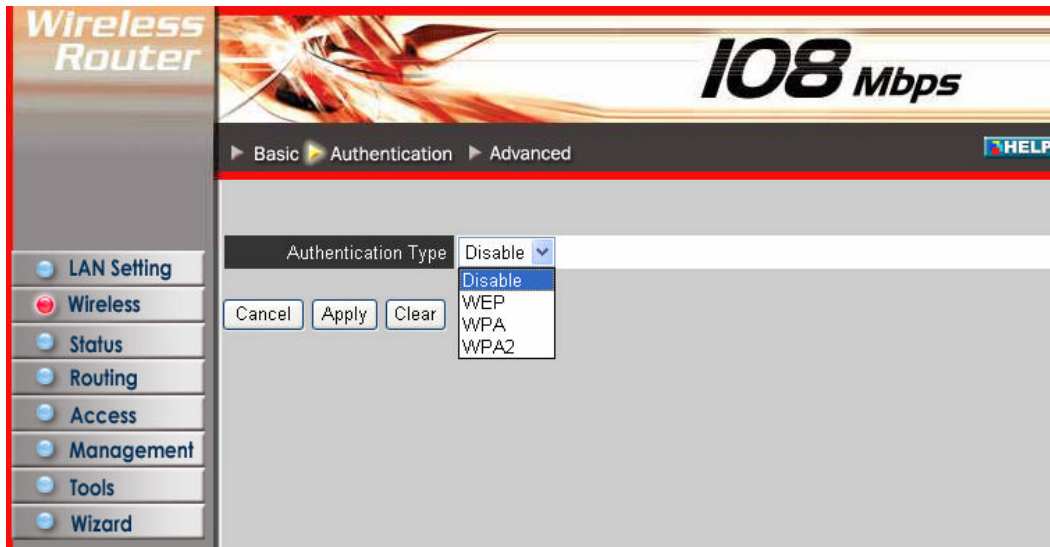


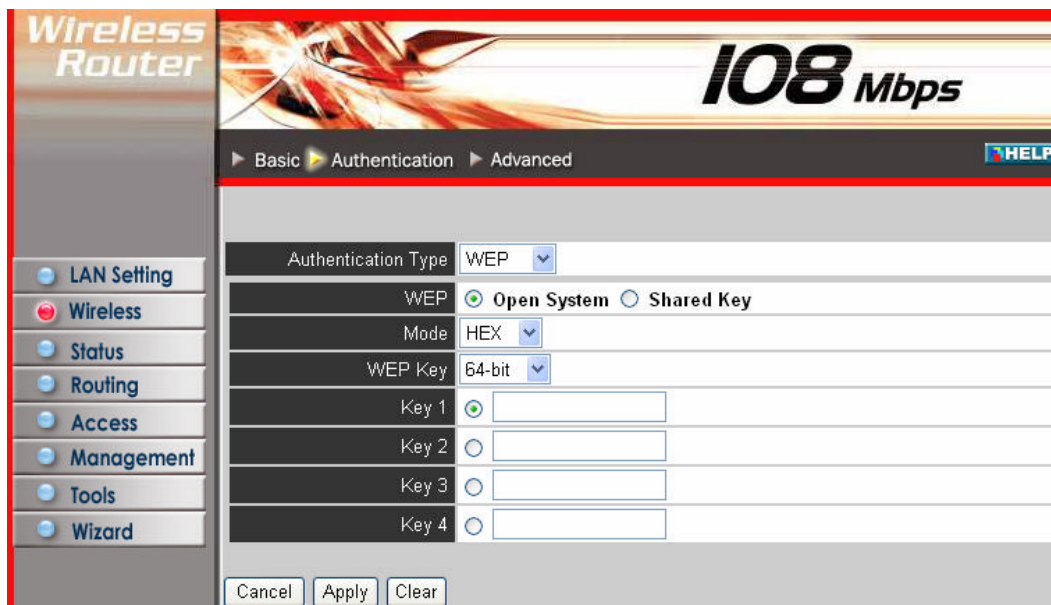
Authentication

The authentication type default is set to disable. There are four options: Disable, WEP, WPA, and WPA2.



Authentication Type: The authentication type default is set to open system. There are three options: Open System; Shared Key, WPA and WPA-PKS.

WEP Encryption



WEP: Open System allows public access to the router via wireless communications; Shared Key requires the user to set a WEP key to exchange data with other wireless clients that have the same WEP key..

