SD1000 Internet Sharer

User's Manual

Fourth Edition, June 2008

www.moxa.com/product

SD1000 Internet Sharer
User's Manual

Copyright Notice

Trademarks

Disclaimer

Technical Support Contact Information
www.moxa.com/support

Moxa Americas:
Toll-free: 1-888-669-2872
Tel: +1-714-528-6777
Fax: +1-714-528-6778

Moxa China (Shanghai office):
Toll-free: 800-820-5036
Tel: +86-21-5258-9955
Fax: +86-10-6872-3958

Moxa Europe:
Tel: +49-89-3 70 03 99-0
Fax: +49-89-3 70 03 99-99

Moxa Asia-Pacific:
Tel: +886-2-8919-1230
Fax: +886-2-8919-1231

TABLE OF CONTENTS

1

Overview

Welcome to Moxa Internet Sharer. A small sharing device gives your team workers easy and simultaneously access to Internet.

This chapter is an overview of the Internet Sharer and includes the following:

- ❑ Features
- ❑ Package Checklist
- ❑ Functionality and Protocol
- ❑ Front Panel View
- ❑ Rear Panel View

The Moxa Internet Sharer is a simple, yet powerful device with one high-speed serial port and four 10BaseT ports that gives you simultaneous Internet access by sharing one phone line, one modem and one Internet account. With the simple configuration, setup your whole network for sharing will be able to be done in 5 minutes. With its excellent functionalities, such as dial-on-demand, IP address translation, virtual mailbox etc., it provides you with the most cost-effective Internet access solution.

Features

- Supports 56 Kbps and ISDN high-speed connectivity to allow multiple users to Access ISP simultaneously through one dial line, one modem and one account.
- Built-in Virtual Server provides each staff with individual mailbox without Mail server on your net.
- Dial-on-demand and auto-disconnection without dialing operation.
- Allows 1 to 4 and more users connecting to Internet simultaneously.
- Compatible with most OS platforms.
- Easy to uplink to another HUB.
- Compatible with various Web browsers, FTP, Email services.
- Plug & Play, requires no technical knowledge.
- Security and Natural Firewall.
- In conformance to FCC, CE.
- Easy Configuration on Windows 95 or Windows NT.

Package Checklist

Upon open your Moxa Internet Sharer, your will find :

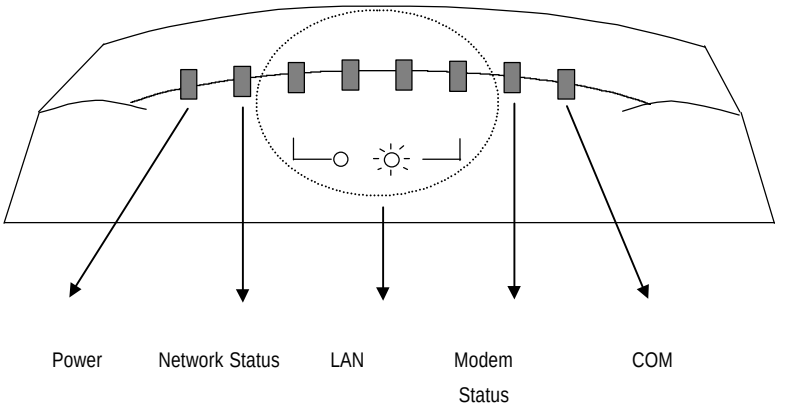
1. One Moxa Internet Sharer
2. One 110V or 220V power adapter
3. One 3 1/2” floppy disk
4. This user’s manual.

The user’s manual is ideal for advanced users for full understanding about all the related information and configuration. Please contact with your distributor if anything is missing.

Functionality and Protocol

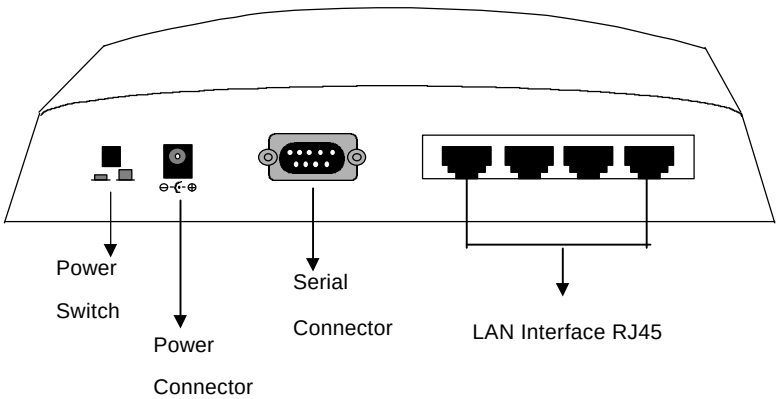
- Virtual mailbox: 64
- TCP sessions: 64, concurrent
- Dial-On-Demand and automatic disconnection
- Application Protocol: Telnet, HTTP, SMTP, POP3, NNTP, FTP, IRC,Gopher
- Network protocol: TCP/IP, DHCP, BOOTP
- Security supported: PAP/CHAP
- Fully compatible with ISP dial-up PPP protocol.
- Compatible with all popular Internet application (Web browser, email, FTP etc.)

Front Panel View



✓ ***Note:*** *For detail description, check with Appendix C LED description.*

Rear Panel View



2

Before Installing Internet Sharer

This chapter tells you what equipment you need to prepare before you start Installing Internet Sharer and continue to access to Internet. Follow the list to prepare all the equipment and list the information carefully.

- ❑ What do you need before installation?
- ❑ Ordering a phone line
- ❑ Ordering an ISP account
- ❑ Prepare a PC running Window95 or Windows NT with LAN interface
- ❑ Complete your ISP Worksheet

What do you need before installation?

You need one computer running Microsoft Windows 95 or Windows NT 4.0 to configure the Internet Sharer. The Setup Wizard program on the disk installs the Internet Sharer Manager and a Monitor utility to your Computer. You may install the Setup program to all Computers on the LAN to ease the configuration of networking and install the monitor utility to every computer.

Check with the equipment you have before you start installing Internet Sharer. Below lists the equipment needed for typical dial-up Internet connection.

- Internet Service Provider (ISP) dial-up account - only one account is needed
- Modem or ISDN terminal adapter
- RS232 Cable for Modem (DB9 male or DB25 male) to Internet Sharer (DB9 female). Usually you can get this cable from your modem package.
- One dedicated phone line or ISDN line
- Ethernet cards for your Computers
- RJ45 to RJ45 cables to connect your LAN cards 10BaseT interface to Internet Sharer
- At least one computer running Windows 95 or Windows NT

✓ ***Note :*** *There are more connection methods supported by Internet Sharer. They are leased line and direct link. Please refer to Chapter 4 Link Connection Type under Basic Configuration.*

Ordering a phone line

You may use your existing phone line for regular modem connection to your ISP to save your budget. Or, you may apply for another phone line solely used for Internet Access. For faster access, you may consider applying ISDN line if that is available at your area.

Ordering an ISP account

If you don't have an ISP account, contact the Internet Service Provider (ISP) you choose and set up an account. Write down all information to the ISP Worksheet on page 2-5 to make sure you have all the information to set up the Internet Sharer.

You may check with your friends, your phone carrier or local yellow page about who is the best ISP suitable for you.

Preparing PC running with LAN interface

You must have a computer with network interface to connect to Internet Sharer so the Internet Sharer can provide the sharing functions. Prepare one computer installed with Windows 95 and Windows NT. Purchase an Ethernet network card and install the needed driver TCP/IP. After you finish these basic equipment and tools, you may proceed to install Internet Sharer. If you are not an experienced user, please refer detail installation of your network card and finish the installation steps. For your convenience of configuring your network, you may check with Chapter 6 for how to configure your PC

✓ ***Note :*** *Chapter 6 tells you more about how to add network to your PC. Don't miss it if you are not familiar with networking.*

ISP Worksheet

Write down the information that you obtain from your Internet Service Provider on the next page. This worksheet contains the needed information for you to configure Internet Sharer.

ISP Worksheet

ISP Name:

User Name:

Password:

DNS IP address: . . .

Dial up phone number:

Do you have a Static IP address?

☐ No

☐ Yes

Your IP Address . . .

Email account :

Email Password:

3

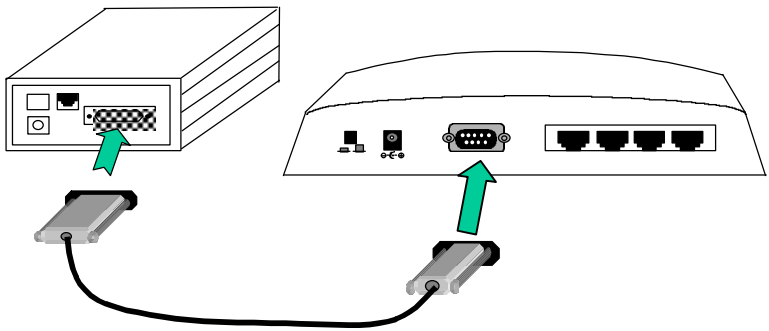
Connecting the Internet Sharer and Equipment

After preparing all the equipment and account listed at Chapter 2, your team are just few steps away to use the Internet Sharer freely and enjoy the fun. Now you need to put all things together. Follow the instruction below to connect your equipment step-by-step.

- ❑ Connecting your modem
- ❑ Connecting Internet Sharer
- ❑ Connecting your PC

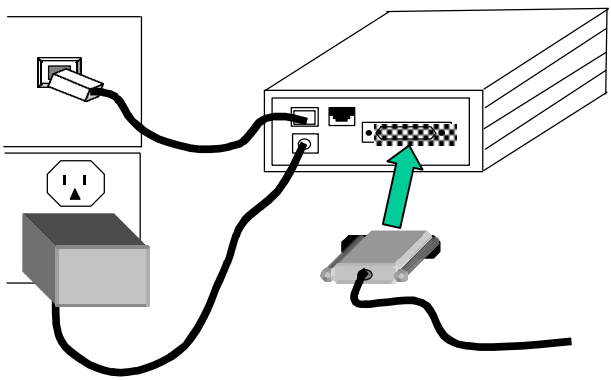
Connecting your modem

- Connect the serial cable from your external modem or ISDN terminal adapter to the serial connector on the back of the Internet Sharer.



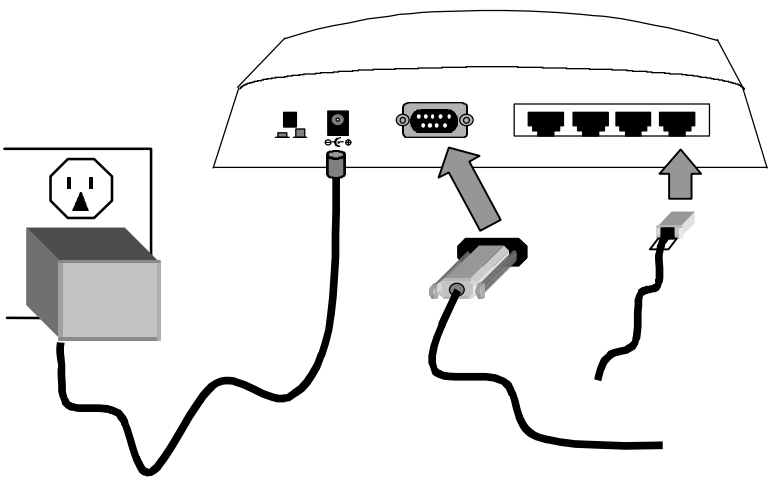
✓ ***Note:*** *You may check with your Modem User s Manual if you find any problem or you want to know more about modem.*

- Connect the telephone cable from the wall outlet to the Line in port of your modem.
- Connect the modem power supply to your modem. Plug the other end into a power outlet.
- Power on your modem.



