

Copyright Statement

Tenda® is the registered trademark of Shenzhen Tenda Technology Co., Ltd. Other trademark or trade name mentioned herein are the trademark or registered trademark of above company. Copyright of the whole product as integration, including its accessories and software, belongs to Shenzhen Tenda Technology Co., Ltd. Without the permission of Shenzhen Tenda Technology Co., Ltd, individual or party is not allowed to copy, plagiarize, imitate or translate it into other languages.

All the photos and product specifications mentioned in this manual are for references only, as the upgrading of software and hardware, there will be changes. And if there are changes, Tenda is not responsible for informing in advance. If you want to know more about our products information, please access our website at www.tenda.cn

Contents

Contents	1
1.1 Hardware Installation	1
1.2 LED Indicators on Rear Panel	2
1.3 Topology.....	2
Chapter Two Configuration Guide	3
2.1 To configure the network on your PC correctly.....	3
2.2 To check the connection.....	5
2.3 Log in the Router.....	6
2.4 Get to Know the Management Interface	7
2.5 Quick Installation Guide.....	8
2.6 Status.....	11
2.7 Wizard.....	11
2.8 Advanced Config.....	12
2.9 DHCP Server	16
2.10 Virtual Server	17
2.11 Security Setting	21
2.12 Routing Setting.....	28
2.13 System Tool	29
Package Contents	34
Physical Environment.....	34

Chapter One Hardware Installation

Rear Panel Port	Details
4 10/100M LAN Ports	Connect to 10/100Base-T Ethernet LAN Cards or Uplink to Switch/Hub
RESET	Warning! When you press “RESET” up to 7 seconds, your configuration will be lost and the router restores to factory default settings.
WAN	Connect to XDSL/Cable Modem/Ethernet
AC9V	AC 9V power Interface

1.1 Hardware Installation

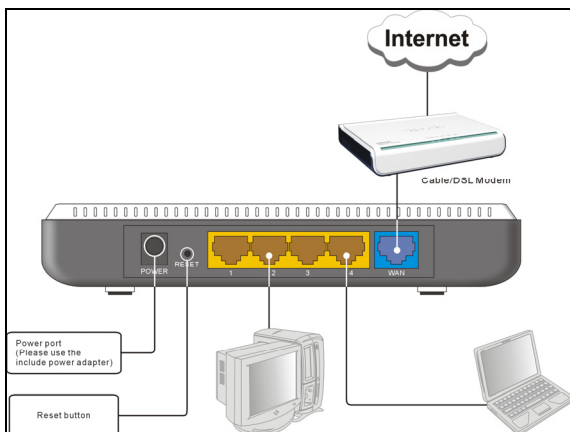
- 1、Please use cable to connect LAN port of router with LAN adapter of your PC or you can also connect the LAN port with switches or Hubs in LAN
- 2、Please connect WAN port of router to internet with Cat. 5 cable
- 3、Please power on the router with specified adapter

1.2 LED Indicators on Rear Panel

LED Indicators		Details
POWER		Indicates the status of the Power
SYS	Blinking	Indicates the device's system goes well.
WAN	Blinking	Indicates the WAN port is transmitting or receiving data.
LAN (1/2/3 /4)	Always ON	Indicates corresponding LAN port is connected correctly.
	Blinking	Indicates the corresponding LAN port is transmitting or receiving data.

1.3 Topology

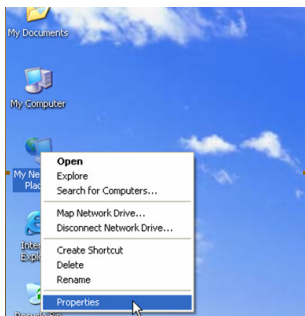
Take 4-port broadband router as example. If you purchased 7/16-port router, the LAN network can be established as the following topology.



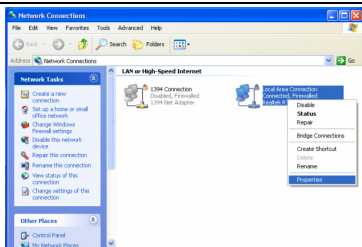
Chapter Two Configuration Guide

2.1 To configure the network on your PC correctly

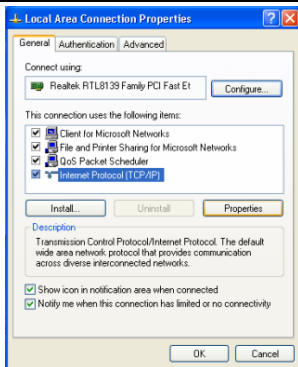
1. Please click “My Network Places” on your desktop and select “Properties”.



