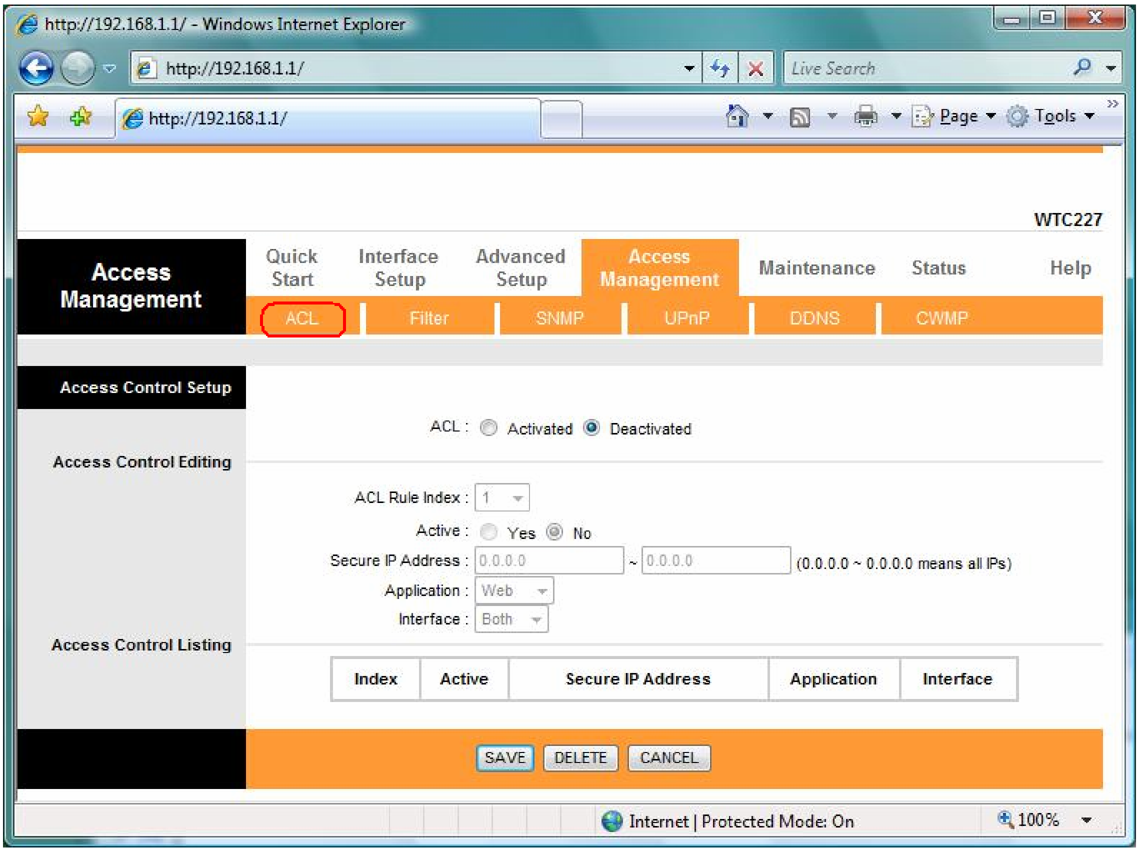
8. Access Management

8.1 ACL

Go to **Access Management → ACL** to enable remote management. Access Control Listing (ACL) is a management tool that acts as a filter for incoming or outgoing packets, based on application. You may use telnet or Web to remotely manage the ADSL Router. User just needs to enable Telnet or Web and give it an IP address that wants to access the ADSL Router. The default IP 0.0.0.0 allows any client to use this service to remotely manage the ADSL Router.



ACL : ○ Activated ● Deactivated

ACL Rule Index : 1

Active : ○ Yes ● No

Secure IP Address : 0.0.0.0 ~ 0.0.0.0 (0.0.0.0 ~ 0.0.0.0 means all IPs)

Application : Web

Interface : Both

Index	Active	Secure IP Address	Application	Interface

ACL: There has **Activated** & **Deactivated** option. The default setting is **Deactivated** which means all IP can access via router. If you choose **Activated**, you only can access via router by listed IP addresses.

ACL Rule Index: Index number from 1 and up to 16.

Active: Once you choose **Yes** then you can access the IP via router.

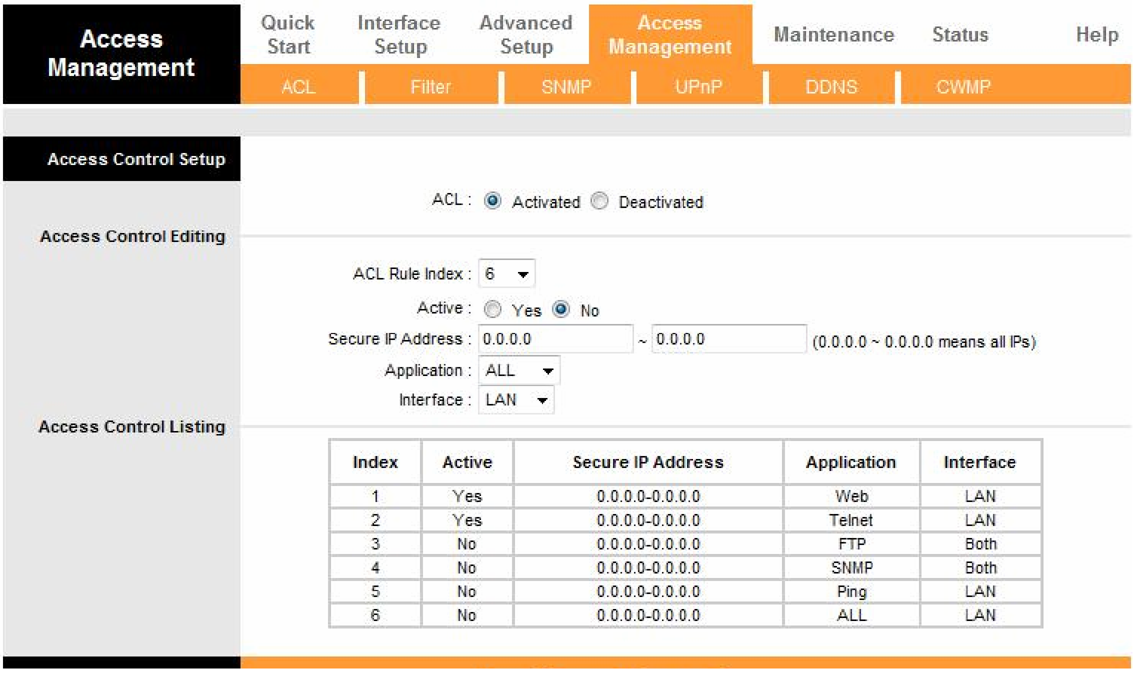
Application: Each of these labels denotes a service that you may use to remotely manage the Router. Choices are **Web, FTP, Telnet, SNMP, Ping, ALL**.

