



# **User Guide**

Wi-Fi 6 Gateway – CF40MESH



Doc No. UG01438

### Important notice

This device, like any wireless device, operates using radio signals which cannot guarantee the transmission and reception of data in all conditions. While the delay or loss of signal is rare, you should not rely solely on any wireless device for emergency communications or otherwise use the device in situations where the interruption of data connectivity could lead to death, personal injury, property damage, data loss, or other loss. NetComm Wireless accepts no responsibility for any loss or damage resulting from errors or delays in transmission or reception, or the failure of the NetComm Wireless Wi-Fi 6 Gateway to transmit or receive such data.

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NetComm Wireless Limited was acquired by Casa Systems in 2019.



Note - This document is subject to change without notice.

# **Document history**

This document relates to the following product:

#### NetComm Wi-Fi 6 Gateway – CF40MESH

Ver.	Document description	Date
v1.00	Initial document release	21 December 2022
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Table i. – Document revision history





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# Overview

# Introduction

This document provides you all the information you need to set up, configure and use the NetComm Wireless Wi-Fi 6 Gateway.

# Prerequisites

Before continuing with the installation of your Wi-Fi 6 Gateway, please confirm that you have the following:

• An electronic computing device with a working Ethernet network adapter and a web browser such as Google Chrome™ or Safari<sup>\*</sup>.

### Notation

The following symbols may be used in this document:

- (i) Note This note contains useful information.
- Important This is important information that may require your attention.
- Warning This is a warning that may require immediate action in order to avoid damage or injury.

\* Safari is a trademark of Apple Inc., registered in the U.S. and other countries and regions.



# Hardware installation instructions

For instructions on how to connect your Wi-Fi 6 Gateway, refer to the Quick Start Guide available at <u>https://support.netcommwireless.com/products/CF40MESH</u>

# Setting up your Internet connection



If you received your gateway from your service provider and they have provided you with their own instructions, refer to those to
 complete the setup. In some cases, the gateway has been pre-configured for you and is ready to use.
 Otherwise, you will need to complete the setup yourself. Refer to the **Basic setup** section of this User Guide.

# **Device overview**

## Interfaces

The Wi-Fi 6 Gateway is designed to be placed on a desktop with the top facing upward.

All of the cables exit from the rear for easy organization along with the power and WPS buttons.

# Top view

There are five LED lights on the top of the Wi-Fi 6 Gateway:



Figure 1 – Wi-Fi 6 Gateway top view





Green Off	The Wi-Fi 6 Gateway is powered on and operating normally.
∩ff	
OII	The power is off.
Green	A device is connected to the Ethernet WAN port.
Red	Authentication failed.
Off	No device is connected to the Ethernet WAN port.
Green	A device is connected to the Ethernet LAN port.
Off	No device is connected to the Ethernet LAN port.
Green	Wi-Fi (either 2.4GHz or 5GHz) is enabled.
Off	Wi-Fi (both 2.4GHz and 5GHz) is disabled.
Green	WPS (Wi-Fi Protected Setup) is enabled.
Green Blinking	WPS pairing is triggered.
Off	WPS is disabled.
	Green Red Off Green Off Green Off Green Green Blinking

The following table contains an explanation of each of the indicator lights on the top of the Wi-Fi 6 Gateway.

Table 1 - LED icon descriptions

## **Rear view**

The following interfaces are available on the rear panel of the Wi-Fi 6 Gateway:



Figure 2 – Wi-Fi 6 Gateway rear view

Interface	Description
LAN 1-4	Gigabit Ethernet LAN ports. Connect your Ethernet based devices to one of these ports for high-speed internet access.
WAN	Gigabit capable WAN port for connection to a WAN network. Connect to your Network Termination Device (NTD) for high-speed internet access.
DC IN	Connection point for the included power adapter. Connect the power supply here.
Power button	Turns the Wi-Fi 6 Gateway on or off.



Interface	Description
WPS	When pressed, this triggers the Wi-Fi Protected Setup (WPS) process.
Reset button	Resets the Wi-Fi 6 Gateway to the factory default settings by holding the Reset button down for 10 seconds when it is powered on. To push this button, you may need to use a paperclip or similar object.

Table 2 – Interface descriptions



# Advanced configuration of the Wi-Fi 6 Gateway

To perform advanced configuration of the Wi-Fi 6 Gateway, you can access its web interface.

- 1 Push the power button on the side of the Wi-Fi 6 Gateway to turn it on. Wait a few minutes for it to complete starting up.
- 2 Open a web browser and type **192.168.20.1** into the address bar, then press **Enter**.
- 3 At the login screen, type **admin** into the Username field. In the Password field, type the unique password printed on the label on the bottom of the gateway, then click the **Login** button. If you have changed the password, enter your chosen password instead.

Î	NetComm
Welcome	to your Wi-Fi 6 CloudMesh Gateway
	admin
	Login

Figure 3 – Login screen

4 The four-section **Summary** screen is displayed.

i⊟ Summary					G
Device Info			Interface Info		
Serial Number: Hardware Version: Software Version: Date Time: Uptime:	217025221650129 A1 CF40MESH.NC.UR-R68018.EN 2022/11/11 12-47:47 Friday 0d 0h 6m 34s		WAN WAN MAC Address: WAN Interface Name: WAN Interface Type: Cable Status: LAN MAC Address: LAN IP Address: LAN IP Address: LAN Subnet Mask:	D0.08.87.55.14.41 wan0_1 Ethernet Convented D0.08.87.55.14.9E 192.168.20.1 255.255.255.0	So to setting
WiFi Info Main WiFi		Go to settion	Internet Info		Go to setting
2.4GHz WiFi SSID: Security: Bandwidth: Channel: SSID: Security: Bandwidth: Channel:	Ensailer NetComm 2728 WPA2-PSK/WPA3-SAE 40MHz 6 Ensailer NetComm 2728 WPA2-PSK/WPA3-SAE 80MHz 36		WAN Type: Connection Status: Connection Time: IP Address: Subnet Mask: Gateway: Primary DNS: Secondary DNS: WAN IPv6	DHCP Connecte Od Oh Om 188 192168.1191 255.255.0 192168.11 192168.11 Not Available	Go to setting
	Device Info Serial Number: Hardware Version: Date Time: Uptime: Uptime: WiFi Info Main WiFi 2.4GH2 WiFi SSID: Security: Bandwidth: Channel: SSID: SECURITY: Bandwidth:	Device Info         Serial Number:       217025224650129         Hardware Version:       All         Software Version:       CF40MESHINCUR-R6B018.EN         Date Time:       2022/11/11         12 Jate Time:       2022/11/11         Uptime:       Od 0h 6m 34s         WIFF Info         Excertise of 0h 6m 34s         WIFF Info         Sub:         Cubre WiFF         SSD:       Excertise:         Bandwidth:       40MHz         Channet:       6         SSD:       Excertise:         SSD:       Factors NetComm 2728         Security:       WIR2-PSK/WPA3-SAE         Bandwidth:       WIR2-PSK/WPA3-SAE	Device Info         Serial Number:       217025221650129         Hardware Version:       Al         Software Version:       CF40MESH.NC.UR-R6B018.EN         Date Time:       2022/11/11         Uptime:       Od 0h for 34s         WIFI Info         Dote Time:         2.4GHz WiFI         SSID:       Crawer Version:         Add WiFI         Dote Time:         Od 0h for 34s	Device Info       Interface Info         Serial Number:       217025221450129         Hardware Version:       A1         Software Version:       CF40MESHINCUR-R6B018.EN         Date Time:       2022/11/11         Uptime:       Od 0h 6m 345         VIFI Info       LAN MAC Address:         LAN MAC Address:       LAN MAC Address:         Stol:       endetion 2728         Security:       WPA2-PSK/MPA3-SAE         Bandwidth:       80H4r         Stol:       scontert Mask         Stol:       scontert Mask         Stol:       scontert Mask         Stol:       scontert Mask         <	Device Info   Serial Number:   Serial Number:   Setware Version:   Consection   Date Time:   2022/11/11   12.47.47   Dride   Uptime:   0.10 hom 34s   WiFi Info   Number:   2.40ft2   Sitic:   Current:   Version:   2.40ft2   Sitic:   Current:   Version:   Sitic:   S

