

NETCOMM LIBERTY™ SERIES

Mobile Broadband Wi-Fi Router

3G41W-T

NetComm®



USER GUIDE

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Save Our Environment

When this equipment has reached the end of its useful life, it must be taken to a recycling centre and processed separately from domestic waste.

The cardboard box, the plastic contained in the packaging, and the parts that make up this device can be recycled in accordance with regionally established regulations. Never dispose of this electronic equipment along with your household waste. You may be subject to penalties or sanctions under the law. Instead, ask for disposal instructions from your municipal government.

Please be responsible and protect our environment.

This manual covers the following products:

NetComm 3G41W-T – Telstra USB Wi-Fi Gateway

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1.0 - Initial document release	05/12/2011

Table 1 - Document Revision History

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Overview

Introduction

This manual provides information related to the installation, operation, and utilisation of the Telstra USB Wi-Fi Gateway.

Target Users

The individual reading this manual is presumed to have a basic understanding of telecommunications terminology and concepts.

Prerequisites

Before continuing with the installation of your Telstra USB Wi-Fi Gateway, please confirm that you comply with the minimum system requirements below.

- A compatible 3G/4G USB Modem with an active Telstra SIM card provisioned for data use. For a list of compatible 3G/4G USB Modems, please visit the NetComm Website.
- A smartphone, tablet or computer running Windows, Mac OS, iOS, Android, or Linux-based operating systems with a working Wireless (802.11b, 802.11g or 802.11n) or Wired Ethernet adapter.
- A Web Browser such as Internet Explorer, Netscape Navigator, Mozilla Firefox, Opera, Safari etc.

Notation

The following symbols are utilised in this user manual:



The following note requires attention.



The following note provides a warning.



The following note provides relevant information.

Product Introduction

Product Overview

- Supports internet access via a 3G / 4G USB Modem.
- 3 x 10/100 LAN Ethernet port for wired connections.
- 1 x 10/100/1000 LAN / WAN Ethernet port for optional alternate Internet connectivity (ADSL/Cable/Satellite).
- 802.11n/300Mbps Wireless¹ (Backward compatible with 802.11b/g).
- 2 x Internal Wi-Fi antennas.
- Browser based interface for configuration and management.
- Wireless security options- WEP, WPA, WPA2.
- 2 x USB ports for attaching a USB Modem and optional Storage devices to share with connected clients.

1. Speeds are dependent on network coverage. See your 3G/4G provider coverage maps for more details. The total number of Wi-Fi users connected to the router can also affect data speeds. Maximum wireless signal rate and coverage values are derived from IEEE Standard 802.11g and 802.11n specifications. Actual wireless speed and coverage are dependent on network and environmental conditions included but not limited to volume of network traffic, building materials and construction/layout.

Package Contents

The 3G41W-T package consists of:

- 1 x NetComm 3G/4G USB Gateway (3G41W-T).
- 1 x Power Adapter (12VDC~1.5A).
- 1 x USB Extension Cable.
- 1 x Ethernet Cable (RJ-45, Cat5e).
- Quick Setup Guide.
- Wireless Security Card.

If any of these items are missing or damaged, please contact NetComm Support immediately by visiting the NetComm Support website at: <http://www.netcomm.com.au/contact-us/technical-support>

Product Features

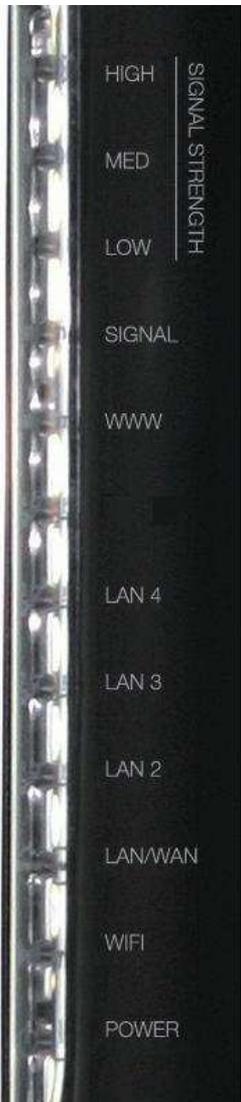
The Telstra USB Wi-Fi Gateway allows you to share your 3G/4G USB Modem by creating a secure Wi-Fi network, providing Internet access for up to 15 users using the Telstra's 3G/4G mobile broadband network. With quick and easy setup, the Telstra USB Wi-Fi Gateway provides a fixed internet experience without the need for fixed line connections. Simply plug the Telstra USB Wi-Fi Gateway into a power outlet and insert an active 3G/4G USB Dongle with an active Telstra SIM card to access a Telstra 3G/4G Internet connection within minutes.

The Telstra USB Wi-Fi Gateway incorporates a WLAN 802.11b/g/n access point and four 10/100Mbps Ethernet port, with one able to act as a 10/100/1000Mbps Ethernet WAN port. Two USB ports provide connectivity to the USB Modem and optionally, to attached USB Storage devices for connected clients. It features the latest security options such as WPA and WPA2 data encryption, SPI (Stateful Packet Inspection) Firewall and VPN pass through.

Physical Dimensions and Indicators

LED Indicators

The Telstra USB Wi-Fi Gateway has been designed to be placed on a desktop. All of the cables exit from the rear for better organization. The display is visible on the front of the Telstra USB Wi-Fi Gateway to provide you with information about network activity and the device status. See below for an explanation of each of the indicator lights.



LED INDICATOR	ICON	DEFINITION
HIGH		High 3G Signal strength available.
MED		Medium 3G Signal strength available.
LOW		Low 3G Signal strength available.
SIGNAL		Connection established with 3G network.
WWW		Internet connection established.
LAN 4		Lit when a powered device is connected to this LAN port. Blinks to indicate LAN port traffic throughput.
LAN 3		Lit when a powered device is connected to this LAN port. Blinks to indicate LAN port traffic throughput.
LAN 2		Lit when a powered device is connected to this LAN port. Blinks to indicate LAN port traffic throughput.
LAN / WAN		Lit when a powered device is connected to this port. Blinks on LAN or WAN port traffic, depending on which is configured.
WIFI		Solid blue light when WLAN is enabled. Blinks on traffic (data transfer).
Power		Solid amber light when device is powered on. Blinks during device start up.

Table 2 - LED Indicators

Figure 1: Front Panel

Connectivity

The following ports are available on the rear of the Telstra USB Wi-Fi Gateway in the cable compartment. Please remove the compartment cover by gently pulling on the grip marks near the OPEN label at the top of the device, in the direction of the arrow.



Figure 2: Rear Panel

INTERFACE	FUNCTION
LAN 4 - 2	LAN Port for wired Ethernet clients (Computers, Laptops, etc).
LAN 1 / WAN	LAN or WAN port for wired Ethernet clients or bridged devices (an ADSL modem, etc).
USB 1 - 2	USB Ports for connecting a 3G/4G USB Modem or optional USB Storage Device (e.g portable hard disk).
Power	Power connector for use with a DC 12V 1.5A Power Adapter.
Reset	Holding this button down for 10 seconds or more will reset the router to factory defaults.

Table 3 - Rear Panel Ports

Physical Dimensions

The following page lists the physical dimensions of the Telstra USB Wi-Fi Gateway.



Figure 3 - Telstra USB Wi-Fi Gateway Dimensions

TELSTRA USB WI-FI GATEWAY	
Length	160mm
Height	195 mm
Width	65 mm
Weight	250 grams

Table 4 - Device Dimensions

Telstra USB Wi-Fi Gateway Default Settings

The following tables list the default settings for the Telstra USB Wi-Fi Gateway.

LAN (MANAGEMENT)	
Static IP Address:	192.168.20.1
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.20.1

Table 5 - LAN Management Default Settings

WAN (INTERNET)	
WAN mode:	Disabled (operates as LAN by default)

Table 6 - WAN Port Default Settings

WIRELESS (WI-FI)	
WiFi Network Name (SSID):	Each device has a unique Wi-Fi Network name. Please refer to the included Wireless Security card located in the box, which has the Wi-Fi network name printed on it.
Security:	WPA2-PSK
Security Key:	Each device has a unique Wi-Fi Security Key. Please refer to the included Wireless Security card, located in the box which has the Wi-Fi Security Key printed on it.