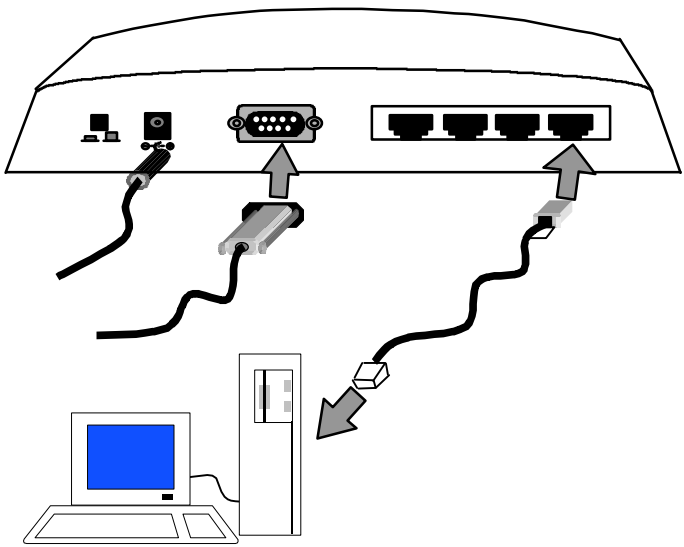
Connecting the Internet Sharer

- Connect the Internet Sharer power cord to the back of Internet Sharer and to the wall outlet.
- Connect one end of Ethernet cable to the back of the Internet Sharer's RJ-45 connector and a 10Mbps.
- Power on the Internet Sharer



Connecting your PC

Use the Ethernet RJ-45 to RJ-45 cable you have prepared from the previous Chapter to connect the network interface on the back of your computer to the back sockets of Internet Sharer.



✓ ***Note :*** *If you have an existing TCP/IP network now, you may continue the installation now. If you recently purchase a network card, you may follow the network card user manual to install the card and configure the TCP/IP step by step. You may also check with Chapter 6 Configuring your PC for detail.*

4

Installing Software and Configuring Internet Sharer

This chapter shows you how to configure Moxa Internet Sharer. However, you need to go through the previous chapters and get everything connected so the software will work.

The disk included in the Moxa Internet Sharer package contains the software to configure and manage Internet Sharer through Windows 95 or Windows NT4.0 system. It also contains a utility for monitoring the status of Internet Sharer. This chapter contains:

- ❑ Installing Internet Sharer Wizard
- ❑ Starting Internet Sharer Manager
- ❑ Uninstalling Internet Sharer
- ❑ Upgrading Internet Sharer Firmware

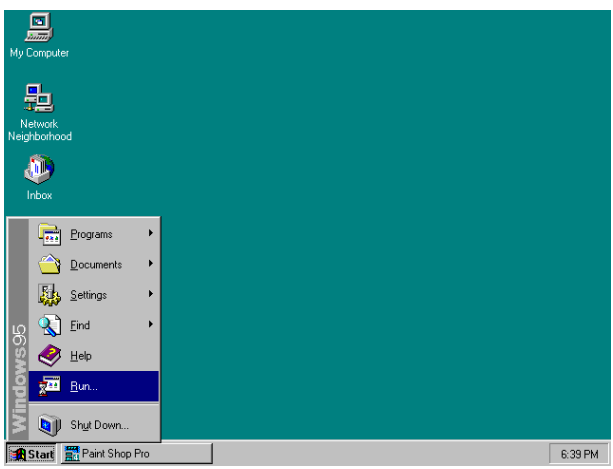
✓ ***Note:*** *Internet Sharer Wizard is used for the first time installation only. For later change and advanced configuration, run Internet Sharer Manager after installing the Internet Sharer Wizard.*

To enable the Internet Sharer to run with your PCs and your account, you need to install the software to at least one of your PC for Configuration. You may also install the software to the rest of your PCs for easy management and install the monitor utilities into all computers.

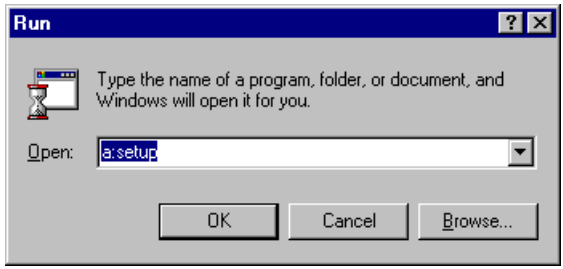
Installing software wizard

Internet Sharer contains an easy Setup Wizard software to guide you through the basic configuration steps. It not only installs the needed files to your system, it provides the easy step-by-step window to setup your ISP information to the Internet Sharer.

1. Insert the SD1000 disk into 3 1/2 floppy drive in your PC. From the Start bar, click Run.



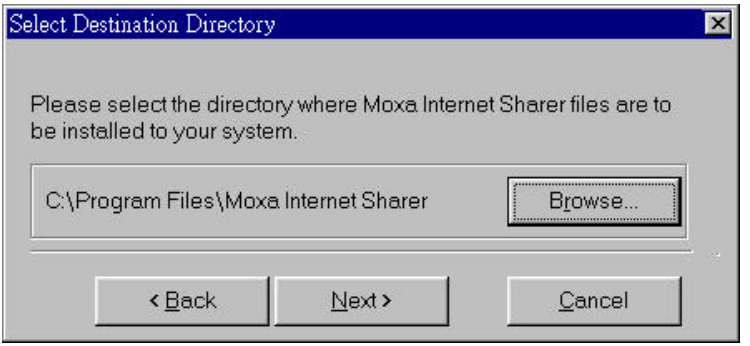
2. Under the dialog box, type in “a:setup” then press OK to continue.



3. The Setup prompts you a welcome message and ask if you want to install the Internet Sharer software now. Click Next to continue. Cancel to stop.

✓ ***Note :*** *If you do not see this screen, but get the other Error message screen instead, it means the Internet Sharer is not connect to your PC properly. Recheck with Chapter 2 and reconnect everything. Or, you may refer to Appendix A-Troubleshooting for more information.*

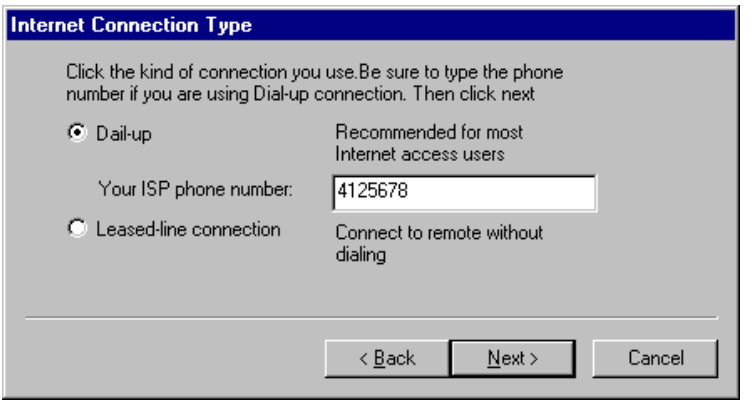
4. Enter the name of directory to install the Internet Sharer files. You may press Next to use default directory name.



5. The following two steps are only required if no one has ever set up the Internet Sharer before. If you are the first one to install Internet Sharer software at your office, you have to type in the basic information to the Internet Sharer so it contains your ISP information to dial out. Refer to the worksheet you entered in Chapter 2 and copy the Username and Password to the corresponding fields. Type the password again then click Next.

✓ ***Note :*** *If you do not see this dialog box but jump to dialog instead, it means the Internet Sharer has already got the basic ISP information inside. If you like to make any change, simply start the Internet Sharer Manger to re-configure. Later in this chapter describes how to start Internet Sharer Manager.*

6. Select Dial-up connection for regular Internet Access and input the ISP dial-up phone number. If you have applied for a leased line account from your ISP, you have to select the corresponding one. Click Next to continue.



✓ ***Note:*** *Choose Leased-Line only if you are sure to do that. You must have a leased line modem and Leased-Line account with your ISP. Internet Share Manager Configuration also provides a Direct Connect method Continue reading this chapter to reach how to set it up.*

7. Enter your Domain Name Server IP address provided by your ISP. If you don't have the DNS IP addresses, the Internet Share will use the DNS assigned by your ISP remote access services while connecting. Click Next to continue.

✓ ***Note:*** *You might have trouble converting a hostname to an accurate IP address if you do not provide DNS or you have an incorrect DNS. If this happens, check with your ISP for an correct DNS.*

8. To ease the networking configuration troubles on your PC, select 'Typical' for dynamically IP address assignment. This is strongly recommended for most non-experienced users. You may also choose Custom if you have an existing LAN and you like to keep your local IP addresses. Check with chapter 5 for setting up your network at your local PC. Click Next to continue.

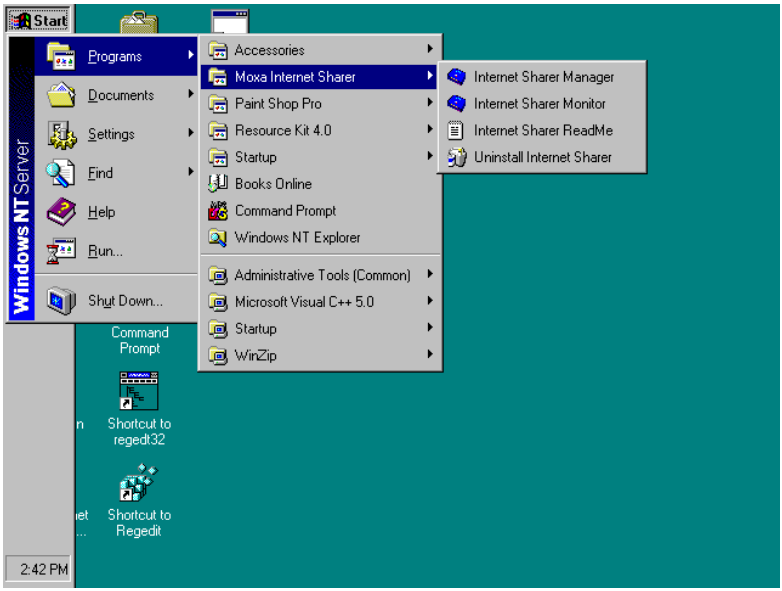
✓ ***Note :*** *This dialog box only shows up under Windows 95.For Windows NT, you must configure your DHCP manually. Check Chapter 8 for installation of network into Windows NT.*

9. If you select 'Typical' setting from the last dialog box, the Wizard will pop up a dialog box ask you to restart your Windows 95. If you do not restart the system now, be sure to restart before accessing Internet.

Starting Internet Sharer Manager

Setup Wizard is designed mainly for first time Internet Sharer users. If you change your ISP or account anyhow, you may change the settings of Internet Sharer at any time by use of Internet Share Manager. It also provides Advanced Configuration for those configurations which are not included in the wizard.