2. Please right-click “Local Area Connection” and select “Properties”.

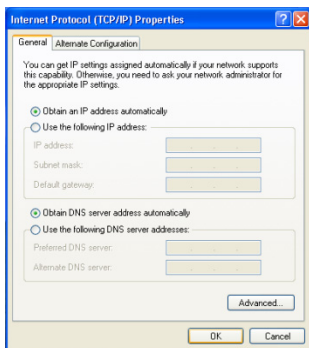


3. Please select “Internet Protocol(TCP/IP)” and click “Properties”.



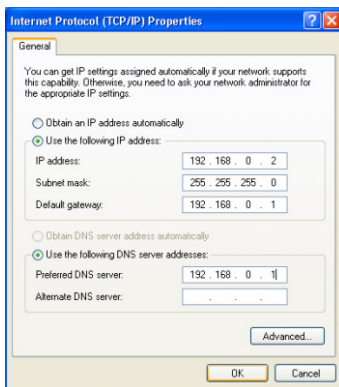
4. On this page, there are two options for IP settings : “Obtain an IP address automatically(O)” and “Use the following IP address(S)”

A: If you select “Obtain an IP address automatically(O)”, please refer to the figure on the right.



B: If you select “Use the following IP address(S)”, you have to input below parameters respectively:
IP address: 192.168.0.XXX
(XXX is among 2~254)
Subnet Mask: 255.255.255.0
Default gateway: 192.168.0.1
Also there are two ways for DNS settings, Please select “Use the following DNS server addresses”.

Preferred DNS Server: Please input the DNS server address provided by ISP. Please contact your ISP for this information if you are not clear.
Alternate DNS Server: If you have a secondary DNS Server



address, please fill in this blank.

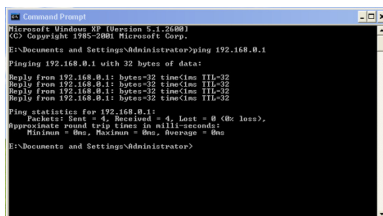
After finishing above settings, please click “OK” to submit configuration, and click “OK” in “Local Area connection” to save configuration.

2.2 To check the connection

1. Click “Start-----Program-----Accessories-----Command Prompt”, you will see below dialogue box.

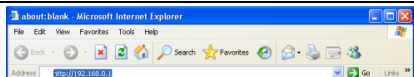


2. Please input command “Ping 192.168.0.1” and then press “Enter”. If the screen displays as the right Figure, it shows your PC and router have been connected normally. Otherwise, please check whether your router is powered on or whether the cable between your PC and router is normally connected.



2.3 Log in the Router

1. Please open IE and enter
“<http://192.168.0.1>” in the
address bar, then press “Enter”



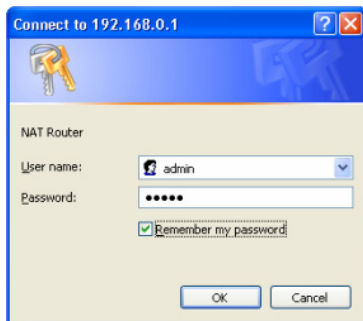
2. Then right Figure will appear to
require User name and
Password, please enter as per
below factory default:

User Name: admin

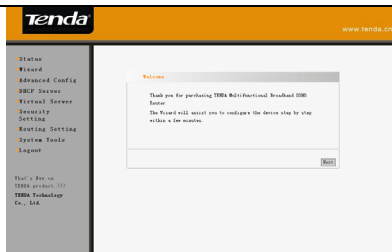
Password: admin

Then click “OK”.

In order to have a faster access
to your router’s management
interface, please select
“Remember my password”



3. If the User name and
Password are correct, IE will
enter into administrator’s
interface as right Figure.



2.4 Get to Know the Management Interface

1、After entering into the configuration Interface, you will see 9 function menus on the left ,including: Status, Wizard, Advanced Config, DHCP Server, Virtual Server, Security Setting, Routing Setting, System Tool, Logout. Press the separate button, you can configure the function settings respectively.



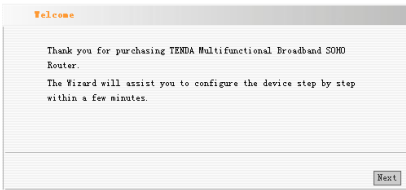
- Status
- Wizard
- Advanced Config
- DHCP Server
- Virtual Server
- Security Setting
- Routing Setting
- System Tools
- Logout

What's New on
TENDA product. >>>

TENDA Technology
Co., Ltd.

2、When selecting each Menu, there will be a detailed setting Figure appearing on the right where you can configure in details for each Menu.

Welcome



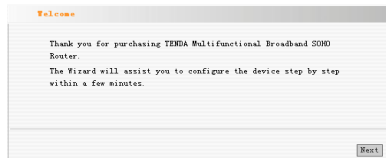
Thank you for purchasing TENDA Multifunctional Broadband 50M Router.

The Wizard will assist you to configure the device step by step within a few minutes.

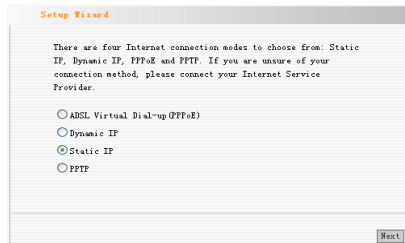
Next

2.5 Quick Installation Guide

1、Click “Next” when you enter in the “Welcome” interface.



