



A8/A31

Wireless N150/ N300 Portable Router



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II



Preface

Thank you for choosing Tenda! Please read this user guide before you start! This user guide instructs you to install and configure your device.

This user guide uses the following formats to highlight special

messages:

Icon	Description					
	This format is used to highlight information of importance or					
Anote:	special interest. Ignoring this type of note may result in					
	ineffective configurations, loss of data or damage to device.					
Ö	This format is used to highlight a procedure that will save time or					
¥ Tip	resources.					
\square						
	Description of fields on the device GUI.					
Knowledge Center						

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- Hotline:

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I Product Overview

1 Package Content

Unpack the package. Your box should contain the following items:



If any of the parts are incorrect, missing, or damaged, contact your dealer. Keep the carton,

including the original packing materials, in case you need to return the product for repair.

2 Getting to know your router

LED





LED	Status	Description	
	Solid	The device is functioning correctly.	
Power	Off	Power is not supplied to the router. Make sure the device is properly connected to power outlet.	
	A green and blinking light	Device is currently operating in hotel mode and WAN port is NOT properly connected	
	A green and solid light	Device is currently operating in hotel mode and WAN port is connected	
	A blinking blue light	Device is currently operating in residence mode and WAN port is NOT properly connected	
Status	A solid blue light	Device is currently operating in residence mode and WAN port is connected	
	A light blue and blinking light	Device is currently operating in Universal Repeater Mode and is not connected to a wireless hotspot	
	A light blue and solid light	Device is currently operating in Universal Repeater Mode and is connected to a wireless hotspot.	

Button & Interface



 $1 \rightarrow RST$: Pressing it for over 10seconds restores the device to factory default settings. For device's factory default settings, see Appendix 3 Factory Default Settings.

2→USB: The USB port that charges terminal devices such as a smart phone or an iPad over a USB cable.

3 \rightarrow **LAN**: The local (LAN) 100M Ethernet ports are for cabling the device to local computers, switches, etc.

4→**WAN/LAN**: 100M LAN/WAN interchangeable interface, which functions as: a) a WAN interface for connecting to an Internet-enabled DSL modem or other uplink network device when operating in Residence Mode or Hotel Mode; or b) a LAN interface for connecting to a PC or an Ethernet switch when operating in Universal Repeater Mode.

Label



 $1 \rightarrow \text{Product Model}$

 $2 \rightarrow$ Default Login IP address. This IP address is to be used to access the router's settings through a web browser. If you change it, you have to open a new connection to the new IP address and log in again.

 $\mathbf{3} \rightarrow \text{Default login password}$

 $4 \rightarrow$ Default wireless network name (SSID).



II Quick Internet Setup

1 Getting Prepared

Before you start the installation process, you need to prepare the following:

Item	Description			
Router	Find it in your package			
PC	Should have a installed IE8 or higher browser			
Ethernet Cable	You will need it to connect your PC to the router			
Ethernet Cable from	This is provided by your ISP			
the incoming Internet				
side				
	Your Internet service provider (ISP) should have provided you with all			
	of the information needed to connect to the Internet. If you cannot			
	locate this information, ask your ISP to provide it.			
	• If your ISP uses a PPPoE Internet connection, you will need ISP			
	login name and password.			
Cathor ISD	• If you use a DHCP Internet connection, no information is needed.			
Information	• If your ISP gives you a fixed or static IP address for Internet			
mormation	connection, you will need to gather the following information:			
	1) IP Address			
	2) Subnet Mask			
	3) Gateway			
	4) DNS Server			
	5) Alternate DNS Server (Optional)			

2 Install

▲_{Note------}

Before you start, make sure you can access Internet by directly connecting the Ethernet cable from the incoming Internet side to your PC.

① Plug the device into a power outlet (For better wireless performance, place it near the center of

the area where your computers, smart phones and other devices operate, and preferably within

line of sight to your wireless devices.)





② Connect the NIC port on your PC to one LAN port on the router using an Ethernet cable or





③ Connect the Ethernet cable from the incoming Internet side to the WAN port on the router.





3 Connect to Router

If you use a wired NIC, refer to <u>3.1 Configure PC TCP/IP Settings</u> and then <u>4 Auto-switch</u> <u>Mode</u>.

3.1 Configure PC TCP/IP Settings

If your computer is set to a static or fixed IP address (this is uncommon), change it to "Obtain an IP address automatically" and "Obtain DNS server address automatically" from the device.

3.2 Join Your Wireless Network

Tip----- The device's SSID is "Tenda_xxxxxx" by default (You can find it on the attached label).

If you secure your wireless network, you must use the security key to join it.

3. To join your wireless network, the PC you use must have an installed wireless network adapter. If not, install one.





Windows 7

1 Click the icon down on the notification area on the bottom right corner.





2 Select the wireless network you wish to connect and click **Connect**.



③ If you see the screen below, you are connecting to the wireless network.

Connect to a Network	
Gettim information from Tenda_0FF02D	
	_
	Cancel

④ Enter the security key and click **OK**.

🔮 Connect to a Net	work	×
Type the netwo	ork security key	
Security key:	•••••	
	✓ <u>H</u> ide characters	
		OK Cancel



When you see **Connected** displayed next to the wireless network you selected, you have connected to the wireless network successfully.

Currently connected to: Network 4 Internet access Identifying (Tenda_0FF02D.) No Internet access	III >
Wireless Network Connection	
Tenda_OFF02D Connected	
Tenda_5	
Default_5G	
Default_2.4G	
123	
Tenda_020070	
100455	Ŧ
Open Network and Sharing Center	



Windows XP

① Right click **My Network Places** from your PC's desktop and select **Properties**.



2 Right click Wireless Network Connection and select View Available Wireless Networks.





③ Double click the wireless network you wish to connect.

(19) Wireless Network Connection			
Network Tasks	Choose a wireless network		
🚭 Refresh network list	Click an item in the list below to connect to a <u>w</u> ireless network in range or to get more information.		
Set up a wireless network for a home or small office	((စု))	Tenda_5G_4BC730	- nl
	U	Unsecured wireless network	BOOUU
Related Tasks	((Q))	Tenda_5G_000058	
 Learn about wireless 		Unsecured wireless network	•000
networking	((Q))	Test_yanf_w85ap-5	
Change the order of preferred networks		😚 Security-enabled wireless network (WPA)	0000
🍄 Change advanced	((Q))	F2	
settings	. [😚 Security-enabled wireless network (WPA2)	
	((o))	Tenda_0FF02D	
		🔓 Security-enabled wireless network (WPA)	aul 🚽
		To connect to this network, click Connect. You might need to enter additional information.	~
			<u>C</u> onnect

(4) Enter the security key and click **Connect**.

Wireless Network Conne	ction 🛛 🔀		
The network 'Tenda_0FF02D' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.			
Type the key, and then click Connect.			
Network <u>k</u> ey:	•••••		
C <u>o</u> nfirm network key:	••••••		
	<u>C</u> onnect Cancel		



(5) When you see **Connected** displayed next to the wireless network you selected, you have connected to the wireless network successfully.

⁽⁽)) Wireless Network Connect	ion			
Network Tasks	Choose a wireless network			
🛃 Refresh network list	Click an item in the list below to connect to a <u>w</u> ireless network in range or to get more information.			
Set up a wireless network	((ດູ))	Tenda_0FF02D	Connected 👷 🛆	
for a nome or small office	U	😚 Security-enabled wireless network (WPA)		
Related Tasks	((ດູ))	tjw_jjj		
 Learn about wireless 	U	Unsecured wireless network	0000	
networking	((ດູ))	Tenda_00006E		
preferred networks	U	Unsecured wireless network	0000	
Settings	((ဓူ))	PTCL-BB-IPT¥a		
secongs	U	Unsecured wireless network	•000U	
	((ဓူ))	c2		
	U	😚 Security-enabled wireless network (WPA2)	000U	
	((ဓူ))	Tenda_office	-0	
	U	😚 Security-enabled wireless network (WPA2)	000U 🧹	

4 Auto-detecting Internet Connection Type

By default, this device automatically detects and switches between DHCP and PPPoE according to actual environment. To test Internet connectivity:

① Launch a web browser and enter the device's IP address. Input the default password (admin) and click **OK** on the login window.