Table 7 - Wi-Fi Default Settings

TELSTRA USB WI-FI GATEWAY WEB INTERFACE ACCESS	
Username:	admin
Password:	admin

Table 8 - Web Interface Default Settings

Safety and Product Care

With reference to unpacking, installation, use and maintenance of your electronic device, the following basic guidelines are recommended:

- To avoid fire or shock hazard do not use or install this product near water. For example, near a bathtub, kitchen sink, laundry tub, or near a swimming pool. Also, do not expose the equipment to rain or damp areas (e.g. a wet basement).
- Do not connect the power supply cord on elevated surfaces. Allow it to lie freely. There should be no obstructions in its path and no heavy items should be placed on the cord. In addition, do not walk on, step on or mistreat the cord.
- To safeguard the equipment against overheating, make sure that all ventilation areas on the router panels are unobstructed.



WARNING

Disconnect the power line from the device before servicing.

Transport and Handling

When transporting the Telstra USB Wi-Fi Gateway, it is recommended the product be returned to the original packaging. This will ensure the product will not be damaged.



In the event the product needs to be returned, ensure it is securely packaged with appropriate padding to prevent damage during courier transport.

Installation and Configuration of the Telstra USB Wi-Fi Gateway

Placement of your Telstra USB Wi-Fi Gateway

Just like your mobile phone, the Telstra USB Wi-Fi Gateway's location will affect its signal strength to the 3G Mobile Base Station (Cell Tower). The data speed achievable from the Telstra USB Wi-Fi Gateway is relative to this signal strength, which is affected by many environmental factors. Please keep in mind that the Telstra USB Wi-Fi Gateway will need adequate signal strength in order to provide Internet connectivity whilst choosing a location to place your Telstra USB Wi-Fi Gateway.

Similarly, the wireless connection between your Telstra USB Wi-Fi Gateway and your Wi-Fi devices will be stronger the closer your connected wireless devices are to your Telstra USB Wi-Fi Gateway. Your wireless connection and performance will degrade as the distance between your Telstra USB Wi-Fi Gateway and connected devices increases. This may or may not be directly noticeable, and is greatly affected by the individual installation environment.

If you have concerns about your network's performance that might be related to range or obstruction factors, try moving the computer to a position between three to five meters from the Telstra USB Wi-Fi Gateway in order to see if distance is the problem.



Please note: While some of the items listed below can affect network performance, they will not prohibit your wireless network from functioning; if you are concerned that your network is not operating at its maximum effectiveness, this checklist may help. Please ensure that your Telstra USB Wi-Fi Gateway's 3G external antenna is positioned vertically (toward the ceiling).

If you experience difficulties connecting wirelessly between your Wi-Fi Devices and your Telstra USB Wi-Fi Gateway, please try the following steps:

- In multi-storey homes, place the Telstra USB Wi-Fi Gateway on a floor that is as close to the centre of the home as possible. This may mean placing the Telstra USB Wi-Fi Gateway on an upper floor.
- Try not to place the Telstra USB Wi-Fi Gateway near any cordless telephones that operate at the same radio frequency as the Telstra USB Wi-Fi Gateway (2.3GHz).

Avoid obstacles and interference

Avoid placing your Telstra USB Wi-Fi Gateway near devices that may emit radio "noise," such as microwave ovens. Dense objects that can inhibit wireless communication include:

- Refrigerators.
- Washers and/or dryers.
- Metal cabinets.
- Large aquariums.
- Metallic-based, UV-tinted windows.
- If your wireless signal seems weak in some spots, make sure that objects such as those listed above are not blocking the signal's path (between your devices and the Telstra USB Wi-Fi Gateway).

Cordless Phones

If the performance of your wireless network is impaired after considering the above issues, and you have a cordless phone:

- Try moving cordless phones away from your Telstra USB Wi-Fi Gateway and your wireless-enabled computers.
- Unplug and remove the battery from any cordless phone that operates on the 2.3GHz band (check the manufacturer's information). If this fixes the problem, your phone may be interfering with the Telstra USB Wi-Fi Gateway.
- If your phone supports channel selection, change the channel on the phone to the farthest channel from your wireless network. For example, change the phone to use wireless channel 1 and set your Telstra USB Wi-Fi Gateway to use wireless channel 11. See your phone's user manual for detailed instructions.
- If necessary, consider switching to a 900MHz or 5GHz cordless phone.

Choose the "Quietest" Channel for your Wireless Network

In locations where homes or offices are close together, such as apartment buildings or office complexes, there may be wireless networks nearby that can conflict with your wireless network and cause interference. Use the Site Survey capabilities found in the Wireless Utility of your wireless adapter to locate any other wireless networks that are available (see your wireless adapter's user manual), and switch your Router and computers to a channel as far away from other networks as possible.

Experiment with more than one of the available channels, in order to find the clearest connection and avoid interference from neighbouring cordless phones or other wireless devices.

Hardware installation

1. If you are using a mobile broadband connection, attach your USB modem to one of the USB ports on the side of the Telstra USB Wi-Fi Gateway. If you are unsure whether your 3G USB Modem is compatible with the Telstra USB Wi-Fi Gateway, please check the compatibility list on the NetComm website.
2. Connect the power adapter to the power socket on the back of the Telstra USB Wi-Fi Gateway.
3. Plug the power adapter into your power point and switch on the power.
4. Wait approximately 60 seconds for the Telstra USB Wi-Fi Gateway to power up.

Connecting via an Ethernet cable

1. If you wish to connect a computer via Ethernet cable, connect the yellow Ethernet cable provided to one of the Ethernet ports on the back of the Telstra USB Wi-Fi Gateway.
2. Connect the other end of the Ethernet cable to your computer or to another Ethernet-enabled device such as a gaming console, a TV or a home cinema system.
3. Wait approximately 30 seconds for the connection to establish.

Connecting wirelessly

You can connect multiple Wi-Fi devices, including laptops, desktops, tablets and PDA's to your Gateway by following these two basic steps.

1. Ensure Wi-Fi is enabled on your device (computer/laptop/Smartphone).
2. Scan for wireless networks in your area and connect to the network name shown on the included Wireless Security Card.
3. When prompted for your wireless security settings, enter the Wireless security key shown on the included Wireless Security Card.
4. Wait approximately 30 seconds for the connection to establish.
5. To connect additional devices via Wi-Fi, repeat steps 1 through 4.

Attention Bigpond Users

BigPond Mobile Broadband services require a user name and password, issued to you by BigPond at the time of purchase, which must be entered into your 3G/4G USB Gateway before use. Please follow the steps below to setup your BigPond connection:

1. Login to the web based management console by opening your web browser (Internet Explorer/Firefox/Safari) and navigating to the address <http://192.168.20.1>
2. Click on the “Login” tab and enter “admin” (without quotes) into the Username and Password fields and click the Submit button.
3. Click on the “Internet” tab on the left hand side of the page.
4. Untick the “Automatically configure my mobile broadband” checkbox and select the “Click here if your service requires a username and Password” link.

