follows: • If using the installation disk for one installation only, name the file ANSWER (no file extension) and copy it to the root directory on the installation disk. • If using one disk for multiple installations, create a file for each different installation and name it with a.ANS file extension (for example, USER1.ANS). Create a subdirectory named ADMIN on the installation disk and copy the files to that subdirectory.

Answer File Example

This following is an example of an answer file:

```
id=rocinstall user=Jane Doe
company=Digital Equipment Corporation
destdir=c:\remote modemkey=5A1
lanos=14
login=jdoe
phone=9,1,508123-4567
password=enter windir=c:\windows
tty=yes
script=login
batch=yes
pserver=serve1
plogin=jdoe
node=026f6fl20E3e
ipxnode=026E6E120e3E
ipxnet=00000002
ipaddr=100.000.000.000
dns=255.255.0.0
```

Parameter Descriptions

Welcome Screen Parameters

The Welcome Screen parameters allow you to specify the user's name, the company name, and the directory where you want to install the Remote Office files.

If you specify these parameters in the answer file, the values you enter appear on the Welcome Screen when you run the installation procedure. The following table describes the keywords for the Welcome Screen parameters.

Welcome Keywords and Values Table

Keyword and Value	Description
user=name	The user's first and last name.
company=name	The name of the company.
destdir=directory	The destination directory where you want to install the Remote Office Client files. If you do not enter this keyword, the installation procedure uses c:\rof as the destination directory.

Modems Screen Parameter

The Modems Screen parameter specifies the type of modem installed on the PC. The keyword for this parameter is modemkey=modem_number.

If you specify this parameter in the answer file, the Select a Modem screen does not appear during the installation procedure.

Each modem type that the Remote Office Client supports has a code number assigned to it. To view a list of modems and their code numbers, do the following:

Step	Action
1	Insert the Remote Office client installation disk into your PC.
2	Change to the drive where you inserted your disk.
3	Type RO MODEMSHOW|MORE or RO MODEMSHOW>MODLIST to redirect the output to a file called MODLIST.

Ports Screen Parameters

The Ports Screen parameters allow you to specify the COM port, the COM Port IRQ value, and the port I/O address. If a ports file exists, the values in the answer file supersede the values in the ports file. The following table describes the keywords and values for the Ports Screen parameters.

Ports Keyword and Value Table

Keyword and Value	Description
port=portnumber	The COM port configured for the modem installed in the PC. Valid values are COM1, COM2, COM3, and COM4.
irq=value	The IRQ value for the COM port. Valid values are 2 through 15.
portaddr=hexvalue	The I/O address for the COM port. The port address requires a hexadecimal value.

Host Access Screen Parameters

The Host Access Screen parameters allow you to specify the login username and password that the access server requires and the access server's telephone number.

If you specify these parameters in the answer file, the values you enter appear on the Host Access screen when you run the installation procedure. Values in an answer file supersede values an existing HOST phonebook record. The following table describes the keywords for the Host Access Screen parameters.

Keyword and Value Table

Keyword and Value	Description
login=name	The username that the access server requires. You can enter a username of up to 15 characters. This field is case sensitive. If you want this field to be blank, specify login=empty.
password=password	The password that the access server requires. You can enter a username of up to 15 characters. This field is case sensitive. If you want the procedure to prompt the user to enter a password, use an asterisk (*) as the password.

Keyword and Value	Description
phone=number	The telephone number of the access server. Include all numbers, including numbers required to obtain outside line or credit card digits. Use commas (,) to create a pause in the dialing process.

LAN Operating System Parameter

The LAN Operating System parameter allows you to specify the type of LAN operating system you want to use. The keyword for the LAN operating system parameter is lanos=lanos_number.

If you specify this parameter in the answer file, the LAN Operating System Choice screen does not appear during the installation procedure.

Each LAN operating system that the Remote Office Client supports has a code number assigned to it. To view a complete list of supported LAN operating systems and their code numbers, do the following:

Step	Action
1	Insert the Remote Office client installation disk into your PC.
2	Change to the drive where you inserted your disk.
3	Type RO LANOSSHOW|MORE or RO LANOSSHOW>LANLIST to redirect the output to a file called LANLIST.

PATHWORKS TCP/IP Login Parameters

The PATHWORKS TCP/IP Login parameters allow you to specify the name of the netbios name file, the name of the user's PC, and the username the user needs to access file or print services. The following table describes the keywords for the PATHWORKS TCP/IP Login parameters.

Login Keywords and Values Table

Keyword and Value	Description
nbnames=filename	The name of the netbios name file stored in the c:\rof directory. During installation, Remote Office creates a file called nbnames and modifies the [pctcp netbios] section in the PCTCP.INI file to point to this file. The netbios name file consists of entries for a name server and the name server's IP address.
setname=PC_name	The name of the PC as it is known on the network. Maximum character length is 15.
setlogon=username	The username required for access to file and print services.

NetWare Login Parameters

The NetWare Login parameters allow you to specify the name of the preferred NetWare server and its user login name. The NetWare Login screen appears if the user selects a LAN operating system choice that includes NetWare during the Remote Office Client installation. The following table describes the keywords for the NetWare Login parameters.