Figure 4 – Device Info > Summary screen

The **Summary** screen displays an overview of some of the critical elements of the gateway.



# Navigating the user interface

The user interface of the Wi-Fi 6 Gateway presents a menu on the left side of the screen which provides a means of opening different settings screens.

Some of these menu items expand to show sub-menus below them, as demonstrated below with the **Summary** page being a sub-page of the **Device Info** section.



Figure 5 - Navigation menu

To view gateway settings, select a section, for example, Management.

Then select one of the sub-menu items, for example, TR-069.

The **TR-069** settings are displayed in the main screen on the right side of the web page.





# **Basic setup**

Normally your CF40MESH Wi-Fi 6 Gateway is shipped pre-configured with connection settings appropriate for your internet and Wi-Fi services. Normally you will not be required to use the tools and settings found in this section.

However, if the pre-configured default profile does not connect, you should run through the Basic Setup wizard described in this section.

This wizard prompts you for the details necessary to set up your internet connection and helps you to configure the Wi-Fi on the gateway. If you are unsure of the settings to enter, please contact your Internet Service Provider.

Basic Setup	
	s through the settings you need to configure to get your WAN If you are unsure of the settings to enter, please contact your
WAN Setting	
Connection Type	O PPPoE O Dynamic IP O Static IP
VLAN ID	-1
Username	
Password	٢
Next	

Figure 6 - Basic Setup

To complete the wizard, you will need to know a few settings about your internet connection, such as Connection Type, VLAN ID and username and password. If you don't know what these are, you should contact your internet service provider.

- Select the connection type and enter the required details depending on the connection type selected.
   When you have entered the details for your connection, select the Next button.
- 2 Enter an SSID (network name) and password for your wireless network. These are required whenever you want to connect a wireless device to your network.



Note - If you are replacing an existing wireless network, you can set the same username and password on the Wi-Fi 6 Gateway and all your devices will connect automatically to the new one.



Basic Setup	
settings will require you to r	ne (SSID) of your wireless network. Note that any changes to these econnect your devices with the new credentials. The settings below nd 5GHz networks, allowing your devices to roam between them he best performance.
WiFi Setting	
SSID	NetComm 2728
WiFi Password	······ ©
Back	Next

Figure 7 – Basic Setup - Wi-Fi Settings

When you have entered the Wi-Fi details, select the **Next** button.

3 Select a time zone offset. This is mainly used for maintaining accurate log data.

Basic Setup			
Use this sectio	n to configur	e the system time.	
Time Se	tting		
Time Zon	e Offset	(GMT+10:00)	Canberra, 🔻
Daylight S	Saving Time	Enable	
Back		Save	

Figure 8 – Basic Setup - Time zone setting

When you have chosen the correct time zone and daylight saving setting, select the **Save** button.

The gateway saves your settings and returns to the **Summary** page. The basic setup is complete.



# **Device** info

# Summary

The **Summary** page is the main page displayed when you first log in to the gateway.

It summarizes the important functions of the gateway so that you can see at a glance whether everything is functioning correctly.

	0.770.07.00.1/7.0.00		WAN		- · ·
Serial Number:	217025221650129				<u>Go to se</u>
Hardware Version:	A1		WAN MAC Address:	D0:DB:B7:55:1A:A1	
Software Version:	CF40MESH.NC.UR-R6B018.EN		WAN Interface Name:	wan0_1	
Date Time:	2022/11/18 16:19:05 Friday		WAN Interface Type:	Ethernet	
Uptime:	0d 2h 13m 17s		Cable Status:	Connected	
			LAN		<u>Go to se</u>
			LAN MAC Address:	D0:DB:B7:55:1A:9E	
			LAN IP Address:	192.168.20.1	
			LAN Subnet Mask:	255.255.255.0	
i WiFi		<u>Go to setting</u>	WAN IPv4		<u>Go to se</u>
WiFi 2.4GHz WiFi		<u>Go to setting</u>	WAN IPv4 WAN Type:	DHCP	<u>Go to se</u>
	Enabled NetComm 2728	<u>Go to setting</u>		DHCP	<u>Go to se</u>
2.4GHz WiFi	Enabled NetComm 2728 WPA2-PSK/WPA3-SAE	Go to setting	WAN Type:		<u>Go to se</u>
2.4GHz WiFi SSID:		Gotosetting	WAN Type: Connection Status:	Connected	Go to se
2.4GHz WiFi SSID: Security:	WPA2-PSK/WPA3-SAE	Satosetting	WAN Type: Connection Status: Connection Time:	Connected Od Oh 9m 20s	Gatose
2.4GHz WiFi SSID: Security: Bandwidth:	WPA2-PSK/WPA3-SAE 40MHz	Satosetting	WAN Type: Connection Status: Connection Time: IP Address:	Connected Od Oh 9m 20s 192.168.1.191	<u>Gato se</u>
2.4GHz WiFi SSID: Security: Bandwidth: Channel:	WPA2-PSK/WPA3-SAE 40MHz	Solosetting	WAN Type: Connection Status: Connection Time: IP Address: Subnet Mask:	Connected Od Oh 9m 20s 192:168.1191 255:255:255.0	<u>Sotose</u>
2.4GHz WiFi SSID: Security: Bandwidth: Channel: SGHz WiFi	WPA2-PSK/WPA3-SAE 40MHz 6	Solosetting	WAN Type: Connection Status: Connection Time: IP Address: Subnet Mask: Gateway:	Connected Od Oh 9m 20s 192.168.1191 255.255.255.0 192.168.1.1	Sotose
2.4GHz WiFi SSID: Security: Bandwidth: Channel: 5GHz WiFi SSID:	WPA2-PSK/WPA3-SAE 40MHz 6 Enabled NetComm 2728	Solosetting	WAN Type: Connection Status: Connection Time: IP Address: Subnet Mask: Gateway: Primary DNS:	Connected Od Oh 9m 20s 192.168.1.191 255.255.255.0 192.168.1.1 192.168.1.1	<u>Sotose</u> Sotose
2.4GHz WiFi SSID: Security: Bandwidth: Channel: 5GHz WiFi SSID: Security:	WPA2-PSK/WPA3-SAE 40MHz 6 Enabled NetComm 2728 WPA2-PSK/WPA3-SAE	Solosetting	WAN Type: Connection Status: Connection Time: IP Address: Subnet Mask: Gateway: Primary DNS: Secondary DNS:	Connected Od Oh 9m 20s 192.168.1.191 255.255.255.0 192.168.1.1 192.168.1.1	