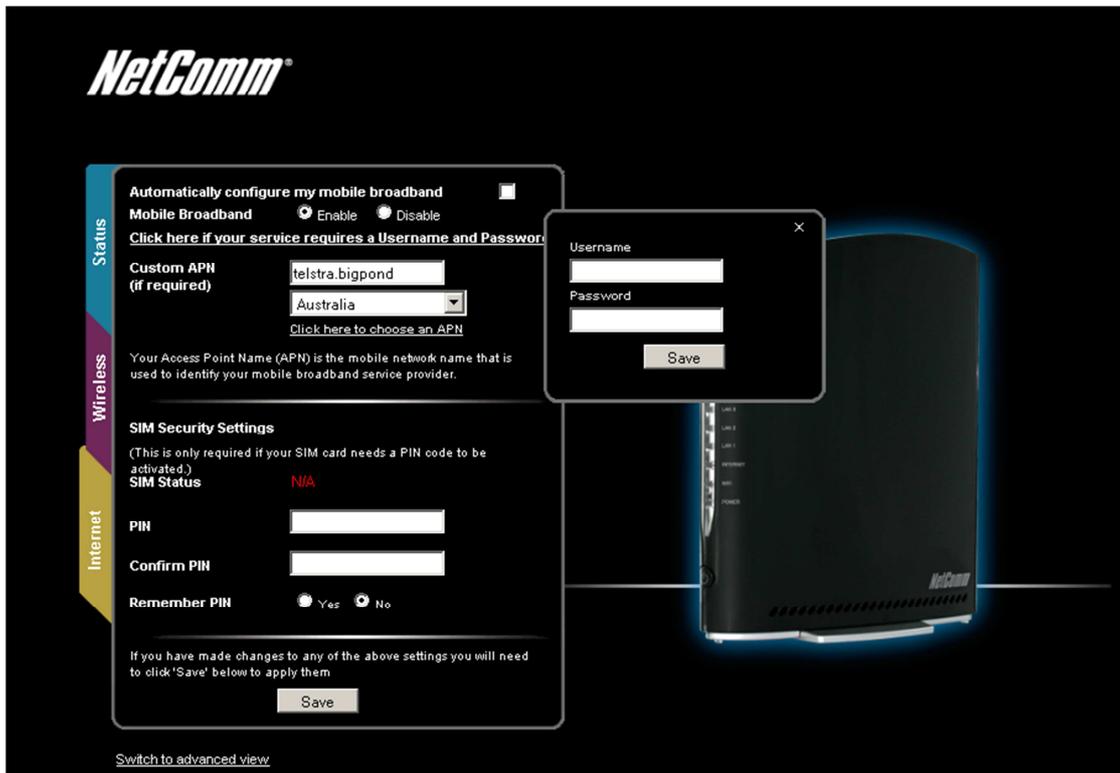


Figure 4: Basic View - Internet - Bigpond Setup

5. Check and ensure “Australia” is shown below the Custom APN field.
6. Select the “Click here to choose an APN” link, mouse over to “Telstra” and select “telstra.bigpond” as the APN.
7. Enter the Username and Password as supplied to you by Bigpond and press the Save button.
8. If a PIN code is required for your Bigpond Mobile Broadband account, enter the PIN in both the PIN and Confirm PIN fields and select yes to Remember PIN.
9. Click the “Save” button at the bottom of the page to store the new configuration settings and connect to the Bigpond Mobile Broadband service.

Attention Telstra IPWAN Customers

Telstra IPWAN Mobile Broadband services require a user name and password, issued to you by Telstra at the time of purchase, which must be entered into your 3G/4G USB Gateway before use. Please follow the steps below to setup your Telstra connection:

1. Login to the web based management console by opening your web browser (Internet Explorer/Firefox/Safari) and navigating to the address <http://192.168.20.1>
2. Click on the “Login” tab and enter “admin” (without quotes) into the Username and Password fields and click the Submit button.
3. Click on the “Internet” tab on the left hand side of the page.
4. Untick the “Automatically configure my mobile broadband” checkbox and select the “Click here if your service requires a Username and Password” link.



Figure 5: Basic View - Internet – Telstra IPWAN Setup

5. Check and ensure “Australia” is shown below the Custom APN field.
6. Enter “Telstra.Corp” into the Custom APN field.
7. Enter the Username and Password as supplied to you by Telstra and press the Save button.
8. If a PIN code is required for your Telstra Mobile Broadband account, enter the PIN in both the PIN and Confirm PIN fields and select yes to Remember PIN.
9. Click the “Save” button at the bottom of the page to store the new configuration settings and connect to the Telstra IPWAN Mobile Broadband service.

Management Console

Management Console Login Procedure

For further device configuration, you can log in to the device's management console via your web browser. The management console is password protected to prevent unauthorized access to the configuration settings of your Telstra USB Wi-Fi Gateway.

To log in to the management console, view the status and make changes to your Telstra USB Wi-Fi Gateway, please follow the steps below:

1. Open your web browser (e.g. Internet Explorer/Firefox/Safari) and navigate to <http://192.168.20.1>
2. Enter the username and password and click the Submit button. The default username and password is "admin".



Please Note: If you forget the Telstra USB Wi-Fi Gateway username and password after changing it, holding the reset button for over 10 seconds will restart the unit with the original factory default settings with the default username and password returning to "admin".



Figure 6 - Management Console Login

Basic Status Overview

The basic status page provides basic system related information. It is shown after logging in to the Telstra USB Wi-Fi Gateway, and can also be accessed by selecting Status from the menu tabs.

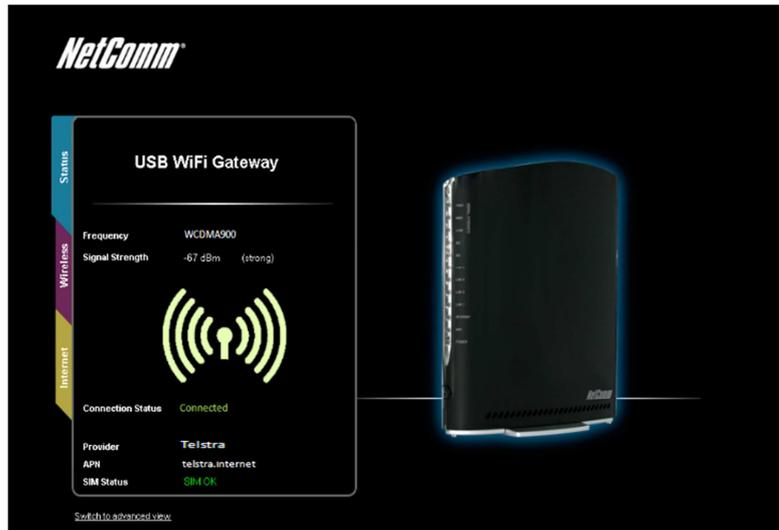


Figure 7 - Basic View - Status

The status page shows the 3G Frequency, Signal Strength (dBm), Connection status, Current 3G Provider, Current 3G APN and the SIM Status.

Wireless

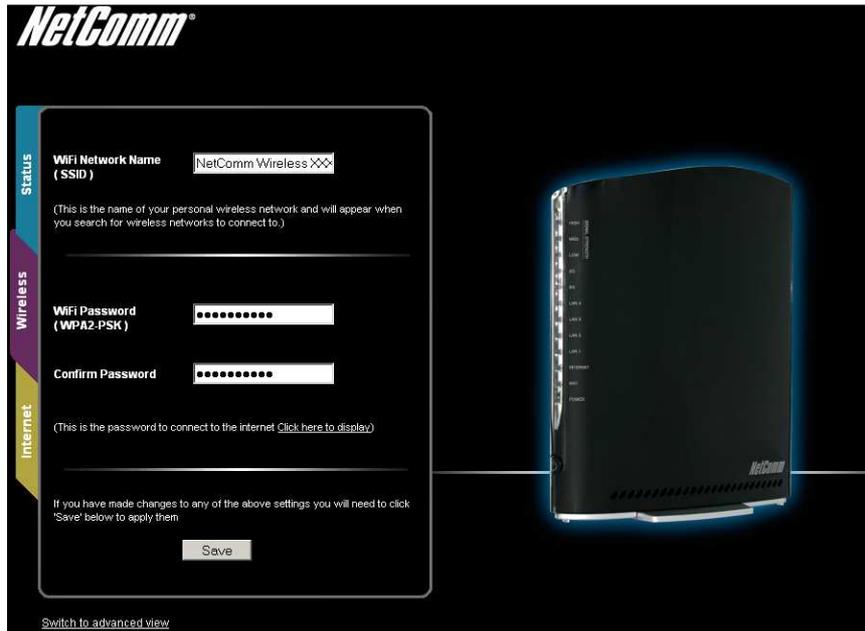


Figure 8 - Basic View – Wireless

The wireless page allows you to configure basic Wi-Fi settings for the Telstra USB Wi-Fi Gateway such as enabling/disabling the Wi-Fi functionality, changing the Wireless Network Name (SSID) or the Wireless Security key.