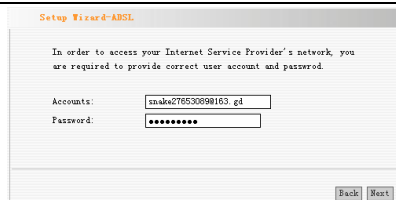
2、Please select your Access mode when you enter into Wizard interface.
This Router supports 4 kinds of Access modes:
Factory default Access mode is “Dynamic IP”



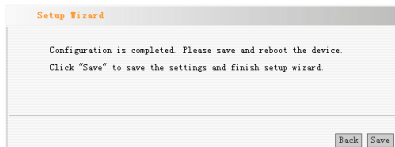
A. If you select “ADSL Virtual Dial-up(PPPoE)”, just enter the User Name and Password, provided by the ISP, into the “Wizard ADSL” dialogue box.
For example, your ISP provided you below User name and password:

User name	snake27653089@163.gd
Password	123snake

Then you have to fill in above parameters as the figure on the right.



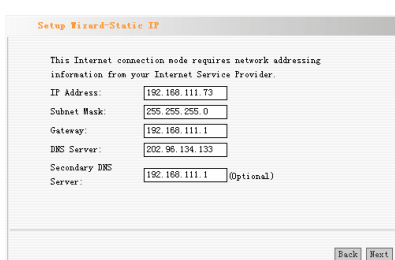
B. If you select “Ethernet Broadband, automatically obtain an IP from ISP (dynamic IP)”. Please click “Save”.



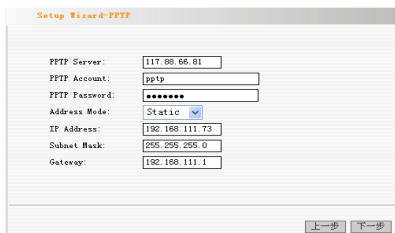
C. If you select “Ethernet Broadband, fixed IP provided by ISP (fixed IP)”, figure on the right will appear, you have to enter IP address, Subnet-mask, Gateway, DNS Server address and Secondary DNS if available. For example, your ISP provided you below information:

IP Address:	192.168.111.73
Subnet -mask:	255.255.255.0
Gateway:	192.168.111.1
DNS Server:	202.96.134.133
Secondary DNS:	192.168.111.1

Then you have to fill in above parameters as right Figure.



D. If you select “PPP Tunneling Protocol (Can support multi-protocol Virtual Private Networks)(VPN)(PPTP). PPTP Server: Including Domain name and IP Address. You only



need to fill in one of them.

PPTP Account: fill in with your Account provided by your ISP.

PPTP Password: fill in with your password provided by your ISP.

Address Moed:

a: If you select "Ethernet Broadband, automatically obtain an IP address from ISP(dynamic IP)", please click "Next" to finish setting.

b: If you select "Ethernet Broadband, fixed IP address provided by ISP(Static IP)",

Please click "Save" to save your configuration

Setup Wizard

Configuration is completed. Please save and reboot the device.
Click "Save" to save the settings and finish setup wizard.

Back Save

4、Running Status

After finishing above settings, you can click "Status" menu on the left to check the connection status between your router and ISP end.

Status

Connection Status: Connected

Item	Value
WAN IP	192.168.1.1
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
Primary DNS	192.168.1.1
Secondary DNS	192.168.1.1
Connection Type	Static IP

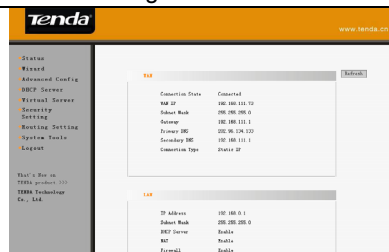
LAN

Item	Value
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DDNS Server	Static
Firewall	Static

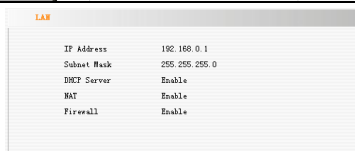
2.6 Status

This section will show you the Router's running status.

The right Figure will show the router's running status.



This page shows the router's LAN port status (the router is under default setting)



2.7 Wizard

Please refer to 2.5 for Quick Installation Guide

2.8 Advanced Config

LAN Settings

This page shows you the detailed settings for LAN ports.

1. MAC Address

This is router's MAC address that you can not change.

2. IP Address: 192.168.0.1 is the Router's current IP Address and Factory default IP Address. You may change it if necessary.

For example, you can change the router's IP address to 192.168.3.1.

Warning:

If you change this IP address, you are required to use the new IP address to log into the

WEB Management Interface so that you can successfully access to the Internet. Moreover, the default gateway of all the computers under this router is required to set as this IP address.