Figure 9 - Device info – Summary

### **Device Info**

The **Device Info** section provides details about the individual gateway unit and information in real time about its current connection status.

Device Info	
Serial Number:	217025221650022
Hardware Version:	A1
Software Version:	CF40MESH.NC.AU-R6B016.EN
Date Time:	2022/10/19 02:25:44 Wednesday
Uptime:	0d 0h 9m 13s







### WiFi Info

Main WiFi	<u>Go to setti</u>
2.4GHz WiFi	
SSID:	Enabled NetComm 5779
Security:	WPA2-PSK/WPA3-SAE
Bandwidth:	40MHz
Channel:	AUTO(3)
5GHz WiFi	
SSID:	Enabled NetComm 5779
Security:	WPA2-PSK/WPA3-SAE
Bandwidth:	80MHz
	AUT0(64)

The WiFi Info section provides real time information

Figure 11 - Device info section

Click either <u>Go to setting</u> link to access the WiFi > Main WiFi page where you can enable or disable the service and see important details regarding either the 2.4GHz or 5GHz WiFi connection.

For more information, go to the WiFi section at page 17 in this User Guide.





### Interface Info

WAN			<u>Go to settin</u>
	WAN MAC Address:	D0:DB:B7:55:17:B4	
	WAN Interface Name:	wan0_1	
	WAN Interface Type:	Ethernet	
	Cable Status:	Disconnected	
LAN			<u>Go to settin</u>
	LAN MAC Address:	D0:DB:B7:55:17:B1	
	LAN IP Address:	192.168.20.1	
	LAN Subnet Mask:	255.255.255.0	

The Interface Info section provides real time information

Figure 12 – Interface info section

Click either <u>Go to setting</u> ink to access the Network Setting > WAN or LAN pages where you can you configure the local network settings of the router.

For more information, go to the **Network Setting** section at page 23 in this User Guide.

### Internet Info

The Internet Info section provides real time information

Internet Info		
WAN IPv4		<u>Go to setting</u>
WAN Type:	DHCP	
<b>Connection Status:</b>	Disconnected	
Connection Time:	0d 0h 0m 0s	
IP Address:	Not Available	
Subnet Mask:	Not Available	
Gateway:	Not Available	
Primary DNS:	Not Available	
Secondary DNS:	Not Available	
WAN IPv6		Go to setting

Figure 13 – Internet info section

Click the <u>Go to setting</u> link to access the Network Setting > WAN page.

For more information, go to the WAN section at page 23 in this User Guide.





# **Connected devices**

To access this page, from the menu on the left, select **Device info**, then **Connected devices**.

The **Connected devices** page displays a list of all devices connected via the Wi-Fi 6 Gateway, both on the wireless network and the wired local network, along with their IP address, MAC address and the time they have been connected.

Client Name       IP Address       MAC Address       Interface Connected       Time Connected         NTCLT01861       192.168.20.250       74:78:27:71:81:6D       Wired Connection       8m 32s			cted Devices				
		Shows	devices conne	cted to the rout	er.		
NTCLT01861 192.168.20.250 74:78:27:71:81:6D Wired Connection 8m 32s	NTCLT01861 192.168.20.250 74:78:27:71:81:6D Wired Connection 8m 32s		Client Name	IP Address	MAC Address	Interface Connected	Time Connected
			NTCLT01861	192.168.20.250	74:78:27:71:81:6D	Wired Connection	8m 32s

Figure 14 - Device info - Connected devices list



# WiFi



The **WiFi** section of the user interface contains various settings related to the configuration of your local wireless network.

This section also includes links to pages to set up Guest WiFi accounts and other WiFi security tools, filters and settings.

## Main WiFi

Band Steering	Enable	
WiFi Status	Enable	
SSID	NetComm 2728	
WiFi Password	•••••	$\bigcirc$
Security Mode	WPA2-PSK/WPA3-SAE	V
Encrypt Algorithm	AES	<b>v</b>
SSID Hidden	Enable	

To access this page, select **WiFi** from the menu on the left, then choose **Main WiFi** from the submenu.

Figure 16 - WiFi - Main WiFi

The Main WiFi page provides basic configuration options for the main wireless network of the Wi-Fi 6 Gateway.

The table below describes the meaning of each setting.



Field	Description
Band Steering	Band steering is a technique that aims to optimise the band (2.4GHz or 5GHz) that clients connect to based on their signal strength, with a focus on encouraging wireless devices to prioritise the less congested 5GHz network where possible.
	If you have some older devices and experience connection problems, you may consider disabling this option, but in most cases, band steering improves the performance of your wireless network.
WiFi Status	Enables or disables the Main Wi-Fi network of your Wi-Fi 6 Gateway.
SSID	The SSID is also known as the wireless network name that appears when you scan for nearby wireless networks.
WiFi Password	The password for the wireless network. This is the password that must be entered when attempting to connect to the Wi-Fi 6 Gateway's Wi-Fi network.
Security Mode	This is the security protocol used to secure your wireless network. The default setting is WPA2-PSK/WPA3-SAE. This is a combination of WPA2 and WPA3. If the wireless device supports WPA3, it will use that as it is the newer and more secure protocol. If you have any problems with connecting to Wi-Fi, try to select "WPA2" or "WPA2-PSK" as the security mode as it is possible that some devices could
	have trouble connecting with the WPA3 protocol.
Encrypt Algorithm	The Advanced Encryption Standard (AES) is the most secure wireless encryption standard and is the default setting on the Wi-Fi 6 Gateway. As it is the most secure option, no other options are provided.
SSID Hidden	When this option is enabled, your wireless network will not appear when a device does a scan for nearby wireless networks. This means that a wireless device must use the manual connection method and enter the SSID and password together in order to connect.