OPTION	DEFINITION
Wi-Fi Network Name (SSID)	The SSID (Service Set Identifier) is the name of your wireless network. Use a unique name to identify your wireless device so that you can easily connect your wireless clients to it. This field is case sensitive and can be up to 32 characters long.
Wi-Fi Password (Security key)	Enter your chosen Wireless Security key here. The default WPA2-PSK key is printed on the wireless security card and on the Product ID on the bottom of the Telstra USB Wi-Fi Gateway. Please note that whilst the key can be customized on this page, the key will revert to the default key if the Telstra USB Wi-Fi Gateway is reset to factory default settings.

Table 9 - Basic View - Wi-Fi Settings

Internet



Figure 9 - Basic View – Internet

The 3G Operation Mode can be configured on this page. Please see the table below for options allowed for the 3G operation mode:

OPTION	DEFINITION
Automatically configure my mobile broadband	When this option is selected the router will automatically detect the SIM card, enter the appropriate APN and connect to the Mobile Broadband network. Do not select this option if your Mobile Broadband connection requires a username and password.
Mobile Broadband	Use this option to enable or disable the Mobile broadband function on the router.
Click here if your service requires a Username and Password.	If your connection requires a username and password to authenticate the Mobile Broadband network connection select this option. Enter the username and password into the small window that will appear and press the Save button.
Custom APN (if required)	Enter an APN (Access Point Name) if the Auto Configuration option does not correctly identify your 3G service settings.
Country	Select the country that your Mobile Broadband provider operates in. By pressing the "Click here to choose an APN" link, a list of Mobile Broadband providers will appear for the selected country for you to choose from.
SIM Status	The current status of the inserted SIM. If 'SIM PIN' is shown, enter the SIM PIN in the fields below.
PIN	Enter the SIM PIN here (if required).
Confirm PIN	Re-enter the SIM PIN here (if required).
Remember PIN	Select to remember the entered SIM PIN. This means you should not need to enter the pin again to be able to use the inserted SIM.

Table 10 - Basic View - Internet Settings

You can also elect to use the "Automatically Configure my Mobile Broadband" option. This option attempts to automatically fill out the correct APN from your 3G SIM enabling you to connect to the applicable 3G service. Please verify the APN detected is correct by clicking on the Status tab. The current APN will be listed at the bottom of the page.

Alternatively, you can disable the "Automatically Configure my Mobile Broadband" option and manually enter the APN you would like to use.

If the "Automatically Configure my Mobile Broadband" option does not correctly detect your APN and you are unsure of what to enter manually, please contact your 3G service provider for more information.

Advanced Features

The basic configuration interface is intended to provide access to settings that most people will want to use on their Telstra USB Wi-Fi Gateway. There are advanced settings available if desired which are accessible by viewing the advanced settings pages. To view the advanced settings, please follow the instructions in the previous chapter to log into the management console, and then click the “Switch to Advanced View” button at the bottom of the page.

The Advanced Management Console provides a number of top level menu items, which are described below:

Home

Clicking the Home menu item will return you to the Basic View page.

Status

The status page provides system related information and is displayed when you login to the Telstra USB Wi-Fi Gateway management console and switch to the Advanced View option. By default, the status page will show System Information, WWAN, Connection Status and Ethernet Port Status.

To view the WLAN status, click on the WLAN link below the green menu bar. This section is hidden by default, however to view them all click on the “All Status” link. Each section contains a breakdown of information relevant to the connection type or function.



Figure 10 - Advanced View – Status

LAN port Mode

The LAN1 port can also operate as a WAN port for connecting to a bridged Ethernet device such as an ADSL modem. If you would like to change this setting, please select the mode applicable to your environment from the dropdown menu at the bottom right hand side of the page.

Internet Settings

WWAN (3G)

This page allows you to setup your WWAN (Wireless Wide Area Network) connection.

There are four connection profiles setup by default on this device. All profiles are disabled by default, except for the AutoConfig profile which tries to connect automatically based on information which is detected by the SIM card that is inserted into the device.

To configure a particular profile, please select it from the dropdown menu labelled "Profile Name". Each profile can be configured independently. To enable/disable each individual profile, please select it from the dropdown list, and configure "Auto Connect" to be either enabled or disabled.

Internet Settings > WWAN (3G) > Connection

WWAN (3G) Profile Settings

Profile Name:

Profile Name:

APN Name: [Choose an APN here](#)

User:

Password:

Auto Connect: Enable Disable

Authentication Type: CHAP PAP

Reconnect Delay: (30-65535) secs

Reconnect Retries: (1-65535, 0=Unlimited)

Metric: (1-65535)

NAT Masquerading: Enable Disable

Profile Name	Enabled	APN	User
Telstra.Internet	No	telstra.internet	
Telstra.Extranet	No	telstra.extranet	
Telstra.Corp	No	telstra.corp	
AutoConfig	Yes		

Figure 11 - Advanced View – WWAN Settings

OPTION	DEFINITION
Profile Name	A descriptive name to identify the Mobile Broadband (MBB) profile and associated settings.
Change Profile Name	The new name you would like to use for the current connection profile details.
APN Name	Enter the APN name you wish to connect to in this field. Please do not edit this field unless you are aware of what effect it will have.
User	The username supplied by your MBB provider in order to connect to the MBB service (if applicable).
Password	The password supplied by your MBB provider in order to connect to the MBB service (if applicable).
Auto Connect	Select to enable or disable the auto connect function to automatically connect to your chosen profile.
Authentication Type	The type of authentication in use by the MBB network. For more information, please contact your MBB provider.
Reconnect Delay	The delay in seconds between attempts to reconnect to the MBB service.
Reconnect Retries	The number of reconnection attempts that will be made to the MBB service.
Metric	This field allows you to customize the metric of the MBB interface. This setting will have no effect for most users, but may be required for advanced routing configurations (Static Routes, RIP, VPN, etc)
NAT Masquerading	Enabled by Default, this option allows you to switch NAT (Network Address Translation) on or off.

Table 11 - Advanced View - Internet Settings

Band Settings

The band settings page enables you to select which frequency band you will use for your connection and enable you to scan for available network operators in your area.

Figure 12 - Advanced View – Band Selection

The following frequency bands are available to select from:

WCDMA 900/2100
 WCDMA All
 GSM ALL
 GSM 900/1800
 All bands

The default setting of “All bands” should be appropriate for the majority of users.

You can also scan for available 3G service providers in your area by selecting “Manual” for the “Current Operator Selection Mode” and then clicking the scan button.

Figure 13 - Advanced View – Operator Selection

A list of the detected 3G service carriers in your area will be displayed. Select the most appropriate 3G service from the list shown and click “Apply”.

The default setting of “Automatic” should be appropriate for the majority of users and locations.

SIM Security

The SIM Security page enables you to configure SIM PIN related functions such as storing the PIN in use on the SIM or changing the PIN protection status.

Home
Status
▶ Internet Settings
▶ Wireless LAN
▶ Services
▶ System

[WWAN \(3G\) > SIM Security](#)

SIM Security Settings	
SIM Status	SIM OK
Number of Retries Remaining	3
PIN	<input type="text"/>
Confirm PIN	<input type="text"/>
Remember PIN: Disabled	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
PIN Protection: Disabled	Enable PIN <input type="button" value="v"/>

Figure 14 - Advanced View - WWAN(3G) - SIM Security

ITEM	DEFINITION
SIM Status	The current status of the inserted SIM card.
Number of Retries Remaining	The remaining number of times an incorrect SIM card PIN can be entered before being prompted to enter a PUK (PIN Unlock Key) code.
PIN	Enter the PIN for your SIM card here (if required).
Confirm PIN	Re-enter the PIN for your SIM card here (if required).
Remember PIN	If a PIN is required set the Telstra USB Wi-Fi Gateway to remember the SIM PIN. This prevents it from having to be entered each time the Telstra USB Wi-Fi Gateway starts up.
PIN Protection	Select to enable or disable PIN protection on your SIM card.

