3. Click $\stackrel{6}{\boxtimes}$ on the tool bar to configure the selected device.

The configure dialog box is categorized into several tabs as shown in the following.

<u>Management</u>

Configure	×
Management Local Port Global Po	rt Virtual Server Packet Filters
Firmware version: 4.08	
Device/Computer Name	Intitled
Domain Name	Domain
PPPoE Enabled	
Username :	11
Password :	***
Auto-disconnect if idle	j minutes
Change Administrator's P	assword
New Password	
Confirm New Password	
TELNET management from	Internet
Save Cancel	

Figure 6

Firmware Version: Read-only.

Device/Computer Name: Enter a descriptive name for identification purpose. Some Internet Service Providers (ISP) requires this information. The Maximum input for this field is **20** alphanumeric characters and it is case sensitive.

Domain Name²: For example: yourcompany.com. The maximum input for this field is 32 alphanumeric characters and it is case insensitive.

PPPoE Enabled: If you are using PPPoE service, please check this box and enter the username and password provided by your ISP.

PPPoE functions

• Single Account Sharing: One Internet account shared by multiple users.

² Your ISP may ask you to input a certain domain name. Domain name is also required for internal network's email and news functions.

- *Automatically connected to the Internet:* Just launch your Internet program and the unit will login and get on-line automatically.
- *Automatically disconnected from the Internet:* This device will disconnect automatically when it has been idle for a predetermined period of time.

Username: (for PPPoE)

• Maximum input is 52 alphanumeric characters (case sensitive).

Password: (for PPPoE)

• Maximum input is 36 alphanumeric characters (case sensitive).

Auto-disconnect...: This device can be configured to auto-disconnect when there is no activity on the line for a predetermined period of time.

- Default: 5 minutes. You can input any number from 0 to 65535.
- To keep the line always connected, please set the number to **0**.

Change Administrator Password: In this dialog box, you can set administrator's password.

• **Maximum: 6** alphanumeric characters (case sensitive). Please record the password and keep it at a safe place.

TELNET management...: Checking this item lets you manage this device remotely from outside of the network through Telnet.

• Default: disabled.

Local Port

This screen contains settings for LAN interface attached to the local network.

Configure 🗙
Management Local Port Global Port Virtual Server Packet Filters
IP address : IS2 . 168 . 1 . 254 Subnet Mask: 255 . 255 . 0
C Do not distribute IP address to local computers
Distribute IP address to local computers
Continuous IP address pool
Number of IP address in pool 128
Save Cancel

Figure 7

IP Address

• Default: 192.168.1.254

SubNetmask

• Default: 255.255.255.0

ODo not distribute IP address to local computers³

Checking this radio button to disable this IP Sharing device to distribute IP Addresses to the local network.

ODistribute IP addresses to local computers

Checking this radio button to enable this IP Sharing device to distribute IP Addresses. And the following field will be activated for you to enter the starting IP Address:

Continuous IP address pool starts at

The starting address of this local IP network address pool. The pool is a piece of continous IP address segment.

Number of IP address in pool

• Maximum: **128**. Default: **128**

³ If you check this selection, remember you have to specify static IP address for each of your local computers.

<u>Global Port</u>

This screen contains settings for the Global interface. Different WAN interface, i.e. ADSL with PPPoE enabled, ADSL/Cable modem, or Leased Line will have different display as illustrated below

Configure	Configure	Configure
Management Local Port Global Port Virtual Server Packet Filters	Management Local Port Global Port Virtual Server Packet Filters	Management Local Port Global Port Virtual Server Packet Filters
Adapter Adams: 00x009820032x0 @ Orban: good performance extension 0 Ø Status: [0] 0	Adapar Adapar Adapar Adapar Addres Obsis Obsis <thobsis< th=""> Obsis Obsis</thobsis<>	Adapter Address : Obs09800032x0 C Obtain global joot configuration automatically C static global joot configuration at P address : 0 0 0 Stabilitation : 0 0 0 0 Cateway : 0 0 0 0 0
DNS server #1 : 1 1 0 . 0 DNS server #2 : 0 . 0 . 0	DNS server #1 : 0 . 0 . 0 . 0 DNS server #2 : 0 . 0 . 0 . 0	DNS server #1: DNS server #2: 0 . 0 . 0 . 0
Sati: Route 2 IP Add: 0 . 0 . 0 . 0 Submak: 0 . 0 . 0 . 0 Gatemay 0 . 0 . 0 . 0	Static Rotte 1 2 IP Addt 0 , 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 , 0 , 0 , 0 0 0 0 , 0 , 0 0	Static Rotte 1 2 IP Addt 0
Save Cancel	Save Cancel	Save Cancel