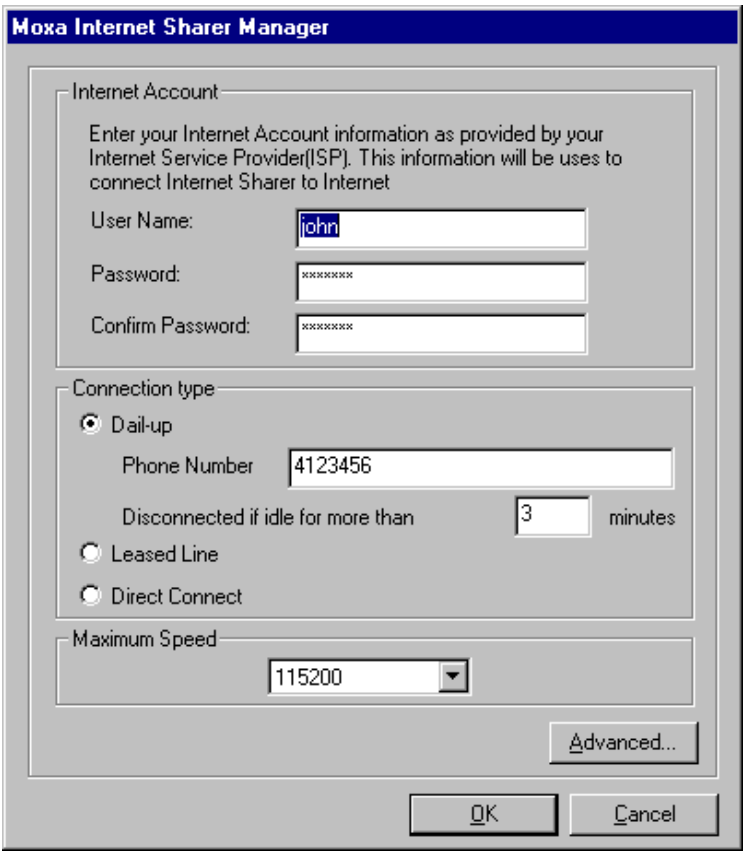
To start the Internet Sharer Manager, go to Program and move to the Moxa Internet Sharer folder. Click on the Internet Sharer Manager.



You have to make sure the Internet Sharer is connected and power on so the Internet Sharer Manager can let you start configuring. Refer to Chapter 2 and Appendix A Troubleshooting if the Internet Sharer cannot be found.

Basic Configuration

Click on the 'Configure' under the main menu of Internet Sharer Manager. It enters the Windows for basic configuration. You can view your current ISP information here and make any change if you want.



Link Connection Type

There are three connection types supported by the Internet Sharer. They are dial-up link, leased line and direct link. For regular Internet Access, choose dial-up link.

Dial-Up link

You need a phone number to dial to. From the previous dialog box, you may see there is a field underneath the dial-up phone number for setting up the idle disconnect time. This is for Internet Sharer to disconnect the link after no data transmit or receive reaching this long of time. If you prefer not to disconnect the link at all, enter

Leased Line connection requirements

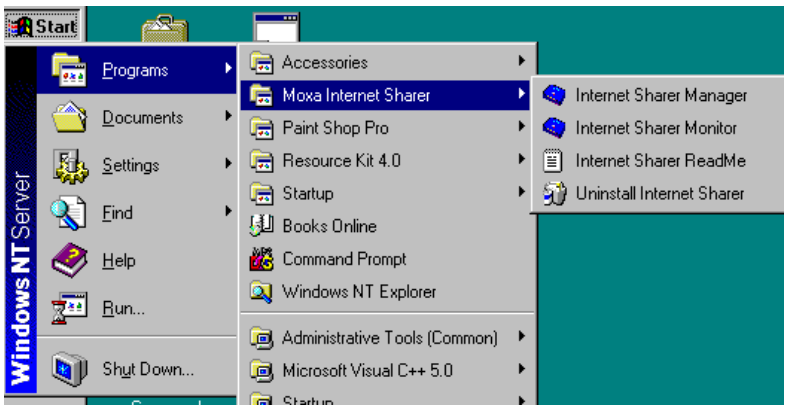
- ISP account provided for leased line connection
- Leased line to your ISP
- Modem which is configurable as leased line connection
- Computers that are connected to the Ethernet network

Direct Connect requirements

- Account assigned by the linked PPP server
- Cable which converts the Internet Sharer DB9 DTE interface to remote serial interface. You can check with Appendix C for Cable Pinouts
- Computers that are connected to the Ethernet network

Uninstalling Internet Sharer Software

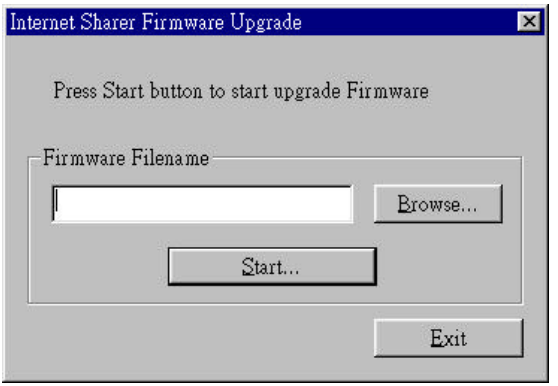
Go to Start | Program | Moxa Internet Sharer from your desktop. Select Uninstall Internet Sharer.



Select ‘Automatic’ uninstall from the popped up dialog box and the Moxa Internet Sharer software will be removed from your system.

Upgrading Internet Sharer Firmware

This function allows upgrade the internal software of Internet Sharer for new features and functional improvements. You may check with ‘http://www.moxa.com” to see if any new firmware been released and download the file to your local site. Go to Internet Sharer Manager (as described at Chapter 3). Select the Firmware Upgrade down at the main menu. Input the filename on the popped up dialog box. Click Start when ready and Exit to abort.



✓ ***Note :*** *After upgrading completed, the Internet Sharer will be restarted automatically to boot from the newer firmware. Thus, it will disconnect all the line linked. Be sure the check if anyone is up in the middle of Internet Access before upgrading.*

5

Advanced Configuration

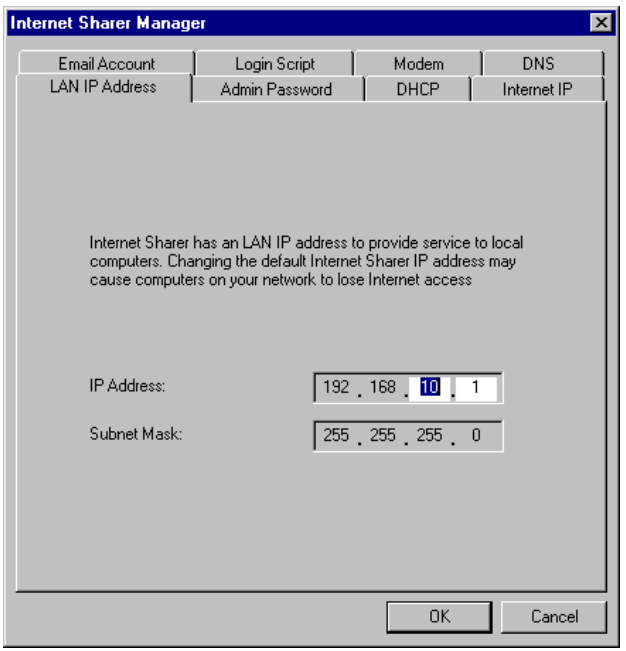
From the previous chapter, you have learned the steps to start Internet Sharer Manager for changing basic configuration. From the Internet Sharer Manager configuration dialog box, you can see the button for 'Advance..' providing for advanced configuration to set up the Internet Sharer for fitting into your existing LAN, setting up Email sharing and others. 'Advanced..' provides you the change of the following configurations:

- LAN IP Address
- Admin Password
- DHCP
- Internet IP Address
- Email Account
- Login Script
- DNS
- Modem Settings

LAN IP address

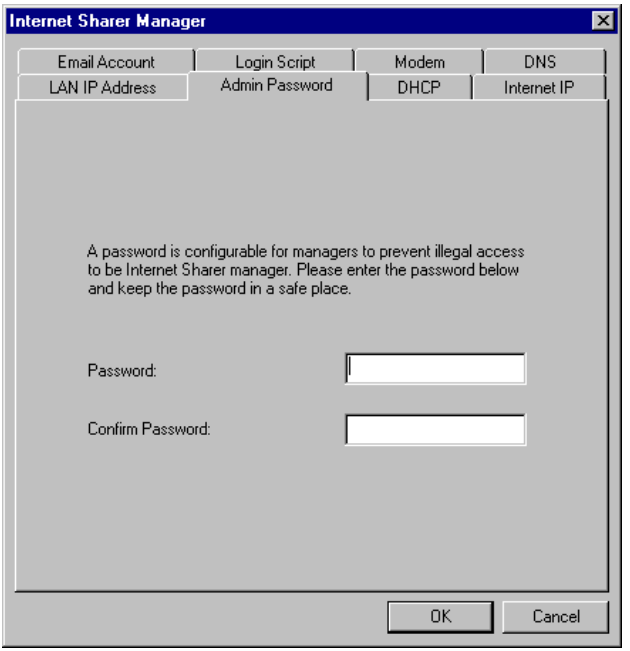
Moxa Internet Sharer is pre-configured for installation on a network that is not set up for TCP/IP. It uses a range of private IP addresses in a range from 192.168.10.2 to 192.168.10.254. The Internet Sharer address is pre-configured as 192.168.10.1.

If you already have an existing LAN and you would like to keep your IP addressing policy, you may change the Internet Sharer IP to fit to your addressing policy. Be aware that the network mask has to be 255.255.255.0. The LAN IP address is restricted to start with 192.168.*n.n*, where *n* is between 0 and 255, for private LAN use.



Admin Password

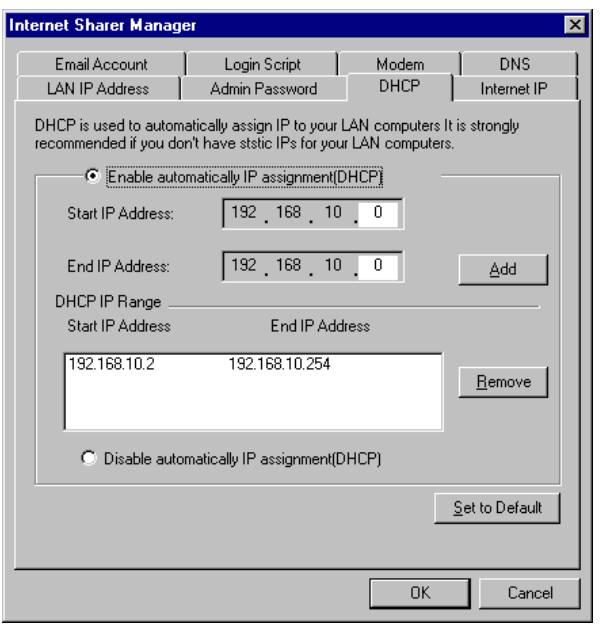
To protect the information set to the Internet Sharer, an administrator password is provided. After setup the password, you will be asked to input your password each time you request to make any changes to the Internet Sharer.



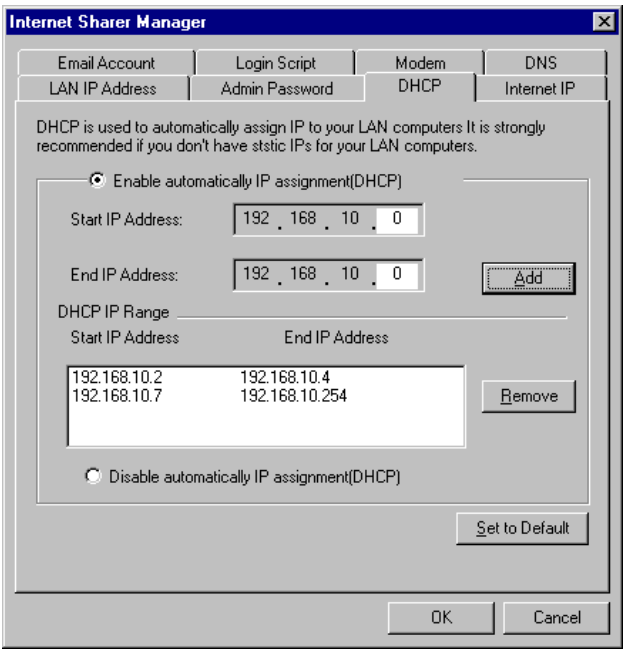
✓ ***Note :*** *As an administrator of your LAN, you must write down the password and keep it at a safe place once you setup the password. Forgotten of the password will cause trouble of not being able to re-configure the Internet Sharer.*

DHCP

Internet Sharer automatically enables Dynamic Host Control Protocol (DHCP) to provide automatic IP address assignment to your local computers. It makes it easier to setup and manage the computers on your network. This DHCP setup is used to change your DHCP settings, to limit the range of IP addresses used for the DHCP server. Internet Sharer can provide 253 nodes for your local computers. You may set a specific range to reserve for some machines which has static IP address on your LAN if needed.