Table 12 - Advanced View - WWAN(3G) - SIM Security

LAN

IP Setup

The LAN functionality of the Telstra USB Wi-Fi Gateway can be configured from this page. Using this page, a user can change the LAN IP, LAN Subnet and DNS Masquerading options.

Home Status Internet Settings Wireless LAN Services System

Internet Settings > LAN > IP Setup

LAN Configuration

IP Address: 192 . 168 . 20 . 1

Subnet Mask: 255 . 255 . 255 . 0

DNS Masquerade

DNS Masquerade: Enable Disable

Save

Figure 15 - Advanced View - LAN Settings

NAME	DESCRIPTION
IP Address	The local IP address of Telstra USB Wi-Fi Gateway.
Subnet Netmask	The subnet mask for the local network.
DNS Masquerade	Select to enable or disable DNS masquerading for connected clients.

Table 13 - Advanced View - LAN Settings

Click 'Apply' to save any changes to the settings.

DHCP

The DHCP page is used to adjust the DHCP settings used by the router. The DHCP settings are then assigned to any device connecting via DHCP and assign a dynamic IP address to each device.

You can manually set the DHCP Start and End Range, the DHCP Lease Time, the default Domain Name Suffix, the Primary and Secondary DNS Server addresses, the Primary and Secondary WINS Server addresses, as well as the NTP Server address, the TFTP Server address and Option 150/Option 160 (VoIP options) settings.

Home
Status
▶ Internet Settings
▶ Wireless LAN
▶ Services
▶ System

All Items
DHCP Relay Configuration

// DHCP Configuration

DHCP	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
DHCP Start Range	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="20"/> . <input type="text" value="100"/>
DHCP End Range	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="20"/> . <input type="text" value="199"/>
DHCP Lease Time	<input type="text" value="86400"/> (seconds)
Default Domain Name Suffix	<input type="text"/>
DNS Server 1 IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
DNS Server 2 IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
WINS Server 1 IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
WINS Server 2 IP Address	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>
NTP Server (Option 42)	<input type="text" value="10"/> . <input type="text" value="100"/> . <input type="text" value="100"/> . <input type="text" value="1"/>
TFTP Server (Option 66)	<input type="text" value="10.100.100.100"/>
Option 150	<input type="text"/>
Option 160	<input type="text"/>

// Address Reservation List

Computer Name	MAC Address	IP Address	
			<input type="button" value="Add"/>

// DHCP Client List

Computer Name	MAC Address	IP Address	Expire Time

Figure 16 - DHCP Settings

After entering the applicable details, click “Save”.

You can also assign a particular IP address to a specific device every time that device makes a DHCP request as follows:

// Address Reservation List

Computer Name	MAC Address	IP Address	
<input type="text"/>	<input type="text"/>	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>	<input type="button" value="Add"/>
			<input checked="" type="checkbox"/> Enable <input type="button" value="Remove"/>

Figure 17 - DHCP Settings - Fixed Mapping

1. Click Add.
2. Enter a name for the computer or device.
3. Enter the computer or devices' MAC address.
4. Enter the IP address to be assigned to the computer or device.
5. Click “Save”

WAN

The WAN page allows you to configure the optional WAN Ethernet port. Select the WAN connection type suitable for your environment and configure parameters according to the selected connection type.

STATIC (fixed IP)

If your WAN connection uses a static IP address, please select "STATIC (fixed IP)" as the WAN Connection Type and enter the required information in the fields provided as shown below.

The screenshot shows the WAN Configuration page with the following fields:

- WAN Connection Type:** STATIC (fixed IP)
- Static Mode:**
 - IP Address: [Text Input]
 - Netmask: [Text Input]
 - Gateway: [Text Input]
 - Primary DNS Server: [Text Input]
 - Secondary DNS Server: [Text Input]
- Save** button

Figure 18 - Advanced View - WAN - Static IP Settings

NAME	DESCRIPTION
IP Address:	Type in the IP address assigned by your Internet Service Provider.
Netmask:	Type in the Subnet mask assigned by your Internet Service Provider.
Gateway:	Type in the WAN Gateway assigned by your Internet Service Provider.
Primary/ Secondary DNS:	Type in the DNS address assigned by your Internet Service Provider.

Table 14 - Advanced View - WAN Settings - Static IP

Click 'Apply' to save any changes made to the settings.

DHCP

The Telstra USB Wi-Fi Gateway when connected to the internet will be assigned a WAN IP address from the Internet Service Provider. Leave everything as default unless instructed by your Internet Service Provider.

The screenshot shows the WAN Configuration page with the following fields:

- WAN Connection Type:** DHCP (Auto config)
- DHCP Mode:** [Text Input]
- Save** button

Figure 19 - Advanced View - WAN - DHCP Settings

Click 'Save' to save any changes to the settings.

Wireless LAN

Configuration

This page allows you to define the basic wireless settings for the Telstra USB Wi-Fi Gateway.

Figure 20 – Advanced View – Wi-Fi Settings

Radio On/Off:

Wi-Fi is turned on by default. Changing this option to OFF will turn OFF the wireless functionality on the Telstra USB Wi-Fi Gateway and you will not be able to connect to your Telstra USB Wi-Fi Gateway wirelessly.

OPTION	DEFINITION
Network Mode; There are 5 modes to select from:	
11b/g mixed mode:	Both 802.11b and 802.11g wireless devices are allowed to connect to your Telstra USB Wi-Fi Gateway.
11b only:	Select this if all of your wireless clients use the 802.11b wireless protocol.
11g only:	Select this if all of your wireless clients use the 802.11g wireless protocol.
11n only:	Select this if all of your wireless clients use the 802.11n wireless protocol.
11b/g/n Mixed mode:	Select this mode if 802.11b, 802.11g and 802.11n wireless devices are all employed in your network.
Frequency (Channel):	This setting configures the frequency that the Wireless Radio uses for wireless connectivity. Select one channel that you wish to use from the drop down list.
Network Name (SSID):	The SSID (Service Set Identifier) is the name of your wireless network. Use a unique name to identify your wireless device so that you can easily connect to it from your wireless clients. This field is case sensitive and can be up to 32 characters long. It is recommended the default SSID be changed for added security.
Network Authentication	See the following pages for an explanation of the different security types available.
WDS Mode:	WDS (Wireless Distribution System) is a system that enables the wireless interconnection of access points, and allows a wireless network to be expanded using multiple access points without a wired backbone to link them. Each WDS Access Point needs to be set with the same channel and encryption type.

Table 15 - Advanced View - Wi-Fi Settings

Click 'Apply' to save any changes to the settings.

Security Settings

This section allows you to configure the wireless security for your Telstra USB Wi-Fi Gateway. Setting up sufficient wireless security can prevent unauthorized access to your wireless network.

Home
Status
▶ Internet Settings
▶ Wireless LAN
▶ Services
▶ System

Wireless LAN > Configuration

Wireless Setup	
Radio On/Off	<input checked="" type="radio"/> ON <input type="radio"/> OFF
Country:	Australia
Network Mode	11b/g/n mixed mode
Frequency (Channel)	2412MHz (Channel 1)
Security Settings	
SSID:	NetComm Wireless XXXX
Network Authentication:	WPA2-PSK
WPA Pre-Shared Key:	●●●●●●●● Click here to display
WPA Group Rekey interval:	600
WPA Encryption:	AES
Wireless Distribution System(WDS)	
MAC address	00:60:64:5C:4A:D4
WDS Mode	Disable

Figure 21 - Advanced View - Wi-Fi Security Settings

OPTION	DEFINITION
Network Authentication	Select the security mode for the wireless network. See below for more information.

Table 16 - Advanced View - Wi-Fi Security Settings

Network Authentication

You may choose from the following wireless security options:

- Disabled
- Open
- Shared
- WPA
- WPA-PSK
- WPA2
- WPA2- PSK
- WPA-PSK-WPA2-PSK
- WPA1-WPA2
- 802.1x.