WAN Setting

This page shows you the detailed Settings for WAN(PPPoE).

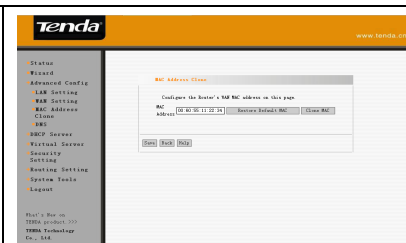
You can change the parameters respectively for different Access Modes. Taking ADSL Access mode as example, we may change parameters as follows:

MTU	(Maximum Transmission Unit)
Service Name	Some ISPs need this to validate customers' information.

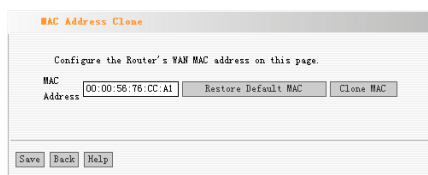
Connection mode	Connect Automatically, Connect after Start and Break off.	
	Manual connect, connect by user.	
	Connect when needed, Connect automatically when data access.	
	Connect timing, automatically connect on the appointed period	

MAC Address Clone

This page configures the MAC Address for router's WAN port.



This function enables you to copy the Administrator's LAN Adapter MAC address as WAN port MAC Address(you may also change the MAC address manually), but if you are not



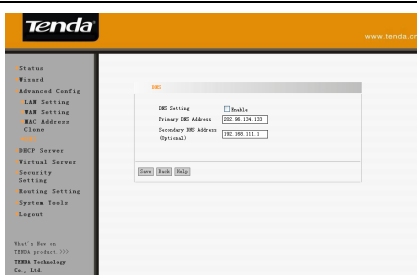
clear how to fill, you are suggested to use this function. For example, you may change the WAN port to 00:00:56:76:CC:A1 as setting on the right.

DNS

DNS (Domain Name System service) Server distributes Domain name address and IP address for internet host.

Domain Name system will translate Domain Name address to IP address for users.

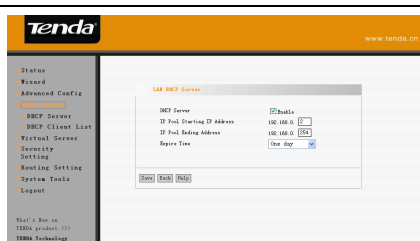
Domain Name Service is an Internet Tool to run Domain Name System. The Server to execute Domain Name Service is called DNS Server which is responding to Domain Name Service's demands.



2.9 DHCP Server

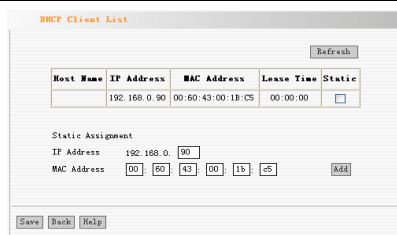
DHCP Server

DHCP (Dynamic Host Configure Protocol) can distribute IP address, Subnet mask, Gateway, DNS Server IP Address and WINS IP Address to clients automatically. It enables administrator to make related settings for all PCs under this router from the Server rather than setting all PCs one by one.



DHCP Client List

You can check the connection status of client through DHCP Client List which includes IP Address, MAC address, Lease Time etc.



2.10 Virtual Server

Virtual Server

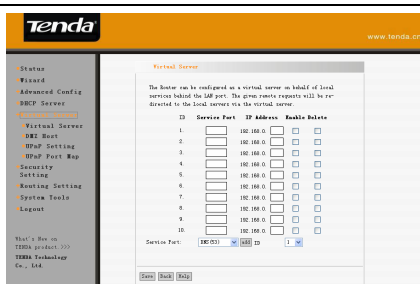
1. Service Port: The service port which the router offers to WAN.

2. IP Address: The IP Address of the computer in the LAN which work as a virtual server.

3. Enable: Please select “Enable” and the rules will go into effect.

4. In “Service Port”, the common port numbers are list here. You could select one of them and then select an ID in “ID” and then press “Insert”, and then the port would be added to the list automatically. For the port numbers which are not displayed here, you could fill it manually.

For example, the server in the LAN with IP address of 192.168.0.10 offers WEB service with port number of 80, in order to enable visitors in the Internet to have successful access to this server, you should configure as the figure beside.



Note:

If you configure a virtual server (server port: 80), you should configure the remote WEB management in “Wireless Security Configure” as a value different from 80. For example, you could set it as 8080. Otherwise the confliction would occur and the server would not be able to function. After you configure the value in “Wireless Security Configure”, you should reboot the router to make the settings go into effect.

Virtual Server

The Router can be configured as a virtual server on behalf of local services behind the LAN port. The given remote requests will be re-directed to the local servers via the virtual server.