Mode: Select the key mode in ASCII or HEX

WEP Key: Select the level of encryption from the drop-down list. The router supports, 64- and 128-bit encryption.

Key 1 ~ Key 4: Enables user to create an encryption scheme for Wireless LAN transmissions. Manually enter a set of values for each key. Select a key to use by clicking the radio button next to the key. Click **“Clear”** to erase key values.

WPA/WPA2 Security



If WPA or WPA2 is selected, the below screen is shown. Please set the length of the encryption key and the parameters for the RADIUS server.

Lifetime: Select the Lifetime of the Encryption Key from 5 Minutes to 1 Day. As soon as the lifetime of the Encryption Key is over, the Encryption Key will be renewed by the Radius server.

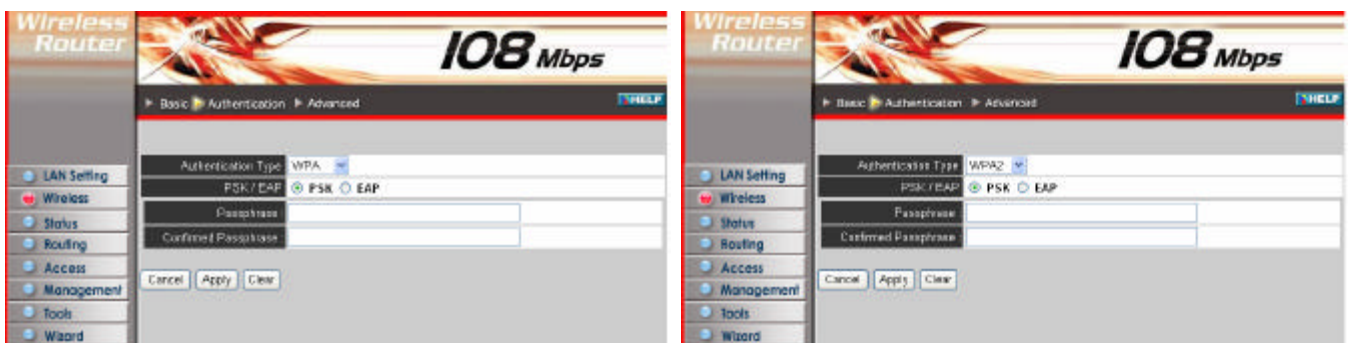
Encryption Key: Select the Encryption Key Length Size ranging from 64 to 128 Bits that you would like to use.

RADIUS Server:

1. Enter the IP address, Port used and Shared Secret by the Primary Radius Server.
2. Enter the IP address, Port used and Shared Secret by the Secondary Radius Server.

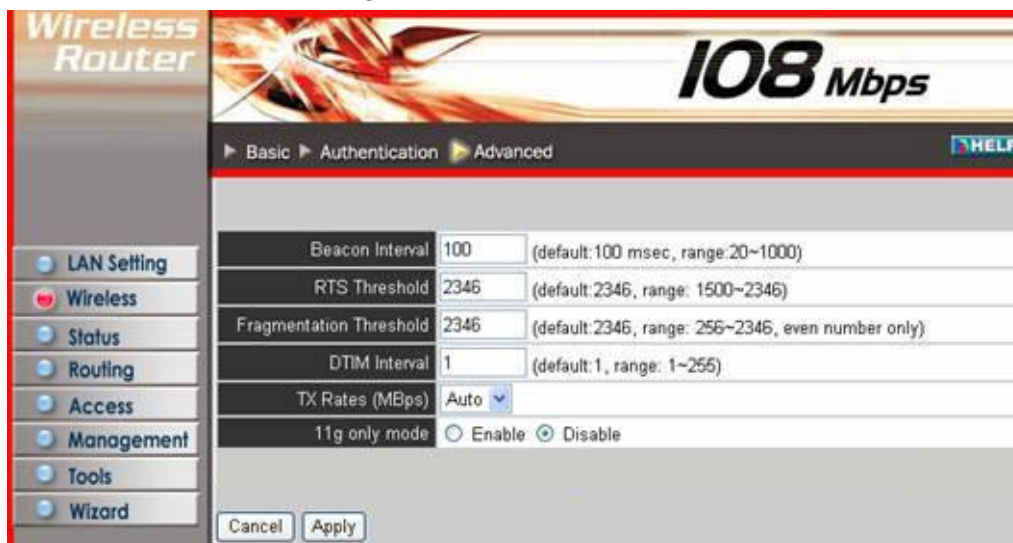
WPA-PSK/WPA2-PSK Security

If WPA-PSK or WPA2-PSK is selected, please set the PSK key in the pass phrase field. The length should be 8 characters at least.