Login	
Default: admin	
Password: •••••	
OK Cancel	



2 The following screen appears if DHCP Internet connection type is detected. Simply specify a

wireless security key, click **Save** and then close the browser.

Current Intern	et Connection Type: Hotel Mode (DHCP)
	Encrypt it now?
Security Key	Please enter a security key
	O Ask me later
	O Never prompt me again
	Save Home

The following screen appears if PPPoE Internet connection type is detected. Enter the ISP login name and password, specify a wireless security key, and then click **Save**.

Current Internet	t Connection Type: Residence Mode							
Please enter your ISP User Name and ISP Password!								
ISP User Name	PPPoE Username							
ISP Password	•••••							
	Encrypt it now?							
Security Key	Please enter a security key							
	 Ask me later Never prompt me again 							
	Save Home							



③ See whether you can access Internet (See <u>3.2 Join Your Wireless Network</u>, if you use a wireless NIC), if not, refer to <u>5 Internet Setup</u>.

Ý.	.	
~	,	

If the Auto-switch feature is disabled, the device will automatically detect and switch to the right Internet connection type in case of an Internet connection failure.

5 Internet Setup

Read this section only when you fail to access Internet after you tried the above mentioned steps

or you can access Internet and want to change the SSID (wireless network name) and security key

of this device.

5.1 Web Login

1 Launch a web browser, say, IE.



2 In the address bar, input 192.168.2.1, and press "Enter".

🍯 Tenda 11N	Wireless Router - Windows Internet Explorer	
	🙆 http://192.168.2.1	

③ Enter the login password and click **OK**. The default password is admin.

Login			
	Default: ad	min	
	Password:	•••••]
	ОК	Cancel	



4 Click **Home** on the appearing screen.

Current Internet Connection Type: Hotel Mode (DHCP)						
	Encrypt it now?					
Security Key	Please enter a security key					
	O Ask me later					
	O Never prompt me again					
	Save Home					

5 The Setup Wizard screen appears.

	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Wizard	Setup Wizard					Help	
	•	Hotel Mode: D	Dynamic IP de: PPPoE			This setup wiza you through ba for Internet cor	ard guides isic settings inection. For
	0	Universal Repe	ater Mode: Clien	t+ap		more or furthe to 'Advanced'.	r settings, go
		Disable Auto-sv	witch Mode		Next		



1. If you access Internet by connecting to the Ethernet cable from the incoming Internet side, see Static IP.

2. If you don't want to use the Auto-switch feature, check the **Disable Auto-switch mode** box.

3. You can also enable the Auto-switch mode feature after you manually set up Internet and your wireless network so that your router can fit different environment, eliminating manual intervention.

5.2 Manual Internet Setup& Wireless Security Setup

Read the following and determine your Internet connection type. Then follow the right setup wizard.

A. If your ISP provides you with an Ethernet cable from the incoming Internet side but no ISP login account or IP information, your ISP uses a DHCP connection. See <u>DHCP</u>.

B. If your ISP provides you with an Ethernet cable from the incoming Internet side and ISP login account, your ISP uses a PPPoE connection. See PPPoE.



C. If your ISP provides you with an Ethernet cable from the incoming Internet side IP information (IP address, subnet mask, gateway IP address, DNS server address), your ISP uses a static IP connection. See <u>Static IP</u>.

D. If you acquire Internet access from a remote AP on an existing network see <u>Universal</u> <u>Repeater Mode</u>.

Hotel Mode (DHCP)

If your ISP does not give you any IP or user name/password info (your ISP uses a DHCP connection), simply connect the network cable from the incoming Internet side to the router and the router to your PC or simply search for and connect to your wireless router from your notebook. No configuration needed, simply plug and play.

For typical network topology, see below:



Ž Tip-----

1. If you already have a wired router, you can use this wireless router (operating in this mode) to convert the wired network into a wireless network. Simply connect the WAN port on this wireless router to a LAN port on the wired router and a wireless access point will be created instantly.

 If your computer is set to a static or fixed IP address (this is uncommon), change it to obtain an IP address automatically from the router. For more information, see <u>Appendix 1 Configure PC</u> <u>TCP/IP Settings</u>.



Configuration Procedures:

1 Select Hotel Mode: Dynamic IP and click Next.

Tenda								
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools	
Wizard	etup Wizard © ©	Hotel Mode: D Residence Moc Universal Repe Disable Auto-su	Dynamic IP de: PPPoE :ater Mode: Client witch Mode	t+ap	Next	Help This setup wiza you through ba for Internet con more or further to 'Advanced'.	ard guides sic settings nection. For r settings, go	

2 Configure your wireless network: SSID, channel, security settings and then click **Next**.

SSID: Tenda_221988

Channel: 6

Security Mode: WPA-PSK

Cipher Type: AES

Security Key: 12345678

Tenda										
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools			
Wizard	Setup Wizard					Неір				
	Enable Wireless SSID Channel	Tenda_22198	8			This setup wiza you through ba for Internet con more or further	ard guides sic settings nection. For settings, go			
	Security Mode WPA Algorithms	WPA2 - PSK		TKIP&AES		to 'Advanced'.				
	Key Security Mode:	12345678 Tenda has opt Using WPA -AE network agains	imized wireless e S encryption can st unauthorized a	ncryption in it effectively pro ccesses. Prev	s products. Itect your					



③ MAC Clone Setup: Enter the computer or broadband modem authorized by your ISP. Then

click Next.

Tenda			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		OK Ŏ	T Y	
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Wizard	Setup Wizard Configure WAN MAC Address: MAC Address MAC Clone	C8:35:3A:22:1 Restr	9:88 Dre to Factory De	efault MAC Previo	ous Next	Help This setup wizz you through ba for Internet cor more or furthe to 'Advanced'.	ard guides isic settings inection. For r settings, go

(4) Click **Finish** and wait for the device to restart automatically. After reboot, reconnect to this

device wirelessly or using an Ethernet cable and you will be able to access Internet.

Tenda							
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Wizard	Setup Wizard	Configurations	Complete!	Previous	Finish	Help This setup wiza you through ba for Internet cor more or further to 'Advanced'.	ard guides sic settings inection. For r settings, go

Residence Mode

If your ISP uses a PPPoE Internet connection (Router operates in Residence Mode), you will need

ISP login name and password.

For common application scenario, see below:





Configuration Procedures:

1 Select **Residence Mode: PPPoE** and click **Next**.

Tenda							
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Wizard	Setup Wizard					Help	
	0	Hotel Mode: D	Dynamic IP de: PPPoE			This setup wiza you through ba for Internet con	ard guides isic settings inection. For
	Ô	Universal Repe	ater Mode: Clien	t+ap		more or further to 'Advanced'.	r settings, go
		Disable Auto-s	witch Mode		Next		

2 Configure your wireless network: SSID, channel, security settings and then click **Next**.

SSID : Tenda_221988

Channel: 6

Security Mode: WPA-PSK

Cipher Type: AES

Security Key: Myrouter

Tenda								
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools	
Wizard	Setup Wizard	3				Help This setup wiza	ard quides	
	SSID	Tenda_22198	88			you through ba for Internet con	sic settings nection. For	
	Channel	Auto		•		more or further	r settings, go	
	Security Mode	WPA-PSK		•		to Advanced.		
	WPA Algorithms	AES	🔘 ТКІР 🛛 🗍	KIP&AES				
	Key	Myrouter						
	Security Mode:	Tenda has op Using WPA -A network again	ntimized wireless e ES encryption can Ist unauthorized ad	ncryption in its effectively prot ccesses. Previo	products. eect your			



③ Internet Setup & MAC Clone: Enter your ISP login user name and password (case sensitive)

and the MAC address of the computer or broadband modem authorized by your ISP. Then click

Next.