Interface: Select the access interface. Choices are **WAN, LAN** and **Both.**

For Example:

How to set your ACL?

1. You must choose **Activated** to enable your ACL function.
2. Select the ACL Rule Index number (up to 16 number)
3. You can set the specific **Secure IP address** or set **0.0.0.0** for all IPs.
4. Choose the **Application** which you want to access for this ACL Rule index.
5. Select the **Interface** you want to access from.
6. After all settings are ready, click **SAVE** and continue next ACL Rule Index setting.



Access Control Setup

ACL : ● Activated ○ Deactivated

Access Control Editing

ACL Rule Index : 6

Active : ○ Yes ● No

Secure IP Address : 0.0.0.0 ~ 0.0.0.0 (0.0.0.0 ~ 0.0.0.0 means all IPs)

Application : ALL

Interface : LAN

Access Control Listing

Index	Active	Secure IP Address	Application	Interface
1	Yes	0.0.0.0-0.0.0.0	Web	LAN
2	Yes	0.0.0.0-0.0.0.0	Telnet	LAN
3	No	0.0.0.0-0.0.0.0	FTP	Both
4	No	0.0.0.0-0.0.0.0	SNMP	Both
5	No	0.0.0.0-0.0.0.0	Ping	LAN
6	No	0.0.0.0-0.0.0.0	ALL	LAN

[Note]

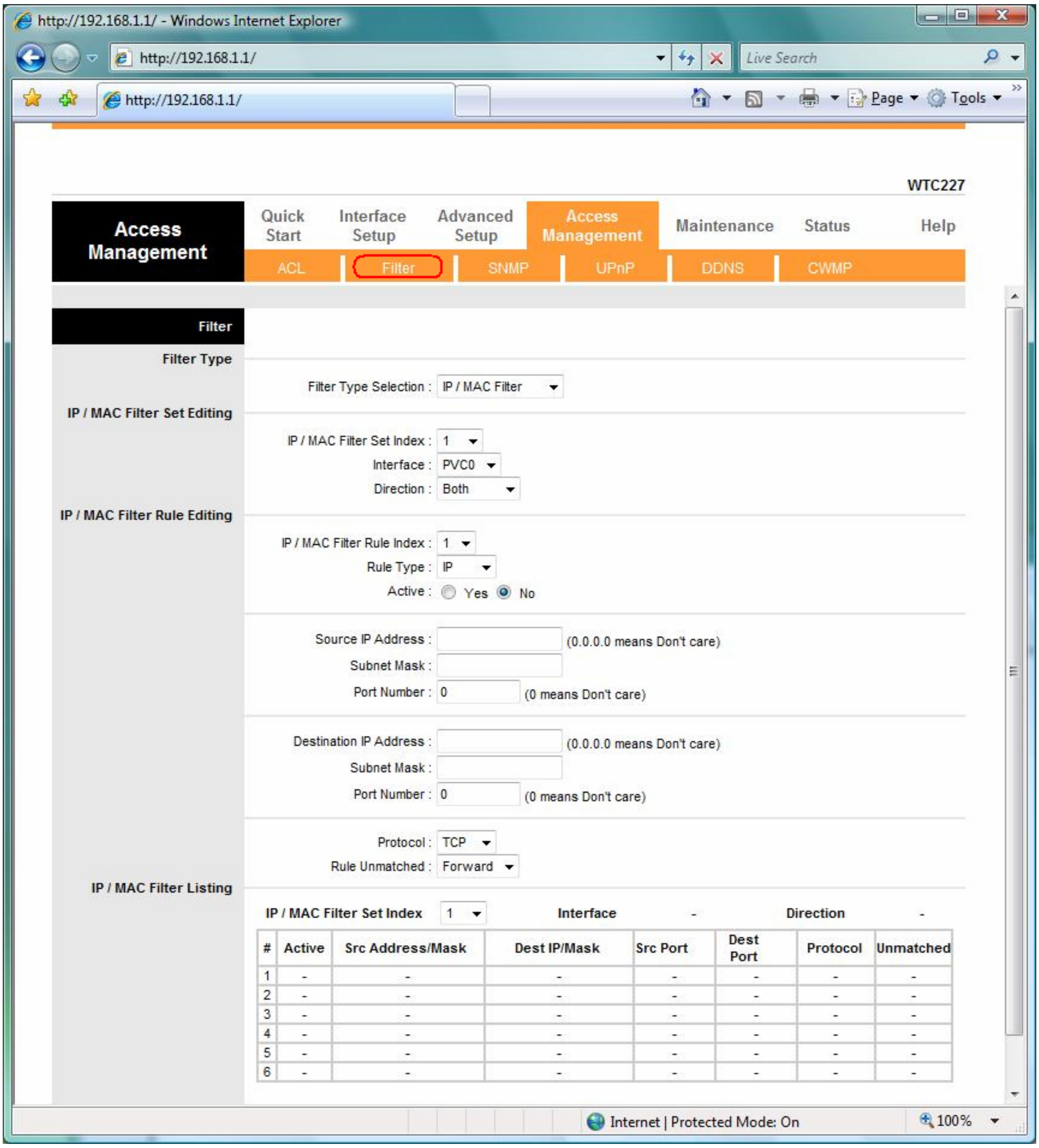
1. You must set one ACL index to access your router via LAN interface. If you don’t, your router cannot access other listed IP Address. (Refer to Index 1).

2. Remember! Once you active your ACL function, you only can access via router by listed Secure IP Address.

8.2 Filter

The Router provides extensive firewall protection by restricting connection parameters to limit the risk of intrusion and defending against a wide array of common hacker attackers. Go to **Access Management → Filter** to set different IP filter rules of a given protocol (TCP, UDP, or ICMP) and a specific direction (incoming, outgoing, or both) to filter the packets.

IP Filter is a more complex filtering tool, based more on IP and custom rules. Each of the indices can hold six rules, and each interface can have four associated indices, allowing 24 rules per interface. If all six rules in an index are Next rules, the data will be sent to the next index for filtering.



Filter

Filter Type

Filter Type Selection : IP / MAC Filter

IP / MAC Filter Set Editing

IP / MAC Filter Set Index : 1

Interface : PVC0

Direction : Both

IP / MAC Filter Rule Editing

IP / MAC Filter Rule Index : 1

Rule Type : IP

Active : ○ Yes ● No

Source IP Address : (0.0.0.0 means Don't care)

Subnet Mask :

Port Number : 0 (0 means Don't care)

Destination IP Address : (0.0.0.0 means Don't care)

Subnet Mask :

Port Number : 0 (0 means Don't care)

Protocol : TCP

Rule Unmatched : Forward

IP / MAC Filter Listing

IP / MAC Filter Set Index 1 Interface - Direction -

#	Active	Src Address/Mask	Dest IP/Mask	Src Port	Dest Port	Protocol	Unmatched
1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-

Filter Type: You can select **IP/MAC Filter**, **Application**, and **URL Filter** type.