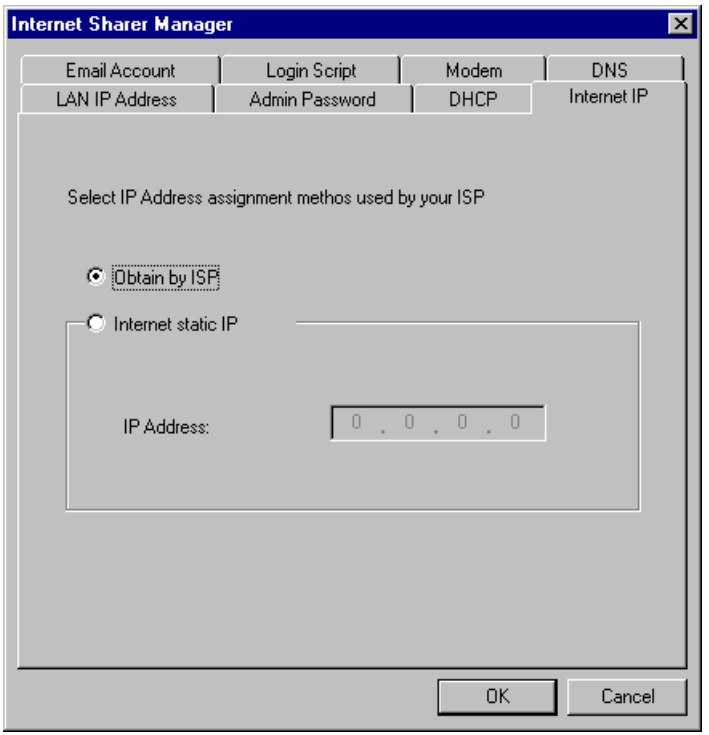
If you like to reserve an IP address for some specific server on your LAN, you may remove the unwanted range and add the range of available IP addresses. For instance, if you have a printer at address 192.168.10.5 and another server at 192.168.10.6, you may set the range as from 192.168.10.2 to 192.168.10.4, and another range at 192.168.10.7



✓ ***Note :*** *You may disable the DHCP. If you do so, you will have to manually set the IP addresses, DNS addresses, domain name server and gateway information under the network configuration on* your computers.

Internet IP address

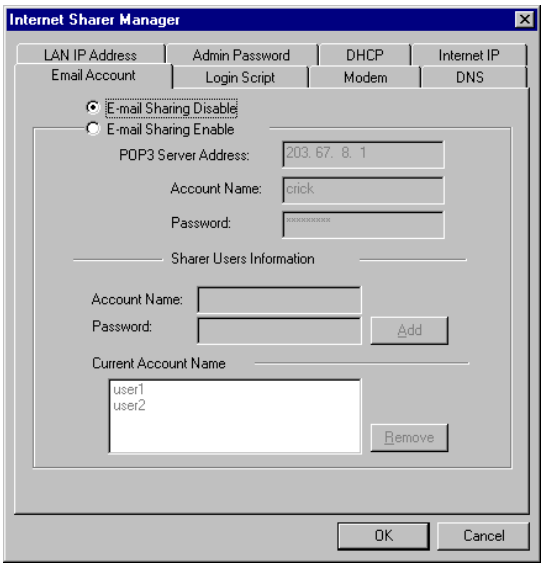
This is used to setup the dial-up Internet Access IP address assigned by the ISP. Most of the ISP provides dynamic IP address assignment to your dial-up connection. However, if a static IP is supported, click the circle of Static and enter the fixed IP address assigned.



Email Account

Internet Sharer supports multiple virtual email boxes by sharing one email account for up to 64 virtual email accounts. To set this email sharing function, you have to input your local email shared name.

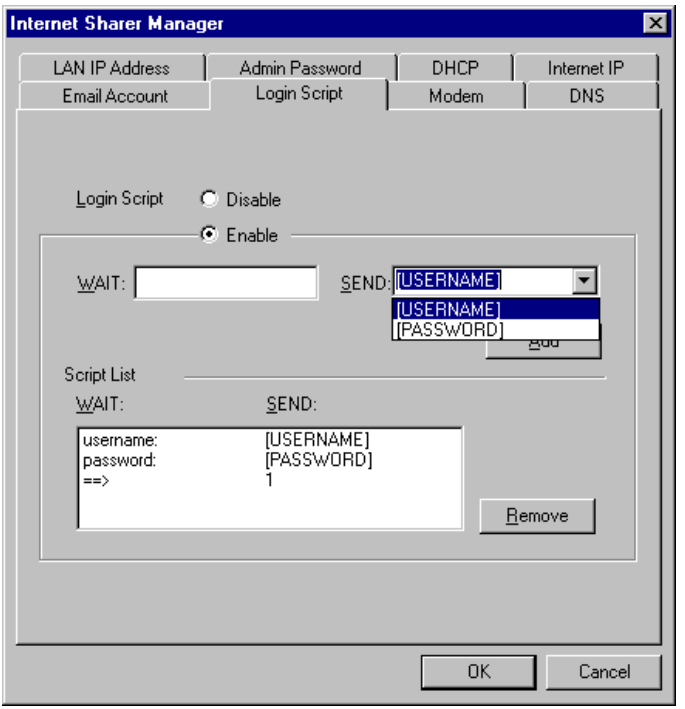
If your users have their own individual email addresses, you may select disable of this function. All user on the LAN uses their regular send and read mail method while using Internet Sharer.



✓ ***Note :*** *The sharing of Email account is slightly complicated associated with your local Email reader. There are simple rules need to be followed. Check with Chapter 7 Virtual Email for more information.*

Login Script

Some ISP requires special login script to start PPP connection and log into the Internet Service. Internet Sharer provides a simple script editor for you to add your script to response to the remote host. It allows Maximum 9 sets of scripts.



✓ ***Note :*** *Be ware that most of the scripts are case sensitive.*

How to Create a login script

1. From the Internet Sharer Manager, click Configure.
2. Click Advanced to continue.
3. Click on the folder instruction for Login Script.
4. If you have a command to wait for, type in the command under the wait column.
5. If you have a command to send, you may type in your command or scroll down to select sending USERNAME or PASSWORD.
6. Click 'Add' to add this set of commands to the script.

Example:

You have applied for your Internet service and your ISP instructs you to log in and select 1 for PPP connection. While using manually log in, it looks like:

username: *john*

password : *john's password*

Welcome to Moxa Terminal Server

1) PPP

2) Terminal

===➔ *2*

Steps for creating the script:

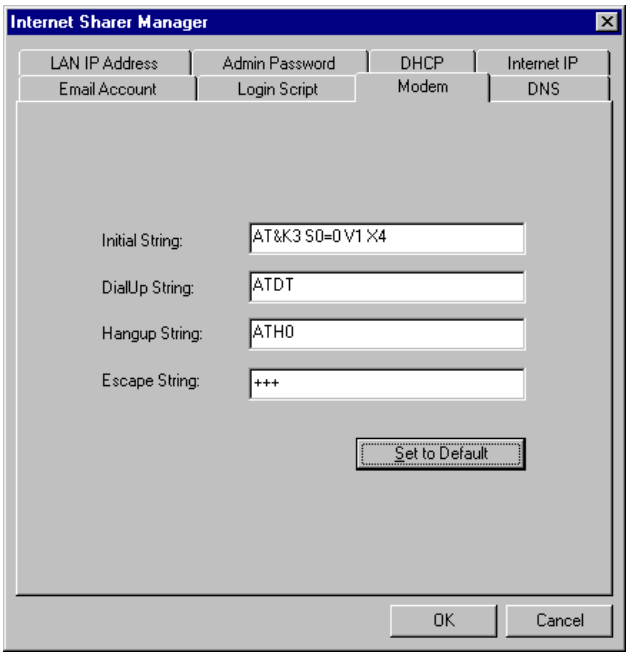
1. Under the Wait-For text box, type in
2. Under the Send text box, scroll down to select USERNAME.
3. Click ADD to add this sets of commands.
4. Follow the same rule to add 'password'.
5. Under the Wait-For text box, type in then click ADD to end.

DNS

This DNS IP address is to be stored at Internet Sharer for request Domain Name service while connect to your ISP. You should have already setup a DNS while using Setup Wizard. If your ISP informs you the change of their DNS, you may enter the correct IP address here.

Modem Setting

Most of the up-to-date modems on the market supports standard modem initialization commands. However, some modems might have problem while you use the standard commands to control it for dialing out. To solve this problem, Internet Sharer allows you to set the special modem initialization command if you refer to the modem manufacturer's user guide.



6

Configuring Your Windows 95 or Windows NT

If you are a new user for networking, recently purchase the network cards and install the cards following their instruction. You have to check if you install the TCP/IP before you continue the software installation of Chapter 4.

The best way for configuring the TCP/IP under Windows 95 is by using Moxa's Internet Sharer software. However, if you have an existing LAN or you like to do it manually, you can follow the instruction later in this chapter.

This chapter describes:

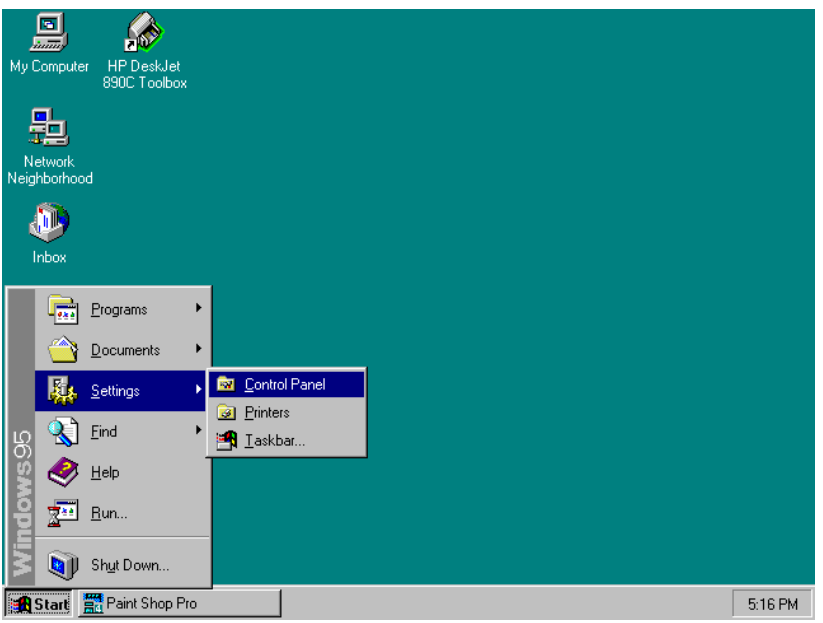
- Setting up a Windows 95 Network
- Setting up a Windows NT Network

Setting up a Windows 95 Network

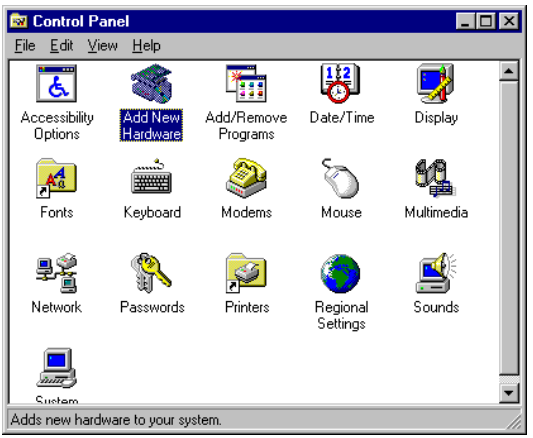
Installing Network Card on Windows 95

If you don't have an existing LAN, follow the following steps to install and configure your PC before installing Internet Sharer.