Tenda								
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools	
Wizard	Setup Wizard					Неір		
	User Name	PPPoE User N	Jame			This setup wiza you through ba	rd guides sic settings	
	Password	PPPoE Passv	vord			for Internet con	nection. For	
	Configure WAN MAC Address:					to 'Advanced'.	settings, go	
	MAC Address	C8:35:3A:22:1	9:88					
	MAC Clone	Rest	ore to Factory De	efault MAC				
				Previo	ous Next			

④ Click **Finish** and wait for the device to restart automatically. After reboot, reconnect to this

device wirelessly or using an Ethernet cable and you will be able to access Internet.

Tenda							
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Wizard	Setup Wizard	Configurations	Complete!			Help This setup wiza	ard guides
				Previous	Finish	for Internet cor more or furthe to 'Advanced'.	nection. For r settings, go



Universal Repeater Mode

Use this universal repeater mode to extend your existing wireless network coverage.

For application scenario, see below:



In this mode, you only need to configure the following settings on the repeater wireless router:

• Configure LAN IP: Specify an IP address that is in the same subnet as yet different from the

remote wireless router for this Tenda wireless router.

• Universal Repeater: Configure this router to bridge the remote wireless router for extended

network coverage.



- 2. Remote router's LAN IP address.
- 3. No Ethernet cable is connected to the Repeater wireless router's WAN port.



Universal Repeater Application Example:

Step 1 Gather information of the remote wireless router:

SSID: Tenda_888

Security Mode: WPA-PSK

Cipher Type: AES

Security Key: 12345678

LAN IP Address: 192.168.2.1

Step 2 Configure Repeater Wireless Router:

① Click Advanced -> LAN Settings to configure an IP address that is in the same subnet as yet

different from the remote wireless router for this Tenda wireless router.

Tenda			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		<u>OK</u> ŏ	j.	
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Status Internet Connection Setup MAC Clone	LAN Settings This page is used to set t LAN MAC Address	he basic network C8:35:3A:22:1	parameters for U 9:88	AN.		Help Here you can s Address and Su This IP Address	et the LAN IP ubnet Mask. s is to be
WAN Speed	IP Address	IP Address 192.168.2.10					
DNS Settings DHCP Server	Subnet Mask	255.255.255.0	Cancel			apply to this pa settings are 19 and 255.255.2	age. Default 2.168.2.1 255.0.
DHCP Client List							

2 Click **OK** in the appearing screen.

3 Select Universal Repeater Mode: Client +AP and click Next.

Tenda									
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools		
Wizard	Setup Wizard © @	Hotel Mode: D Residence Moc Universal Repe Disable Auto-su	Dynamic IP de: PPPoE kater Mode: Clien witch Mode	t+ap	Next	Help This setup wizz you through ba for Internet com more or further to 'Advanced'.	ard guides isic settings inection. For r settings, go		



④ Click here to search for available APs.

Tenda									
		Wizard	Advan	ced	Wireless	QoS	Applications	Security	Tools
Wizard	Setup W Ren Remote	lizard note AP's SSI : AP's Chann Security Mod	D el 1 e Disabl	le	Scan	× ×		Help This setup wizz you through ba for Internet cor more or further to 'Advanced'.	ard guides sic settings inection. For r settings, go
	Selected	SSID MAG	Address	Channel	Encryption A	lgorithm	Signal Strength		
	SL.					Pre	vious Next		

(5) Select the wireless network you wish to connect to.

Tenda									
		Wizard	Advanced	Wireless	QoS	Applications	Security	Tools	
Wizard	Setup W Rer Remote	Alzard note AP's SSID e AP's Channel Security Mode PA Algorithms Security Key	Tenda_888 5 WPA - PSK © AES C 12345678	Clear	× × KES	1	Help This setup wiza you through ba for Internet con more or further to 'Advanced'.	ird guides sic settings nection. For settings, go	
	Selected	SSID		MAC Address	Channel	Encryptio Algorithn			
	o	Tenda_888		00:88:88:88:CC:DD	5	WPA/AES			

(6) The information of the remote AP will be added automatically. You only need to enter the security key.



⑦ Click Clear and Next.

Tenda				SOC?			
	Wizard	Advanced	Wireless Q	oS Applications	Security Tools		
Wizard	Setup Wizard				Help		
	Remote AP's SSID Remote AP's Channel	Tenda_888	-		This setup wizard guides you through basic settings for Internet connection. For		
	Security Mode	WPA - PSK			more or further settings, go to 'Advanced'.		
	Security Key	12345678					
			Scan				
	Selected SSID MAC A	ddress Channe	Encryption Algorith	m Signal Strength			
				Previous Next			

(8) Click Finish and wait for the device to restart automatically. After reboot, reconnect to this device wirelessly or using an Ethernet cable and you will be able to access Internet.

Tenda								
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools	
Wizard	Setup Wizard					Help		
		Configurations	Complete!			This setup wiza you through ba	ard guides sic settings nection For	
				Previous	Finish	more or further to 'Advanced'.	settings, go	

▲_{Note-----}

When the Universal Repeater is configured successfully, wireless clients need to join the repeater wireless router's SSID for Internet access.

Step 3: Configure PC3 & PC4

 If PC 3 and PC 4 are set to static or fixed IP addresses (This is uncommon), change them to "Obtain an IP address automatically" and "Obtain DNS server address automatically" from the device. For details, see <u>Appendix 1Configure PC TCP/IP Settings</u>.

Ý

If PC 3 and PC 4 are already set to "Obtain an IP address automatically" and "Obtain DNS



server address automatically" from the device, click **Repair** to repair the IP settings.

2 Wait until your PC successfully obtains an IP address.

📥 Local St	atus	? 🛛
General	upport	
Connec	tion status Address Type: IP Address:	Assigned by DHCP 192. 168. 2. 103
	Subnet Mask: Default Gateway: Details	255, 255, 255, 0 192, 168, 2, 1
Windows connecti Repair.	edid not detect problems with this on. If you cannot connect, click	Repair
		Close



Verify Connectivity:

1) On PC 3 or PC4, Click **Start -> Run**.

Administrator	
Internet Internet Explorer Internet Explorer Image: Contract State Image: Contract Stat	My Documents My Recent Documents My Pictures My Music My Computer
Command Prompt Tour Windows XP C++	Control Panel Set Program Access and Defaults Connect To
Tenda Wireless Utility Paint Windows Media Player	Printers and Faxes Help and Support Search
All Programs 🕨	Log Off 0 Turn Off Computer

2 Enter cmd and click OK.





③ Input ping 192.168.2.1 and press Enter. If you get a screen as seen below, you have

successfully implemented WDS.



6 Verify Internet Connectivity

Click Advanced-> Status and check the Connection Status.

A. If connection status displays "Connected" (as shown below), you are connected to the Internet.

Tenda					OK O		
	Wizard	dvanced	Wireless	QoS	Applications	Security	Tools
	WAN Status					Help	
Internet Connection Setup	Connection Status	Connected				Connection S	tatus:Refers
MAC Clone	Internet Connection Type	DHCP				to the connect the router and	ion between the device
WAN Speed	WAN IP Subnet Mask	10.0.1.13 255.0.0.0				connected to t WAN.	he router's
LAN Settings	Gateway	10.0.0.254				Internet Con	nection
DNS Settings	DNS Server Alternate DNS Server	10.0.0.254 8.8.8.8				Type: This can be se	t in Advanced
DHCP Server	Connection Time	00:00:03				> Internet Con	nection Setup.
DHCP Client List		Release	Refresh			most common.	
	System Status					Connection 7	Time:Displays
	LAN MAC Address	C8:35:3A:2	2:19:88			the DHCP/Dyn PPPoE connect	amic IP and ion type.
	System Time	2011-04-0	1 00:01:40			System Vers	ion:Displays



B. If connection status displays "Disconnected" (as shown below), the Ethernet cable from the incoming Internet side to the router's WAN port may be connected improperly or disconnected. Make sure the cable from the incoming Internet side is properly connected to the router's WAN port. If nothing is wrong, "Connecting" or "Connected" will be displayed.