Table 3 - Main WiFi - Descriptions





## Guest WiFi

Use a Guest network to allow others to use your internet connection while preserving the security of your own local network.

To access this page, select **WiFi** from the menu on the left, then choose **Guest WiFi** from the submenu.

Juest Hetwork to allo	w others to use your internet connection while pres	serving the security of your own	ocal network.	
2.4GHz Guest 1		5GHz Guest 1		
WiFi Status	Enable	WiFi Status	Chable	
SSID	NetComm_2G_Guest1	SSID	NetComm_5G_onboard	
WiFi Password	······ ©	WiFi Password	······ ©	
Security Mode	WPA2-PSK/WPA3-SAE *	Security Mode	WPA2-PSK/WPA3-SAE *	
Encrypt Algorithm	AES *	Encrypt Algorithm	AES •	
SSID Hidden	Enable	SSID Hidden	Enable	
2.4GHz Guest 2		5GHz Guest 2		
WiFi Status	Enable	WiFi Status	Enable	
SSID	NetComm_2G_Guest2	SSID	NetComm_5G_bh	
wiFi Password	······ ©	WiFi Password	······ ©	
Security Mode	WPA2-PSK/WPA3-SAE	Security Mode	WPA2-PSK/WPA3-SAE	
Encrypt Algorithm	AES 👻	Encrypt Algorithm	AES -	
SSID Hidden	Enable	SSID Hidden	Enable	
2.4GHz Guest 3		5GHz Guest 3		
WiFi Status	Enable	WiFi Status	Enable	
SSID	NetComm_2G_Guest3	SSID	NetComm_5G_Guest3	
wiFi Password	······ ©	WiFi Password		
Security Mode	WPA2-PSK/WPA3-SAE	Security Mode	WPA2-PSK/WPA3-SAE	
Encrypt Algorithm	AES *	Encrypt Algorithm	AES 👻	
SSID Hidden	Enable	SSID Hidden	Enable	
Save				

Figure 17 - Guest WiFi settings page

The Guest WiFi page provides you with the option of configuring up to six guest networks in total; three on the 2.4GHz band and three on the 5GHz band. Refer to *Table 3 – Main WiFi – Descriptions* for a description of each field.

Each wireless network should run a unique SSID (network name) so that it is easily identifiable when a scan for nearby networks is performed.





## Advanced

To access this page, select WiFi from the menu on the left, then choose Advanced from the submenu.

The Advanced page has two separate subsections: WiFi Settings and WPS Settings

### WiFi Settings

These Wi-Fi configuration options can be used to adjust advanced settings to suit your environment.

The default settings are the ideal settings.



Only make changes in this section if you understand /  $\mathbb{N}$  Important – the impact of those changes. Any changes could result in lower performance.

WIFIS	settings			
enviro	e Wi-Fi configuration options onment. The default setting apact of your changes as th <b>2.4GHz</b>	is are the ideal settings. (	Dnly	change these if you understand
	802.11 Mode	802.11b/g/n/ax	٣	
	Channel Width	40 MHz	*	
	Country Code	New Zealand	*	
	Max Clients	32		(Maximum:32)
	MU-MIMO	• Enable O Disable		
	TWT	C Enable O Disable		
	OFDMA	• Enable O Disable		
	Beamforming	• Enable • Disable		
	WiFi Power	High	*	
	5GHz			
	802.11 Mode	802.11a/n/ac/ax	*	
	Channel Width	80 MHz	*	
	Country Code	New Zealand	Ŧ	
	Max Clients	64		(Maximum:64)
	MU-MIMO	• Enable O Disable		
	TWT	Enable ODisable		
	OFDMA	• Enable • Disable		
	Beamforming	O Enable O Disable		
	WiFi Power	High	*	
	Save			

Figure 18 - WiFi – Advanced Settings



### **WPS Settings**

2.4GHz		
WPS Status	Enable	v
	Start WPS	
5GHz		
WPS Status	Enable	Ŧ
	Start WPS	

Use the WPS function to easily connect a wireless device to your gateway using WiFi.

Figure 19 - WiFi - MAC Filter

To ensure the WPS functionality is working, select **Enable** from the **WPS Status** drop down list for either 2.4GHz or 5GHz or both.

For either the 2.4GHz or 5GHz WiFi press the WPS function button both devices within 2 minutes of each other to connect them.





### **MAC Filter**

You can filter access for devices based on the unique MAC address of each electronic device. The **MAC Filter** function allows you to either **Allow** the specified MAC addresses or **Block** other specified MAC addresses.

To access this page, from the menu on the left, select WiFi, then MAC Filter.

The first step is to open the MAC Restrict Mode drop-down list and select either Allow list or Block list and add a new rule that either allows or blocks the specific MAC address of a unique device.

MAC Filter			
Here you can create a list of devi the wireless network on the CF4		her allowed or blocked form conne	cting to
MAC Restrict Mode	Disable		
	Disable		
	Allow list		
Save	Block list		

Figure 20 - WiFi - MAC Filter - Select Mode

The **Add Rule** page requires the entry of a meaningful Device Name for the rule as well as the device's unique MAC address.

Add Rule		×
Enter MAC Address Mode	Manual	
Device Name	BestFriendsTablet_0A	
MAC address	2C:54:91:88:C9:E3	
	Close Save	

Figure 21 - WiFi - MAC Filter – Add Rule

The new rule will be added to either the Allow or Block list.

Existing rules can be either edited or deleted from each list by clicking the respective button on the rule's row in the **Device List** table.



# **Network Setting**



This section provides a variety of options for configuring your **WAN** or **LAN** connections.

Figure 22 – Network Setting menu

### WAN

To access this page, **Network Setting** from the menu on the left, then choose **WAN**.

There are three separate sections on the WAN page:

- WAN Info
- WAN Setting
- Default Gateway & Default DNS

#### WAN Info

The topmost section of the WAN page contains the WAN Info table.

