



Sharedband Bonded Broadband

TP Link TD-W8968 Configuration Guide

Introduction

This document is to instruct you how to configure the Sharedband software on the TP Link TD-W8968 router. It also walks you through setting up your LAN and WAN/Internet connections.

Note: This guide assumes that the router is not configured.

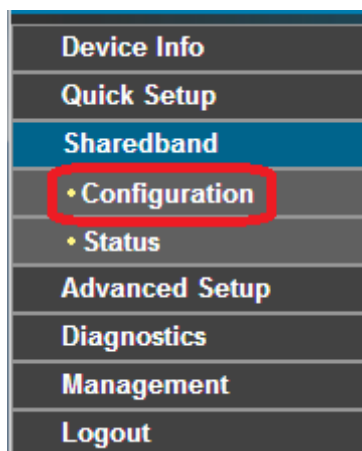
Preparation

Make sure you have the Sharedband user Details for the Community you wish to setup.

Configuring Sharedband

Step 1: Logon to the Web interface of the router (default address <http://192.168.3.17>). The default login is 'admin' and password 'Bonding123'.

Step 2: Click '**Configuration**' under '**Sharedband**' (by default clicking on '**Sharedband**' should also take you to the Sharedband configuration page).



Step 3: You should now be presented with a screen similar to this:

Sharedband Service Configuration

Configuration

Sharedband Enabled:

Sharedband Subscription

Your Username:

Your Password:

Community ID number:

Node Identifier:

Aggregation Server IP: . . .

Local Network

Sharedband MTU:

Virtual Router IP (VRRP): . . .

Virtual Router (VRRP) Netmask: . . .

Use Router in Failover mode:

To enable the fields on the form to fill in your Sharedband service details, you need to enable Sharedband by selecting “Yes” from the '**Sharedband Enabled**' drop down menu.

Under section '**Sharedband Subscription**', fill in your Sharedband **Username**, **Password**, **Community ID Number** and **Aggregation Server IP** address as provided to you in their corresponding fields above. These details should be the same on all the routers that you plan to be on the same **Community ID Number**. The only difference on the routers should be the '**Node Identifier**', which has to be unique on all the routers (ranging from **1** to **8**, depending on your subscription).

Section '**Local Network**' allows you to configure the **MTU** (Maximum Transmission Unit) to be used by the Sharedband service, together with the desired **VRRP** (Virtual Router Redundancy Protocol) IP address you desire to use (which should be under the same subnet mask as the router's IP address) and **VRRP Netmask**. These values should be the same on all the routers you decided to be in the same **Community ID Number**. If you wish for any of the routers to be in failover mode (i.e. on standby and only become active if you have no other active WAN connections in the community), select “Yes” from the drop down menu for field '**Use Router in Failover Mode**'.

Clicking '**Save**' saves your changes and takes you to below pages to reboot router for changes to apply.

Sharedband Service Configuration Saved

Sharedband details saved. For details to take effect, you need to reboot the router by going to **Management => Reboot**

NOTE: LAN (Local Area Network) IP address of each router has to be unique and under the same subnet as the rest of the routers in the same **Community ID Number**. Refer to the next section, '**Local Area Network (LAN) Setup**', on how to change the LAN IP address of the router.

Local Area Network (LAN) Setup

Each router on the network is required to have a unique IP address. You also need to make sure that routers in the same **Community ID Number** are under the same net mask (**X.X.X.<node number>**). The LAN IP address is normally set to 192.168.3.X (**X** being the node number). To set the LAN IP, selecting '**Advanced Setup**' → '**LAN**' → '**IPv4 LAN Config**' from the main menu will take you to below screen

Local Area Network (LAN) Setup

Configure the DSL Modem Router IP Address and Subnet Mask for LAN interface. GroupName

IP Address:
Subnet Mask:

Enable IGMP Snooping

Disable DHCP Server
 Enable DHCP Server

Start IP Address:
End IP Address:
Leased Time (hour): (1~48)

Static IP Lease List: (A maximum 32 entries can be configured)

MAC Address	IP Address	Status	Enable/Disable	Edit	Remove
<input type="button" value="Add"/> <input type="button" value="Enable All"/> <input type="button" value="Select All"/> <input type="button" value="Remove"/>					

Enable DHCP Server Relay

DHCP Server IP Address:

Note: You have to disable NAT of the WAN connections. Or the DHCP Relay may not take effect!