IP/MAC Filter Set Index: The IP/MAC Filter Set Index from 1 to 12 and each index can set up to 6 IP Filter.

Interface: Choices from **PVC0** to **PVC7** and **LAN**.

Direction: Choices are **Both**, **Incoming** and **Outgoing**. Select which direction of data flow you wish to apply the filters to. Note that **Incoming and Outgoing** are from the point of view of your router, relative to the interface you select. **For WAN**, data coming from outside your system is considered Incoming and data leaving your system is Outgoing. **For LAN**, data leaving your system is considered Incoming and data entering your system is Outgoing.

IP/MAC Filter rule Index: The IP/MAC Filter rule Index from 1 to 6.

IP/MAC Filter Rule Editing: Select the IP/MAC Filter Rule Index you wish to modify.

Active: Toggle this rule index on or off with Yes or No, respectively.

Source IP Address: Enter the source IP address you wish to deny access to your system.

Subnet Mask: Enter the subnet mask of the source IP address.

Port Number: Enter the port number of the source IP address. Note that 0 means all that ports are allowed.

Destination IP Address: Enter the destination IP address that you wish to deny access to your system.

Subnet Mask: Enter the subnet mask of the destination IP address

Port Number: Enter the port number of the destination IP address. Note that 0 means that all ports are allowed

Protocol: Select the protocol to filter. Choices are TCP, UDP, and ICMP.

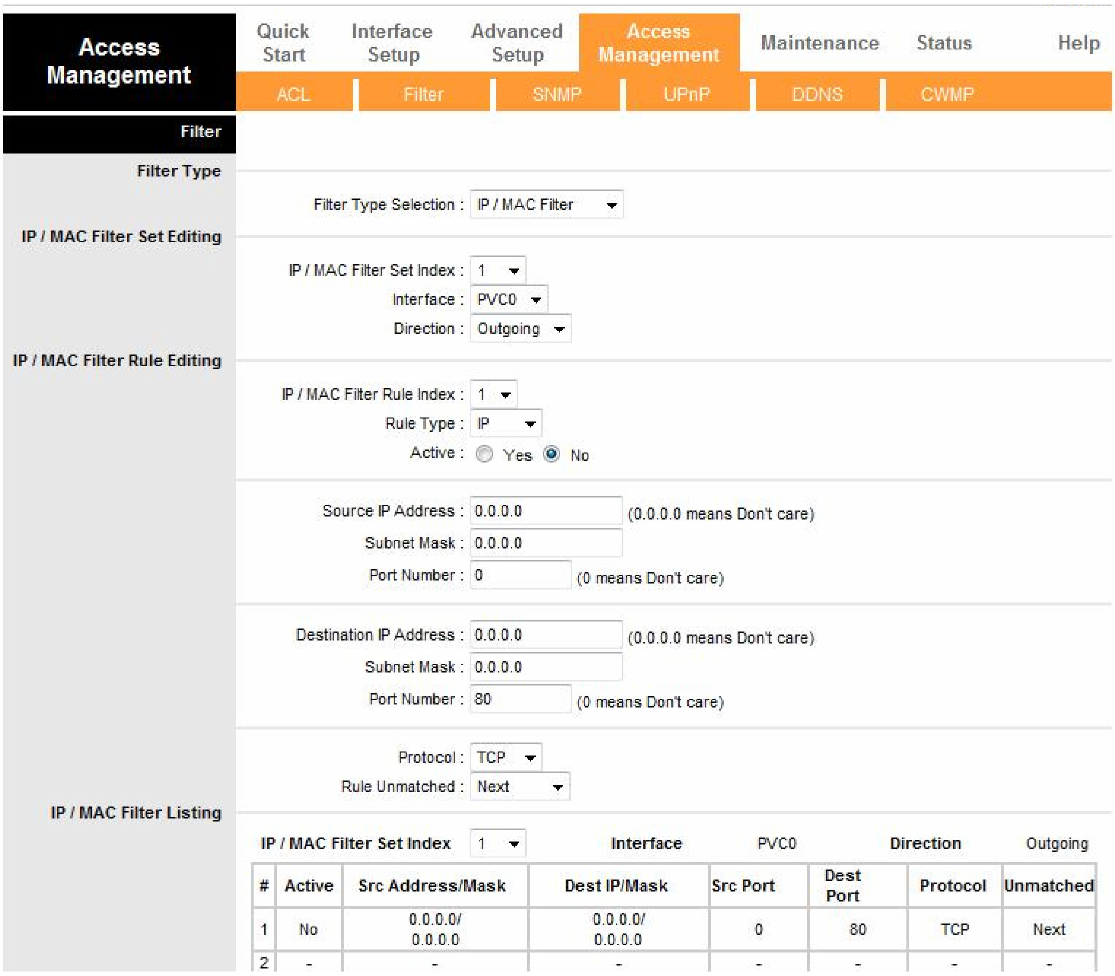
Rule Unmatched: Choices are **Forward** and **Next.** Select what happens to the data in question if the rule you are currently editing is unmatched. Next means that the data is then compared to the next IP filter rule. Forward means that the data will be allowed into your system. Note that a Forward rule should be the last rule, as no data will be compared to rules after a Forward rule.

IP/MAC Filter Set Index: Select the IP/MAC filter set you wish to view.

For Example

Please follow below steps to set your IP Filter:

1. **IP/MAC Filter Set Editing**: Choose your **IP/MAC Filter Set Index**, Interface and Direction options. Remember, Interface and Direction functions are affected with IP/MAC Filter Set Index. EX: if your 1st index set of IP filter set PVC0 as Interface and Outgoing as Direction, so the list of 1st IP Filter will be PVC0 and Outgoing as their settings.
2. **IP/MAC Filter Rule Editing:** Select the **IP/MAC Filter Rule Index** (up to 6 numbers for each set index) and choose **Active** option. As below example, **Source IP Address** is 192.168.1.4, **Subnet Mask** is 255.255.255.255, **Destination IP Address** & **Subnet Mask** is 0.0.0.0, **Port Number** is 80. And, **Protocol** sets TCP. From this setting, it filters 192.168.1.14, so it cannot access the web. **Notice**, each IP Filter Set Index can has up to 6 filters IP. At “**Rule Unmatched**” option, you must choose **NEXT** until the last filter IP choose **Forward**.
3. After every setting is done, click **SAVE** to continue next IP Filter Editing.