Advanced

This screen enables user to configure advanced wireless functions.



Beacon Interval: Type the beacon interval in the text box. User can specify a value from 1 to 1000. The default beacon interval is 100.

RTS Threshold: Type the RTS (Request-To-Send) threshold in the text box. This value stabilizes data flow. If data flow is irregular, choose values between 256 and 2432 until data flow is normalized.

Fragmentation Threshold: Type the fragmentation threshold in the text box. If packet transfer error rates are high, choose values between 256 and 2432 until packet transfer rates are minimized. (NOTE: set this fragmentation threshold value may diminish system performance.)

DTIM Interval: Type a DTIM (Delivery Traffic Indication Message) interval in the text box. User can specify a value between 1 and 65535. The default value is 1.

TX Rates (Mbps): Select one of the wireless communications transfer rates, measured in megabytes per second, based upon the speed of wireless adapters connected to the WLAN.

11g only mode: If selected the Enable, only allow 802.11g WLAN client communicate with this WLAN Router.

Status

This selection enables user to view the status of the router LAN, WAN and Wireless connections, and view logs and statistics pertaining to connections and packet transfers.

Device Information

This screen enables user to view the router LAN, Wireless and WAN configuration.

The screenshot shows the status page of a Wireless Router 108 Mbps. The page has a navigation menu on the left with options: LAN Setting, Wireless, Status (selected), Routing, Access, Management, Tools, and Wizard. The main content area displays the following information:

Firmware Version: 4.00 , 14 Dec 2005

LAN	
MAC Address	00-10-ab-cd-12-34
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled DHCP Table

Wireless	
Connection	802.11g AP Enable
ESSID	default
Channel	6
Authentication	Disabled

WAN	
MAC Address	00-10-ab-cd-12-35
Connection	DHCP Client Disconnected <input type="button" value="DHCP Release"/> <input type="button" value="DHCP Renew"/>
IP	0.0.0.0
Subnet Mask	0.0.0.0
Default Gateway	0.0.0.0
DNS	

Firmware Version: Displays the latest build of the router firmware interface. After updating the firmware in Tools - Firmware, check this to ensure that the firmware was successfully updated.

LAN: This section displays the LAN interface configuration including the MAC address, IP address, subnet mask, and DHCP server status. Click “DHCP Table” to view a list of client stations currently connected to the router LAN interface.

Wireless: This section displays the wireless configuration information, including the MAC address, the Connection status, SSID, Channel and Authentication type.

WAN: This section displays the WAN interface configuration including the MAC address, Connection status, DHCP client status, IP address, Subnet mask, Default gateway, and DNS.

Click “*DHCP Release*” to release all IP addresses assigned to client stations connected to the WAN via the router. Click “*DHCP Renew*” to reassign IP addresses to client stations connected to the WAN.

Log

This screen enables user to view a running log of router system statistics, events, and activities. The log displays up to 200 entries. Older entries are overwritten by new entries. The Log screen commands are as follows:

Click “*First Page*” to view the first page of the log

Click “*Last Page*” to view the final page of the log

Click “*Previous Page*” to view the page just before the current page

Click “*Next Page*” to view the page just after the current page

Click “*Clear Log*” to delete the contents of the log and begin a new log

Click “*Refresh*” to renew log statistics



The screenshot shows the 'Log' page of a wireless router. The page has a header with 'Wireless Router' and '108 Mbps'. A navigation bar includes 'Device information', 'Log', 'Log Setting', 'Statistic', and 'Wireless'. A sidebar on the left contains menu items: LAN Setting, Wireless, Status, Routing, Access, Management, Tools, and Wizard. The main content area features a table of log entries with columns for Time, Message, Source, Destination, and Note. Above the table are buttons for 'First Page', 'Last Page', 'Previous Page', 'Next Page', 'Clear Log', and 'Refresh'. The table shows several DHCP-related events from April 11, 2006.