Configure the second IP Address and Subnet Mask for LAN interface

!!! IF YOU CHANGED THE LAN IP ADDRESS, UPON CONFIRMING TO SAVE THE CHANGES, ROUTER WILL BE REBOOTED AUTOMATICALLY IN THE BACKGROUND IF SHAREDBAND IS ENABLED AND RUNNING. !!!

Change the IP address in field '**IP Address**' from **192.168.3.17** as needed. On doing so and moving focus to another field on the form, a warning message in **red**, circled in the diagram above will appear. When you click on the '**Save and Reboot**' button, you will be present with the below dialog box.

The page at 192.168.3.19 says:

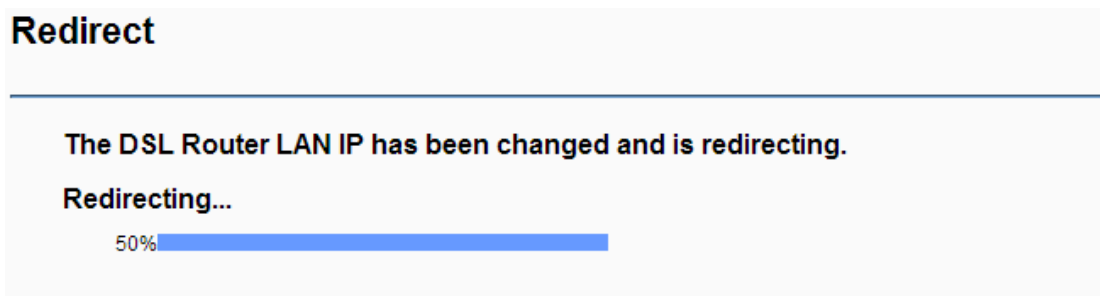
Modification of LAN IP address or subnet mask will require you to re-login. The Modem Router may also become inaccessible from this PC.

IF SHAREDBAND IS ENABLED, ROUTER WILL BE REBOOTED AUTOMATICALLY IN THE BACKGROUND. PLEASE BE PATIENT AND WAIT FOR 1 OR 2 MINUTES BEFORE YOU LOGON AGAIN.

Would you like to continue?

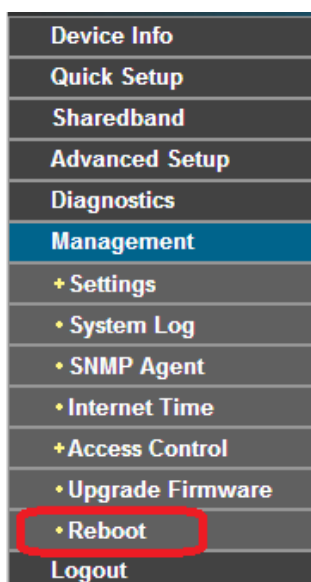
(NOTE: If you wish to change the **LAN Subnet Mask** or DHCP Server **Start** and/or **End IP address** range, this can be done by changing the values of the '**Subnet Mask**', '**Start IP Address**' and/or '**End IP Address**' fields respectively. If the LAN IP address of the router was not changed, you will not see the above mentioned dialog box and the router will be rebooted. **IF YOU CHANGE THE LAN SUBNET MASK OR DHCP RANGE, MAKE SURE THAT YOU ALSO APPLY THE SAME CHANGES TO ALL THE OTHER ROUTERS IN THE SAME COMMUNITY ID NUMBER.**

Pay attention to the circled parts in **red** on the dialog box. They will only appear if you change the LAN '**IP Address**'. (Changing the LAN '**Subnet Mask**' will also result in a similar dialog box to be display, but without the section circled in **red**). Applying the change by clicking on the '**OK**' button will result in the below redirection screen, **BUT** will not take effect with Sharedband until you logon and reboot the router.