Status	Interface	Туре	IP Version	IP Address	VlanID	IGMP/MLD	NAT	Firewall	Delete
Disconnected	wan0_1	IPOE	IPv4/IPv6	N/A	N/A	Disabled	Enabled	Enabled	Ū
Disconnected	wan0_2	IPOE	IPv4/IPv6	N/A	10	Disabled	Enabled	Enabled	Ū

Figure 23 - Network Setting – WAN Info table

The WAN Info table provides details of the WAN connections of your Wi-Fi 6 Gateway.





### **WAN Setting**

WAN Setting				
WAN Interfa	ce	wan0_1	Ŧ	
Service Type	e	IPOE	v	
IP Version		IPv4 & IPv6	Ŧ	
Advanced				
Vlan ID		-1		
MTU		1500		
Firewall		Enable		
NAT		<ul> <li>Enable</li> </ul>		
IGMP/MLD		Enable		
IPv4		DHCP	<b>v</b>	
IPv6		DHCP	Ŧ	
Request IAN	A	Enable		
Request IAF	PD	<ul> <li>Enable</li> </ul>		
Save				

On this page configure standard WAN interface settings.

Figure 24 - Network Setting – WAN Setting page

Click the <u>Advanced</u> link to drop down more settings for the WAN.

### **Default Gateway & Default DNS**

Select either IPv4 or IPv6 to view the respective gateway details.

Default Gateway & Default DNS		
IPv4 / IPv6	2	
Current Gateway	Not Available	
Default Gateway	wan0_1	Ŧ
Current DNS	Not Available	
Default DNS	Auto	Ŧ
Save		

Figure 25 - Network Setting – Default Gateway & Default DNS



## LAN

To access this page, **Network Setting** from the menu on the left, then choose LAN.

There are three separate sections on the LAN page:

- LAN Setting
  - IPv4
  - IPv6
- IP/MAC Binding
- VLAN Setting

#### LAN Setting

This page lets you configure the local network settings of the router for both of the protocols that are supported by the device: IPv4 or IPv6

#### IPv4

LAN Setting	
This page lets you configure the	e local network settings of the router.
IPv4 / IPv6	
MAC Address	D0:DB:B7:55:17:B1
IP Address	192.168.20.1
Subnet Mask	255.255.255.0
DHCP Server	Enable -
DHCP Address Range	192.168.20. 2 ~ 254
DHCP Lease Time	24 Hours 🔹
Save	

Figure 26 - Network Setting – LAN settings for IPv4

The LAN Setting page provides details of the WAN connections of your Wi-Fi 6 Gateway.



#### IPv6

Click the <u>IPv6</u> link to display the LAN settings specific to the IPv6 connection.

AN Setting		
This page lets you configure the	local network settings	s of the router.
IPv4 / IPv6		
Interface Address(prefis length is required)		
ULA Prefix Advertisement	Randomly Generate	v
IPv6 LAN Applications DHCP	Stateless	v
RADVD	💿 Enable 🔵 Disat	ble
Save		

Figure 27 - Network Setting – LAN settings for IPv6

The LAN settings for IPv6page provides configuration options for the Wi-Fi 6 Gateway.

### **IP/MAC Binding**

Use IP/MAC binding to reserve a static IP assignment for a client.

P/MA	C Binding					
		Static IP Address Binding	List		$\oplus$	
	Device Name	Device MAC Address	IP Address	Edit	Delete	
	No data in table.					
	Save					







### Add Static IP Address Binding

Select the add button  $\textcircled{\oplus}$  in the Static IP Address Binding List heading bar to open the configuration popup box:

Static IP Address Bind	ling List	×
Select Binding Device		•
MAC address	80:e8:2c:9d:8d:7d	
IP Address	192.168.20.78	
	Close	Save

Figure 29 - Advanced Setup – Add Static IP Address Binding list dialog

Enter the device MAC address and IP address, then select the **Save** button to add the binding. The device appears in the **Static IP Address Binding List**. Select the **Save** button below the list to finalise the addition of the new binding.

S	tatic IP Address Bindir	ng List		$(\neq)$
Device Name	Device MAC Address	IP Address	Edit	Delete
	80:e8:2c:9d:8d:d7	192.168.20.78		Ū

Figure 30 - Advanced Setup – Add Static IP Address Binding list - Save

### **VLAN Settings**

Create a Virtual Local Area Network (VLAN) custom network from one or more existing LANs.

VLAN Binding List(-)InterfaceVLAN IDDeleteLAN23232III	VLAN	Settings			
			VLAN Binding I	List	$\oplus$
LAN2 3232			Interface	VLAN ID	Delete
			LAN2	3232	Ū

Figure 31 - Network Setting - LAN - VLAN Settings



### Add a VLAN Binding

Add Rule			×
Select a Interface Port	LAN2		Ŧ
VLAN ID	123456		
	Close	Save	

Click the add button ⊕ in the VLAN Binding List heading bar to open the Add Rule popup box:

Figure 32 - Advanced Setup – Add VLAN Binding Rule dialog

Enter the new VLAN details. Select an Interface Port from the drop down list and create a VLAN ID [the ID must be a number between 3-4094].

Click the Save button to add the rule to the VLAN Binding List.



# **Advanced Setup**



This section provides a variety of options for configuring system related settings.

Figure 33 – Advanced Setup menu

## **Firewall**

The Stateful Packet Inspection (SPI) Firewall and Denial of Service (DOS) Protection options provide you with important protection from malicious attacks.

To access this page, Network Setting from the menu on the left, then choose Firewall.

There are two separate sections on the LAN page:

- Firewall
- Firewall Rules





### Firewall

Firewall	
	on (SPI) Firewall and Denial of Service (DOS) Protection portant protection from malicious attacks.
SPI Firewall Settings	Enable
DoS Protection	Enable
Save	

To access this page, select **Advanced Setup** from the menu on the left, then choose **Firewall** from the submenu.

Figure 34 - Advanced Setup – Firewall

The Firewall section provides two options for protection from malicious attacks.

Select 🗹 Enable to apply Stateful Packet Inspection (SPI) measures to your firewalls.

You can also select **Enable** to apply Denial of Service (DOS) Protection.

Click the Save button to apply the selected protective measures to all the Firewalls.

### **Firewall Rules**

Firewall Rules may be created to allow or block traffic on your network.

Firewa	all Rules									
Firewa	all rules may be cre	ated to all	ow or block traffic on	your network.						
	Firewall		Enable		Ŧ					
				Firewall Rule	S					(+)
	Rule Name	IP Version	Source IP Address	Dest IP Address	Protocol	Source Port	Dest Port	Target	Edit	Delete
	No data in table.									
	Save									

Figure 35 - Advanced Setup – Firewall Rule list

This table provides configuration details of all Firewall Rules.