NetWare Login Keywords and Values

Keyword and Value	Description
pserver=servername	Specifies the preferred Novell server name. If you select a NetWare LAN operating system and do not specify a preferred Novell server name, the system appears to hang when the login executes.
plogin=username	Specifies the NetWare login name for the users. If you do not specify the login name, the NetWare login program prompts the user for the login name.

Phonebook Record Parameters

The Phonebook Record parameters are never displayed during the installation; however, you can enter this information in the answer file to pre-configure your user's environment. The following table lists the keywords for the Phonebook Record parameters. See the Remote Office Client for NetRider Installation and Use documentation for detailed descriptions of these parameters.

Phonebook Keywords and Values Table

Keyword and Value	Description
tty=mode	Tells the Remote Office Client to enter tty mode immediately after a successful connection to an access server. To enter tty mode, use tty=tty. To enter a tty mode TCACS dialog after successful connection, specify tty=tcacs.
script=filename	Specifies that a script file executes when Remote Office enters tty mode. The filename can have up to 8 characters with a three-character extension. Remote Office copies the script file to the directory where the Remote Office files are installed. This option is not valid for TACACS.
batch=yes/DEC	Specifies that a batch file executes upon successful connection to an access server. This parameter applies to Windows installations only. Use the DEC parameter if you selected PATHWORKS TCP/IP as your LAN operating system.
logopts=NetWare login	Specifies NetWare login options.
map=NetWare command	Maps NetWare drives and printers. You can specify multiple map commands.
capture=command	Specifies NetWare capture commands. You can specify multiple NetWare capture commands.

When specifying a batch file:

When you use the batch keyword in the answer file, the installation procedure creates the batch file using the following additional keyword values:

- destdir - for the directory where the software reside
- pserver - for the name of the server
- plogin - for the name of the user

The installation procedure assumes that the batch file is to be used to log into a NetWare server. It creates a file named $xxLI.BAT in the directory where you install the Remote Office files (the destination directory). The xx in the file name corresponds to the relative record number of the HOST phonebook record, which is usually 0. When the installation procedure creates the batch file, it contains the following:

CD [ROF directory] login [server]/[user] [drive letter where ROF installed:]

Windows Install Screen Parameter

This parameter specifies whether to install the Windows or DOS version of the PC client. The keyword for this parameter is windir=no or windir=path. If you specify windir=no, the installation procedure installs the DOS version of the PC client and does not display the Windows Install screen. If you specify windir=path, the Windows Install screen appears during the installation. The path value is the full path, including the drive letter, where Windows is installed.

Configuration Parameters

The Configuration parameters affect the way the PC Client operates. During installation, the procedure creates a configuration file. You can override configuration defaults by adding the configuration parameters to the answer file. The following table describes the Configuration parameters.

Configuration Keywords and Values Table

Keyword and Value	Description
node=nnnnnnnnnnnn	Specifies the node address as 12 hexadecimal numbers. Each Remote Office client requires a unique node address.
buffers=number	Specifies the number of buffers to allocated. Valid values are 0 - 300.
md5load=yes	Loads the MD5 CHAP algorithm. The default is to not load this algorithm.

Parameter Descriptions

Keyword and Value	Description
ipxnet=nnnnnnnn	Specifies the IPX network number as 8 hexadecimal numbers.
ipxnode=nnnnnnnnnnnn	Specifies the IPX node number as 12 hexadecimal numbers.
ipaddr=n.n.n.n	Specifies the PCs IP address. Specify the address as four groups of numbers separated by dots (.). The maximum value for each group is 255.
dns=n.n.n.n	Specifies the IP address for the domain name server. Specify the address as four groups of numbers separated by dots (.). The maximum value for each group is 255.
exewarn=yes/no	Specifies whether EXEGUARD should warn users about loading applications across the remote link. The default is yes
chargeback=number	Specifies the telephone number a telephone service provider should use for billing purposes.

Additional Files

Message Files

In addition to creating an answer file, you can include a message file that displays customized text at the beginning of the installation procedure. Do the following:

Step	Action
1	Create an ascii text file named MESSAGE.TXT.
2	Enter the text you want displayed. Each line of text can contain a maximum of 58 characters.
3	Save and exit the file. When the user starts the installation,. your message text appears before the Welcome Screen displays.
4	Copy the file to the same directory on the installation disk where you placed your answer file.

Script Files

You can supply login script files to automate tty connections. During installation, the procedure copies the script file you provide to the Remote Office destination directory (usually c:\rof).

Do the following:

Step	Action
1	Create an ascii text file.
2	Enter the script commands as described in the Remote Office Client readme.txt file or the Remote Office Client for Netrider installation documentation.
3	Save the file with a file name of up to eight characters and a three-letter extension. For example, LOGPASS.SCR.
4	Specify the script keyword in your answer file. See the "Phonebook Record Parameters" section in this appendix for details.
5	Copy the file to the same directory on the installation disk where you placed your answer file.