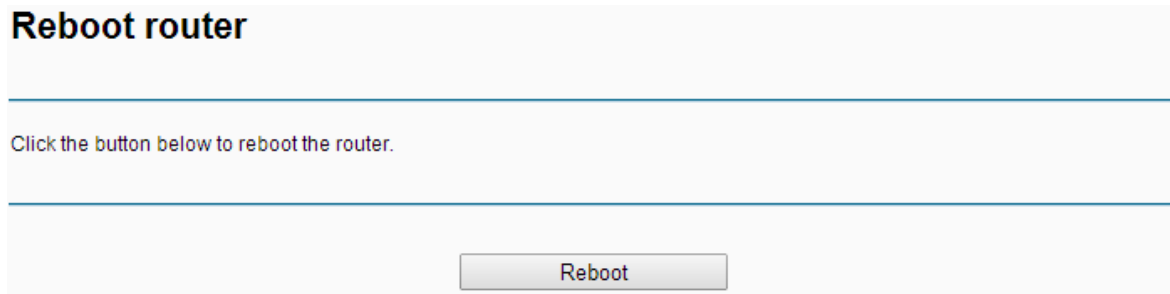


If Sharedband is already enabled and running, the router will be rebooted in the background (as warned in the circled sections on the form and dialog box) – in which case we recommend giving between 1 and 2 minutes before attempting to logon again.

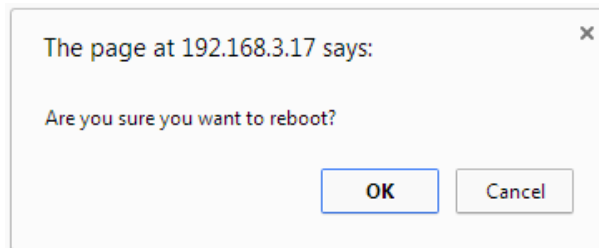
If Sharedband is not running, when redirected and requested to logon to the router, the address bar on your web browser will change to the new LAN IP address that you allocated to the router (e.g. if you changed the LAN IP address from **192.168.3.17** to **192.168.3.1**, the web browser URL will contain <http://192.168.3.1>). As explained in the dialog box (circled in **red**) when you changed the LAN IP address, for Sharedband to pick up this change, you need to reboot the router. This this is done by selecting '**Management**' → '**Reboot**'



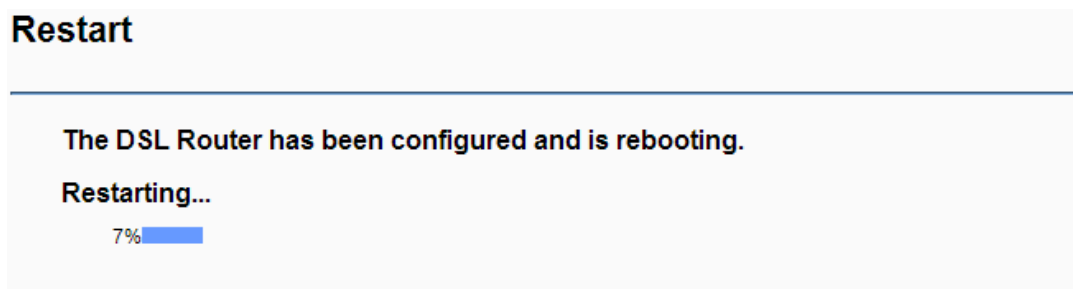
which will take you to the reboot page below. Click on the **Reboot** button



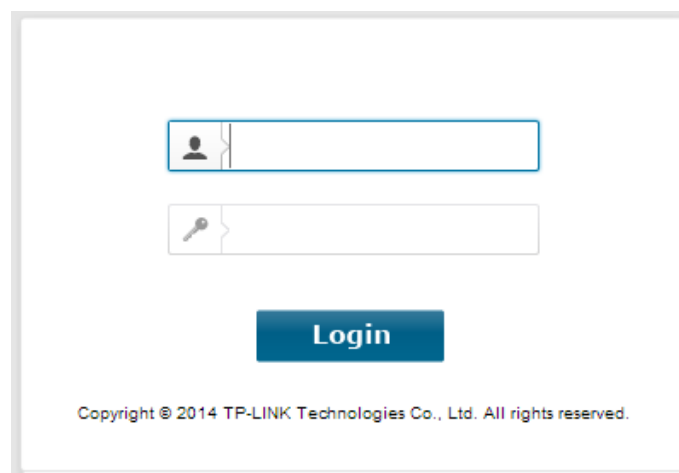
and confirm you want to reboot the router by clicking on the **OK** button on the dialog box similar to below.