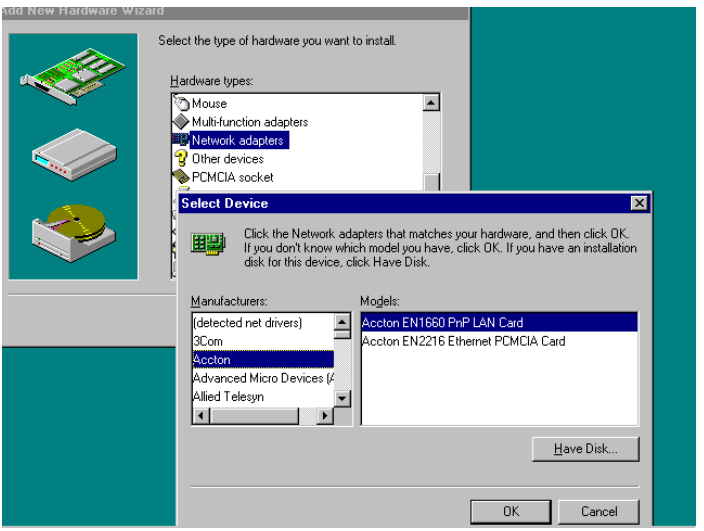
1. Click start from the Taskbar. Move your mouse cursor to Settings then move cursor to Control Panel and click on it.



2. Under Control Panel window, click on Add New Hardware.



3. Click on Network adapters under the Add New Hardware and select the card you have from the list.



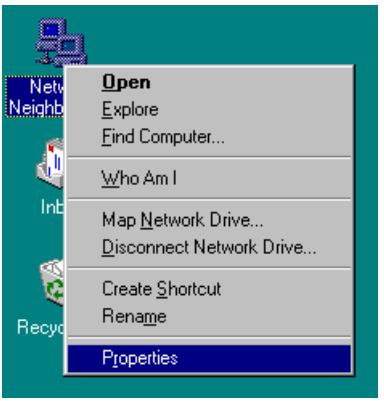
You may be asked to reboot your system to complete your Hardware installation.

Installing TCP/IP on Windows 95

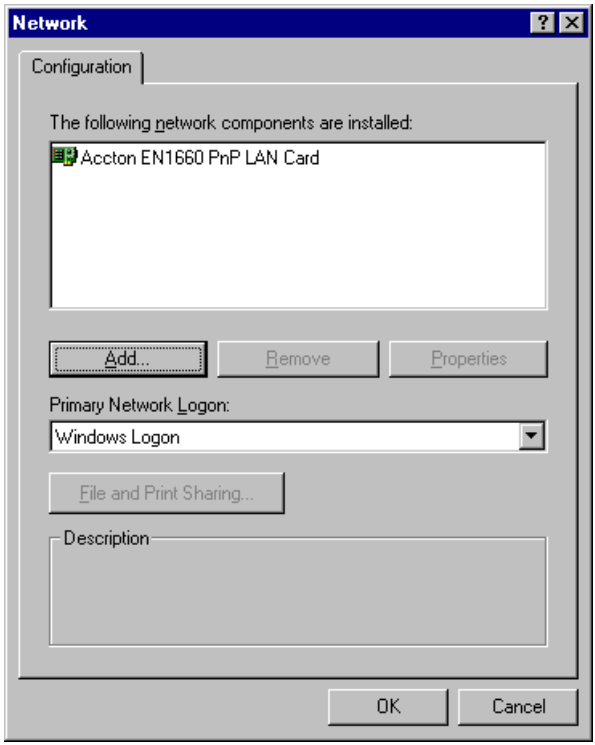
Now that you have finished installing your LAN card and the driver, you still need TCP/IP to communicate Internet and Internet Sharer. Most LAN card driver don't install TCP/IP to your system. Thus, you still need to install TCP/IP for communicating Internet Sharer and Internet.

Please follow the steps below to add TCP/IP protocol to your computer.

1. Right click on the Network Neighborhood from your desktop. Select Properties.

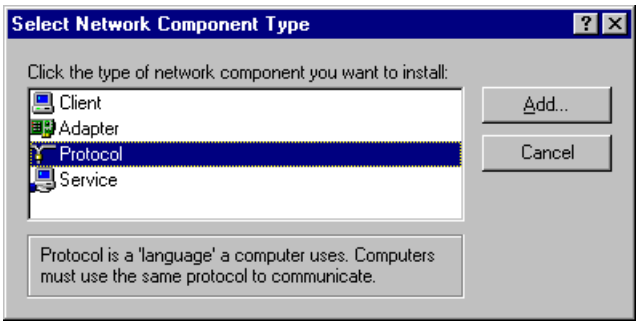


2. Click Add ..from the popped up Network dialog box.

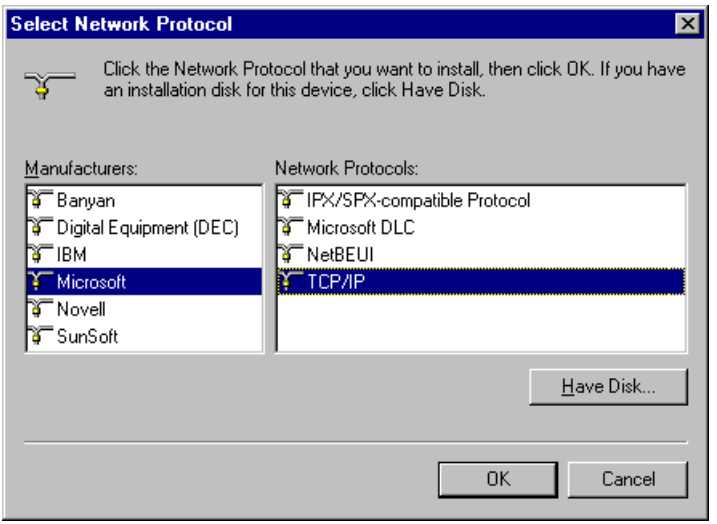


✓ ***Note :*** *You should see the LAN card you have selected from the step Installing Ethernet Card with some protocols like Microsoft Network or others. Add the TCP/IP protocol only if you cannot see it from this list.*

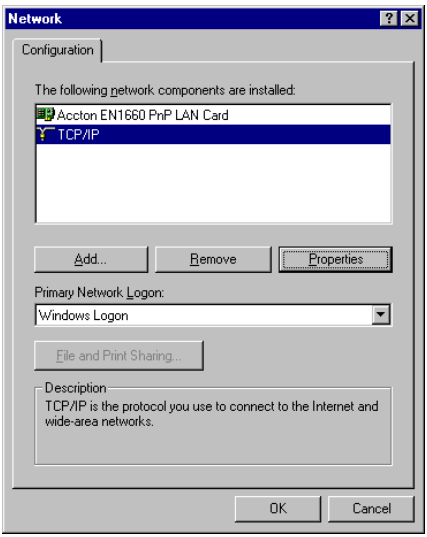
3. Click on Protocol then click Add



4. Select Microsoft from the Manufacturer list then select TCP/IP. Click OK to continue.



5. Now you have TCP/IP protocol. Click OK then you will be asked to restart the system.



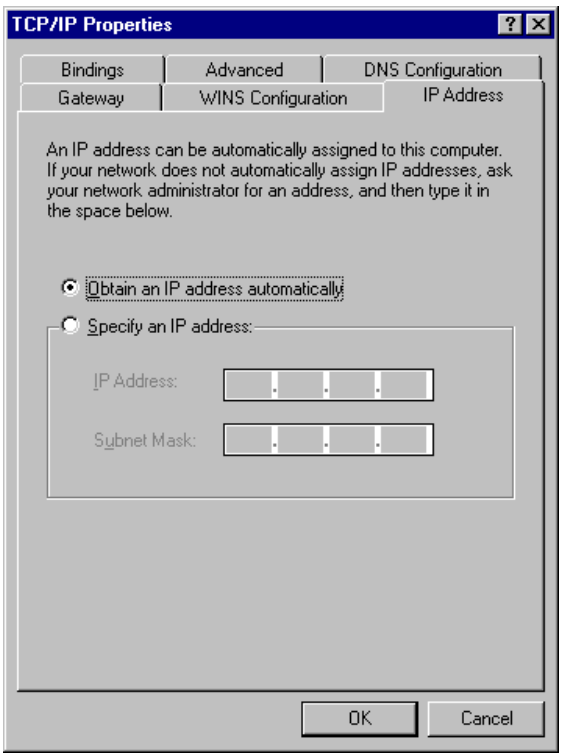
Congratulations! Now you have the LAN card and TCP/IP installed on your system. You may leave the rest of the configuration jobs to Internet Sharer because the default setup of Windows 95 TCP/IP works with Internet Sharer or you may check with next section to manually configure your Network to talk with Internet Sharer.

Configuring Windows 95 TCP/IP

If you have an existing local network, you may need to configure your network settings manually so you can work on your local network and communicate through Internet Sharer. Check here to see what you may

need to change and keep the original environment working.

1. Right click Network Neighborhood from your desktop. Select Properties from the screen popped up.
2. Select TCP/IP from the Network screen. If you see more than one TCP/IP settings, select the one for your network card.
3. Click on Properties.



4. If you have an IP address specified for this computer. Select ‘Specify an IP address’ and input the correct address with Subnet Mask.

✓ ***Note :*** *You may need to record down the IP you use. If you specify an IP address group other from 192.168.10.0. You have to run Internet Sharer Manager to change the Internet Sharer LAN IP to your IP group. However, the class for 192.168. is suggested for private use so you had better use this IP address group to your local network. Check back with previous chapter 5 Advance Configuration of Internet Sharer.*

5. Select Gateway from the menu. Enter the Internet Sharer IP address as your gateway.
6. Select DNS from the menu. You have to specify your Domain Name Server properly.

Setting Up a Windows NT Network

Installing Network Card on Windows NT

Log on as a member of the Administrators group for the local computer to install and configure TCP/ IP. Follow these steps to install network card on a Windows NT computer:

1. Right click the Neighborhood on the desktop and click on Properties.
2. Choose Adapter. Select Add. The system will show you a list of network card. Follow your network card manual to choose the card type you have or install from a disk and click OK to continue.
3. After the system installing the software for your card, Windows NT system will prompt you a dialog box to configure the TCP/IP protocol if your NT system already have TCP/IP driver installed. You may continue with the section below which describes how to configure TCP/IP.

✓ ***Note:*** *The Windows NT 4.0 system asks you about installing some network protocols while installing the system. If your system do not have the TCP/IP protocol installed, you may follow the steps above and choose protocol to add TCP/IP.*

Configuring Windows NT TCP/IP as DHCP client

Using DHCP

It is recommended that you use the Internet Sharer DHCP service for assigning your PC to work unless you have an existing LAN and some specific IP addresses are needed. The DHCP server eases you the trouble for setting dedicated IP address, Gateway and Domain Name Server. You may follow the steps below to set your system using automatic assigned IP address:

1. Right click Network Neighborhood and select Properties. Choose Protocol.
2. Choose TCP/IP then click on Properties.
3. Select the network card using for connecting Internet Sharer.
4. Check *Enable Automating DHCP Configuration.*
5. You may setup the DNS address if you get the DNS address from your ISP. You may just leave it blank if you don t have this address.