Time	Message	Source	Destination	Note
Apr/11/2006 00:50:07	DHCP Request success			172.21.81.178
Apr/11/2006 00:50:07	DHCP Request			172.21.81.178
Apr/11/2006 00:50:06	DHCP Discover			
Apr/11/2006 00:50:02	DHCP Discover			
Apr/11/2006 00:50:00	DHCP Discover			
Apr/11/2006 00:49:58	DHCP Discover no response			
Apr/11/2006 00:49:58	DHCP Discover			
Apr/11/2006 00:49:41	DHCP Discover			
Apr/11/2006 00:49:32	DHCP Discover			
Apr/11/2006 00:49:28	DHCP Discover			

Time: Displays the time and date that the log entry was created.

Message: Displays summary information about the log entry.

Source: Displays the source of the communication.

Destination: Displays the destination of the communication.

Note: Displays the IP address of the communication

Log Setting

This screen enables user to set router logging parameters.

The screenshot shows the 'Log Setting' page for a 'Wireless Router 108 Mbps'. The page has a navigation menu on the left with options: LAN Setting, Wireless, Status, Routing, Access, Management, Tools, and Wizard. The main content area has a breadcrumb trail: Device information > Log > Log Setting > Statistic > Wireless. Below this, there are input fields for SMTP Server, Send to (Email Address), and Syslog Server (0.0.0.0). The Log Type section has checkboxes for System Activity (checked), Debug Information, Attacks (checked), Dropped Packets, and Notice (checked). There are 'Cancel' and 'Apply' buttons at the bottom.

SMTP Server: Type the SMTP server address for the email that the log will be sent to in the next field.

Send to: Type an email address for the log to be sent to. Click “Email Log Now” to immediately send the current log.

Syslog Server: Type the IP address of the Syslog Server if user wants the router to listen and receive incoming Syslog messages.

Log Type: Enables user to select what items will be included in the log:

System Activity: Displays information related to router operation.

Debug Information: Displays information related to errors and system malfunction.

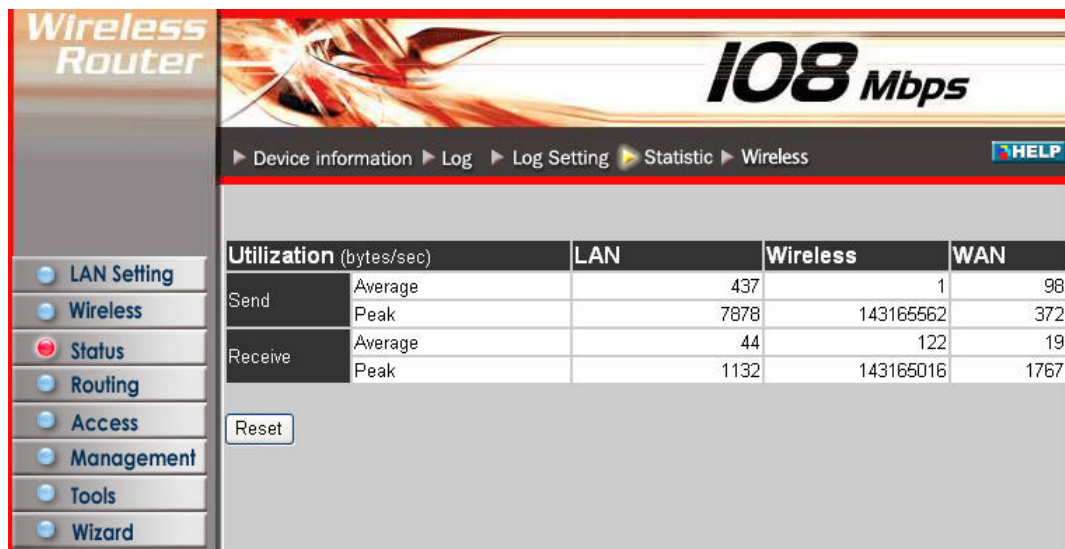
Attacks: Displays information about any malicious activity on the network.

Dropped Packets: Displays information about packets that have not been transferred successfully.

Notice: Displays important notices by the system administrator.

Statistic

This screen displays a table that shows the rate of packet transmission via the router LAN, Wireless and WAN ports (in bytes per second).