This will take you to the restart progress screen similar to below



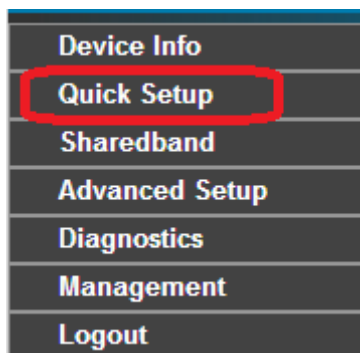
On completion, you will be taken back to the login screen as shown below



WAN (Wide Area Network)/Internet Connection

This section walks you through how to configure your Internet connection. At present, the TP Link TD-W8968 router only supports **PPPoA** (Point-to-Point over ATM) WAN link type. Please make sure to contact your Internet Service Provider (ISP) for your PPP username & password, together with connection settings for VPI (Virtual Path Identifier), VCI (Virtual Channel Identifier) and encapsulation mode.

To configure your Internet connection, click on the '**Quick Setup**' link when you logon to the web GUI.



This will lead you to the below page to fill in your connection details obtained from your ISP.

Quick Setup - WAN Configurations

Country: ▼

ISP: ▼

VPI/VCI: / ([0-255] / [32-65535])

Encapsulation Mode: ▼ (optional)

WAN Link Type: ▼

PPP Username:

PPP Password:

MTU (bytes): (optional)

If your ISP is available in the drop down for field '**ISP**' and is selected, make sure that the values in the '**VPI/VCI**' and '**Encapsulation Mode**' matches that from your ISP. If it is different, select "**Other**" from the '**ISP**' field, which will enable these fields to be editable, for you to enter the correct values.

Enter your login details from your ISP in the '**PPP Username**' and '**PPP Password**' fields. If you wish, you may change the MTU value used by the router to communicate with your ISP – which is usually **1492**. (As mentioned in section '**Configuring Sharedband**', this MTU value is different to that configured for Sharedband communication).

At this point, clicking on the '**Cancel**' button will ignore any changes and return you to the router's '**Device Info**' page. To proceed with your changes, click the '**Next**' button, which will ask you to confirm your changes as shown on the next page.

Quick Setup - Summary

WAN Configurations

WAN Type:	ADSL WAN
Layer2 Information:	0/38 VC/MUX
WAN Link Type:	PPPoA
PPP Username:	username
PPP Password:	password
PPP MTU:	1492

Note 1: Some WAN Connection(s) or Layer2 interface(s) may be replaced by new one!

Note 2: The Virtual Server Rules of some WAN Connection(s) may be deleted!

Cancel Back Confirm

If you do not wish to proceed with the changes, click the '**Cancel**' button, which will take you to the router's '**Device Info**' page. To make amendments to the connection settings, select the '**Back**' button. If you are happy with the new settings, click the '**Confirm**' button, which will save and apply the changes, then take you to the router's '**Device Info**' page similar to below.

Device Info

Version Info

Firmware Version:	1.0.5 Build 140211 Rel.36150 with Sharedband v2.33 - 8199m
Hardware Version:	TD-W8968 V3 0x00000001
System Running Time:	0Day(s) 00:27:29

LAN Info

IPv4	LAN IP Address:	192.168.3.17
	LAN MAC Address:	e8:de:27:47:53:e4
IPv6	IPv6 Address/Prefix Length:	NULL
	Auto Configuration:	NULL

ADSL Info

Line State:	Showtime
Line Rate - Upstream (Kbps):	1151
Line Rate - Downstream (Kbps):	9215

Internet Info

IPv4	Status:	Down
	WAN Type:	ATM WAN
	Layer2 Interface:	atm1(0/38)
	Connection Type:	PPPoA
	WAN IP Address:	0.0.0.0
	Shortcut:	Click here to view all WAN interface's status and troubleshooting information.