WPA1/WPA2

WPA (Wi-Fi Protected Access) authentication is suitable for enterprise applications. It must be used in conjunction with an authentication server such as RADIUS to provide centralized access control and management. It provides a stronger encryption and authentication solution.

Security Settings	
SSID:	NetComm Wireless XXXX
Network Authentication:	WPA1-WPA2
WPA Pre-Shared Key:	•••••••• Click here to display
WPA Group Rekey interval:	600
RADIUS Server IP Address:	0.0.0.0
RADIUS Port:	1812
RADIUS Key:	••••••
WPA Encryption:	AES

Figure 22 - Advanced View - Wi-Fi Security Settings - WPA1/WPA2

WPA-PSK/WPA2-PSK

A newer type of security is WPA-PSK (TKIP) and WPA2-PSK (AES). This type of security gives a more secure network compared to WEP. TKIP is used as the Encryption Type for WPA-PSK security and AES is used as the Encryption Type for WPA2-PSK. Having selected WPA-PSK or WPA2-PSK as the Network Authentication type, enter a wireless security key in the WPA Pre-Shared Key field. The WPA Pre-Shared Key needs to be more than 8 characters and less than 63 characters long and can be any combination of letters and numbers.



Please note that the configuration for WPA-PSK and WPA2-PSK is also identical.

Security Settings	
SSID:	NetComm Wireless XXXX
Network Authentication:	WPA-PSK-WPA2-PSK
WPA Pre-Shared Key:	•••••••• Click here to display
WPA Group Rekey interval:	600
WPA Encryption:	AES

Figure 23 - Advanced View - Wi-Fi Security Settings - WPA-PSK/WPA2-PSK



Your Telstra USB Wi-Fi Gateway uses WPA2-PSK by default as the Network Authentication type. Check the Wireless Security Card or the device label on the bottom of the Telstra USB Wi-Fi Gateway for your default SSID and Security key to begin connecting your wireless devices.

802.1x

In order to use 802.1X security, you need to have a RADIUS server on your network that will act as the authentication server. Please type in the details for your RADIUS server in the fields required.

Security Settings	
SSID:	NetComm Wireless XXXX
Network Authentication:	802.1X
RADIUS Server IP Address:	0.0.0.0
RADIUS Port:	1812
RADIUS Key:	••••••
802.1x WEP	<input checked="" type="radio"/> Disable <input type="radio"/> Enable

Figure 24 - Advanced View - Wi-Fi Security Settings - 802.1x



Please note: After configuring wireless security, you also need to configure your wireless adapter to use the same security settings before you can connect wirelessly. Not all wireless adapters support WPA-PSK/WPA2-PSK/WPA/WPA2 security;

Please refer to your wireless adapter user guide for more details. It is strongly recommended to set up a simple wireless security type such as WPA-PSK (when the wireless client supports WPA-PSK) in order to secure your network.

Most wireless adapters in computers and laptops support at least WEP and WPA wireless security types.

Station Info

The Station List shows the wireless clients currently associated with your Telstra USB Wi-Fi Gateway.



[Wireless LAN > Station Info](#)

Station List						
This page allows you to view a list of the wireless clients that are currently associated with your Router.						
Wireless Network						
MAC address	Host Name	IP Address	RSSI	PSM	BW	Connected Time

Figure 25 - Advanced View - Wi-Fi Station List

Services

Routing

Static

The Static Route page is used to add or delete static routes. Static routes can be used to facilitate communication between devices on different networks and can be used as a means of configuring a fixed path selection of routers across computer networks in the absence of communication between routers of the network topology.

Figure 26 - Static Route Settings

Some routes are added by default by the router on initialisation such as the Ethernet subnet route for routing to a device on the Ethernet subnet. A PPP route is also added upon obtaining a WAN PPP connection.

Adding Static Routes

- Enter the required values in the fields (as shown above) for route being added.
- Click the “ADD” button.



Please note: You must increment the “Route no” field by 1 for each route in the “Route no” field otherwise the current route will be overwritten.

1. Enter the Destination IP Address on your local network.
2. Enter the IP Subnet Mask.
3. Enter the Gateway IP Address. Use 0.0.0.0 in place of any IP address.
4. Enter a Metric value to indicate the associated cost of using the indicated route. This can be useful for determining the efficiency of a certain route from two points in a network.

The Static routing table at the bottom of the page will then show the new route added.

Deleting Static Routes

Click the “Delete Entry” link (in blue) to delete a static route rule.

RIP

RIP (Routing Information Protocol) is used for advertising routes to other routers. Thus all the routes in the router's routing table will be advertised to other nearby routers. For example, the route for the router's Ethernet subnet could be advertised to a Router on the PPP interface side so that a Router on this network will know how to route to a device on the router's Ethernet subnet. You will have to add the routes appropriately in the previous Static Routes section – see Adding Static Routes.



Please note: Some routers will ignore RIP.

RIP Routing	
RIP Enable	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Version	2
<input type="button" value="Save"/>	

Figure 27 - RIP Settings

- Click Enable on the RIP Page.
- Select the RIP version you wish to use.
- Click the Save button to save any changes to the RIP settings.

NAT

The NAT page is used to configure the Network Address Translation rules currently in use on the router. The router is in NAT mode by default.

Home
Status
Internet Settings
Wireless LAN
Services
System

Services > Routing > NAT

IP Mapping Settings

Mapping no	<input type="text"/>
Protocol	TCP ▾
Source IP Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Incoming Port Range	<input type="text"/> - <input type="text"/> 1-65535
Destination IP Address	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Destination Port Range	<input type="text"/> - <input type="text"/> 1-65535

Item	Protocol	Incoming Address	Incoming Port	Destination Address	Destination Port
IP mapping Table empty					

Figure 28 - NAT Settings

This is only needed if you need to map inbound requests to a specific port on the WAN IP address to a device connected on the Ethernet interface, e.g. a web camera.

OPTION	DEFINITION
Mapping no	A number used to identify each port mapping rule. Increment by 1 for as many rules as required.
Protocol	Specify the protocol to use for the port mapping rule. Options include TCP, UDP or All protocols.
Source IP Address	Specifies either a "Friendly" IP address that is allowed to access the router or a wildcard IP address of 0.0.0.0 that allows all IP addresses to access the router.
Incoming Port Range	Specify the external port(s) to listen to.
Destination IP Address	Local Area Network Address of the computer or device to forward inbound requests to.
Destination Port Range	Local Area Network Port(s) to forward connections to.

Table 17 - Advanced - Services - Routing - NAT

How to configure Port Forwarding

1. Enter the Mapping No for the configuration rule.
2. Select the protocol – UDP, TCP or All.
3. Enter the Source IP Address from where the data packets originate.
4. Enter the Incoming Port range. If the incoming port is a single port enter the same number in both fields.
5. Enter the Destination IP Address , to where the data packets will be forwarded to.
6. Enter the Destination Port Range. If the destination port is a single port enter the same number in both fields.
7. Click the Save NAT button.



Please note: If the "Incoming Port Range" specifies a single port then the destination port can be set to any port. If the "Incoming Port Range" specifies a range of port numbers then the "Destination Port Range" MUST be the same as the "Incoming Port Range".

To delete a port forwarding rule, click on the corresponding "Delete Entry" link from the list of IP Mappings.

DMZ

If you have a client computer or device that cannot run an Internet application (e.g. Games) properly from behind the NAT firewall, then you can open up the firewall restrictions to allow unrestricted two-way Internet access by defining a DMZ (demilitarized zone) Host.

The DMZ function allows you to re-direct all packets going to your WAN port IP address, to a particular IP address in your LAN. The difference between the virtual server and the DMZ function is that the virtual server re-directs a particular service/Internet application (e.g. FTP, websites) to a particular LAN client/server, whereas DMZ re-directs all packets (regardless of services) going to your WAN IP address to a particular LAN client/server.

Figure 29 - Advanced View - DMZ Settings

OPTION	DEFINITION
DMZ Settings:	Enable/disable DMZ.
DMZ IP Address:	Enter the IP address of a particular host in your LAN Network that will receive all the packets originally going to the WAN port/Public IP address of your Telstra USB Wi-Fi Gateway.