Wireless Router

108 Mbps

▶ Device information ▶ Log ▶ Log Setting ▶ Statistic ▶ Wireless

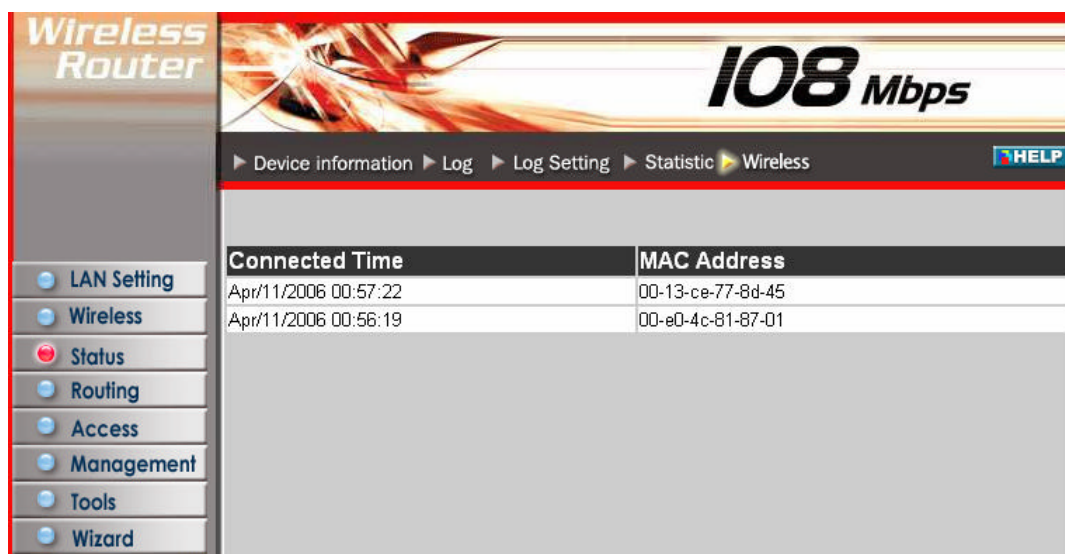
Utilization (bytes/sec)		LAN	Wireless	WAN
Send	Average	437	1	98
	Peak	7878	143165562	372
Receive	Average	44	122	19
	Peak	1132	143165016	1767

Reset

Click “Reset” to erase all statistics and begin logging statistics again.

Wireless

This screen enables user to view information about wireless devices that are connected to the WLAN Router.



Wireless Router

108 Mbps

▶ Device information ▶ Log ▶ Log Setting ▶ Statistic ▶ Wireless

Connected Time	MAC Address
Apr/11/2006 00:57:22	00-13-ce-77-8d-45
Apr/11/2006 00:56:19	00-e0-4c-81-87-01

Connected Time: Displays how long the wireless device has been connected to the LAN via the router.

MAC Address: Displays the devices wireless LAN interface MAC address.

Routing

This selection enables user to set how the router forwards data: Static and Dynamic. Routing Table enables user to view the information created by the router that displays the network interconnection topology.

Static

It enables user to set parameters by which the router forwards data to its destination if user's network has a static IP address.

The screenshot shows the configuration interface for a wireless router. The top banner displays 'Wireless Router' and '108 Mbps'. A navigation sidebar on the left contains links for LAN Setting, Wireless, Status, Routing, Access, Management, Tools, and Wizard. The main configuration area features tabs for 'Static', 'Dynamic', and 'Routing Table', with a 'HELP' button. Below the tabs are five input fields: 'Network Address', 'Network Mask', 'Gateway Address', 'Interface' (a dropdown menu currently showing 'LAN'), and 'Metric'. Below these fields are four buttons: 'Add', 'Update', 'Delete', and 'New'. At the bottom of the configuration area is a table with the following headers: 'Network Address', 'Mask', 'Gateway', 'Interface', and 'Metric'.

Network Address: Type the static IP address user's network uses to access the Internet. User's ISP or network administrator provides user with this information.

Network Mask: Type the network (subnet) mask for user's network. If user does not type a value here, the network mask defaults to 255.255.255.255. User's ISP or network administrator provides user with this information.

Gateway Address: Type the gateway address for network. User's ISP or network administrator provides user with this information.

Interface: Select an interface, WAN or LAN, to connect to the Internet.

Metric: Select which metric that user want to apply to this configuration.

Add: Click to add the configuration to the static IP address table at the bottom of the page.