Manually Configuring your TCP/IP

If you already have an existing LAN and you would like to add another PC to work with both your TCP/IP server on your LAN and Internet Sharer, you need to set your TCP/IP manually without using DHCP.

1. Right click Network Neighborhood and select Properties. Choose Protocol.
2. Choose TCP/IP then click on Properties.
3. Select the network card using for connecting Internet Sharer.
4. Choose configure IP address.
5. Enter your IP address and subnet mask as assigned by your LAN administrator.
6. Go to DNS dialog. Enter your DNS you get from your ISP. You may just leave it blank if you don t have this address.
7. Go to Gateway dialog. Enter the Internet Sharer IP address to the gateway box.

7

Virtual EMail Server

Continuing with the simple description on Chapter 4 - Advanced setting of Internet Sharer Email Account, this Chapter provides detail description on the Virtual Email function of Moxa Internet Sharer. You will learn how to set up the accounts at Internet Sharer for sharing your email account. And, you can check how you can setup the email address for your email reading program and how to send mail.

This chapter includes:

- ❑ Assigning Virtual Email Accounts for Your Team
- ❑ Configuring the Virtual Email at Internet Sharer
- ❑ Setup Virtual Email Account under Outlook Express
- ❑ Setup Virtual Email Account under Netscape Communicator
- ❑ How to Send Email to Virtual Email users?
- ❑ Sending and Receiving Emails

✓ ***Note :*** *If you don't see your email reader from this chapter, simply follow the example provided under Assign Virtual Email under this Chapter.*

Assigning Virtual Email Accounts for Your Team

Internet Sharer Mail Server provides multiple individual E-mail addresses by sharing only one E-mail account. It provides 64 email accounts without additional software needed. The configuration is embedded in the Internet Sharer Manager. Simply follow the instructions below and you can setup your user s email accounts in minutes.

Let us follow the follow Worksheet as an example. Suppose you have:

E-mail account : yourname@company.com.

users: Andy, Cindy, Frank and Michael to use the Email

The right column at the below table lists the email address to be when your team using the Virtual Email Service. The email address will be in the format: accountname<yourname@company.com.> You may follow the example below and make a list for your own.

Virtual Email Account Worksheet			
Your ISP assigned Email: john@yourcompany.com			
account	Account Name	Password	Email address
1	John	xxxxx	“john”<john@company.com>
2	Andy	xxxx	“andy”<john@company.com>
3	Cindy	xxxx	“cindy”<john@company.com>
4	Frank	xxxxxx	“frank”<john@company.com>

✓ ***Note :*** *Password are always hidden when type in because of security* issue.

Basic information needed for account Andy:

- Assigned Email account: john@.company.com
- account name: Andy
- Full Email account: “andy”<john@company.com>
- POP3 incoming mail server: the Internet Sharer IP address - 192.168.10.1 . **This is for input as POP3 server for local Email reading program like Outlook Express or Netscape.**
- SMTP outgoing mail server: company.com

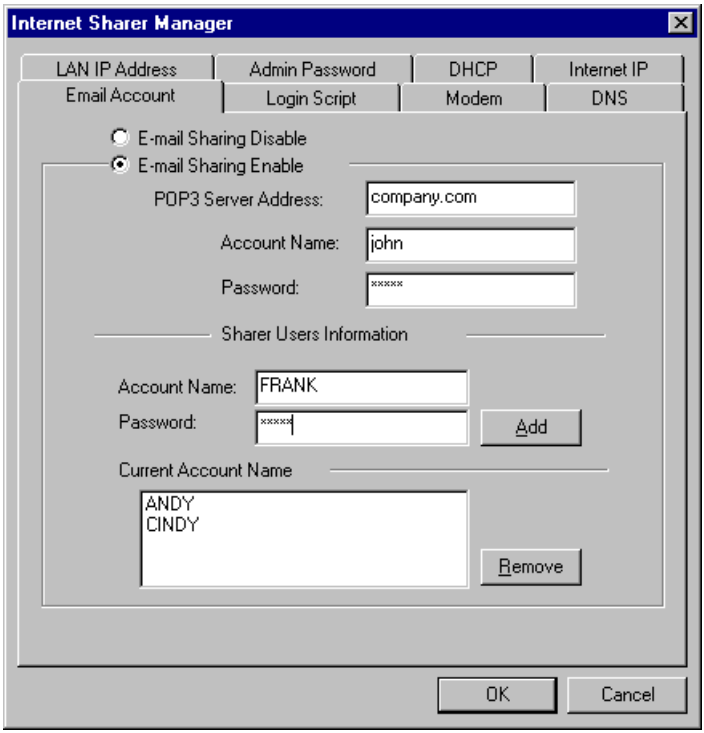
Configuring Virtual Email Accounts on Internet Sharer

Enter the ISP assigned Email account:

1. Go to Start | Moxa Internet Sharer | Internet Sharer Manager.Click “E-mail Account” on the menu screen.
2. Enable E-mail Sharing
3. Enter the POP3 server IP name/address given by your ISP. This is usually the hostname accompanied with your email address. For instance, it should be ‘*company.com*’ for the above example.
4. Enter your E-mail account assigned by your ISP.
5. Enter the corresponding password

Add Your Team's E-mail Accounts

1. Enter one user's account name and password from the worksheet.
2. Click Add to add account.
3. Continue with other user's accounts.
4. If you have entered any wrong account, move your cursor to the one and click remove.

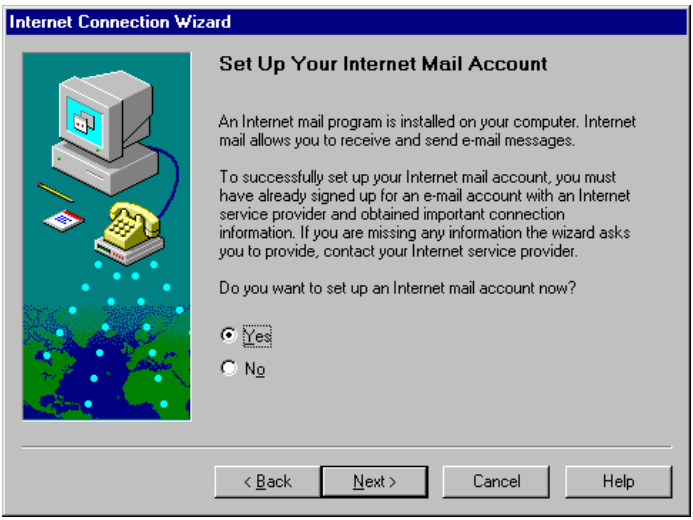


Set up Virtual Email Account on Outlook Express

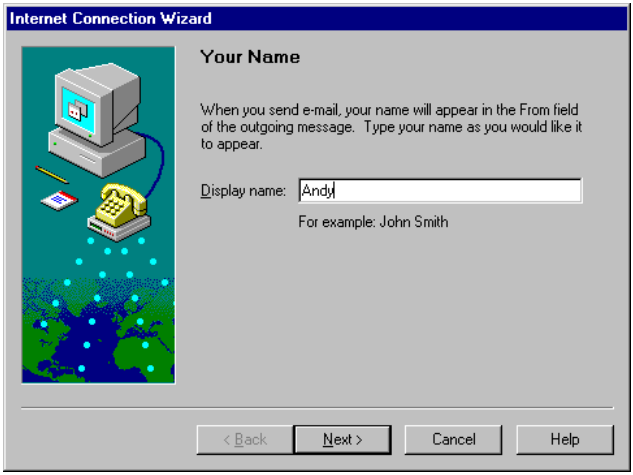
For your convenience, a simple description of Outlook Express under IE4.0 email setup is described below. If you are not familiar with Outlook Express, be sure to read their on-line help so you can use the email reader.

Setting up through Internet Connection Wizard

1. After installing Internet Explorer, it prompts you to add your Email Information. You may also go to Outlook express and add an account under Tool | Account then it will evoke the Internet Connection Wizard.
2. Click Yes to enter your Mail account now.

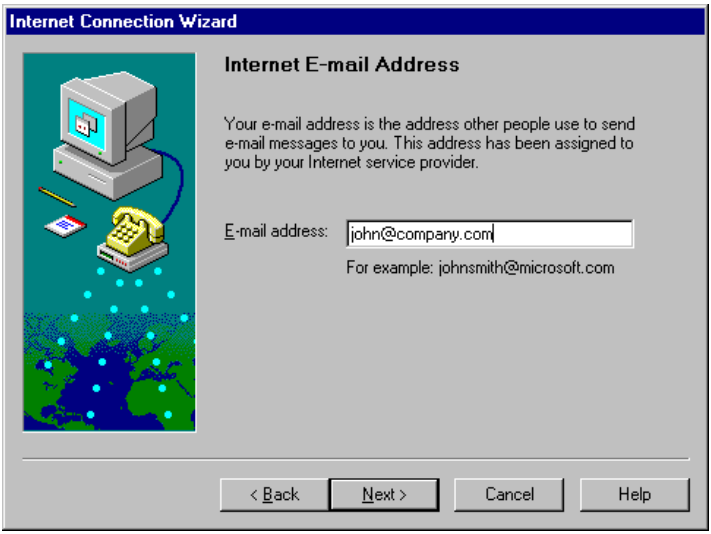


Follow the Wizard to enter the outgoing message name. Be aware that this name should be the account name you input as Internet Sharer Email Account. For instance, john, andy, cindy or frank is the name to input here.

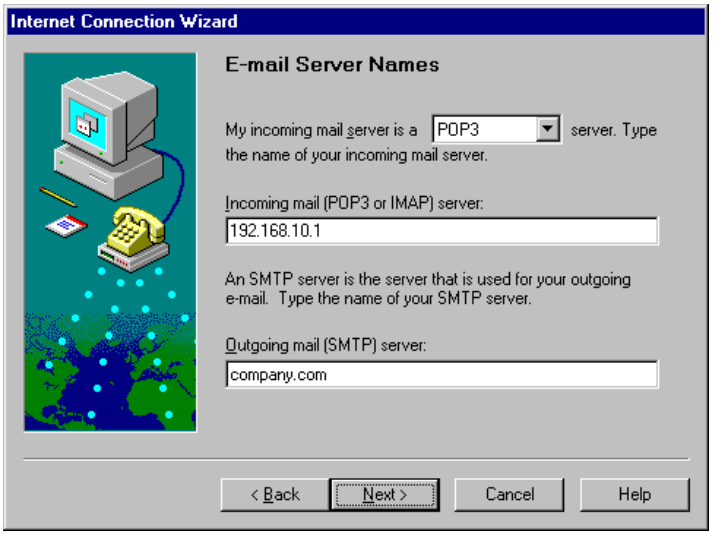


✓ ***Note :*** *This name will be used to combine with your ISP assigned email address to send to your email receiver. For easy reply by the receiver, be sure to input the correct name here.*

1. Enter the ISP assigned email address as the Email account name. You may enter ‘john@company.com’ from the above example.

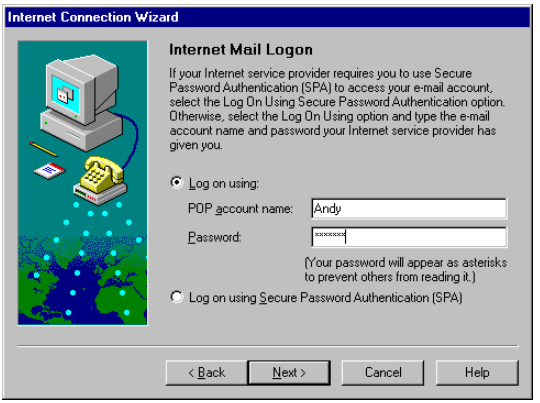


2. Under the Email Server Names window, select POP3 server and fill the Incoming Mail Server with Internet Sharer IP address 192.168.10.1.