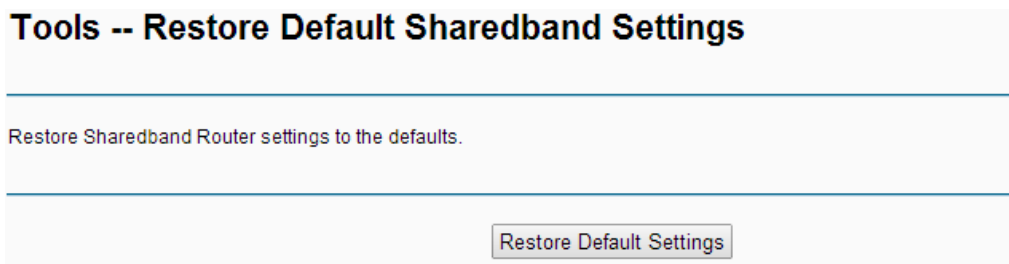
The '**Device Info**' page is automatically refreshed every 30 seconds. Once you have a successful connection to your ISP, the '**Internet Info**' section will update with the connection details, similar to below.

Internet Info

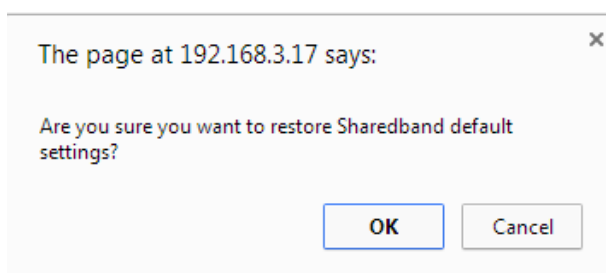
IPv4	Status:	UP
	WAN Type:	ATM WAN
	Layer2 Interface:	atm1(0/38)
	Connection Type:	PPPoA
	WAN IP Address:	XXX.XXX.XXX.XXX
	Subnet Mask:	XXX.XXX.XXX.XXX
	Default Gateway:	XXX.XXX.XXX.XXX
	DNS Server (Primary, Secondary):	XXX.XXX.XXX.XXX
	Internet Up Time:	0Day(s) 00:01:57
	Shortcut:	Click here to view all WAN interface's status and troubleshooting information.

Restoring to Default Settings

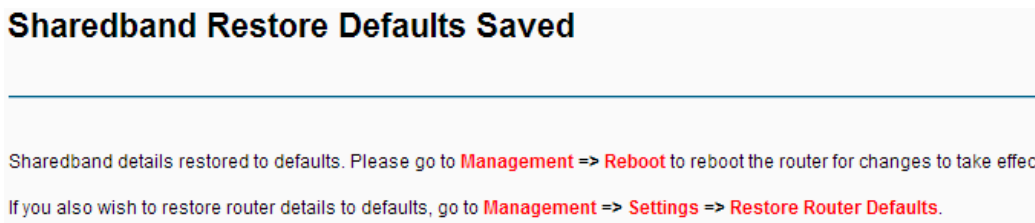
If you wish to restore the router back to its default state, this needs to be done in two steps, first for Sharedband, then for the router. For Sharedband, select **'Management'** → **'Settings'** → **"Restore Sharedband Defaults"**. You will be provided with below page



Clicking on the **'Restore Default Settings'** button will provide you with a dialog box, similar to below to confirm that you want to proceed with the change.

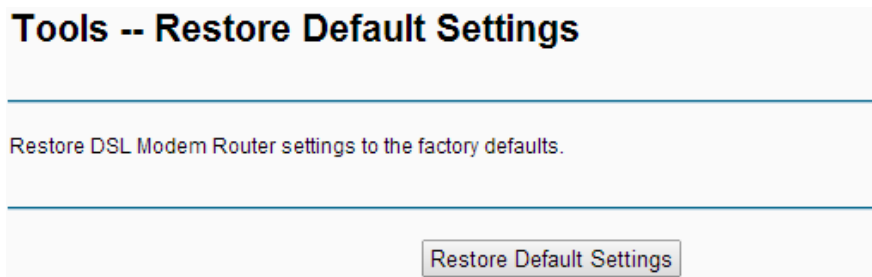


Clicking on the **Cancel** button will result in the restoration of Sharedband default settings not to be applied. If you click on the **OK** button, it will proceed to restore Sharedband default settings. Once it has been applied, you will be provided with a confirmation page similar to below.