Filter Type

Filter Type Selection : IP / MAC Filter

IP / MAC Filter Set Editing

IP / MAC Filter Set Index : 1

Interface : PVC0

Direction : Outgoing

IP / MAC Filter Rule Editing

IP / MAC Filter Rule Index : 1

Rule Type : IP

Active : ○ Yes ● No

Source IP Address : 0.0.0.0 (0.0.0.0 means Don't care)

Subnet Mask : 0.0.0.0

Port Number : 0 (0 means Don't care)

Destination IP Address : 0.0.0.0 (0.0.0.0 means Don't care)

Subnet Mask : 0.0.0.0

Port Number : 80 (0 means Don't care)

Protocol : TCP

Rule Unmatched : Next

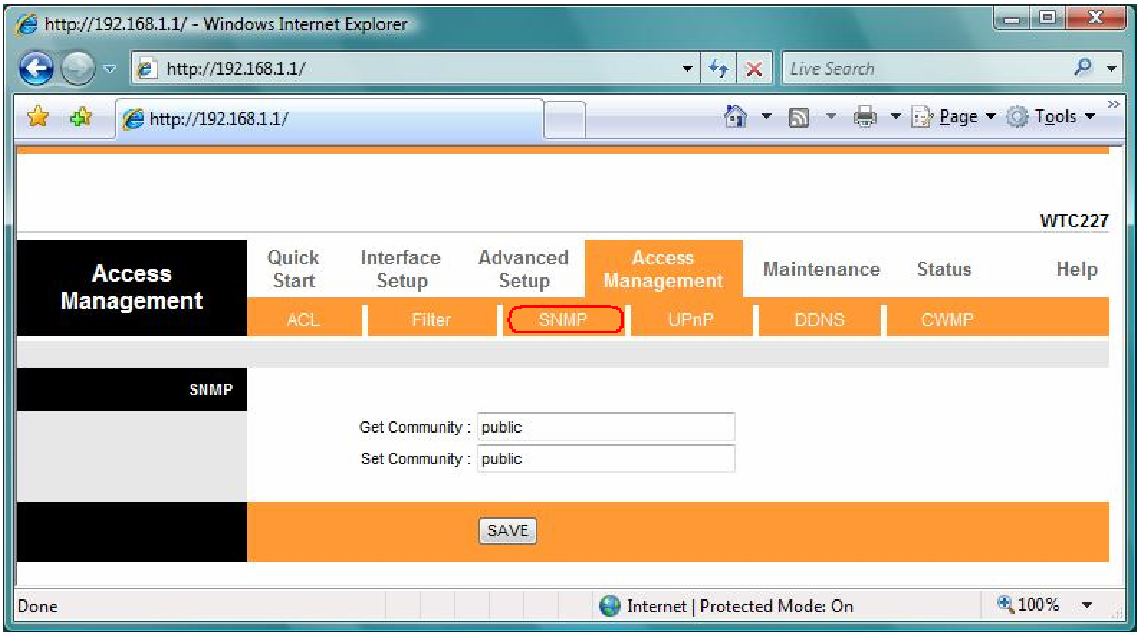
IP / MAC Filter Listing

IP / MAC Filter Set Index 1 Interface PVC0 Direction Outgoing

#	Active	Src Address/Mask	Dest IP/Mask	Src Port	Dest Port	Protocol	Unmatched
1	No	0.0.0.0/ 0.0.0.0	0.0.0.0/ 0.0.0.0	0	80	TCP	Next
2	-	-	-	-	-	-	-

8.3 SNMP

The **Simple Network Management Protocol (SNMP)** is used for exchanging information between network devices. It enables a host computer to access configuration, performance, and other system data that resides in a database on the modem. The host computer is called a *management station* and the modem is called an *SNMP agent*. The data that can be accessed via SNMP is stored in a *Management Information Database* (MIB) on the modem.



Get Community : public

Set Community : public

Get Community: Select to set the password for incoming Get- and GetNext request from management station.

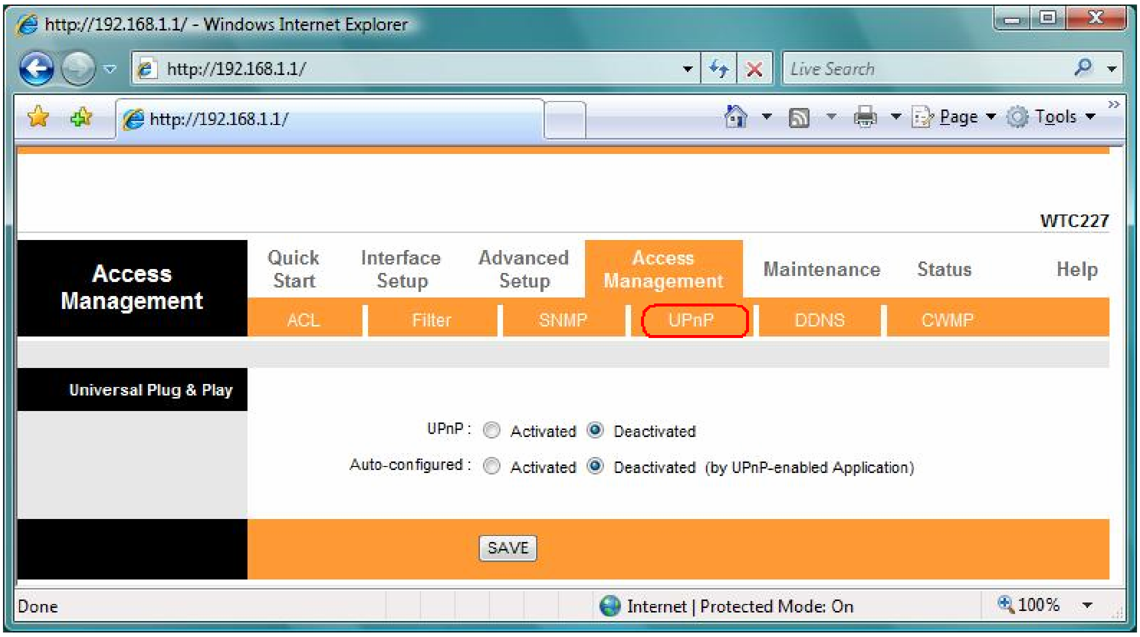
Set Community: Select to set the password for incoming Set request from management station. The default password is '**public**'. When you are done making changes, click on **SAVE** to save your changes.

8.4 UPnP

UPnP (Universal Plug and Play) is a distributed, open networking standard that uses TCP/IP for simple peer-to-peer network connectivity between devices. An UPnP device can dynamically join a network, obtain an IP address, convey its capabilities and learn about other devices on the network. In turn, a device can leave a network smoothly an automatically when it is no longer in use. UPnP broadcasts are only allowed on the LAN.

How do I know if I'm using UPnP?

UPnP hardware is identified as an icon in the Network Connections folder (in Windows XP & Windows ME). Each UPnP-compatible device that is installed on your network will appear as a separate icon.