Tenda		- LY S	JK O		
	Wizard Advanced W	/ireless QoS	Applications	Security	Tools
	WAN Status			Help	
Internet Connection Setup	Connection Status Disconnected			Connection St	atus:Refers
MAC Clone	Internet Connection Type DHCP			to the connectio the router and t	n between he device
WAN Speed	WAN IP Subnet Mask			connected to the WAN.	e router's
LAN Settings	Gateway			Internet Conn	ection
DNS Settings	DNS Server Alternate DNS Server			Type: This can be set	in Advanced
DHCP Server	Connection Time 00:00:00			> Internet Conn DHCP and PPPo	ection Setup. Fare the
DHCP Client List	Diagnose Connection Status Please check ha	rdware connection of the WA	AN port.	most common.	L are the
	Release System Status	Refresh		Connection Ti WAN connection the DHCP/Dyna PPPoE connectio	me:Displays duration for mic IP and on type.
	LAN MAC Address C8:35:3A:22:19 WAN MAC Address C8:35:3A:22:19):88 9:88		System Version the current firm	n:Displays ware version

C. If connection status displays "Connecting", wait until the webpage automatically refreshes 5

times.

Tenda							
	Wizard	lvanced	Wireless	QoS	Applications	Security	Tools
Status	WAN Status					Help	
Internet Connection Setup	Connection Status	Connecting				Connection S	tatus:Refers
MAC Clone	Internet Connection Type	DHCP				to the connecti the router and	on between the device
WAN Speed	WAN IP Subnet Mask					connected to the WAN.	he router's
LAN Settings	Gateway					Internet Con	nection
DNS Settings	DNS Server Alternate DNS Server					Type: This can be se	t in Advanced
DHCP Server	Connection Time	00:00:00				> Internet Con DHCP and PPP	nection Setup. oE are the
DHCP Client List		Release	Refresh			most common.	
	System Status					Connection T WAN connectio	ime:Displays n duration for
	LAN MAC Address	C8:35:3A:2	22:19:88			the DHCP/Dyn PPPoE connecti	amic IP and ion type.
	WAN MAC Address	C8:35:3A:2	22:19:88			System Versi	on Displays
	System Time Running Time	2011-04-	01 00:03:20			the current firm	nware version

And if it still displays "Connecting", try the following steps:

• If you are using DHCP Internet connection type, try cloning MAC address. For more



information, see 1.3 MAC Clone.

• If you are using the PPPoE Internet connection type, read the diagnostic information next to the Diagnose Connection Status on the screen.

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III Features & Configurations

1 Advanced Settings

1.1 Status

Click **Advanced** to enter the status screen. Here you can view the router's WAN status and system status as noted below:

V Tip-----

1.IP Address/Subnet Mask/WAN subnet mask/Gateway/Primary DNS Server/Secondary DNS Server: This type of information appears only if the router successfully connects to Internet via a PPPoE or DHCP (dynamic IP) connection. However if you connect the router to Internet with static IP settings provided by your ISP, these fields will display the settings you entered whether the router successfully connects to the Internet or not.

2. If nothing appears in the secondary DNS server field, there is no available secondary DNS server.

Tenda										
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools			
	WAN Status					Help				
Internet Connection Setup	Connection Status	Connected				Connection St	atus Refers			
MAC Clone	Internet Connection Type	DHCP				to the connection	on between			
WAN Speed	WAN IF	10.0.1.13				connected to th	e router's			
LAN Settings	Subnet Mask Gateway	<pre>/ 255.0.0.0 / 10.0.0.254</pre>				WAN.				
DNS Settings	DNS Server	10.0.0.254				Type:	lection			
Divis Settings	Alternate DNS Server	8.8.8.8				This can be set	in Advanced			
DHCP Server	Connection Time	00:00:03				DHCP and PPPc	E are the			
DHCP Client List		Release	Refresh			most common.				
	System Status					Connection T	ime:Displays			
	LAN MAC Address WAN MAC Address	C8:35:3A:2	2:19:88			the DHCP/Dyna PPPoE connection	mic IP and on type.			
	System Time	2011-04-0	01 00:01:40			System Versio	on:Displays			



1.2. Internet Setup

Click **Advanced** -> **Internet Connection Setup** to configure your Internet connection settings. Select your Internet connection type:

A. Select PPPoE if your ISP uses a PPPoE connection and gives you a PPPoE user name and a PPPoE password.

B. Select Static IP if your ISP provides you with fixed or static IP address settings (special deployment by ISP; this is rare).

C. Select DHCP (Dynamic IP) if you can access Internet simply by directly connecting your computer to an Internet-enabled ADSL/Cable modem without configuring any settings.

PPPoE

Tenda		y co	P.(000	
	Wizard	dvanced Wireless	QoS	Applications	Security	Tools
Status	Internet Connection S	etup		^	Help	
	Internet Connection Type	PPPoE	•		PPPoE:PPPoE is	a
MAC Clone	DDD-C Usersers	Enter upprograme provided by IS			with some DSL c	associated onnections
WAN Speed	PPPoE Osername	Enter password provided by IS			that requires Us Password. Conta	ername and act your ISP if
LAN Settings	MTU	1492			you need assista these login cred	ance with entials.
DNS Settings		(The default value is 1492. Do	o not modify i	t unless	Contact your ISP	for help if
DHCP Server		required by your ISP.)			you are not sure	about
DHCP Client List	Service Name	(Only enter this information if i	instructed by	ISP.)	type to use.	onnection
	Server Name					
	Select the corresponding con	(Unly enter this information if i nection mode according to your © Connect automatically: Col	nstructed by situation. nnect automa	ically		

Configuration Procedures:

- 1 Internet Connection Type: Select PPPoE.
- 2 **PPPoE Username:** Enter the ISP login name.
- **3 PPPoE Password:** Enter the ISP login password.
- 4 Click **OK** to save your settings.



1. MTU: The MTU (maximum transmission unit) is the largest data packet a network device



transmits. The normal MTU value for most Ethernet networks is 1500 bytes, or 1492 bytes for PPPoE connections. The best MTU value is often just the factory default value. For some ISPs, you might need to change the MTU. This is rarely required, and should not be done unless you are sure it is necessary for your ISP connection. For more information, see <u>WAN MTU Setup</u>.

2. Service Name: This is the descriptive name of the current connection. Only enter it if your ISP provides it.

3. Server Name: This is the descriptive name of the server. Only enter it if your ISP provides it.

Static IP

Tenda		- ~ J				
	Wizard	dvanced Wireless	QoS	Applications	Security	Tools
Status	Internet Connection S	etup			Неір	
	Internet Connection Type	Static IP	•		Static IP:Static IF	o is a
MAC Clone					connection type t you to specify the	hat allows Static IP
WAN Speed	IP Address	10.0.1.24			information provi	ded by
LAN Settings	Subnet Mask	255.0.0.0			with your existing	un caponas
DNS Settings	DNS Server	10.0.0.254			networking equip you have a fixed	ment. If (or static
Dito Settings	Alternate DNS Server	10.0.254		New N	IP) address, your	ISP will
DHCP Server	Alternate DNS Server	8.8.8.8	(0	(ptional)	required informa	tion. Select
DHCP Client List	MTU	1500			Static IP option ar	nd type the
		(The default value is 1500. required by your ISP.)	. Do not modify it	uniess	and Gateway IP A the correct boxes	et Mask Iddress into 1.
		OK Cancel			Contact your ISP f you are not sure	ior help if about

Configuration Procedures:

1 Internet connection Type: Select Static IP.

2 IP Address/Subnet Mask/WAN subnet mask/Gateway/DNS Server/Alternate DNS Server:

Enter the ISP information you gathered in **<u>1Getting Prepared</u>**.