ID	Service Port	IP Address	Enable	Delete
1.	80	192.168.0.10	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>
3.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>
4.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>
5.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>
6.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>
7.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>
8.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>
9.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>
10.		192.168.0.	<input type="checkbox"/>	<input type="checkbox"/>

Service Port: ID:

DMZ Host

In certain special case, we must make one of the LAN computers completely using for the internet to realize the dual communication. Then you may appoint the computer as the Host. DMZ Host

Tenda www.tenda.cn

DMZ

The DMZ function is to allow one computer in LAN to be exposed to the Internet for special-purpose services or Internet gaming or videoconferencing.
(Note: After the DMZ host is configured, firewall-related rules (IP address will not work.)

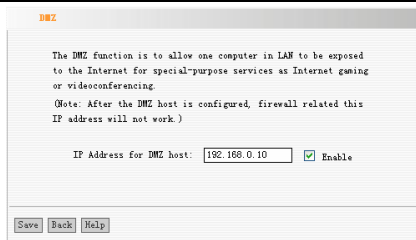
IP Address for DMZ host: ☐ Enable

Status
 Wizard
 Advanced Config
 DHCP Server
 Virtual Server
 Virtual Services
 DMZ Host
 IPAD Setting
 IPAD Port Map
 Security Setting
 Monitoring Setting
 System Tools
 Logout

Host's IP on
 TENDA product: 192
 TENDA Technology
 Co., Ltd.

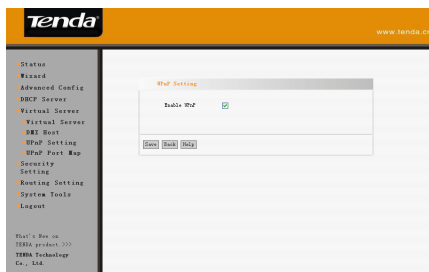
At first you input the IP Address of the LAN computer that is set as DMZ Host in the DMZ Host's IP Address bar. Then you select the "start". Finally click and save all the DMZ Host settings.

For example: set a computer with IP address 192.168.0.10 in the LAN as the DMZ Host, in order to realize that it can communicate with another Host in the internet, then the process is shown in the right Figure.



UPnP Setting

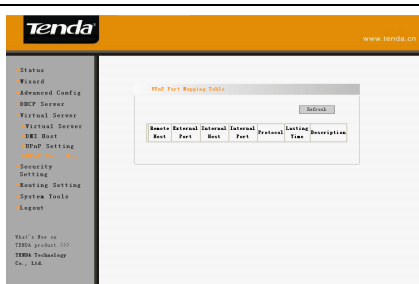
Supports the latest Universal Plug and Play (UPnP protocol). This function requires Windows XP/Windows ME OS (remark: your OS should be integrated with directx or DirectX 9.0 should be installed in the OS already) or application software of supporting UPnP. Otherwise, it will not take effect. Depending



on UPnP protocol, the Host in the LAN can ask the router for a special port conversion, which enables the external Host to access the resource of the internal Host when necessary.

UPnP Mapping Table

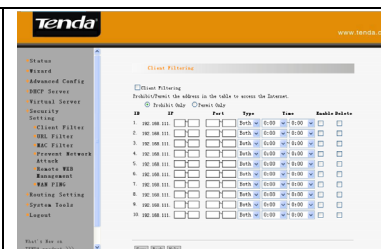
After enabling the UPnP function, you can see the port conversion information if you have opened the related applied program. The port conversion information is supplied when the applied program is sending a request.



2.11 Security Setting

Client Filter

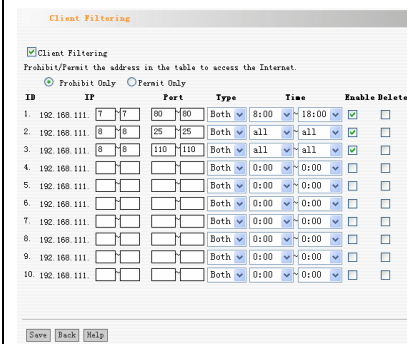
To benefit your further management to the computers in the LAN, you can control some ports access to Internet by data packet filter function.



1. Click “Prohibit Only” or “Permit Only”. When you click “Prohibit Only”, you are only forbidding the host in LAN with the corresponding IP to go through the router by the corresponding port. When you click “Permit Only”, you are only allowing the host in LAN with the corresponding IP to go through the router by the corresponding port.

3. IP: Please fill in the IP address of the controlled computer in the LAN. You are able to use a range of IP addresses.

4. Port: Please fill in the TCP/UDP protocol port that you require to control, you can



set a range of IP addresses.

5. Type: Select the protocol of data packet controlled (All means TCP/ UDP both included).

6. Time: Please fill in the time when this rule goes into effect and goes out of effect.

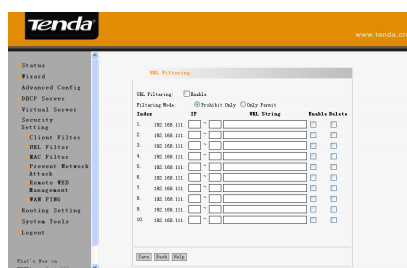
7. Enable: This filter rule functions.