UPnP : ○ Activated ● Deactivated

Auto-configured : ○ Activated ● Deactivated (by UPnP-enabled Application)

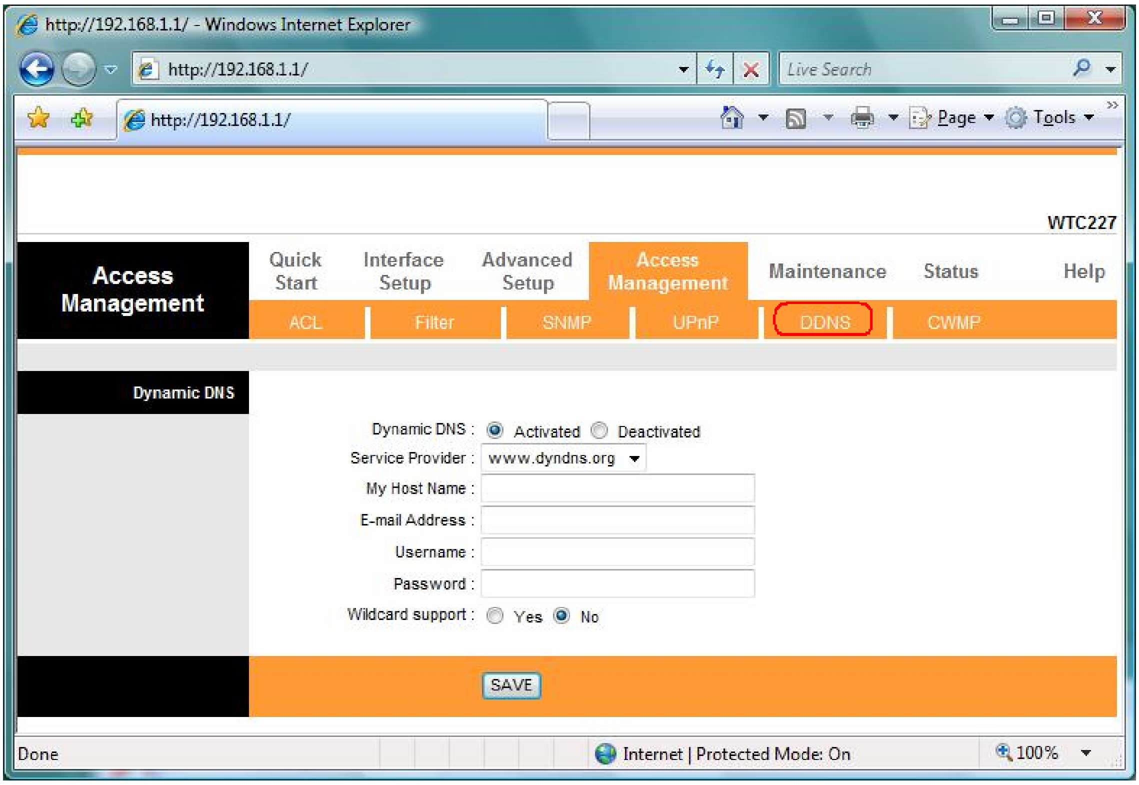
UPnP (Universal Plug and Play): You can choose **"Activated"** or **"Deactivated"** option from this session.

Auto-Configured (by UPnP Application): UPnP network devices can automatically configure network addressing, announce their presence in the network to other UPnP devices and enable exchange of simple product and service descriptions. Choose **"Activated"** option to allow UPnP-enabled applications to automatically configure the ADSL Router so that they can communicate through the ADSL Router, for example by using NAT traversal, UPnP applications automatically reserve a NAT forwarding port in order to communicate with another UPnP enabled device; this eliminates the need to manually configure port forwarding for the UPP enabled application. If you don't want to make configuration changes through UPnP, just choose **"Deactivated"**.

SAVE: Click **SAVE** to save the setting to the ADSL Router.

8.5 DDNS

The **Dynamic Domain Name System** allows you to update your current dynamic IP address with one or many dynamic DNS services so that anyone can contact you (in NetMeeting, CU-SeeMe, etc.). You can also access your FTP server or Web site on your own computer using a DNS-like address (for instance myhost.dhs.org, where my host is a name of your choice) that will never change instead of using an IP address that changes each time you reconnect. Your friends or relatives will always be able to call you even if they don't know your IP address. First of all, you need to have registered a dynamic DNS account with www.dyndns.org. This is for people with a dynamic IP from their ISP or DHCP server that would still like to have a DNS name. The Dynamic DNS service provider will give you a password or key.



Dynamic DNS : ● Activated ○ Deactivated
Service Provider : www.dyndns.org
My Host Name :
E-mail Address :
Username :
Password :
Wildcard support : ○ Yes ● No

Dynamic DNS: Choose the option for **Activated** or **Deactivated** DDNS.

Service Provider: The default Dynamic DNS service provider is **www.dyndns.org**.

My Host Name: Type the domain name assigned to your ADSL by your Dynamic DNS provider.

E-mail Address: Type your e-mail address.

Username: Type your user name.

Password: Type the password assigned to you.

Wildcard support: Select **Yes** or **No** to turn on DYNDNS Wildcard.

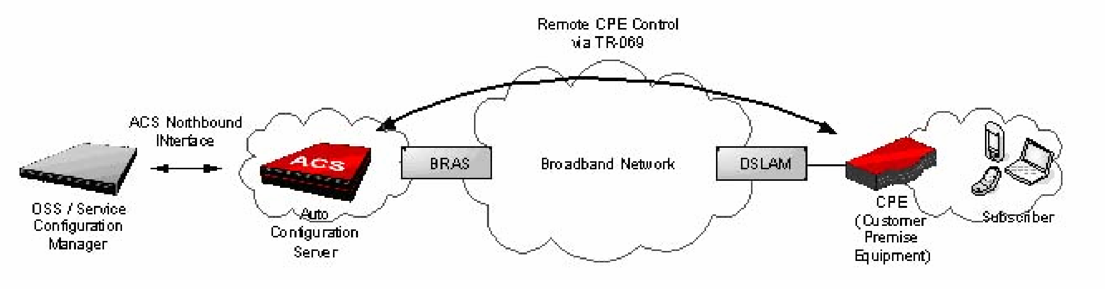
DYNDNS Wildcard --> Enabling the wildcard feature for your host causes *.yourhost.dyndns.org to be aliased to the same IP address as yourhost.dyndns.org. This feature is useful if you want to be able to use, for example, www.yourhost.dyndns.org and still reach your hostname.