3 Click **OK** to save your settings.



DHCP

Tenda			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		OK o		
	Wizard	dvanced	Wireless	QoS	Applications	Security	Tools
Status	Internet Connection S	etup				Help	
	Internet Connection Type	DHCP		-		DHCP:DHCP of	r Dynamic IP
MAC Clone	MTU					allows the route	type that er to
WAN Speed	MIU	(The defau	lt value is 1500. D	o not modify	it unless	automatically a information from	cquire IP m your ISP or
LAN Settings		required b	y your ISP.)			your existing ne equipment for	etworking Internet
DNS Settings						access. No con	figurations
DHCP Server		OK	Cancel			selected.	ing option is
DHCP Client List						Contact your ISI you are not sur which Internet o type to use.	P for help if e about connection

Configuration Procedures:

- 1 Internet connection Type: Select DHCP.
- 2 Click **OK** to save your settings.

WAN MTU Setup

The MTU (maximum transmission unit) is the largest data packet a network device transmits. The normal MTU value for most Ethernet networks is 1500 bytes, or 1492 bytes for PPPoE connections. For some ISPs, you might need to change the MTU. This is rarely required, and should not be done unless you are sure it is necessary for your ISP connection. When one network device communicates across the Internet with another, the data packets travel through many devices along the way. If a device in the data path has a smaller MTU value than the other devices, the data packets have to be "fragmented" to accommodate the device with the smallest MTU value.

The best MTU value is often just the factory default value. In some situations, changing the MTU value fixes one problem but causes another. Leave the MTU unchanged unless one of these situations occurs:

A. You have problems connecting to your ISP or other Internet service, and either your ISP or our technical support suggests changing the MTU value. Below web-based applications might require an MTU change:

A secure website that does not open, or displays only part of a web page



- Yahoo email
- MSN portal
- B. You use VPN and encounter serious performance problems.

C. You used a program to optimize MTU for performance reasons, and now you have connectivity

or performance problems.

If you suspect an MTU problem, try changing the MTU to 1400. If this does not help, gradually reduce the MTU from the maximum value of 1500 until the problem disappears.

The common MTU sizes and applications are listed in the table below.

МТО	Application						
1500	Typical for connections that do not use PPPoE or VPN.						
1492	Used in PPPoE environments.						
1472	Maximum size to use for pinging. (Larger packets are fragmented.)						
1468	Used in some DHCP environments.						
1436	Used in PPTP environments or with VPN.						

∧_{Note} ------

A wrong/improper MTU value may cause Internet communication problems. For example, you may be unable to access certain websites, frames within websites, secure login pages, or FTP or POP servers.



1.3 MAC Clone

Some ISPs (Internet Service Providers) require end-user's MAC address to access their network.

This feature copies your current PC's MAC address to the router. Click Advanced -> MAC Clone

to enter the configuration screen.

	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Status	MAC Clone					Help	
nternet Connection Setup	MAC Addres	c8:35:3A:22:19	9:88			Some Internet s providers (ISPs)	service) require end
MAC Clone	Rec	tore Default MAC	Clone MAC Ar	Idress		-user's MAC ac	dress to
WAN Speed	1(65	tore Deladit MAC		101633		access their net	twork. This
LAN Settings		OK	Cancel			address of your	r network
DNS Settings							
DHCP Server						address to be r	registered
DHCP Client List						Pertore Defa	ult MAC.
						Restore the def	fault
						hardware MAC	address.
						Clone MAC A	ddress:
						Register your P	C's MAC
						address	

Knowledge Center-----

1. Restore Default MAC: Reset the router's WAN MAC to factory default.

2. Clone MAC Address: Clicking this button copies the MAC address of the computer that you

are now using to the router. Also, you can manually enter the MAC address that you want to use.

You have to use the computer whose MAC address is allowed by your ISP.

To restore default MAC address:

- 1 Click **Restore Default MAC**.
- 2 Click **OK** to save your settings.

To clone the MAC address of the computer that you are currently using to the router:

- 1 Click Clone MAC Address.
- 2 Click **OK** to save your settings.

To manually enter the MAC address allowed by your ISP:

- 1 Enter the MAC address allowed by your ISP.
- 2 Click **OK** to save your settings.
- 1.4 WAN Speed



Click Advanced -> WAN Speed to enter the WAN port mode screen. Here you can configure the

router's WAN speed and duplex mode.

Tenda						
	Wizard Adv	anced Wireles	s QoS	Applications	Security	Tool
Status	Choose The WAN Speed				Help	
Internet Connection Setup	AUTO				Here you can li	mit the WAN
MAC Clone	10M HALF-duplex				speed. It is rec to use the defa	ommended ult "AUTO"
	10M FULL-duplex				setting to allow speed. Howeve	maximum r, WAN
LAN Settings	 100M FULL-duplex 	•			connection may router is too di	fail if your stant from t
DNS Settings		01/			Internet-enable	d modem.
DHCP Server		UK Cance			duplex mode.	Care TOM I
DHCP Client List						

1. The best port mode is often just the factory default of "Auto".

2. In some situations, you might need to change the port mode. For example, if the cable connected to your router's WAN port is too long, you may need to use 10M full-duplex or 10M half-duplex for better performance.

Тір-----

1.5 LAN Settings

Click Advanced -> LAN Settings to enter the configuration screen. Here you can configure the LAN IP address. This IP address is to be used to access the router's settings through a web browser. Be sure to make a note of any changes you apply to this page.

V Tip -----

- 1. Default IP address and subnet mask are respectively 192.168.2.1 and 255.255.255.0.
- 2. This router does not support VLSM.

3. Be sure to make a note of any changes you apply to this page. If you change the LAN IP address of the router, you have to open a new connection to the new IP address and log in again.





Tenda		
	Wizard Advanced Wireless QoS Applica	ttions Security Tools
Status	LAN Settings	Help
Internet Connection Setup	This page is used to set the basic network parameters for LAN.	Here you can set the LAN IP
MAC Clone	LAN MAC Address C8:35:3A:22:19:88	Address and Subnet Mask. This IP Address is to be
WAN Speed	IP Address 192.168.2.1	used to access the router's homepage through a web
	Subnet Mask 255,255,255,0	browser. Be sure to make a note of any changes you
DNS Settings		apply to this page. Default settings are 192.168.2.1
DHCP Server	OK Cancel	and 255.255.255.0.
DHCP Client List		

Configuration Procedures:

- ① Change the IP address to the one you wish to use, for example, 192.168.10.1.
- 2 Click **OK** to save your settings.

1.6 DNS Settings

Click Advanced -> DNS Settings to enter the configuration screen. Here you can set the DNS

(Domain Name Server) settings. The DNS server is used to look up site addresses based on their names.

Tenda			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		<u>ok</u> č	Ň	
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Status	DNS Settings					Help	
Internet Connection Setup	Enable Manual DNS					Here you can m	nanually set
MAC Clone	Assignment	10.0.0.254				Server) settings	or obtain
WAN Speed	Alternate DNS Address	8.8.8.8		(Op	otional)	them from your automatically. T	The Alternate
LAN Settings	Note: To activate new sett	tings, you must r	eboot the device.			DNS Address is	optional.
		OK	Cancel			If the DNS Addr entered are inc	resses orrect, web
DHCP Server						pages will not b open.	be able to
DHCP Client List							

Configuration Procedures:

- (1) Enable Manual DNS Assignment: Check to enable the DNS settings.
- 2 **Primary DNS Server:** Enter the IP address of your ISP's primary DNS server.

3 Alternate DNS Address: If a secondary DNS server address is available, enter it here. This

field is optional.

④ Click **OK** to save your settings.



▲_{Note} -----

The default DNS settings are recommended. Only change the DNS default settings if you know that your ISP requires specific servers. If incorrect DNS settings are configured, webpages will be unable to open.

1.7 DHCP Server

DHCP (Dynamic Host Configuration Protocol) assigns an IP address to each device on the LAN/private network. When you enable the DHCP Server, the DHCP Server will automatically allocate an unused IP address from the IP address pool specified in this screen to the requesting device as long as the device is set to "Obtain an IP Address Automatically". If you disable this feature, you have to manually configure the TCP/IP settings for all PCs on your LAN to access Internet.

Click Advanced -> DHCP Server to enter the DHCP Server screen. Here you can change the

DHCP IP address pool and lease time.