#### Add Firewall Rule

Click the add button 🕀 in the Firewall Rule List heading bar to open the Add Firewall Route popup box:

Add Rule		×
Rule Name	rule_1	
IP Version	IPv4 •	
Source IPv4 Address	[ip, ip/mask, or ip range(ip1-ip2)]	
Dest IPv4 Address	[ip, ip/mask, or ip range(ip1-ip2)]	
Protocol	TCP/UDP •	
Source Port	[port or start-end]	
Dest Port	[port or start-end]	
Source Interface	All Interface 🔹	
Dest Interface	All Interface 🔹	
Target	Drop -	
	Close Done	

Figure 36 - Advanced Setup – Add Firewall Rule

Create a meaningful Rule Name and enter the Firewall configuration options for the new rule.

Click the **Done** button to add the rule to the **Firewall Rules** list.

#### Edit/Delete Rule

To edit an existing rule in the list, click the rule's edit button  $\square$ , a popup box with he same fields as the Add Rule dialog will open.

To permanently remove an existing rule in the list, click the rule's delete button  $\overline{\mathbb{U}}$ .





## DMZ

The DMZ function allows you to place a specific local device in a "Demilitarized Zone", i.e. fully open to the internet.



To access this page, select **Advanced Setup** from the menu on the left, then choose **DMZ** from the submenu.

DMZ	
, ,	lace a specific local device in a "Demilitarized Zone", i.e. fully open s carries risks as all packets are forwarded directly to this device.
DMZ	Enable
DMZ Host	NTCLT0283 -
Host IP	192.168.20.78
Save	

Figure 37 - Advanced Setup – DMZ

To enable a DMZ on a specific, select the **Z** Enable button, then select its DMZ Host and enter its Host IP address.

Click the Save button to apply the DMS to the specified device.





## ALG

The device supports a number of Application Layer Gateways (ALGs).

To access this page, select **Advanced Setup** from the menu on the left, then choose **LAN** from the submenu.

ALG		
Select the ALG below	N	
FTP	Enable	O Disable
TFTP	Enable	O Disable
IRC	Enable	O Disable
H323	Enable	O Disable
SIP	O Enable	O Disable
RTSP	Enable	O Disable
PPTP	Enable	O Disable
SNMP	Enable	O Disable
Save		

Figure 38 - Advanced Setup – ALG

To enable a gateway type, select the O Enable radio button.

## UPnP

Universal Plug and Play (UPnP) is a way of quickly forwarding the ports in use to other devices on a network automatically with one setting change and no additional configuration needed.

UPnP Port Forwarding is widely used by many network devices, allowing them to communicate with each other more efficiently and to automatically create workgroups for data sharing, among other applications.





To enable this service, select **Advanced Setup** from the menu on the left, then choose **UPnP** from the submenu.

PnP					
JPnP i	s activated	only when there is a	live WAN ser	vice with NAT e	nabled.
	UPnP	🖌 E	nable		
		UPn	P Port Mappi	ng	
	Protocol	Application Name	Client IP	Internal Port	External Port
	No data in table.				

Figure 39 - Advanced Setup – UPnP

Important - UPnP is activated only when there is a live WAN service with NAT enabled.

To enable a UPnP, select the **C** Enable button.

Details of UPnP port mapping appear in the data table.

## Routing

To access this page, select **Advanced Setup** from the menu on the left, then choose **Routing** from the submenu.

<b>Route</b> g Static Route (A max	imum 32 entries can be c	onfigured)			
	Static Route List				$\oplus$
Destination IP Address	Default Gateway	Interface	Metric	Edit	Delete
No data in table.					
Save					

Figure 40 - Advanced Setup – Static Route Rule list

This table provides configuration details of all **Static Routes**. A maximum of 32 routes can be specified.



#### Add Static Route

IP Version:	IPv4	,
Destination IP Address (/Prefix Length) :		
Interface:	LAN	
Default Gateway:		
Metric:		

Click the add button 🕀 in the Static Route List heading bar to open the Add Static Route popup box:

Figure 41 - Advanced Setup – Add Static Route

Click the Save button to add the rule to the Static Route list.

#### Edit/Delete Rule

To edit an existing route in the list, click the rule's edit button  $\mathbf{\Sigma}$ , a popup box with he same fields as the Add Static Route dialog will open.

To permanently remove an existing rule in the list, click the rule's delete button  $\overline{\mathbb{U}}$ .

### DNS

Dynamic DNS (DDNS) allows your router to associate an easy-to-remember domain name such as **[YourDomainName].com** with the regularly changing IP address assigned by your Internet Service provider. This feature is helpful when running a virtual server.

To access this page, Network Setting from the menu on the left, then choose DNS.

There are two separate sections on the **DNS** page:

- Dynamic DNS
- DNS Proxy





### **Dynamic DNS**

when running a virtual serve		iternet Service provider. This fea	
DDNS Status	Enable		
Status	Disconnected		
Server Address	no-ip.com	v	
Host Name			
Username			
Password		Ŵ	
Timeout	24	hours	

On this page you can set your own domain name.

Figure 42 - Advanced Setup – Dynamic DNS

You can also add a password and set a period after which the account will time out and close if there is no activity.

#### **DNS Proxy**

To access this page, from the menu on the left, select Advanced Setup, then LAN.

DNS Proxy	
DNS Proxy	Enable
Host name of the Broadband Router	CF40MESH
Domain name of the LAN network	home
Save	

Figure 43 - Advanced Setup – DNS Proxy


# **Virtual Server**

A Virtual Server allows you to direct incoming traffic from the WAN interface (identified by its Protocol and External port) to the Internal server with a private IP address on the LAN interface.

To access this page, select **Advanced Setup** from the menu on the left, then choose **Virtual Server** from the submenu.

Virtual Server allows you to direct incoming traffic from the WAN interface (identified by its Protoc and External port) to the Internal server with a private IP address on the LAN interface. Device name Local IP address Internal port External port Protocol Edit Delete No data in table.	Virtual Server						
Device name Local IP address Internal port External port Protocol Edit Delete							
			Device list				$\oplus$
No data in table.	Device na	ame Local IP address	Internal port	External port	Protocol	Edit	Delete
			No data i	n table.			
Save	Save						

Figure 44 - Advanced Setup – Virtual Server Device List table

The **Device List** provides details of each virtual server.

### Add Virtual Server Rule

Click the add button  $\textcircled{\oplus}$  in the **Device List** heading bar to open the **Add Rule** popup box:

Add Rule		×
Service name	Office-City	
Host IP	192.622.0.1	
Protocol type	TCP/UDP	•
Internal port	1411	
External port	1551	
	Cancel	Save

Figure 45 - Advanced Setup – Add Virtual Server Rule dialog

Click the Save button to add the rule to the Virtual Server Device list.