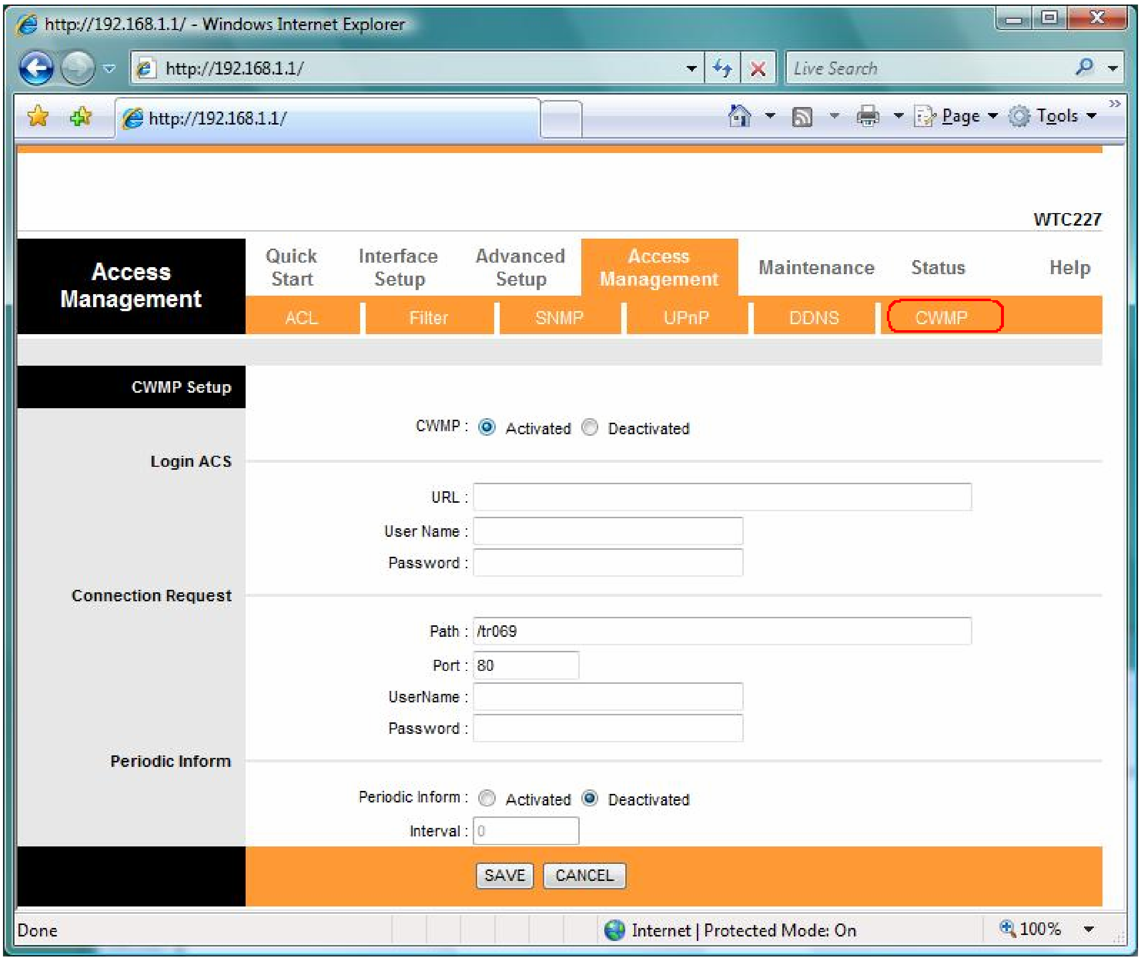
SAVE: Click **SAVE** to save your changes.

Note that you must enter the user name exactly as your ISP assigned it. If the assigned name is in the form of user@domain where domain identifies a service name, enter it exactly as given. When you are done making changes, click on SAVE to save your changes.

8.6 CWMP

TR-069 is a **CPE WAN Management Protocol** (**CWMP**). As a bidirectional SOAP/HTTP based protocol it provides the communication between **CPE** and **Auto Configuration Servers** (**ACS**). It includes both a safe auto configuration and the control of other CPE management functions within an integrated framework. In the course of the boom of the broadband market, the number of different Internet access possibilities grew as well (e.g. modems, routers, gateways, Set-top box, paddles, VoIP-phones). At the same time the configuration of this equipment became more complicated -- too complicated for the end-users. For this reason the TR-069 standard was developed. It provides the possibility of auto configuration of these access types. The technical specifications are managed and published by the DSL Forum. Using TR-069 the terminals can get in contact with the **Auto Configuration Servers (ACS)** and establish the configuration automatically. Accordingly other service functions can be provided. TR-069 is the current standard for activation of terminals in the range of DSL broadband market.





CWMP Setup

CWMP : ● Activated ○ Deactivated

Login ACS

URL :

User Name :

Password :

Connection Request

Path : /tr069

Port : 80

UserName :

Password :

Periodic Inform

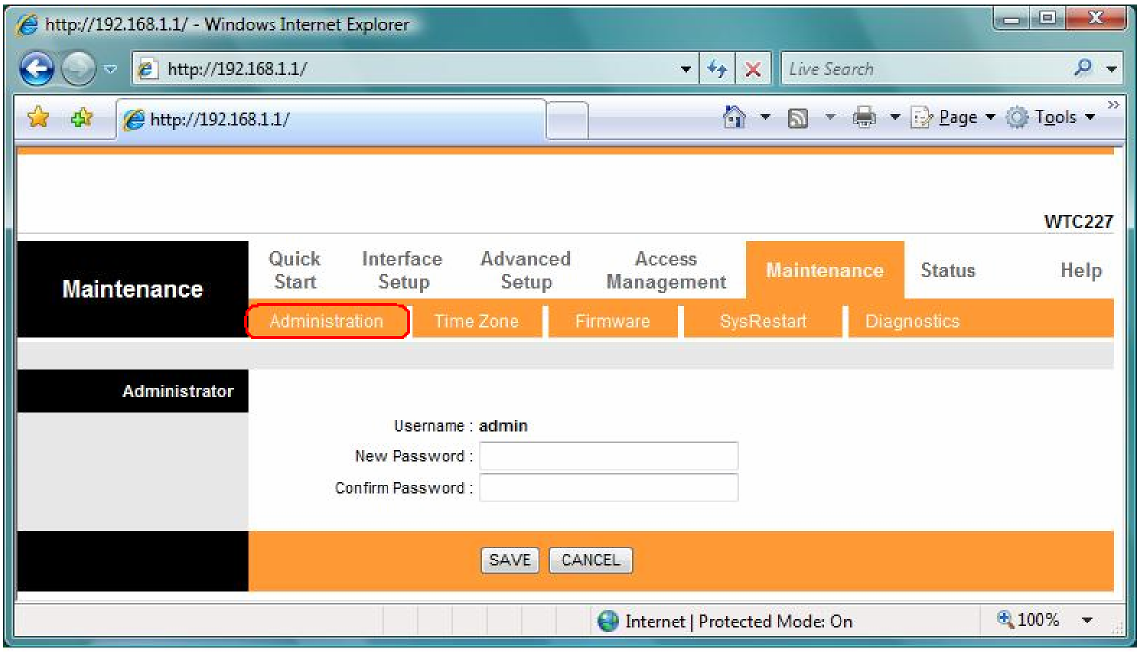
Periodic Inform : ○ Activated ● Deactivated

Interval : 0

9. Maintenance

9.1 Administration

There is only one account that can access Web-Management interface-**Administration**. Admin has read/write access privilege. In this web page, you can set new password for admin.