Tenda							
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Status	DHCP Server					Help	
Internet Connection Setup	DHCP Server	Enable				DHCP server (D	ynamic Host
MAC Clone	IP Pool Start Address	192.168.2. 1	00			Configuration Pi assigns an IP ac	rotocol) Idress to
WAN Speed	IP Pool End Address	192.168.2. 1	50			each device on LAN/private net	the work. When
LAN Settings	Lease Time	One day				you enable the the DHCP Serve	DHCP Server
DNS Settings		OK	Cancel			automatically al	locate an
DHCP Server		0.1	2.11001			IP address pool	to the
DHCP Client List						requesting devi the device is se an IP Address Automatically".	ce as long as t to "Obtain



Configuration Procedures:

1 DHCP Server: Select whether to enable or disable the DHCP server feature.

2 IP Pool Start IP Address / IP Pool End IP Address: You can specify the starting and ending

address of the IP address pool here. These addresses should be part of the same IP address subnet as the router's LAN IP address.

3 Lease Time: The lease time is a time length that the IP address is assigned to each device before it is refreshed.

4 Click **OK** to save your settings.



Tin------

1. By default, the router functions as a DHCP server. Do not disable the DHCP server feature unless you want to manually configure the TCP/IP settings for all PCs on your LAN.

2.Lease time will be renewed automatically upon expiry. No additional configurations are needed.

3. If you are not an advanced user, the default DHCP server settings are recommended.

1.8 DHCP Client List

Click Advanced -> DHCP Client List. You can know whether there are unauthorized accesses by

viewing the client list.

Tenda								
	Wiza	ard Advanced	Wireless (QoS Applications	Security	Tools		
Status	Static Assign	nment			Неір			
Internet Connection Setup	IP Addres	is 192.168.2.			DHCP Client List	displays a		
MAC Clone	MAC Addres	is i i	:	Add	obtained IP add	resses from		
WAN Speed					the router's DH0	CP Server.		
LAN Settings	NO. IP A	Address	MAC Address	Delete	You can manual static IP address	ly assign a s to a device		
DNS Settings	DHCP Client	List			by entering the MAC address ar	device's		
DHCP Server				Refresh	desired IP addre	ess, and		
DHCP Client List				Trencon	CIECK OIL AUG. AL	last.		
	Host Name	IP Address	MAC Address	Lease Time				
	luckyme-PC	192.168.2.100	C8:9C:DC:3B:AC:89	23:52:45				

Also, you can specify a reserved IP address for a PC in the LAN. That PC will always receive the same IP address each time when it accesses the DHCP server. Reserved IP addresses could be assigned to servers that require permanent IP settings.



Static Assignment Application Example:

To have a PC at the MAC address of 44:37:E6:4F:37:3B always receive the same IP address of

192.168.0.123.

Configuration Procedures:

- 1 Enter the last number of the IP address you want to reserve, for example, 123.
- 2 Enter the MAC address of 44:37:E6:4F:37:3B.
- 3 Click Add.

Tenda			\sim \sim	Y K	JK O) J	
	Wiza	ard Advance	d Wireless	QoS	Applications	Security	Tools
Status	Static Assig	nment				Неір	
Internet Connection Setup MAC Clone	IP Addres	s 192.168.2. 123 s 44 : 37 : E6	: 4F : 37 : 3B		Add	DHCP Client Li list of devices obtained IP ad	st displays a that have dresses from
WAN Speed	NO. IP	Address	MAC Address	D	elete	the router's DF	ICP Server.
LAN Settings DNS Settings	DHCP Client	List				static IP addre by entering the	ss to a device e device's
DHCP Server					Refresh	desired IP add click on "Add"	iress, and at last.
DHCP Client List	Host Name	IP Address	MAC Address	Lea	ase Time		
	luckyme-PC	192.168.2.100	C8:9C:DC:3B:AC:8	39 23	:52:45		
		ОК	Cancel				



④ Click **OK** to save your settings.

Tenda								
		Wizard	Advance	d Wireless	QoS A	pplications	Security	Tools
Status	Static	Assignm	ent				Help	
Internet Connection Setup		P Address	192.168.2. 123				DHCP Client Lis	t displays a
MAC Clone	MAG	C Address	44 : 37 : E6	: 4F : 37 : 3B		Add	list of devices t obtained IP add	hat have dresses fron
WAN Speed		10.4.11					the router's DH	CP Server.
LAN Settings	NO.	IP Addre	55	MAC Address	Del	lete	You can manua static IP addres	Ily assign a
DNS Settings	1	192.168	.2.123	44:37:E0:4F:37:3B	De	lete	by entering the	device's
DHCP Server	DHCP	Client Li	st				desired IP add	ress, and at last
DHCP Client List						Refresh	citic of Add t	
	Host I	Name	IP Address	MAC Address	Lease	Time		
	luckym	ne-PC	192.168.2.100	C8:9C:DC:3B:AC:	89 23:52	:45		

Tip----- 1. If the IP address you have reserved for your PC is currently used by another client, then you will not be able to obtain a new IP address from the device's DHCP server, instead, you must manually specify a different IP address for your PC to access Internet.

2. For PCs that has already obtained IP addresses, you may need to perform the Repair action to activate the configured static IP addresses.



2 Wireless Settings

2.1 Wireless Basic Settings

Here you can configure the basic wireless settings of the router. This router supports two operating

modes: Wireless Access Point (AP) and WDS Bridge Mode.

A. To only use the wireless network delivered by this router, select Wireless Access Point (AP).

B. To extend an existing wireless network, select **WDS Bridge Mode**.

Wireless AP Mode

Тір-----

1. By default, this device operates in the Wireless Access Point (AP) mode.

2. The primary SSID is defaulted to Tenda_XXXXXX, where XXXXXX is the last six characters in the device's MAC address. You can find this SSID on the label attached on the bottom of the device.

3. If you are not an advanced user, it is advisable to only change the primary SSID (name of the network) and channel and leave other items unchanged.

4. The device supports two SSIDs: primary SSID and secondary SSID. The secondary SSID is optional. By default, the secondary SSID is disabled.

5. Instructions to configure the primary SSID also apply to the secondary SSID. The primary SSID is used as an example below to illustrate all wireless related features.

Tenda			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~)Kě		
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
	Wireless Basic Setti	Help					
Wireless Security	Enable Wireless					In this section y	ou can
Access Control	Primary SSID	Tenda_22198	3			configure the wi settings of the r	ireless outer such
Wireless Connection Status	Secondary SSID					as the SSID (nar network) and Br	ne of the roadcast
	Wireless Working Mode	Wireless Ad	cess Point(AP)	WDS Bri	dge Mode	Channel.	
	Network Mode	11b/g/n mixed	mode			SSID: This is the	public
	SSID Broadcast	Enable	O Disable			name of your w	ireless eset to
	AP Isolation	Enable	Oisable			"Tenda_XXXXXX	X" (where
	Channel	AutoSelect		•		"XXXXXX" repre last six characte	esents the ers in device
	Channel Bandwidth	© ₂₀	20/40			MAC address.) Please change i	by default. t for better
	Extension Channel	Auto Select		•		security. Note the should not be le	hat this field eft blank.
	WMM Capable	Enable	Disable			SSID Broadca	st:This



Configuration Procedures:

1 **Primary SSID:** This is the public name of your wireless network.

2 **Channel:** Select a channel or select Auto to let system automatically select one for your wireless network to operate on if you are unsure. The best selection is a channel that is the least used by neighboring networks.

3 Click **OK** to save your settings.

Knowledge Center-----

- **1. Secondary SSID:** This is an alternate name for your wireless network.
- 2. Network Mode (802.11 Mode): Select a correct mode according to your wireless clients.
- 11b: This network mode delivers wireless speed up to 11Mbps and is only compatible with 11b wireless clients.
- 11g: This network mode delivers wireless speed up to 54Mbps and is only compatible with 11g wireless clients.
- 11b/g mixed: This network mode delivers wireless speed up to 54Mbps and is compatible with 11b/g wireless clients.
- 11b/g/n mixed: This network mode delivers wireless speed up to 300Mbps (A31)/150Mbps (A8) and is compatible with 11b/g/n wireless clients.