8. Save: Click to finish and save setting.

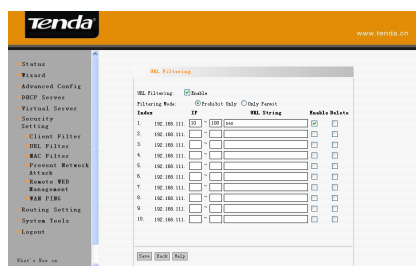
For example, if you require forbidding the computer (IP address 192.168.0.7) browsing website during 8:00-18:00 and forbidding the computer with IP of 192.168.0.8 receiving emails all day, you can set as the figure beside.

URL Filter

In order to control the computer to have access to websites. You can use URL filtering to allow the computer to have access to certain websites at fixed time and forbids it having access to certain websites at fixed time.



1. Enable URL Filter Function
 2. Filter Mode: Two filter modes, "Prohibit Only" and "Permit Only", are available. When you select "Prohibit Only", you are able to forbid the computer with the IP address visiting the URL with the contents stated. When you select "Permit Only", you are allowing the computer with the IP address to have access to the URL with the contents stated only.
 3. IP: Input the IP of the computer in LAN to be managed, or you can also input a range of IP addresses.
 4. URL String: Input full or part of the domain name.
 5. Enable: To enable the selected URL filter rules.
 6. Save: To save your settings.
- For Example: If you require forbid the computers in LAN with IP Address of from 192.168.0.10 to 192.168.0.100 from having access to the websites with the domain of "sex", or part of its domain name with words of "sex", you could set as the figure beside.



Note:

You should restart your client utility, or run “net stop dnscache” in its MS-DOS window to make the setting go into effect due to the DNS cache function of Windows.

MAC Filter

In order to manage the computers in the LAN better, you can control the computer's access in the LAN to the internet by using the MAC address filtering function.

1. MAC Filter: Choose “Enable” to enable MAC filter function.

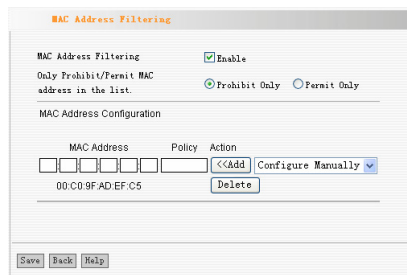
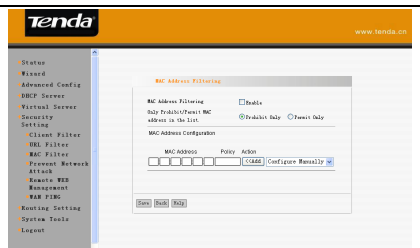
2. Filtering Rule:

Please refer to the figure below.

Please choose “Prohibit Only” to prohibit the MAC listed in the MAC address column. Also, you could choose “Permit Only” to allow the MAC in the list to have access to Internet.

3. MAC address: Fill in the MAC address which you need to control.

4. Comment: To fill in the



description of this computer with this MAC address.

5. Action: Click “ADD” to add the MAC Address in the MAC address column.

6. Save: Please click “Save” and you could save your settings.

For example: you don’t want the computer with MAC of 00:C0:9F:AD:EF:C5 to access Internet, but allow other computers in LAN to access, you would configure as the figure beside.

Prevent Network Attack

Startup the function of preventing the network from attack: after starting the function, router will startup the function of preventing the network from attack. When the router inspects that there is an attack to it from a Host, it will limit the bandwidth of the Host. You may click the “system log” of the system tool to look over the IP address that initiates the attack.



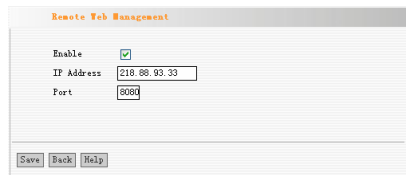
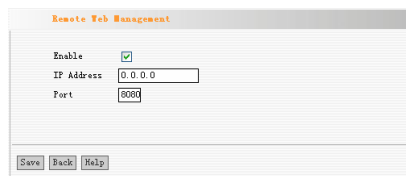
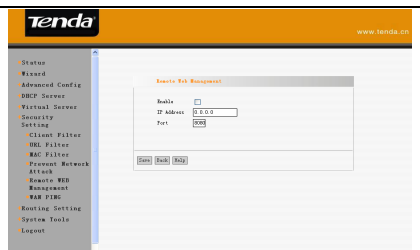
Remote Web Management

This section sets the web management port and IP address of computer which can execute remote web management in the WAN;

1. Enable: Enable remote WEB manager function.
2. IP Address: The IP address in WAN which is allowed to execute remote WEB managing function.
3. Port: The port through which the computer in WAN execute remote WEB manager function.