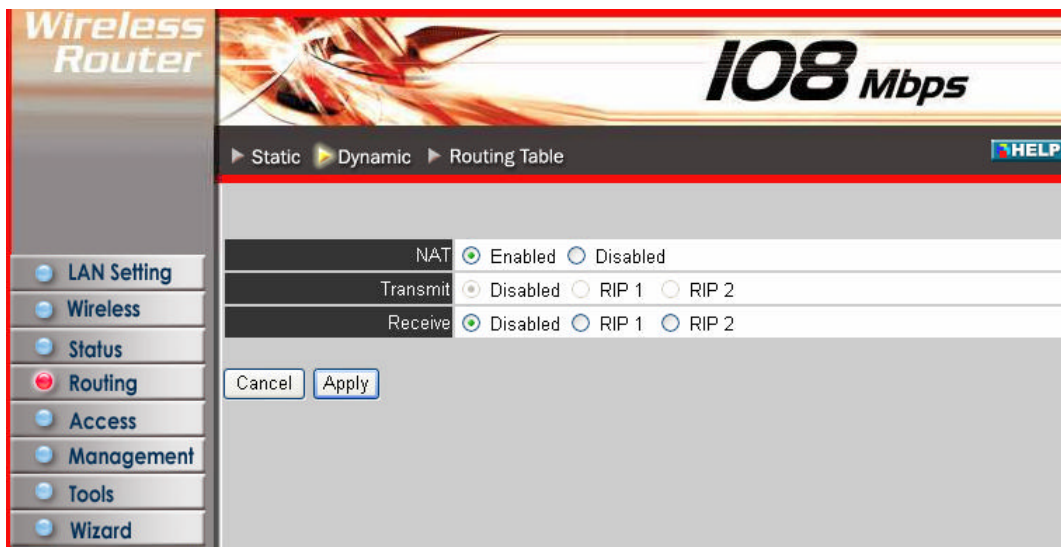
Update: Select one of the entries in the static IP address table at the bottom of the page and, after changing parameters, click "Update" to confirm the changes.

Delete: Select one of the entries in the static IP address table at the bottom of the page and click "Delete" to remove the entry.

New: Click "New" to clear the text boxes and add required information to create a new entry.

Dynamic

This screen enables user to set NAT parameters.



NAT: Click the radio buttons to enable or disable the NAT function.

Transmit: Click the radio buttons to set the desired transmit parameters, disabled, RIP 1, or RIP 2.

Receive: Click the radio buttons to set the desired transmit parameters, disabled, RIP 1, or RIP 2.

Routing Table

This screen enables user to view the routing table for the router. The routing table is a database created by the router that displays the network interconnection topology.



Network Address: Displays the network IP address of the connected node.

Network Mask: Displays the network (subnet) mask of the connected node.

Gateway Address: Displays the gateway address of the connected node.

Interface: Displays whether the node is connected via a WAN or LAN.

Metric: Displays the metric of the connected node.

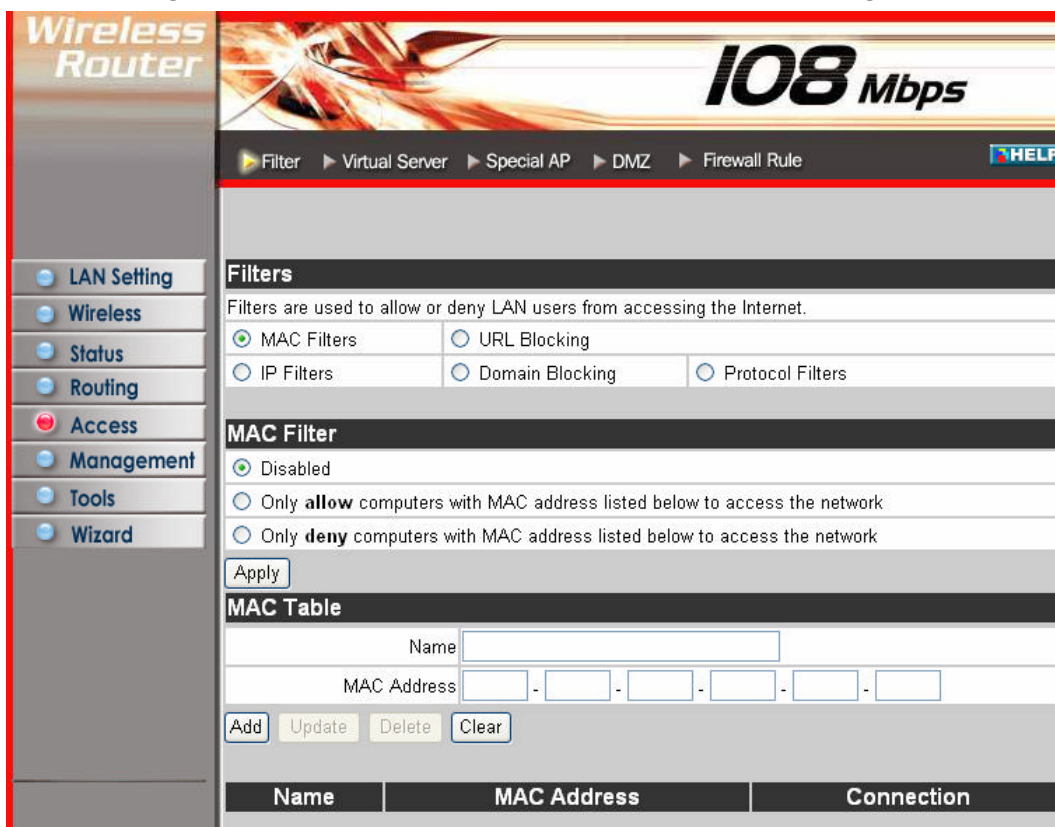
Type: Displays whether the node has a static or dynamic IP address