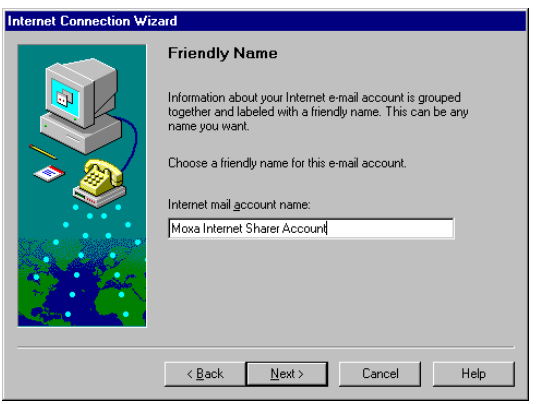


3. Under the same window. Enter your ISP assigned outgoing Mail server to the blank for Outgoing Mail Server. This is usually the name as ‘company.com’.

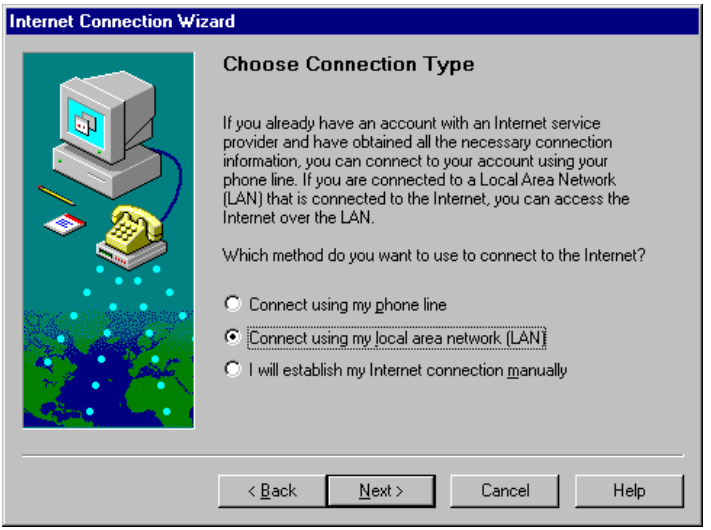
4. Under the Internet Mail Logon window, enter the virtual mail account name and password.



5. Finally, the wizard prompt you to enter a friendly name for this account. You may enter it as Internet Sharer Account



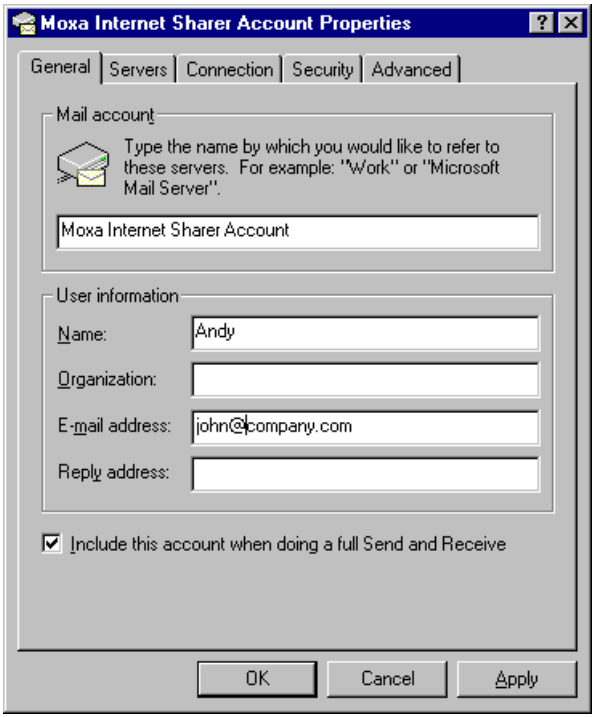
6. Finally, you have to choose Connection Type as Connect using LAN then you are ready to work on your account.



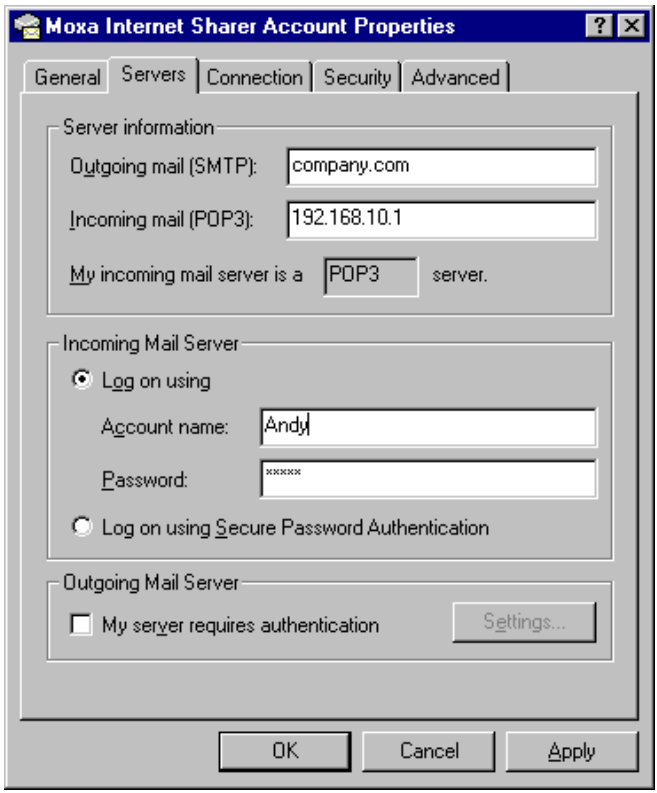
Email Account Modification

You may modify your account any time by going to Outlook Express and select account. Click Outlook Express | Tool | Account. Select the account you have and click properties.

1. Check with the Email name and Address to see if correct. If not, please modify it.



2. Move to Server. Check the Incoming POP3 to be Internet Sharer. Also check your login name here.



Setup Virtual Email Account on Netscape Communicator

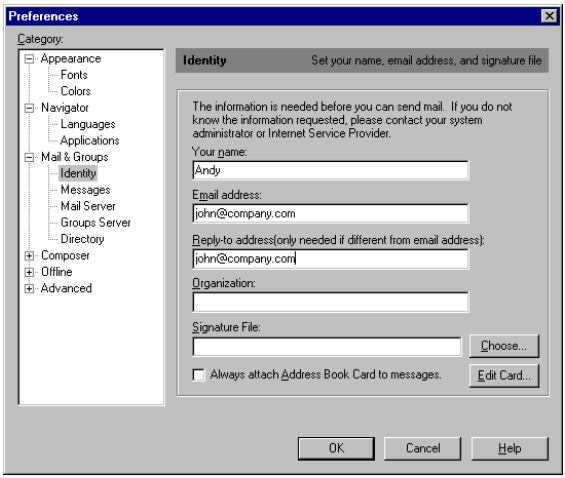
from the worksheet

Follow the same rule as described earlier in this Chapter for Assigning Virtual Emails for Your Team. Take account
as an example:

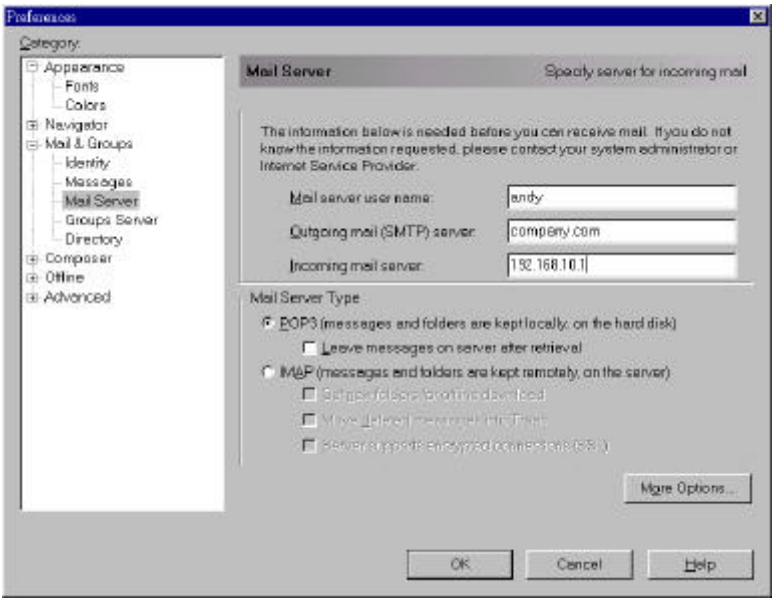
- Assigned Email account: john@.company.com
- account name: Andy
- Email account: andy<john@company.com>
- POP3 incoming mail server: 192.168.10.1 (Internet Sharer LAN IP address)
- SMTP outgoing mail server: company.com.

To set up, follow the steps below:

1. Go to Netscape Communicator Preference. Move to Mail Group | Identity. Input your account name and account address.



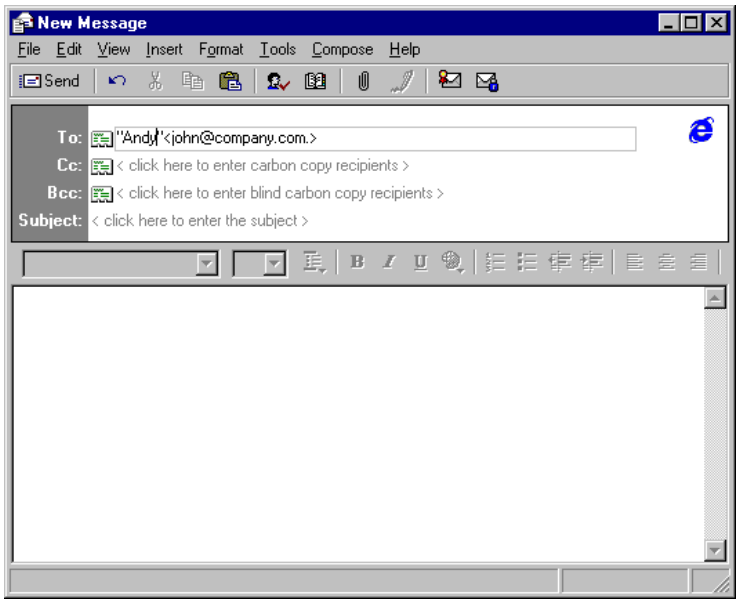
2. Move to Mail Server and input the corresponding information.



How to send Email to another Virtual EMail Account?

Simply follow the rule under Virtual Email Account Worksheet, you can find the email address formatted as:

"virtualusername"<sharedaccount@company.com>.



You may put this email address on your name card so your customer can send email to you using this virtual email address. While follow the above configuration to your email reader, you automatically attached your email address to the receiver. The receiver can click on the reply key and reply email to you easily.

Tips: To add email to the address book, use
name. And, the ISP assigned email account as the email address. Then, the email will automatically add the name while you use the addressbook to send mails.

Sending and Receiving Mails

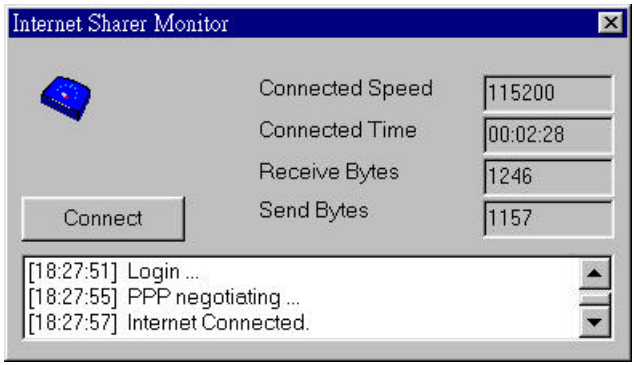
Internet Sharer makes no influence on the way you using Emails. Account change is the only change that you need to do for using Virtual Email Server. For sending and receiving mails, follow the regular rules.