Note:

1. The default port through which the computer in WAN is able to execute remote WEB managing function is 80. If you change the port (take 8080 for example), you should type http://192.168.1.2:8080 to go to the WEB management interface.
2. The default IP which is allowed to execute remote WEB managing function is 0.0.0.0. Under this default situation, all

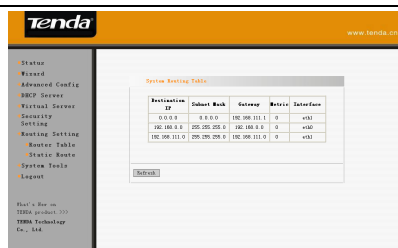


2.12 Routing Setting

Route Table

System routing table is a table of the router that owns the fixed route which is set by the system in advance.

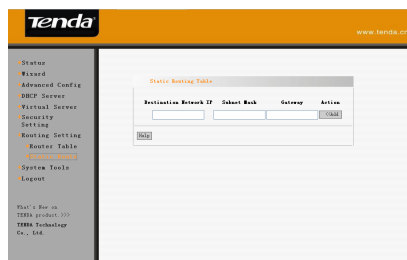
Generally speaking, it is configured after starting the system. Router table can decide where the computer data go.



Static Route

★Tips: The routing table which is set by administrator in advance is called static route. Usually, it is set according to network configuration when installing the operation system. It would not be changed according to network structure's change.

1. Destination LAN IP: The IP address or IP segment which would be accessed.
2. Subnet Mask: Fill in Subnet Mask. Usually, it is 255.255.255.0.
3. Gateway: The IP address of the host or router, to which the data packet is transferred.
4. Action: After you click "ADD", the setting would be taken into effect.



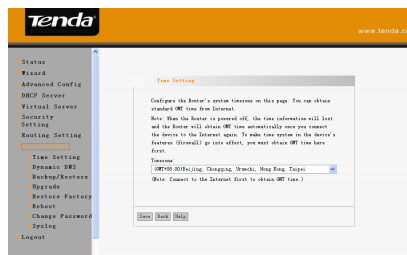
2.13 System Tool

Time Setting

This section is to set system time of router. You would set your own time or obtain GMT time from Internet.

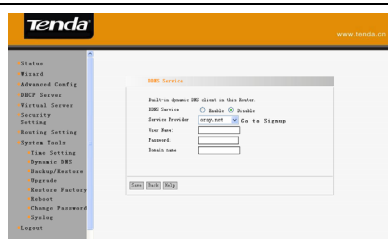
Note:

After you turn off the power of the router, the time information would be lost. When you turn on the router and connect to the Internet, the router would obtain GMT time automatically. You should go to Internet and obtain GMT time, or come to this page for setting the time of the router, and the time restriction of other functions (for example: firewall), would take into effect.



Dynamic DNS

DDNS is the short name of Dynamic Domain Name Serve. The “dynamic” of DDNS indicates that the IP is dynamic and fluctuant. All the ordinary DNS are based on static IP, maybe one to one, maybe one to more,

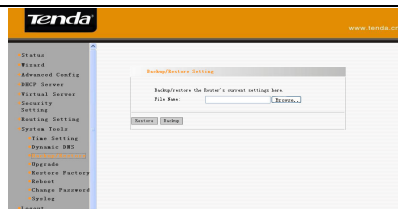


but all the IP are fixed, one or more.

Whereas the IP of DDNS is fluctuant and stochastic.

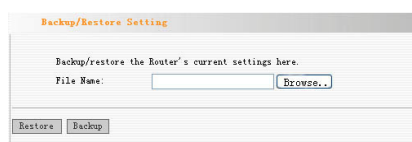
Backup/Restore

Here you may backup the setting currently or resume the former router setting.



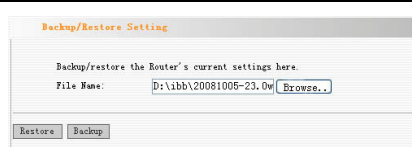
Method Of Backuping The Setting:

Click the button of “backup” and a dialog box will appear. Click “save” and the file is saved to the computer.



Method of Resuming The Setting:

Browsing the backup file, click the “restore” button. When the system resume, please turn off the electricity and restart.



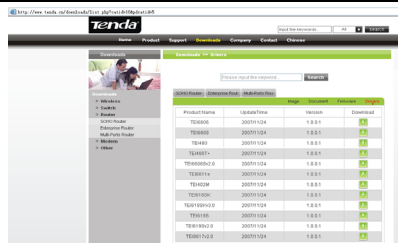
Upgrade

By upgrading the software of the router, you will get a stable router edition and add new routing function.

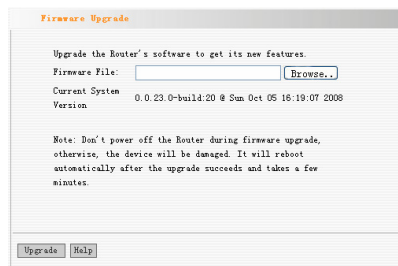


Steps Of Software Upgrade

1、Please login our company website(www.tenda.cn) before upgrade, and download the newer edition software.