3. SSID Broadcast: This option allows you to have your network names (SSIDs) publicly broadcast or if you choose to disable it, the SSIDs will be hidden.

4. AP Isolation: When enabled, devices wirelessly connected to the same SSID will not be able to intercommunicate.

5. Channel Bandwidth: Select a proper channel bandwidth to enhance wireless performance. This option is available only in 802.11b/g/n. Wireless speed in the channel bandwidth of 20/40 is 2 times in 20.

6. Extension Channel: This is used to ensure N speeds for 802.11n devices on the network. This option is available only in 11b/g/n mixed mode with channel bandwidth of 20/40.

7. WMM Capable: WMM is QoS for your wireless network. Enabling this option may better stream wireless multimedia data (such as video or audio).

8. ASPD Capable: Select to enable/disable the auto power saving mode. This option is effective only if WMM Capable is enabled. It is advisable to disable it.



WDS Bridge Mode

WDS Bridge Mode: wireless distribution system (WDS) is a system enabling the wireless interconnection of access points in an IEEE 802.11 network. It allows a wireless network to be expanded using multiple access points without the traditional requirement for a wired backbone to link them.

▲_{Note}-----

The Access Points you select MUST support WDS.





WDS Bridge Mode Application Example:

To implement WDS Bridge for the application scenario above, do as follows:

Step 1: Get Prepared

① View and note down the SSID and wireless security settings of Router 1.

Click Wireless -> Wireless Basic Settings to enter the wireless basic configuration screen. Here

you can view the SSID and channel.

Tenda				AP A	0 1 0		
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Wireless Basic Settings	Wireless Basic Settin	ngs				Help	
Wireless Security	Enable Wireless					In this section y	ou can
Access Control	Primary SSID	Tenda_221988	}			settings of the i	router such
Wireless Connection Status	Secondary SSID					as the SSID (nai	me of the
	Wireless Working Mode	Wireless Ac	cess Point(AP)	🔘 WDS Bri	dge Mode	Channel.	oudeust
	Network Mode	11b/g/n mixed	mode	•		SSID: This is the	e public
	SSID Broadcast	Enable	🔘 Disable			name of your w network. It is p	rireless reset to
	AP Isolation	Enable	Disable			"Tenda_XXXXX	X" (where
	Channel	2437MHz (Cha	annel 6)			last six charact	esents the ers in device
	Channel Bandwidth	© 20 ●	20/40			MAC address.) Please change	by default. t for better
	Extension Channel	2417MHz (Cha	annel 2)	•		security. Note t should not be l	hat this field eft blank.
	WMM Capable	Enable	Disable			SSID Broadca	st:This
	APSD Capable	Enable	Oisable			option allows y	ou to have

- SSID : Tenda_221988
- Channel: 6

Click **Wireless** -> **Security** to enter the wireless security configuration screen. Here you can view the security settings.



Tenda					CHK O		
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Wireless Basic Settings Wireless Security	Wireless Security Se Select SSID	etup Tenda_22198	8	•		Help Here you can s	et the
Access Control Wireless Connection Status	Security Mode WPA Algorithms Security Key	WPA - PSK(Re AES(Recom Default: 12345	ecommended) mended) ©	TKIP C	TKIP&AES	wireless passw wireless networ recommended -PSK as Securit AES as WPA Alg Type. WEP Key:Must	ord for your 'k. You are to select WPA y Mode and torithms be either 5
	WPS Settings	To configure a Disable OK	wireless security I © Enable Cancel	key, disable ti	Reset OOB	or 13 ASCII cha or 26 Hex char WPA/WPA2-P can enable per mixed mode, b make sure that client also supp selected Securi	racters or 10 acters. 'ersonal:You sonal (PSK) or ut you must the wireless ports the ty mode.

- Security Mode: WPA-PSK
- Cipher Type: AES
- Password: 12345678
- AP MAC (BSSID): C8:3A:35:00:01:20 (can be found on the label attached to the device)
- Make sure DHCP server is enabled on router 1.

Click Advanced -> DHCP Server to enter the DHCP server configuration screen. You can view

and configure the DHCP server settings here.

Tenda) Na series a series a Na series a s	
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Status	DHCP Server					Help	
Internet Connection Setup	DHCP Server	V Enable				DHCP server (E	Dynamic Host
MAC Clone	IP Pool Start Address	192.168.2.	100			Configuration P assigns an IP a	rotocol) ddress to
WAN Speed	IP Pool End Address	192.168.2.	150			each device on LAN/private ne	the twork. When
LAN Settings	Lease Time	One day		•		you enable the the DHCP Serve	DHCP Server, er will
DNS Settings		OK	Cancel			automatically a	llocate an
DHCP Server						IP address poo	l to the
DHCP Client List	-					the device is se an IP Address Automatically".	et to "Obtain

② Set the LAN IP address of Router 1 to a different address yet on the same net segment as Router 2.

For example, Router 1: 192.168.2.1, Router 2: 192.168.2.10.

About how to configure these IP addresses, see 1.6 LAN Setting.



Step 2: Configure Router 1

 Set the LAN IP address of Router 1 (Set it to a different address yet on the same net segment as Router 2. For example, Router 1: 192.168.2.1, Router 2: 192.168.2.10). For more

information, see <u>1.6 LAN Settings</u>.

Tenda			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		OKŎ	Ĭ	
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Status	LAN Settings					Help	
Internet Connection Setup	This page is used to set th	ie basic network	parameters for L	AN.		Here you can s	et the LAN IP
MAC Clone	LAN MAC Address	C8:35:3A:22:	9:88			Address and S This IP Addres	ubnet Mask. s is to be
WAN Speed	IP Address	192.168.2.1				used to access homepage thro	the router's ough a web
LAN Settings	Subnet Mask	255.255.255.0)			browser. Be su note of any cha	ire to make a anges you
DNS Settings						apply to this p settings are 19	age. Default 92.168.2.1
DHCP Server		OK	Cancel			and 255. <mark>255</mark> .	255.0.
DHCP Client List							

② Click Wireless -> Wireless Basic Settings to enter the configuration screen. Select WDS

Tenda				0 K O			
	Wizard	Advanced Wireless	QoS	Applications	Security	Tools	
Wireless Basic Settings	Wireless Basic Settin	ngs			Help		
Wireless Security	Enable Wireless				In this section y	ou can	
Access Control	Primary SSID	Tenda_221988			settings of the	router such	
Wireless Connection Status	Secondary SSID				as the SSID (na network) and B	me of the roadcast	
	Wireless Working Mode	Wireless Access Point(AP)	WDS Bri	dge Mode	Channel.		
	Network Mode	11b/g/n mixed mode	•		SSID: This is th	e public	
	SSID Broadcast	Enable			name of your v network. It is p	vireless reset to	
	AP Isolation	Enable O Enable			"Tenda_XXXXX	X" (where	
	Channel	AutoSelect	•		last six charact	esents the ers in device	
	Channel Bandwidth	© 20			MAC address.) Please change	by default. it for better	
	Extension Channel	Auto Select			should not be l	eft blank.	

Bridge Mode and click Open Scan.



S	elect	SSID	MAC Address	Channel	Security	Signal Strength					
(٥	Tenda_0E1A78	C8:3A:35:0E:1A:78	7	WPA/AES	68					
0	D	Tenda_0004E8	C8:3A:35:00:04:E8	7	NONE	81					
(Mess	age from webpage	(A		X						
0 0	Please click on OK to confirm that you want to connect to this AP!										
-				ОК	Cancel						

③ Select the AP you wish to connect to and click **OK** to confirm it and then click **Close Scan**.

(4) Verify that the automatically populated SSID, channel and MAC address, etc. are correct and

then click **OK**.