Access

This page enables you to define access restrictions, set up protocol and IP filters, create virtual servers, define access for special applications such as games, and set firewall rules.

Filters

Using filters to deny or allow the users to access. Five types of filters to select: MAC, URL blocking, IP, Protocol filter and Domain blocking.



Wireless Router **108 Mbps**

Filter ▶ Virtual Server ▶ Special AP ▶ DMZ ▶ Firewall Rule **HELP**

Filters

Filters are used to allow or deny LAN users from accessing the Internet.

MAC Filters URL Blocking
 IP Filters Domain Blocking Protocol Filters

MAC Filter

Disabled
 Only **allow** computers with MAC address listed below to access the network
 Only **deny** computers with MAC address listed below to access the network

MAC Table

Name

MAC Address - - - - -

Name	MAC Address	Connection
------	-------------	------------

MAC Filters

Wireless Router **108 Mbps**

Filter ▶ Virtual Server ▶ Special AP ▶ DMZ ▶ Firewall Rule **HELP**

Filters
Filters are used to allow or deny LAN users from accessing the Internet.

MAC Filters URL Blocking
 IP Filters Domain Blocking Protocol Filters

MAC Filter
 Disabled
 Only **allow** computers with MAC address listed below to access the network
 Only **deny** computers with MAC address listed below to access the network

Apply

MAC Table

Name
MAC Address - - - - -

Add Update Delete Clear

Name	MAC Address	Connection
------	-------------	------------

MAC Filter: Enables you to allow or deny Internet access to users within the LAN based upon the MAC address of their network interface. Click the radio button next to Disabled to disable the MAC filter.

Disable: The function of MAC filter is disable.

Allow: Only allow computers with MAC address listed in the MAC Table.

Deny: All users are allowed Internet access except those computers in the MAC Table are deny Internet access.

MAC Table: Use this section to create a user profile which Internet access is denied or allowed. The user profiles are listed in the table at the bottom of the page. (Note: Click anywhere in the item. Once the line is selected, the fields automatically load the item's parameters, which you can edit.)

Name: Type the name of the user to be permitted/denied access.

MAC Address: Type the MAC address of the user's network interface.

Add: Click to add the user to the list at the bottom of the page.

Update: Click to update information for the user, if you have changed any of the fields.

Delete: Select a user from the table at the bottom of the list and click Delete to remove the user profile.

New: Click New to erase all fields and enter new information.

URL Blocking

You could enable URL blocking to deny the users from accessing the specified URL. Add those specified URL in the text box.

The screenshot shows the configuration page for a Wireless Router. The interface includes a navigation menu on the left with options: LAN Setting, Wireless, Status, Routing, Access, Management, Tools, and Wizard. The main content area is titled "Wireless Router" and "108 Mbps". A breadcrumb trail at the top indicates the path: Filter > Virtual Server > Special AP > DMZ > Firewall Rule. The "Filters" section is active, showing options for MAC Filters, URL Blocking (selected), IP Filters, Domain Blocking, and Protocol Filters. Below this, the "URL Blocking" section is expanded, showing the "Enabled" radio button selected. A text input field is present for entering keywords, with a "Delete" button next to it. At the bottom right, there are "Add" and "Cancel" buttons.

Wireless Router 108 Mbps

Filter > Virtual Server > Special AP > DMZ > Firewall Rule HELP

Filters

Filters are used to allow or deny LAN users from accessing the Internet.

MAC Filters URL Blocking

IP Filters Domain Blocking Protocol Filters

URL Blocking

Block those URLs which contain keywords listed below.