PPPoE enabled

Leased line with an fixed IP address ADSL/Cable with DHCP IP address

Figure 8

Adapter Address: It is necessary for some ISP to identify this device by its MAC address.

Obtain global port configuration automatically:

If this selection was grayed out, it means you are using ADSL PPPoE (To be set in the Management part. See the previous section). The Global port IP address is then obtained through DHCP protocol from ISP after the device boots up. The address may vary each time the device restarts.

If not, then you can choose to obtain a dynamic IP address, or static IP address.

Set static global port configuration: Check this item if your ISP provides you with a fixed IP address.

IP address: Provided by your ISP.

SubNetmask⁴: Provided by your ISP.

Gateway/DNS server #1/DNS server #2: These values will be automatically provided once you click "**Obtain global port configuration automatically**". You can change the values if necessary.

Static Route: You can set static routes to manually administrate the network topology/traffic when the dynamic route is not effective enough.

⁴ If you checked PPPoE in **Management** tab (see the **Management** section), "**Obtain global port configuration** automatically" and "Set static global port configuration" are grayed to deny any modification.

Enter the settings for "**Static Route #1**" or "**Static Route #2**", and click "**SAVE**" to save settings. Click "**Cancel**" to close the configuration window.

Virtual Server

Being a natural Internet firewall, this IP Sharing device protects your network from being accessed by outside users. When there is application that requires outside users to access internal servers (e.g. Web Server, FTP Server, e-mail Server or News Server), this device can act as a virtual server to public services. You can set up a local server with specific port number which stands for the service (e.g. web(80), FTP(21), Telnet(23)). When this device receives an incoming access request for this specific port, it will be forwarded to the corresponding internal server.

Configure
Management Local Port Global Port Virtual Server Packet Filters
Add Server Single Port C Port Range Port Type to C TCP C UDP
Local Server: Browse
Add
Server List
Port# Local Server Type
Delete
Save Cancel



Single Port/Port Range: For selecting between a specific port and a range of ports which you want the Internet users to be able to access. The valid port number ranges from 0 to 65535.

Port Type: please select the port type (TCP or UDP) for the port number that was entered earlier.

Well Known Port: Click the down arrow \forall to scroll down and select from the most popular server applications for Virtual Server. The following is a list of port numbers that are commonly used for some Internet applications.

Port Name Number

ftp	21
telnet	23
рорЗ	110
smtp	25
dns	53
WWW	80
news	119
gopher	70

Port Numbers for some Internet applications

Local Server: Enter the Local Server's IP address (for the specified port entered above).

Browse: If DHCP function is enabled, click on "Browse", the distributed IP Addresses (with associated computer name) will appear on the screen. You can select the desired IP address (for the specified port entered above) and add it to the server list.

Computer name	IP Address	
Andy	192.168.1.1	
Eleen	192.168.1.2	
1		

Figure 10

Add: After finish selecting the port number and the internal server, click Add to save the new virtual server so that it can take effect after system being rebooted.

Note: Maximum 12 Server entries are allowed and each port number can only be assigned to one IP address.

Delete: click to select the **Port#** in the "Server List" and click "Delete" to delete the server from the list.

Packet Filters

In the Packet Filters setup screen, you can block specific internal users from accessing the Internet and you can also disable specific Internet services. You can set up the filters through

the following three types of filter. Each filter can be set to **filter (drop)** or **forward (pass)** packets. You can input up to six filters in this device.

Network Adapter Address Filter: filter according to **local** computer's network adapter MAC address (also known as the adapter card's Physical Address).

IP Address Filter: Filter with computer's IP address. You can filter a single IP, or a range of the IP addresses.