Table 18 - Advanced View - DMZ Settings

Click the 'Save' button to save any changes to the above configuration.

DDNS

The DDNS page is used to configure the Dynamic DNS feature of the router. A number of dynamic DNS hosts are offered to select from.

Home Status ▶ Internet Settings ▶ Wireless LAN ▶ Services ▶ System

Services > DDNS

DDNS Configuration

DDNS Configuration Enable Disable

Status Information

DDNS Settings

Server Address

Host Name

User Name

Password

Verify Password

Save

Figure 30 - DDNS Settings

Dynamic DNS provides a method for the router to update an external name server with the current WAN IP address.

The following DDNS Providers are available:

www.dhs.org
 www.dyndns.org
 www.dyns.cx
 www.easydns.com
 www.justlinux.com
 www.ods.org
 www.tzo.com
 www.zoneedit.com

To configure dynamic DNS:

1. Click the Enable option to enable Dynamic DNS.
2. Select the Dynamic DNS service that you wish to use. Enter your dynamic DNS account credentials.
3. Click the 'Save' button to save the new configuration.

NTP

The NTP page is used to configure NTP Synchronisation or to select the NTP server used for synchronisation.

Home Status ▶ Internet Settings ▶ Wireless LAN ▶ Services ▶ System

Services > NTP

NTP Configuration

Enable NTP server Enable Disable

NTP Server Address

Save

Figure 31 - NTP Settings

The NTP (Network Time Protocol) settings allow your router to synchronise its internal clock with a global Internet Time server. This setting will affect functions such as System Log entries and Firewall settings where the current system time is displayed. You can use the default NTP server or enter one manually if required.

System Monitor

The System Monitor page is used to configure the behaviour of the Periodic Ping monitor function.

Periodic PING Settings		Display Introduction
Destination Address	<input type="text"/>	
Second Address	<input type="text"/>	
Periodic PING Timer	<input type="text"/>	(0=disable, 300-65535) secs
Periodic PING Accelerated Timer	<input type="text"/>	(0=disable, 60-65535) secs
Fail Count	<input type="text"/>	(0=disable, 1-65535) times
Force reset every	<input type="text"/>	(0=disable, 5-65535) mins

Figure 32 - System Monitor Settings

The Periodic Ping Reset Monitor configures the router to transmit controlled ping packets to 2 specified IP addresses. Should the router not receive responses to the pings, the router will reboot.

This works as follows:

1. After every "Periodic Ping Timer" configured interval, the router sends 3 consecutive pings to the "Destination Address".
2. If all 3 pings fail the router sends 3 consecutive pings to the "Second Address".
3. The router then sends 3 consecutive pings to the "Destination Address" and 3 consecutive pings to the "Second Address" every "Periodic Ping Accelerated Timer" configured interval.
4. If all accelerated pings in step 3 above fail the number of times configured in "Fail Count", the router reboots.
5. If any ping succeeds the router returns to step 1 and does not reboot.



Please note: The "Periodic Ping Timer" should never be set to a value less than 60 seconds; this is to allow the router time to reconnect to the cellular network following a reboot.

How to disable the Periodic Ping Monitor

To disable the Periodic Ping Reset Monitor simply set to "Fail Count" 0



Please note: The traffic generated by the periodic ping feature is counted as chargeable usage, please keep this in mind when selecting how often to ping.

How to configure a Forced Reset

This facility is available by clicking on the "Services" menu followed by the "System Monitor" menu item on the right.

The router can be configured to automatically reboot after a period of time specified in minutes. While this is not necessary, it does ensure that in the case of remote installations, it will reboot the router if some anomaly occurs.

The default value is 0 which disables the Forced Reset Timer. The maximum value is 65535 minutes.

System

Log

The Log page is used to download or display the current System Log of the router.



Figure 33 - System Log

The System Log helps you to troubleshoot any issues you may be experiencing with your router. Selecting the appropriate logging level will show you either informational messages about your router or every message produced when “All” is selected.

ITEM	DEFINITION
All	Display all system log messages.
Debug	Show extended system log messages with full debugging level details.
Info	Show informational messages only.
Notice	Show normal system logging information.
Warning	Show warning messages only.
Error	Show error condition messages only.

Table 19 - System Log Detail Levels

You can also download the current System Log to your computer for off-line viewing. To do this, click the “Download Log File” link at the bottom of the page.

Settings

The settings page is used to backup or restore the router's configuration or to reset it to factory default settings.

The screenshot shows the router's settings interface. At the top is a navigation bar with links: Home, Status, Internet Settings, Wireless LAN, Services, and System. Below this is a breadcrumb trail: System > Load/Save > Settings. The main content area is divided into three sections:

- Save a copy of current settings:** This section contains two input fields for 'Password' and 'Confirm Password', followed by a 'Save' button.
- Restore saved settings:** This section contains a 'File' input field, a 'Browse...' button, and a 'Restore' button.
- RESTORE FACTORY DEFAULTS:** This section contains a single 'Restore' button.

Figure 34 - Load / Save Configuration Page



Please note: In order to perform an update, you must be logged into the router as the root user (see the Remote Administration section for more details).

Saving a copy of the router's configuration:

1. Key in the root manager Password and click the Save button.

This will download a copy of the current settings from the router to your PC.



Please note: The following conditions apply:

- It is NOT possible to edit the contents of the file downloaded; if you modify the contents of the configuration file in any way you will not be able to restore it later.
- You may change the name of the file if you wish but the filename extension must remain ".cfg"

Restoring a copy of the router's configuration:

1. Click the Browse button.
2. Select the configuration file you wish to restore the router settings to.
3. Click the Restore button.

Restoring the router's configuration to factory default settings:

Click Restore to restore the factory default configuration.

The router will then restart with the factory default configuration loaded.

Update Firmware

This page allows you to upgrade the Telstra USB Wi-Fi Gateway's internal software.

To upgrade the firmware of your Telstra USB Wi-Fi Gateway, you need to download the upgrade image file to your local hard disk, and then click the Browse button and navigate to the location of the firmware file on your computer.

Once you have selected the new firmware file, click 'Apply' to start the upgrade process.

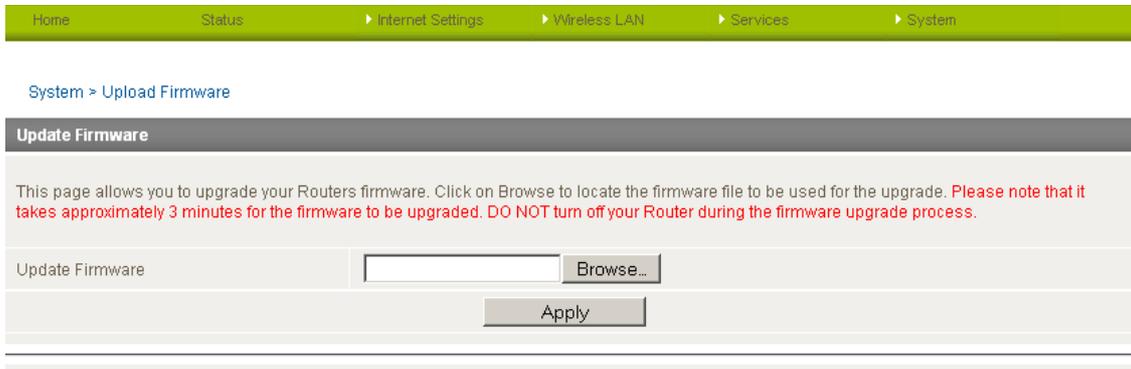


Figure 35 - Advanced View - Firmware Update

The upgrade process takes several minutes. During the firmware upgrade process, all the lights on the front of the Telstra USB Wi-Fi Gateway will flash.

Do not interrupt the power supply during the upgrade process.

Once completed, follow the on-screen prompts and your Telstra USB Wi-Fi Gateway will restart.

After a firmware upgrade it is important to perform a factory reset to so that the firmware loads correctly onto the router. To do this select the Restore button from the System > Settings router page.