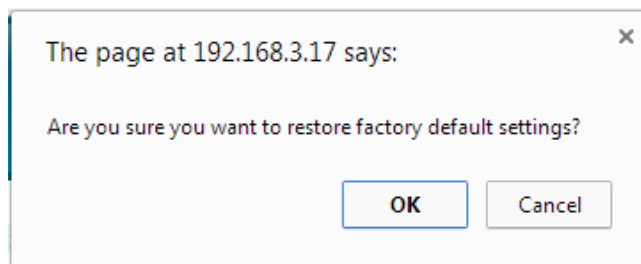


If you wish to only restore Sharedband default settings, as instructed for the changes to take effect, you will need to reboot the router. Follow the instructions on the screen to do so.

If you wish to also restore router's default settings, as advised above, go to **'Management'** → **'Settings'** → **"Restore Router Defaults"**, which will take you to below page.



You will be prompted if you wish to proceed with the change as shown below. Click the **Cancel** button if you do not wish to restore default settings.



To proceed with the change, click the **OK** button, which will take you to a progress page similar to below.



Once you restore the router back to its default setting, the LAN IP address of the router will return to **192.168.3.17** (if you changed it from this originally) and you will be directed to the web login page (<http://192.168.3.17>).

Sharedband Connection Status

Once you have completed configuring Sharedband and your Internet connection, you can check Sharedband's status by clicking the '**Sharedband**' → '**Status**' link. If Sharedband has not been enabled, (remember, for any change to the status of Sharedband to take effect, a reboot of the router is required), you will see the below message

Sorry, the Sharedband software hasn't been started. Please reboot your router after activating it

If Sharedband is active but unable to successfully connect to the Sharedband Aggregation Server. Check that you entered the correct details for your configuration.

If everything was configured correctly for Sharedband and your Internet connection, you will have a page similar to below

Sharedband version 2.33 status

Service Status

Internet Connection Status	Active
Aggregation Server Status	Active
Routing Mode	Via WAN only

Community Information

Number of live Sharedband routers	1 [diagnostics]
Number of accessible connections	1

Traffic Statistics (updated every minute)

	MBytes	Packets
Outgoing	8,805	76
Incoming	8,805	56
Total	17,610	132

n.b. traffic seen during past 28 days 2 hours 3 minutes 9 seconds

Setup Information

Aggregation Server	xxx.xxx.xxx.xxx
Community ID	xxx
Local Index	2
WAN IP Address	xxx.xxx.xxx.xxx
WAN MAC Address	No WAN MAC has been obtained

If the router is linked to at least one or more Sharedband router on your LAN in the same community, field '**Number of live Sharedband routers**' under section '**Community Information**' will state the total number of routers this router can see, including itself. Field '**Number of accessible connections**' will tell you how many of these routers are connected directly to Sharedband.

Clicking on the [\[diagnostics\]](#) link next to the value of field '**Number of live Sharedband routers**' will take you to a diagnostics page similar to below.

Sharedband Community Diagnostics

Community Diagnostics

Index	IP Address	Active WAN?	Connected To Service?	Mutually Visible?
2*	192.168.3.17	Yes	Yes	-

The * next to the 2 under column '**Index**' indicates that the router configured with this Sharedband node ID (in this case this router) is the one controlling the VRRP interface. If the router can see at least one more Sharedband router in the same community, you will have a display similar to below.

Sharedband Community Diagnostics

Community Diagnostics

Index	IP Address	Active WAN?	Connected To Service?	Mutually Visible?
2*	192.168.3.17	Yes	Yes	-
3	192.168.3.18	Yes	Yes	Yes