Username : admin
New Password :
Confirm Password :

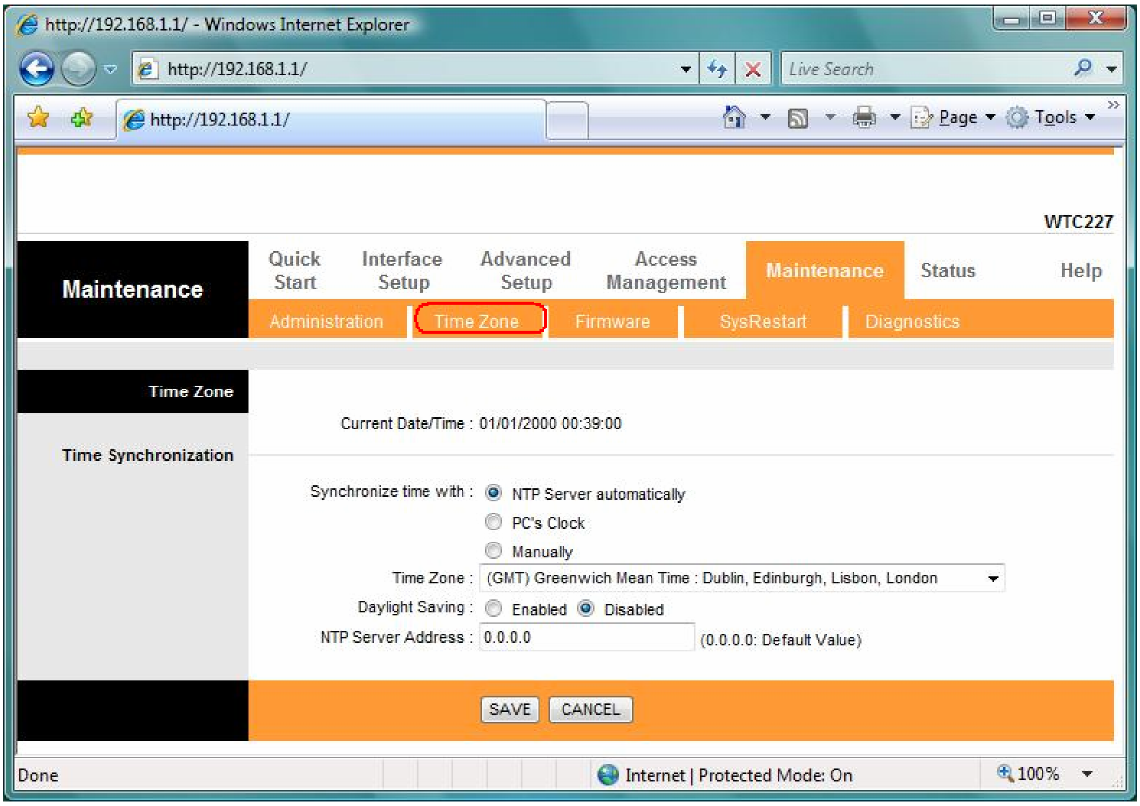
New Password: Type the new password in this field.

Confirm Password: Type the new password again in this field.

Note:* *If you ever forget the password to log in, you may press the RESET button up to 6 second to restore the factory default settings. The Factory Default Settings for User Name & Password are admin & admin.

9.2 Time Zone

The system time is the time used by the device for scheduling services. You can manually set the time or connect to a NTP (Network Time Protocol) server. If an NTP server is set, you will only need to set the time zone. If you manually set the time, you may also set Daylight Saving dates and the system time will automatically adjust on those dates.



Current Date/Time : 01/01/2000 00:39:00

Synchronize time with : ● NTP Server automatically ○ PC's Clock ○ Manually

Time Zone : (GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

Daylight Saving : ○ Enabled ● Disabled

NTP Server Address : 0.0.0.0 (0.0.0.0: Default Value)

Current Date/Time: This field displays an updated Date and Time when you reenter this menu.

[Time Synchronization]

Synchronize time with: You can choose ***"NTP Server automatically", "PC's Clock", or "Manually"*** to coordinate the time.

Time Zone: Choose the Time Zone of your location. This will set the time difference between your time zone and Greenwich Mean Time (GMT).

Daylight Saving: Choose **"Enabled"** or **"Disabled"** to use daylight savings time.

NTP Server Address: Type the IP address or domain name of your timeserver. Check with your ISP/network administrator if you are unsure of this information.

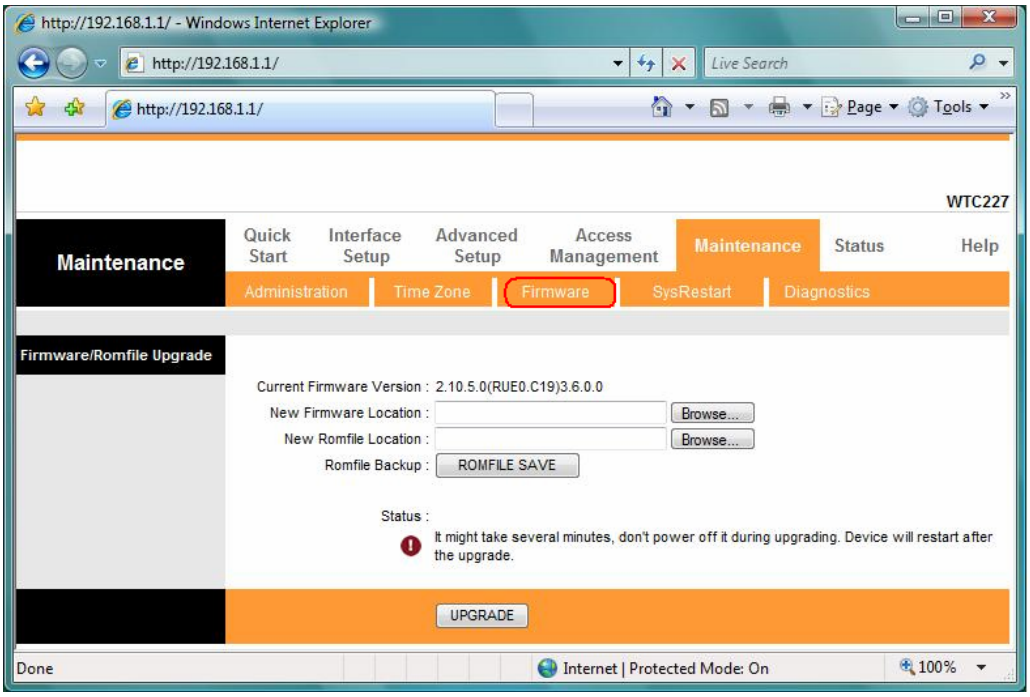
A ***Network Time Protocol (NTP)*** server can automatically set the router time for you. If you use an NTP server, you will only need to select your time zone. If you manually set the time, you can enable Daylight Saving. The router will automatically adjust when Daylight Saving goes into effect.

When you are done making changes, click on **SAVE** to save your changes or on **CANCEL** to exit without saving.