Enabled Disabled

Delete

Add Cancel

IP Filters

This screen enables you to define a minimum and maximum IP address range filter; all IP addresses falling in the range are not allowed Internet access. The IP filter profiles are listed in the table at the bottom of the page. (Note: Click anywhere in the item. Once the line is selected, the fields automatically load the item's parameters, which you can edit.)

The screenshot displays the configuration interface for IP filters on a wireless router. The left sidebar contains navigation links: LAN Setting, Wireless, Status, Routing, Access, Management, Tools, and Wizard. The main content area is titled "Wireless Router 108 Mbps" and features a breadcrumb trail: Filter > Virtual Server > Special AP > DMZ > Firewall Rule. Below the breadcrumb, there is a "Filters" section with a description: "Filters are used to allow or deny LAN users from accessing the Internet." This section includes radio buttons for "MAC Filters", "IP Filters" (which is selected), "URL Blocking", "Domain Blocking", and "Protocol Filters". Below this is the "IP Filter" configuration area, which includes an "Enable" checkbox (selected), "Range Start" and "Range End" input fields, and buttons for "Add", "Update", "Delete", and "Clear". At the bottom, there is a table with two columns: "Start" and "End".

Enable: Click to enable or disable the IP address filter.

Range Start: Type the minimum address for the IP range. IP addresses falling between this value and the Range End are not allowed to access the Internet.

Range End: Type the minimum address for the IP range. IP addresses falling between this value and the Range Start are not allowed to access the Internet.

Add: Click to add the IP range to the table at the bottom of the screen.

Update: Click to update information for the range if you have selected a list item and have made changes.

Delete: Select a list item and click Delete to remove the item from the list.

New: Click New to erase all fields and enter new information.

Domain Blocking

You could specify the domains that allow users to access or deny by clicking one of the two items. Also, add the specified domains in the text box.

The screenshot shows the configuration interface of a Wireless Router. The top banner displays "Wireless Router" and "108 Mbps". A navigation menu includes "Filter", "Virtual Server", "Special AP", "DMZ", "Firewall Rule", and "HELP". The left sidebar contains menu items: "LAN Setting", "Wireless", "Status", "Routing", "Access", "Management", "Tools", and "Wizard".

The main content area is titled "Filters" and includes the text: "Filters are used to allow or deny LAN users from accessing the Internet." Below this, there are four radio button options: "MAC Filters", "URL Blocking", "IP Filters", and "Domain Blocking" (which is selected). A fourth option, "Protocol Filters", is also present.

The "Domain Blocking" section is expanded, showing three radio button options: "Disabled", "Allow users to access all domains except 'Blocked Domains'" (which is selected), and "Deny users to access all domains except 'Permitted Domains'".

Below the "Domain Blocking" section is a "Blocked Domains" section with a text input field and a "Delete" button. At the bottom right, there are "Add" and "Cancel" buttons.

Protocol Filters

This screen enables you to allow and deny access based upon a communications protocol list you create. The protocol filter profiles are listed in the table at the bottom of the page.

Note: When selecting items in the table at the bottom, click anywhere in the item. The line is selected, and the fields automatically load the item's parameters, which you can edit.

The screenshot shows the configuration page for Protocol Filters on a Wireless Router. The interface includes a navigation menu on the left, a breadcrumb trail at the top, and a main content area with several sections: Filters, Protocol Filter, Edit protocol Filter in List, and a table of existing filters.

Wireless Router 108 Mbps

Filter > Virtual Server > Special AP > DMZ > Firewall Rule [HELP](#)

Filters
Filters are used to allow or deny LAN users from accessing the Internet.

MAC Filters URL Blocking
 IP Filters Domain Blocking Protocol Filters

Protocol Filter

Disable List
 Enable List : Deny to access internet from LAN when the list as below item be enable.

Edit protocol Filter in List

Enable Enable Disabled
Name
Protocol
Port - (Type Range for ICMP)

	Name	Protocol	Range
<input type="checkbox"/>	Filter FTP	TCP	20-21
<input type="checkbox"/>	Filter HTTP	TCP	80
<input type="checkbox"/>	Filter HTTPS	TCP	443
<input type="checkbox"/>	Filter DNS	UDP	53
<input type="checkbox"/>	Filter SMTP	TCP	25
<input type="checkbox"/>	Filter POP3	TCP	110
<input type="checkbox"/>	Filter Telnet	TCP	23