8

Internet Sharer Monitor

Internet Sharer is designed for users access to Internet without needs to know when to dial-up to connect or when to disconnect. However, users - especially administrator, might want to know how is the remote connection of the Internet Sharer while using a browser or any Internet service. Internet Sharer Monitor is the utility designed for any network users to monitor the Internet Sharer status. This program is installed while you run the Setup program on the enclosed disk. It is a also a tool to help diagnose what is going on if problems occurs when accessing Internet.

What to See in the Internet Sharer Monitor?



Internet Sharer Monitor is equipped with the following items:

- Connected Speed: The speed that modem communicates with remote site for this connection.
- Connected Time: The time since the start of this connection
- Bytes Sent: The bytes been sent since this start of connection.
- Bytes Received: The bytes received from Internet since this start of connection.
- Connect: This button is supported for users who like to manually connect to remote without using Internet Access programs like browsers, FTP, etc.
- A Event Log window: This window records the recent events for user to verify the situation of the connection. This window maintains a maximum of 20 logs. You may scroll up or down to see the latest or previous logs.

To run the monitor, go to Start, find Moxa Internet Sharer and click the Internet Sharer Monitor bar.

The Internet Sharer Monitor will embedded in your system till you completed close it. To close the Monitor, right click on the 'tray' icon of Internet Sharer down at the Taskbar and choose close.

✓ ***Note :*** *If you don't see the Monitor icon shows up at the taskbar, it means the Internet cannot be found on your LAN. Check with troubleshooting for detail.*

Event Logs

This section describes the messages you may get under the event logs window of Internet Sharer Monitor.

- Modem Not Ready - Modem is not powered on or the modem is not connected.
- Modem Ready - Modem is connected and ready to connect to remote.
- No Carrier / No Answer – Carrier dropped or remote modem does not answer after certain time.
- Remote Busy - The phone line you are dialing is busy. You may try back later. If this happens continuously, you may try other number or check with your ISP to provide you another line.
- No Dial Tone – The line from your modem to the wall outlet may not be properly hooked or you have a broken line so the modem cannot detect a dial tone from the line.
- PPP Authentication Failed – Your account name and password may

not match the one on your ISP machine. Double check with the ISP account name and the password you type in to the Internet Sharer using Internet Sharer Manager. If you are sure they are the one that your ISP provided, call your ISP for the problem.

Appendix A describes what to check while problems occur. Check over there if you find these messages cannot be solved.

A

Appendix A Troubleshooting

This appendix gives solutions to problems that might occur during installation and operation of Internet Sharer.

Problem during installation

📖 ***No power to the Internet Sharer***

- Check to see the power cable is firmly connected
- Make sure the outlet connected is working
- Press the Power button on the front panel

📖 ***Cannot install Internet Sharer Software***

This happens when the Internet Sharer cannot be found. For instance, if you try ‘ping 192.168.10.1’ from the MS-DOS prompt, you get the response from the address you ping. In this case, you won get response from the Internet Sharer. You may check with the following steps:

- Check to see if the Internet Sharer is powered on.

- Check your cable connection between Internet Sharer and your PC
- Check the LAN LED on the Internet Sharer. If the port connected to your computer is not lit on, check the network cable connections on both the Internet Sharer site and your Computer site. If it is connected, but the LAN LED still isn t lit, try another cable.
- Check if your LAN driver and TCP/IP protocol is properly installed on your PC. Following are the commands to show how is the configuration at your platform now. If you can address, you may go to Chapter 6 to check your LAN card and TCP/IP setting again.
- On Windows 95: Run winipcfg from Run on the Start menu. Your PC should have an IP address of 192.168.10.*n*, where *n* is from 2 to 254. If the IP address is not in this range, click Release and then click Renew.
- On Windows NT: Type 'ipconfig' from the command prompt. Your PC should have an IP address of 192.168.10.*n*, where *n* is from 2 to 254. If the IP address is not in this range, try ipconfig /release release then try
- There may have duplicate Internet Sharer IP on your LAN. Power down the Internet Sharer and try to ping 192.168.10.1 or the current Internet Sharer IP address. If you can get the response, you have another machine with the same IP. You may choose to change the IP address of your machine. Or you may change the IP address of Internet Sharer. You have be aware to power down your machine before power on Internet Sharer.
- If you have already installed the Ethernet card and TCP/IP, try to remove the driver and reinstall it. Check if your Ethernet card has been removed for some reason. This could happened if you are

using a easy removable PCMCIA card for your notebook.

- You may have a defect Ethernet card. Try another card.
- If you still can't connect to Internet Sharer or getting error messages, try another Ethernet card.
- Press the Power button of Internet Sharer off and on again.

Problems while connecting to Internet

You may run Internet Sharer Monitor from any PC installed with Internet Sharer software. Check with the status log to see if any error messages occurs especially the last log.

🕮 ***Modem not Ready***

- Check if the modem power is on
- Check if the cable connecting modem to Internet Sharer is with correct pinouts and firmly hooked. If still not working, try a new cable.

🕮 ***Modem Ready but connect to ISP failed***

- Check if the phone line is working and connected properly.
- Check if 'no dial-tone' message is shown. If so, you need to check with your phone line. You may connect a phone to see if you can call out from this line.
- Run Internet Sharer Manager and verify that the phone number and other ISP settings like account and password are correct or retype if needed. If everything is correct, call your ISP to verify your account.
- Do you phone line require a prefix like for outside line?

- Remote busy. If your ISP supports multi-line, you may go to Internet Sharer Manager to input another phone number. You can connect directly through the Internet Sharer Monitor.

Other Problems while using Internet Sharer

🕮 ***I have connected to my ISP while I check with my Internet Sharer Monitor. However, I cannot browse the web.***

Your Domain Name Server not properly configured.

- Try to ping one or two IP addresses from your DOS prompt, i.e. you can ping your ISP's IP address to see if the ISP working properly. Try another IP if the first one is not working. If at least one is working, it means your connection to ISP is ok. However, you may not have a proper Domain Name Server configured. You can try Moxa's address at 203.67.8.1 or your DNS IP address.
- Check if you have got the DNS from your ISP.
- Go to Internet Sharer Manager | configure | Advance.. | DNS. Input the correct DNS here.
- Go to your Network Neighborhood | properties | TCP/IP properties | DNS. Input the server IP address.

You may have Gateway problem :

- If you do not choose typical while installing Internet Sharer software, you have to make sure you have configure your gateway address properly. Go to your Network Neighborhood | properties | TCP/IP properties | Gateway. Input the gateway IP address as Internet Sharer IP address.

🕮 ***I found my Internet Sharer keep dialing out occasionally even there***

is no one access to Internet. What is wrong?

Those programs need to get information from Internet occasionally enable Internet Sharer dialing out.

- Check if Web browsers have enable something like active channel to get Internet data after some certain minutes.
- Check if your Email Service reads your mail every certain minutes.

🕮 ***My Web browsing programs keeps popping up the dial-up connection while I start reading any information. What should I do?***

- You must have installed your browser using Dial-up network. With Internet Sharer, you have to select LAN while setting up your browser or Email for Internet Connection. Thus, it is suggested that you remove the dial-up connection from now on.

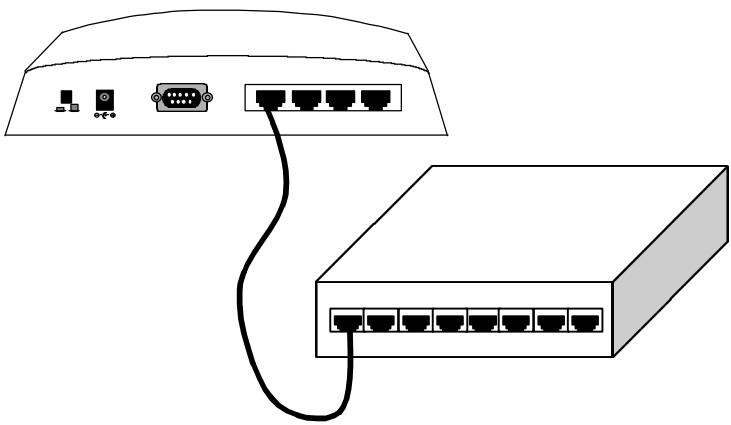
🕮 ***I can access to Internet and everything is fine. However, when I try to use some special programs, i.e. games, Netmeeting. I found troubles. What is wrong?***

- Internet Sharer is using the NAT protocol which not allow remote to access to your local LAN. This might have a result of not functioning for those program needing remote to connect to your local IP. Moxa has tested some of the well-known programs like Microsoft NetMeeting, Yahoo pager, games – Diablo. If you find any special programs bumping these kind of problem, you may consult with Moxa customer service to see how will that work.

B

Appendix B Expanding Your Network

Internet Sharer is able to connect to another Hub to expand your network. Thought Internet Sharer is not equipped with an Uplink port, you can connect any one of the 10BaseT LAN port of Internet Sharer to a HUB uplink port. The 10BaseT RJ-45 to RJ-45 link cable is easy to find in any computer shop.



C

Appendix C LED Descriptions

LED	Color	Description
Power	Red	Indicate the Internet Sharer is turned on
Network	Yellow	Flashing indicates packet collisions on the local Ethernet LAN
LAN 1-4	Yellow	Indicates that data link has been made between Internet Sharer and your computer network card. Blinking light indicates data being sent or received.
Modem	Yellow	Indicates modem DTR is on, that modem is ready to use
COM	Yellow	Indicates PPP link has been made between Internet Sharer and remote server

D

Appendix D Cable Pinouts

Internet Sharer follows the standard cable pinouts thus you can find most of the cables in computer stores. However, if you need have special requirements, you may check with this section for reference.

- RS-232 DB9 WAN Port Pinouts.
- Direct link RS-232 wiring.
- Cable pinouts to connect from WAN port to modem port.
- 10BaseT Port Pinouts.
- Straight-Through 10BaseT Cable to connect to a HUB uplink port .
- Signal switched cable to connect to a HUB without uplink port.

RS-232 DB9 WAN Port Pinouts with Direct Connect Wiring

Signal	DB9 DTE male	Connection	Direct connect	DB9 DTE male	DB25 DTE male
DCD	1	-------	DCD	1	8
RxD	2	-------	TxD	3	3
TxD	3	-------	RxD	2	2
DTR	4	-------	DSR	6	6
GND	5	-------	GND	5	7
DSR	6	-------	DTR	4	20
RTS	7	-------	CTS	8	5
CTS	8	-------	RTS	7	4
RI	9	-------	RI	9	

10BaseT RJ-45 Port Pinouts

PIN	Description
1	Tx+
2	Tx-
3	RX+
6	RX-

Straight-through 10BaseT Cable to Connect to a HUB Uplink Port

RJ-45 Pin	Signal	Direction	RJ-45 Pin
1	TX+	→	1
2	TX-	→	2
3	RX+	←	3
4	-	-	4
5	-	-	5
6	RX-	←	6
7	-	-	7
8	-	-	8

Signal Switched Cable to Connect to a HUB without Uplink Port.

If you have a HUB on your LAN already and the HUB is without any uplink port, you may need to make the cable your own by the following wiring method.

RJ-45 Pin	**Signal**	**Direction**	**RJ-45 Pin**
1	TX+	→	3
2	TX-	→	6
3	RX+	←	1
6	RX-	←	2