#### Edit/Delete Rule

To edit an existing rule in the list, click the rule's edit button  $\mathbf{\Sigma}$ , a popup box with he same fields as the Add Rule dialog will open.

To permanently remove an existing rule in the list, click the rule's delete button  $\overline{\mathbb{U}}$ .

# **Parental Control**

Parental control can be used to restrict internet access to certain website and also based on time.

To access this page, select **Advanced Setup** from the menu on the left, then choose **LAN** from the submenu.

arental Control						
arenta	al control can be used	d to restrict intern	et access to certain web	osite and also based on time.		
			Parental Control List			$\oplus$
	Description	Devices	Prohibited websites	Allow Internet Access Time	Edit	Delete
	ChildrenStudyTime	NTCLT0283	www.facebook.com	17:30-23:00 Sun,Fri,Sat		Ū

Figure 46 - Advanced Setup – Parental Control List table

The Parental Control List provides details of each control rule that you have created.

### Add Parental Control Rule

Click the add button  $\oplus$  in the **Parental Control List** heading bar to open the **Add Rule** popup box:

Add Rule		×
Description:	ChildrenStudyTime	
Devices:	*NTCLT0283	
Allow Internet Access Tim	e	
Days:	Sun Mon Tues Wed Thur Fri Sat	
Time:	17 • : 30 • to 23 • : 00 •	
Prohibited websites		
www.facebook.com		×
www.twitter.com		Add
	Close	Save

Figure 47 - Advanced Setup – Add Parental Control Rule

Click the Save button to add the rule to the Parental Control List.





### Edit/Delete Rule

To edit an existing rule in the **Parental Control List**, click the rule's edit button , a popup box with he same fields as the **Add Rule** dialog will open.

To permanently remove an existing rule in the list, click the rule's delete button  $\overline{\mathbb{II}}$ .

# QoS

To access this page, Network Setting from the menu on the left, then choose QoS.

There are four separate sections on the **QoS** page:

- Basic QoS
- Queue
- Classification
- Port Shaping

### Basic

To access this page, from the menu on the left, select Advanced Setup, then QoS.

The first section allows you to **Performance** or **Disable** the QoS functionality and select a default **DSCP Mark**.

Basic	
To use QoS, check the QoS Enab incoming traffic without referen	ble checkbox then select a default DSCP mark to classify nce to a particular classifier.
QoS Enable	Enable
Select Default DSCP Mark	default(000000) •
Save	

Figure 48 - Advanced Setup – Basic QoS section

Click the Save button to add the rule to the apply those settings.



### Queue

To access this functionality select **Advanced Setup** from the menu on the left, then **QoS** from its submenu.

The second section of the page contains a **Queue List** showing a maximum of eight queues that can be configured. for each Ethernet interface.

	Qu	eue List			$\oplus$
Name	Interface eth1 👻	Prec/Alg	Shaping Rate (bps)	Enable	Delete
WAN Q1	eth1	1/SP			Ū
WAN Q2	eth1	2/SP			Ū
WAN Q3	eth1	3/SP			Ū
WAN Q4	eth1	4/SP			Ū
WAN Q5	eth1	5/SP			Ū
WAN Q6	eth1	6/SP			Ū
WAN Q7	eth1	7/SP			Ū
WAN Q8	eth1	8/SP			Ū

Figure 49 - Advanced Setup – LAN

Select **C** Enable to apply the queue to the selected Ethernet interface.

To permanently remove an existing rule in the list, click the rule's delete button  $\overline{I\!\!I\!}$ .



### Add Queue Rule

Name	WAN 04	
Enable	Enable	Ŧ
Interface	eth0.3	Ŧ
Queue Precedence		~
Shaping Rate	-1	[1-965 Kbps] (-1 indicates no shaping)

Click the add button  $\oplus$  in the **Queue List** heading bar to open the **Add Rule** popup box:

Figure 50 - Advanced Setup – LAN

As a maximum number of eight queues are allowed at any time, select one of the eight **Interfaces** to edit. Click the **Save** button to make changes to the queue.

### Classification

To access this functionality select **Advanced Setup** from the menu on the left, then **QoS** from its submenu.

The third section of the page contains a **Classification List**.

Classi	fication					
Classif	ication					
		Classification List				$\oplus$
	Class Name	Enable	Interface	Order	Edit	Delete





### Add Classification Rule

Click the add button 🕀 in the Classification List heading bar to open the Add Rule popup box:

Add Rule			×
Traffic Class Name :			
Rule Order :	Last	Ŧ	
Rule Status	Enable	Ŧ	
Ingress Interface :	LAN	Ŧ	
Ether Type :		Ŧ	
Specify Egress Interface (Required) :		Ŧ	
Specify Egress Queue (Required) :		Ŧ	
Mark Differentiated Service Code Point (DSCP) :		Ţ	
Mark 802.1p priority :		Ŧ	
Set Rate Limit(kbps) :		[Kbits/s	]
	Cancel	Save	

Figure 52 - Advanced Setup – LAN

Click the Save button to make changes to the classification rule.





## **Port Shaping**

QoS port shaping supports traffic shaping of Ethernet interface.

To access this functionality select **Advanced Setup** from the menu on the left, then **QoS** from its submenu.

The fourth section of the page contains a table showing **Port Shaping** details.

Interface	Туре	Shaping Rate (Kbps)	Burst Size (bytes)
eth1	WAN	50000	16000
LAN1	LAN	-1	0
LAN2	LAN	-1	0
LAN3	LAN	-1	0
LAN4	LAN	-1	0

Figure 53 - Advanced Setup – LAN

Note that if **Shaping Rate (Kbps)** is set to '-1', it means no shaping and **Burst Size (bytes)** will be ignored.

Enter new settings into the fields and click the **Save** button to make changes to the **Port Shaping** settings.





# Management



This section provides a variety of options for configuring system related settings.

Figure 54 – Management menu

# System

To access this page, select **Management** from the menu on the left, then choose **System** from the submenu.

There are three separate sections on the **System** page:

- Reboot and Reset
- Backup and Restore
- Timeout





## **Reboot and Reset**

Reboot the DeviceRebootRestore Default SettingsRestore	Reboot And Reset		
Restore Default Settings Restore	Reboot the Device	Reboot	
	Restore Default Settings	Restore	

Click the **Reboot** button to turn the device off and then back on using the existing settings.

Figure 55 - Management – System – Reboot and Reset page

If the problem you are troubleshooting persists, click the **Reset** button to delete current user defined settings and reapply all factory default settings. This will permanently delete all current settings.