2、Please decompress the upgrade file downloaded by using the WinRAR software. Click the “browse” button and select the upgrade software you downloaded. Click “upgrade”. After finishing the upgrade, please turn off the electricity and reboot router.



Notice:

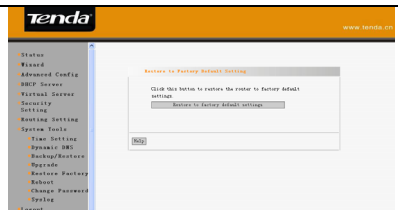
To avoid damage to the router, do not interrupt the upgrade procedure by turning off the router or closing the browser. The upgrading will take several minutes.

Restore Factory

Clicking the button of “restore factory setting”, the router will be restore to the default status at the factory:

Default Username: admin

Default Password: admin



Default IP address: 192.168.0.1

Default Subnet Mask:

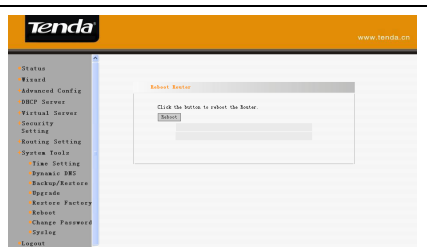
255.255.255.0

Notice:

After restoring factory setting, it will not take effect until you reboot the router.

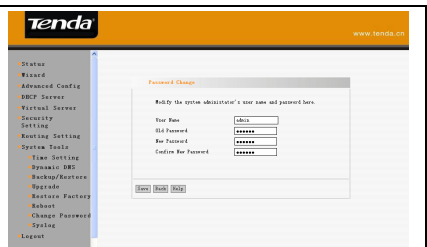
Reboot

This section is for “reboot router”, which will take effect after the setting changes, the router will break off the connection with the ADSL automatically before the router restart.

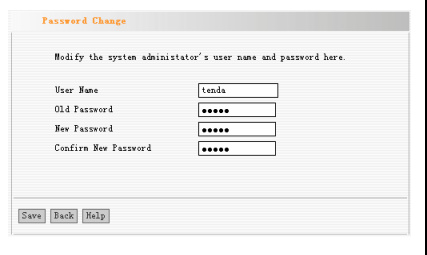


Change Password

This section is for changing the login Password of the system administrator.



Please input the original Login Password, and then input the new login Password. If you input the right original login Password, click “save”. Then you may change the user’s Login Password successfully.



For example: we change the Username and Password into:

Username	tenda
Password	tenda

Then you need to input your parameter information according to the figure on the right.

Notice:

Considering the security, we strongly recommend that you change the initial Username and Password.

Syslog

From the system, you may look over all arisen circs after starting the system, also you may look up that whether there is a network attack or not.

Index	Log Description
0	[Thu Oct 07 14:48:20 2009][System]System start
1	[Thu Oct 07 14:48:20 2009][System]Ver 0.0.23.0 build 20.4 Sys Oct 05 16:18:07 2009
2	[Thu Oct 07 14:48:36 2009][DHCP]Client[192.168.1.101] sending
3	[Thu Oct 07 14:48:36 2009][DHCP]Client[192.168.1.101] received
4	[Thu Oct 07 14:48:36 2009][DHCP]Client[192.168.1.101] sending
5	[Thu Oct 07 14:48:36 2009][DHCP]Client[192.168.1.101] received
6	[Thu Oct 07 14:48:37 2009][DHCP]Reply from 192.168.0.100
7	[Thu Oct 07 14:48:38 2009][DHCP]Server clock and time by dhcpclient
8	[Thu Oct 07 14:48:38 2009][DHCP]Time from dhcp request rx
9	[Thu Oct 07 14:48:38 2009][DHCP]Reply from 192.168.0.100
10	[Thu Oct 07 14:48:38 2009][DHCP]Reply from 192.168.0.100
11	[Thu Oct 07 15:04:58 2009][DHCP]Reply from 192.168.0.100
12	[Thu Oct 07 15:05:00 2009][DHCP]Reply from 192.168.0.100

Package Contents

Please unpack the packaging carefully and you would be able to find the following articles included:

Article	Quantity
Multifunctional broadband router	1
Power supply adapter	1
Quick Installation Guide	1
Installation disk	1

Kind Tip:

If you find there is any damage or missing of the goods, please contact with local “tenda” dealer in time.

Physical Environment

1. Connect the LAN port of the router with the LAN by twisted-pair cable.
2. ADSL/CABLE MODEM or residential area broadband connection is connected to the WAN port of the router.
3. Browser of IE 5.5, Netscape 6.1 or above.
4. Os supports: Windows, Linux, NetWare etc, network supporting TCP/IP communication protocol.
5. Lay the router in the level.
6. Please keep the router far away from heating sources
7. Don't lay the router in dirty or dank places.