Administration

The Administration page is used to enable or disable remote administration and set the username / password required to access the Telstra USB Wi-Fi Gateway remotely.

Figure 36 - Administration Configuration Items

OPTION	DEFINITION
Remote Administration	Enable or disable remote HTTP access to the router. You can also set the port you would like remote HTTP access to be available on.
Admin Password	Enter the new password for the Admin account.
Confirm Password	Re-enter the new password for the Admin account.

Table 20 - Administration Configuration Items



Please note: The password will only be changed two matching passwords are entered. It is not necessary to change the password if you are only changing the incoming port number.

To access the router's configuration pages remotely from a remote computer, perform the following steps:

1. Open a new browser window (e.g. Internet Explorer, Firefox, Safari ...).
2. Ensure the 3G connection you are using assigns a Public IP Address to the WAN interface. Contact your 3g provider for further details.
3. In the address bar, enter the router's WAN IP address and assigned port number, e.g. "10.10.10.10: 8080" and press the enter key.



Please note: You can find the router's WAN IP address by clicking on the "Status" menu. The Local field in the WWAN section shows the router's WAN IP address.

4. Type "admin" in the Username and "admin" in the Password fields (without quotes) unless you have changed the administration password. Then click on the "Submit" button.

System Configuration

The System configuration page is used to specify an external syslog server address.



Figure 37 - System Configuration Items

OPTION	DEFINITION
IP / Hostname [:PORT]	The IP address and port of the external syslog server you would like logging information regarding the router and its associated services sent to.

Table 21 - System Configuration Items

Logoff

The logoff item will log you out of your web configuration session.



Figure 38 - Logoff

Reboot

The reboot item will reboot the router. This can be useful if you have made configuration changes you want to implement or want to restart the router.



Figure 39 - Reboot Router

Technical Data

The following table lists the hardware specifications of the Telstra USB Wi-Fi Gateway.

FEATURE	SPECIFICATION
Connectivity	3G USB WWAN x 1, 10/100 Ethernet LAN x 3, 10/100/1000 Ethernet LAN/WAN x 1, WLAN
LED Indicators	Power, Signal(3G), 3G Signal Strength, Wi-Fi, WWW, LAN, LAN/WAN
Operating Temperature	0 ~ 50 degrees Celsius (operating temperature)
Power input	100-240VAC to 12VDC – 1.5A
Dimensions & Weight	160 mm (L) x 195 mm (H) x 65 mm (W) 250 grams

Table 22 - Technical Specifications for the Telstra USB Wi-Fi Gateway

Electrical Specifications

A suitable power supply is available on request or via direct purchase from the NetComm Online shop. It is recommended that the Telstra USB Wi-Fi Gateway be powered using the 12VDC/1.5A power supply which is included with the device.

Environmental Specifications / Tolerances

The Telstra USB Wi-Fi Gateway is able to operate over a wide variety of temperatures from 0°C ~ 50°C (ambient).

FAQ

1. Does the NetComm 3G/4G USB Gateway require any configuration out of the box?

For most customers, the NetComm 3G/4G USB Gateway is a plug and play device. Plug the device into an electrical outlet and once the status indicator lights are on, plug in your LAN cable for data connectivity. For Wi-Fi connectivity the SSID (Service Set Identifier) and wireless network key (password) are located on the bottom of the device. If you would like to customize your settings you can enter 192.168.20.1 into your Web browser to access the Management Console and device settings.

2. I cannot seem to access the web page interface.

The default IP address of the unit is 192.168.20.1, so first try to open a web browser to this address. Ensure you have an Ethernet cable connected from one of the LAN ports on the router to the Ethernet port on your computer. Also check that your laptop/ PC is on the same subnet as the router's Ethernet port.

3. The router was connected but I cannot get back online.

You may need to enable the periodic ping timer using the System Monitor Link from the Management Console. This ensures that if the connection drops (i.e. outage on the network) the router will reboot after a specified number of failed pings and then force a re-connect. Setting the timer to around 15 minutes should be sufficient.



Please note: The traffic generated by the periodic ping feature is counted as chargeable usage, please keep this in mind when selecting how often to ping.

4. The router is rebooting frequently.

Check the System Monitor link in the Administration menu on the management console to check whether the Periodic Reset timeout is set to something other than 0. If it is set to 1 this means the unit will reboot every minute regardless of what happens. Reset it to 0 if you do not need to use this feature or select a higher value if you don't want the router to reboot so often.

5. The router has a current connection but I cannot access the internet.

Check that DNS Proxy is enabled by clicking on the LAN link on the Internet Settings interface. Make sure that the DHCP DNS server address 1 IP address is set to the same address as that of the Ethernet port.

6. I cannot seem to get a 3G WAN connection

Click on the 3G Internet Settings link on the webpage interface and check that the correct APN settings are entered.

- Also check that the username and password credentials are correct if the APN in use requires these details.
- Make sure that Auto Connect is enabled on the WWAN(3G) Profile Settings section on the Internet Settings page.
- Check you have suitable 3G signal strength and that your SIM is active and does not require a PIN code to be entered.

7. The SIM status indicates that the SIM is "not installed or reboot required" on the home page of the router.

If a SIM is installed correctly this may indicate that the SIM has been removed or inserted whilst the unit is powered up. In this case you must reboot the unit. Selecting the Reboot option from the System menu will reboot the router.

8. Is the NetComm 3G/4G USB Gateway secure; can other people access my wireless network?

The NetComm 3G/4G USB Gateway comes configured with WPA-PSK Wi-Fi security enabled. When accessing the router interface for the first time, type 192.168.20.1 into the address bar of a web browser, and configure the wireless security settings of the router (please see the Quick Start Guide for more information on connecting your data devices to the NetComm 3G/4G USB Gateway). Only people you allow will be able to connect to the NetComm 3G/4G USB Gateway ensuring your connection is secure and safe.

9. Can I change the name and password of my wireless network?

Yes. You can change your NetComm 3G/4G USB Gateway settings from the router's user interface by typing 192.168.20.1 into the address bar of your Web browser. The SSID (Service Set Identifier) or network name, security standards (WPA, WPA2, WEP) and your Wi-Fi password can each be customised to suit your requirements.

10. How do I share my Internet connection, using the NetComm 3G/4G USB Gateway, with other users?

Provide any users with whom you wish to share your Wi-Fi Internet connection, the SSID (Service Set Identifier) and Wi-Fi network password for your Telstra USB Wi-Fi Gateway. Each user will need to select the Telstra USB Wi-Fi Gateway SSID, on their Wi-Fi enabled computer or device and enter the network password you provide.

11. What is the difference between upload and download speeds and why do they differ?

Uploading is when you send information (e.g. emails) from your computer and downloading is when you receive information via the Internet. The speeds at which upload and download operate depend on the way you use the Internet, the size of files you send and receive, the network capability and current network traffic.

12. Do I need to attach an antenna on this device?

No. Your NetComm 3G/4G USB Gateway comes equipped with an internal Wi-Fi antenna.

13. I have lost the security card that came with the setup instructions. What can I do?

If you have lost your security card, and forgotten the wireless security details (SSID and Wi-Fi network password), check that there is a label stuck to the base of your Telstra USB Wi-Fi Gateway with all your original security details. If the label is unreadable or has been removed, the Wi-Fi network password can be viewed/reset by logging in to the Management Console using an Ethernet Cable connected to the LAN port of the Telstra USB Wi-Fi Gateway.

14. I forgot my Management Console password. What can I do?

If you have forgotten your Management Console password and cannot access the Web user interface, you will need to reset your Telstra USB Wi-Fi Gateway back to factory default settings. To reset your device press and hold the reset button on the back of your Telstra USB Wi-Fi Gateway for 10-15 seconds. All the indicator lights on the unit will flash when your device has reset. After a reset, the default Wi-Fi settings (SSID and WPA key) will match those found on the base of your Telstra USB Wi-Fi Gateway. (Note - this will also reset any custom settings and passwords you may have already set up).

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Legal & Regulatory Information

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IC Important Note

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter. The County Code Selection feature is disabled for products marketed in the US/Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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