- Local IP: filtering IP address of a local computer.
- **Remote IP**: filtering IP address of a **remote** server (this remote server connects to the device via Internet).

Note: Use "Remote IP Filter" function to prohibit all local stations from accessing certain web sites on the Internet (requires the web site's IP address).

TCP/UDP Port Filter: Filter using the port number. You can set filter for a single port or a range of ports.

- **TCP port**: filter according to the Connection-Based Application Service on the **remote** server using the port number.
- **UDP port**: filter according to the Connectionless Application Service on the **remote** server using the port number.

Management Local Po	ort Global Port Virtual	Server Packet Filters
Adapter	Forward [Netwo	ork Adapter Address Filter] -
address :		Add
© Filter — O H © Single © Ran	Forward uge © Local IF C Remote	[IP Address Filter] IP
		Add
Filter List	nge C UDP	Add
		Delete

Figure 11

Note: You can only set each filter type to either forward or filter. For example, you can't set one IP address to forward and set another IP address to filter. You must set them both to either forward or filter. However, you can set to forward an "Adapter Address" and set to filter an "IP address".

Network Adapter Address Filter:

Filter according to local computer's network adapter MAC address.



Figure 12

Network Adapter's MAC address consists of 12 alphanumeric characters

(i.e. 00 ab 12 cd 34 ef) and it is normally printed on a sticker on the network adapter.

If you have Windows 95, 98, or ME, go to "Start", select "Run", and type in **winipcfg**. Select the "network adapter" and you can find the Physical Address on the screen.

If you have NT or Win2000, open a DOS prompt window, type in **ipconfig** /**all** and then press "Enter". The MAC (Physical) Address along with adapter's IP information will appear on the screen.

IP Address Filter:

Allows IP address range setting.

Local IP: Filter according to the IP address of the local computer.

Remote IP: Filter using the IP address of a remote server (i.e. Web Server).



Figure 13

TCP/UDP Port Filter

TCP port: filter according to the Connection-Based Application Service on the **remote** server using the port number.

UDP port: filter according to the Connectionless Application Service on the **remote** server using the port number.

Filter — C Forward — Single C Range to	[TCP/UDP Port Filter] - TCP UDP Add
--	--



When you have finished setting the filters, click **Add** and the added filter will appear on the **Filter List**. To remove a filter, click to select the filter in the **Filter List** and click **Delete**.

After the configuration, click on **Save** to save the settings. Click **Cancel** to cancel the configuration process.

Filter List	
1	Delete
Save Cancel	



Please see examples on how to setup filters in **Terminal Command** section under vserv.

CONFIGURATION VIA WEB

Assuming the workstation's TCP/IP is set to obtain IP automatically and the IP Sharing Device's Local Port is set to "Distribute IP" (default), and all the cables are connected correctly. Open the browser, enter the local port IP address (default at 192.168.1.254) of the IP Sharing Device, and click "Go" to get the login page.

http: <u>F</u> ile	//info Edit	<mark>o.aboco</mark> ⊻iew	m.co F <u>a</u> v	o <mark>m.tw/</mark> orites	- Micro	soft Inte Help	rnet Explorer					>
e Back	+	+ Forward	· .	Stop	(‡) Refre:	sh Horr	he Search	Favorites	3 History	<mark>I≧</mark> ≁ Mail	Print	
Address	1	192.168.	1.254	4						-	∂Go	Links

No user name or password is required for the first time login, click **OK** to continue when the following dialog box appears.

Enter Net	work Passwo	rd	? ×
? >	Please type yo		
۶U	Site:	192.168.1.254	
	Realm		
	<u>U</u> ser Name		
	Password		
	\Box Save this p	bassword in your password list	
		OK Can	cel

At the setup home page, the left navigation pane where bookmarks are provided, links you directly to the desired setup page. You can select **Management**, Local Port, Global Port, Virtual Server, Packet Filter, Advanced Settings or Network Status.

Click on the desired setup page to expand the page in the main navigation pane. The setup pages covered in this utility are described below.

Management

Change Administrator's Password: Check and type in "new password", and then at "confirm password", retype the new password to set/change the administrator's password.

• Maximum: 6 alphanumeric characters (case sensitive).