Tenda							
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
	Wireless Basic Setti	ngs				Help	
Wireless Security	Enable Wireless					In this section y	you can
Access Control	Primary SSID	Tenda_0E1A7	8			configure the w settings of the	vireless router <mark>such</mark>
Wireless Connection Status	Secondary SSID					as the SSID (na network) and B	me of the Broadcast
	Wireless Working Mode	C Wireless Ad	ccess Point(AP)	WDS Bri	dge Mode	Channel.	
	Network Mode	11b/g/n mixed	I mode	•		SSID: This is th	e public
	SSID Broadcast	€ Enable	C Disable			name of your v network. It is p	vireless reset to
	AP Isolation	C Enable	O Disable			"Tenda_XXXXX	X" (where
	Channel	2442MHz (Cha	annel 7)	•		last six charact	esents the ters in device
	Channel Bandwidth	O 20 0	20/40			MAC address.) Please change	by default. it for better
	Extension Channel	2417MHz (Ch	annel 2)	•		security. Note t should not be l	that this field left blank.
	WMM Capable	€ Enable	C Disable			SSID Broadca	ist:This
	APSD Capable	C Enable	O Disable			option allows y	ou to have
	Wireless Working M	ode: WDS(Re	peater mode))		publicly broad	cast or if you
	AP MAC Address	C8:3A:35:0E	1A:78			choose to disal will be hidden.	ble it, the SSID



Step 3: Configure Router 2

1 Configure the LAN IP address of Router 2

_	Wizard Advanced Wireless QoS	Applications	Security	Tool
Status	LAN Settings		Help	
Internet Connection Setup	This page is used to set the basic network parameters for LAN.		Here you can se	t the LAN I
MAC Clone	LAN MAC Address C8:35:3A:22:19:88		Address and Su This IP Address	bnet Mask. is to be
WAN Speed	IP Address 192 168 2 10		used to access t homepage throu	the router's ugh a web
	Subnet Mask 255 255 0		browser. Be sur note of any char	e to make nges vou
DNS Settings	200.200.200		apply to this par	ge. Default
DHCP Server	OK Cancel		and 255.255.2	55.0.
DHCP Client List				



Click Wireless -> Wireless Basic Settings to enter the configuration screen. Select WDS
 Bridge Mode and click Open Scan.

Wireless Working Mode	Wireless Access Point(AP)	WDS Bridge Mode
Network Mode	11b/g/n mixed mode	
SSID Broadcast	enable Disable	
AP Isolation	Enable O Disable	
Channel	AutoSelect	•
Channel Bandwidth	© 20	
Extension Channel	Auto Select	
WMM Capable	enable Disable	
APSD Capable	Enable O Enable	
Wireless Working Mo	ode: WDS(Repeater mode)	
AP MAC Address		
AP MAC Address		
Note: SSID and channel will you select MUST also suppo compatibility with your sele	automatically set to match your se ort WDS. WEP is recommended for cted AP.	ected AP. Note that the AP the connection for better
	Open Scan	



③ Select the AP you wish to connect to (The SSIDs of these two wireless networks become the same now. You need to identify them by their MAC addresses.). Click OK on the appearing dialog box and then close scan.

Select	SSID	MAC Address	Channel	Security	Signal Strength
٢	Tenda_0E1A78	C8:3A:35:00:04:E8	7	WPA/AES	68
Mess	age from webpage	(A		— X	
0	Please click on 0	OK to confirm that you wa	int to conne	ect to this AP!	
			ОК	Cancel	

(4) Check the automatically populated SSID, channel and MAC address, etc of the remote AP.

Verify that all settings are correct and then click **OK**.

Tenda	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Wireless Basic Settings Wireless Security Access Control Wireless Connection Status	Wireless Basic Settin Enable Wireless Primary SSID Secondary SSID Wireless Working Mode SSID Broadcast AP Isolation Channel Channel Bandwidth Extension Channel WMM Capable APSD Capable	Tenda_0E1At Tenda_0E1At C Wireless A 11b/g/n mixe E Enable C Enable 2442MHz (Ch C 20 2417MHz (Ch C Enable C En	recess Point(AP) d mode C Disable C Disable annel 7) 20/40 mannel 2) C Disable C Disable Disable Disable	© WDS Br	idge Mode	Help In this section y configure the w settings of the i as the SSID (nai network) and B Channel. SSID: This is the name of your w network. It is p "Tenda_XXXX "XXXX" repri- last six charact MAC address.) Please change security. Note t should not be I SSID Broadca option allows y your network n publicly broadc	ou can ireless router such me of the roadcast e public ireless reset to X" (where essents the ers in device by default. it for better hat this field eft blank. st:This ou to have ames (SSIDs) asst or if you oble it, the SSID
	AP MAC Address	C8:3A:35:00:0)4:E8			will be hidden.	



(5) Set the security key of Router 2 to the same as Router 1.

Click Wireless -> Security to set the security settings to match the remote device (Security Mode:

WPA2-PSK, Cipher Type: AES, Security Key: 12345678).

Tenda									
	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools		
Wireless Basic Settings	Wireless Security Se	etup				Help			
Wireless Security	Select SSID	Tenda_0E1A7	'8	•		Here you can se	et the		
Access Control	Security Mode	WPA - PSK(Re	ecommended)	•		wireless password for your wireless network. You are			
Wireless Connection Status	WPA Algorithms		TKIP&AES	recommended to select WPA -PSK as Security Mode and					
	Security Key	12345678				AES as WPA Alg	orithms		
	WPS Settings	To configure a	wireless security C Enable	key, disable t	he WPS below!	WEP Key:Must or 13 ASCII cha or 26 Hex char	be either 5 racters or 10 acters.		
		ОК	Cancel		Reset OOB	WPA/WPA2-P can enable per mixed mode, b make sure that client also supp selected Securit Security Key: between 8~63	ersonal:You sonal (PSK) or ut you must the wireless orts the y mode. Must be case-		

(6) Click Advanced -> DHCP Server and disable the DHCP server on Router 2 (Disable DHCP server on the local router that is used to extend the wireless network from the remote Internet-enabled router).

	Wizard	Advanced	Wireless	QoS	Applications	Security	Tools
Status	DHCP Server					Help	
Internet Connection Setup	DHCP Server	Enable				DHCP server (D	Dynamic Hos
MAC Clone	IP Pool Start Address	192.168.2.	100			Configuration P assigns an IP a	rotocol) ddress to
WAN Speed	IP Pool End Address	192.168.2.	150			each device on LAN/private ne	the twork When
LAN Settings	Lease Time	One day		•		you enable the	DHCP Serve
DNS Settings		OK	Cancal			automatically a	llocate an
DHCP Server	9	OK	Cancer			IP address poo	ress from th I to the
DHCP Client List						requesting devi the device is se	ice as long et to "Obtain
						an IP Address	

If WDS connection fails, try a different security mode and/or cipher type.



Step 4: Configure PC3 & PC4

③ If PC 3 and PC 4 are set to static or fixed IP addresses (This is uncommon), change them to "Obtain an IP address automatically" and "Obtain DNS server address automatically" from the device. For details, see <u>Appendix 1Configure PC TCP/IP Settings</u>.

Тір------

If PC 3 and PC 4 are already set to "Obtain an IP address automatically" and "Obtain DNS server address automatically" from the device, click **Repair** to repair the IP settings.

④ Wait until your PC successfully obtains an IP address.

- Local S	tatus	? 🛛
General	Support	
Connec	tion status	
1	Address Type:	Assigned by DHCP
۲ <u>ط</u>	IP Address:	192. 168. 2. 103
	Subnet Mask:	255. 255. 255. 0
	Default Gateway:	192. 168. 2. 1
	Details	
Windows connecti Repair.	s did not detect problems with this on. If you cannot connect, click	Repair



Verify Bridge Connectivity:

4 On PC 3, Click Start -> Run.



(5) Enter cmd and click OK.

Run	? 🛛
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	cmd 💌
	OK Cancel Browse



⑥ Input ping 192.168.2.1 and press Enter. If you get a screen as seen below, you have successfully implemented WDS.



△_{Note} ------

1 WDS feature can only be implemented between 2 WDS-capable wireless devices. Plus, SSID, channel, security settings and security key must be exactly the same on both such devices.2 To ensure a proper wireless connection, do not change any settings on the two devices after WDS is successfully implemented.