9.3 Firmware

You can upgrade the **firmware and Romfile** of the router in this page. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to browse the local had drive and locate the firmware to be used for the update. Then press **UPGRADE** to upload new Firmware. **It might take several minutes, don't power off it during upgrading. Device will restart after the upgrade!!**

After a success upload, the system automatically restarts. Please wait for the device to finish restarting. This should take about 2 minutes or more. You need to log in again if you want to access the device.



Current Firmware Version : 2.10.5.0(RUE0.C19)3.6.0.0

New Firmware Location :

New Romfile Location :

Romfile Backup :

Status :

It might take several minutes, don't power off it during upgrading. Device will restart after the upgrade.

Current Firmware Ver.: This filed displays the current firmware version.

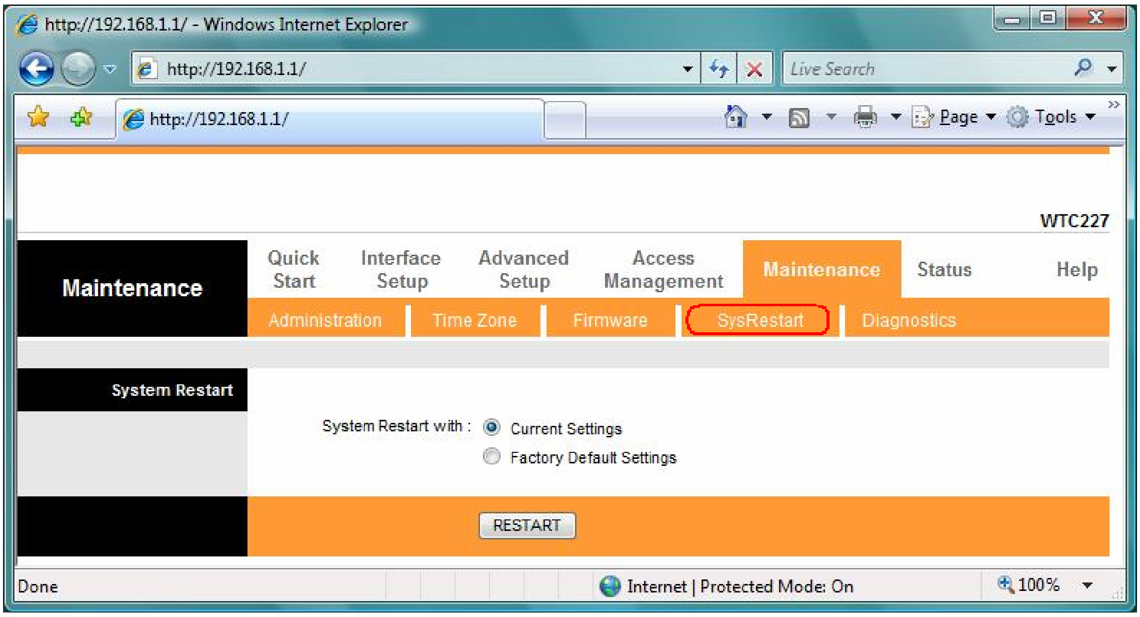
New Firmware Location: Type in the location of the file you want to upload in this field or click **Browse…** to find it.

UPGRADE: Click **UPGRADE** to begin the upload process.

9.4 System Restart

The SysRestart screen allows you to restart your router with either its current settings still in place or the factory default settings.

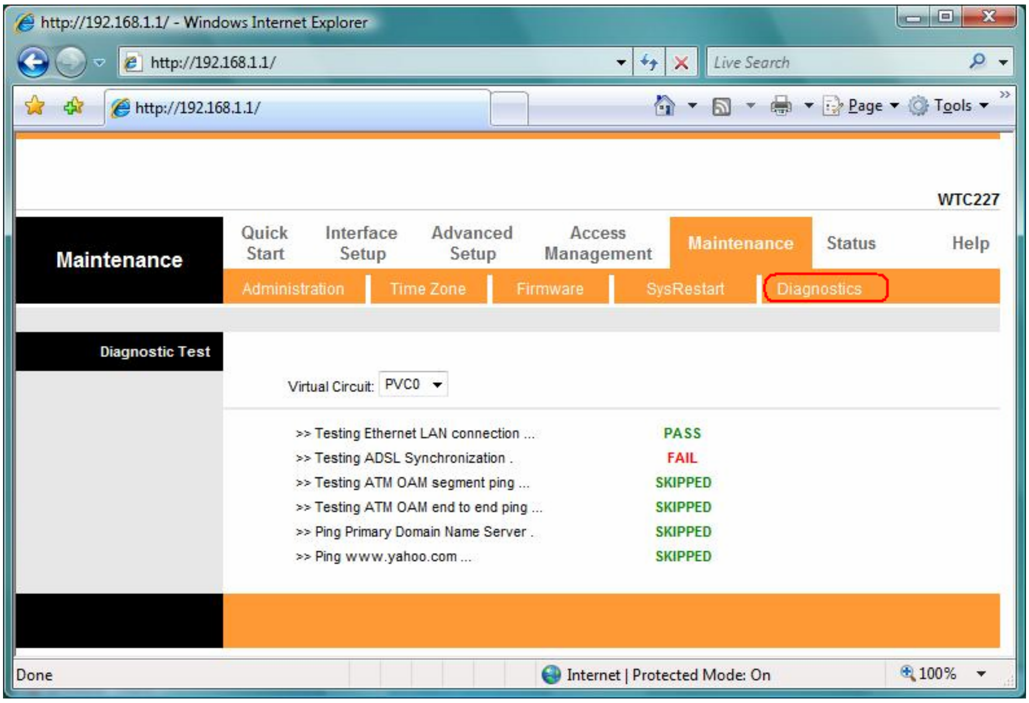
If you wish to restart the router using the factory default settings (for example, after a firmware upgrade or if you have saved an incorrect configuration), select **Factory Default Settings** to reset to factory default settings. Otherwise, you can select **Current Settings**. You may also reset your router to factory settings by holding the **DEFAULT** button on the back panel of your router in for 10-12 second while the router is turned on.



System Restart with : ● Current Settings
○ Factory Default Settings

9.5 Diagnostic

The **Diagnostic Test** page shows the test results for the connectivity of the physical layer and protocol layer for LAN & WAN sides.



Virtual Circuit: PVC0

```
>> Testing Ethernet LAN connection ...        PASS
>> Testing ADSL Synchronization .             FAIL
>> Testing ATM OAM segment ping ...           SKIPPED
>> Testing ATM OAM end to end ping ...        SKIPPED
>> Ping Primary Domain Name Server .          SKIPPED
>> Ping www.yahoo.com ...                     SKIPPED
```

Select which PVC you wish to test from the dropdown list. The router will automatically run diagnostic tests on that circuit. A green **PASS** means that the given test was passed, a red **FAIL** means that the test was failed and a green **SKIPPED** means that the test was skipped.

Note: 1) User ONLY can view **PVC0**'s Diagnostic Test connection.

2) **"Testing ADSL Synchronization"** might take 30 sec to execute the Diagnostic Test.