We recommend that prior to clicking the **Restore** button you create a backup file which you can later use to restore those settings
Note – should the problem not be solved by restoring the factory default settings.
See next section for the **Backup** and **Restore** process.

## **Backup and Restore**

### Backup

Click the **Backup** button to create a backup file which contains all the current settings.

Backup And Restore		
Backup Settings	Backup	
Update Settings	Select File	NETCOMM-CF40_A1-20221019-backup.tar.gz
	Update	

Figure 56 - Management – System –Backup and Restore page

A file with device details and the **-backup.tar.gz** file extension will be downloaded into your browser's default download folder.

### Restore

If required to return the system's configuration to what it was prior to **Resetting** the device, first click the **Select File** button to select the backup file from the browser's default download folder [or another location if you have moved it].

When a valid backup file has been selected, the **Update** button will appear.

Click the Update button to reapply the previously defined user settings.



The process will take a few minutes and the following progress indicator will appear:



Figure 57 – Restore progress indicator

When the process is over the backup file's settings will over-write any differing factory default settings.

## Timeout

Enter the amount of time that the device can remain logged up when no interaction has occurred.

Timeout		
Enter the time in seconds	for an idle web interface login se	ession to remain before it is logged out.
Timeout	18000	(300-86400 sec)
Save		

Figure 58 - Management – System –Timeout page

The time is entered in seconds, for example if you want to set the unattended **Timeout** time to 5 hours enter:

**18,000 seconds** which = 300 minutes (seconds/minutes) which = 5 hours (minutes/hours)

## **Firmware Update**

From time to time the firmware on the device will be updated by the manufacturer and distributed to current users in an image file.

If you become aware of a new firmware version image file, download it and put it into a known location.

To access this page, select **Management** from the menu on the left, then choose **Firmware Update** from the submenu.



Figure 59 - Management – LAN





Click **Select Firmware** button, navigate to the folder where the downloaded file was saved.

Select the firmware update image file and click the **Open** button. Once successfully uploaded, the filename will appear to the left of the **Select Firmware** button and the **Update** button to install the firmware.

If you want to remove the existing firmware image files select  $\checkmark$  Clear current configuration permanently delete the previous firmware files.

# TR-069

The WAN Management Protocol (TR-069) allows an Auto-Configuration Server (ACS) to remotely perform auto-configuration, provision, collection, and diagnostics to this device.

To access this page, select **Management** from the menu on the left, then choose **TR-069** from the submenu.

By default the TR-069 functionality is disabled, select **C** Enable to display the following settings fields:

	-069) allows a Auto-Configuration Server (ACS) to perform ollection, and diagnostics to this device.
TR-069	Enable
ACS URL ACS Username	
ACS Password	0
Inform	Enable
Inform Interval	86400
Connection Request Authentication Connection Request Username	Enable
Connection Request Password	$\bigcirc$
Connection Request Port	30005
Connection Request URL	
Save	

Figure 60 - Management -TR-069 - display settings

Select **C** Enable for either Inform or Connection Request Authentication to apply additional security settings.

Click the Save button to allow TR-069 access based on those settings.



# Time

To ensure the accuracy of the system time, synchronize the router's system time with the network time. You can also elect to use **Daylight Saving Time** if it applies to your area.

To access this **Time Setting** page, select **Management** from the menu on the left, then choose **Time** from the submenu.

Time Setting	
The network time is mainly used to ensure the accuracy of the sy	to synchronize the router's system time with the network time stem time.
Current Time	2022/10/19 05:24:16 Wednesday
Status	Not Synchronized
NTP Sync Enable	Enable
First NTP time Server	0.netcomm.pool.ntp.org
Second NTP time Server	1.netcomm.pool.ntp.org
Third NTP time Server	
Fourth NTP time Server	
Time Zone Offset	(GMT+12:00) Auckland, 🔻
Daylight Saving Time	Enable
Save	

Figure 61 - Management – Time Setting page

Click the Save button to add the rule to the apply those settings.





# Access Control

To access this page, **Management** from the menu on the left, then choose **Access Control f**rom the submenu.

There are two separate sections on the **Access Control** page:

- Services Control
- Access List

## **Services Control**

The Services Control page allows you to enable or disable the services running on the router:

ervices Control				
he Services Control L	ist allows y	ou to enable	or disable th	ne services running on the route
Services	LAN	Port	WAN	Port
HTTP	~	80		80
HTTPS	~	443		443
SSH		22		22
ICMP				
Save				

Figure 62 - Advanced Setup – Access Services Control page

Click the **Save** button to add the rule to the apply those settings.



## Access List

The IP Address Access Control mode, if enabled, permits access to local management services from the WAN side IP addresses contained in the Access Control List.

If the Access Control mode is disabled, the system will not validate the WAN side IP addresses for incoming packets. The services affected are the system applications listed in the Service Control List.

addresses contained	in the Access Con	trol List. If the Acce	ess Control mod	anagement services fr e is disabled, the syste applications listed in th	m will not validate th
Access List Mode	e Ena	ble	v		
	Access List	Rules	$\oplus$		
IP Add	ress	Subnet Mask	Delete		
	No dat	a in table.			
Save					
3476					

Figure 63 - Management – Access Rules List

Click the Save button to Enable or Disable the rules described in the table for this functionality.

### Add Access Rule

Click the add button in the **Access List** heading bar to open the **Add Rule** popup box:

Add Rule		×
IP Address		
Subnet Mask		
	Close	Done

Figure 64 - Advanced Setup – Add Access Rule dialog

Click the **Done** button to add the new rule to the **Access List** table.



# Account

Access to your broadband router is controlled through your admin account.

The username 'admin' has unrestricted access to change and view configuration of your Broadband Router.

To access this page, select **Management** from the menu on the left, then choose **Account** from the submenu.

Account		
The username 'admin' has unrestr	s controlled through your admin accoun icted access to change and view configu 16 characters and click 'Save' to change	
Current Username	admin	
New Username	admin	
Current Password		
New Password		
Confirm Password		
Save		

Figure 65 - Management – Account access settings

Enter up to 16 characters in each of the fields.

The Passwords cannot contain spaces. (กิ` Note -Also the **Passwords** are case-sensitive.

Click the Save button to add the rule to change your username and/or password.

# LED Control

In some environments, for example is a bedroom, the continuous display of LED lights can be undesirable. The LED Control setting allows you to turn on or off LED indicator display on the top panel of the router.

To access this page, select **Management** from the menu on the left, then choose **LED Control** from the submenu.

LED Control	
Select whether the I	ED indicators on the panel of the router are turned on or off.
LED Status	<b>O</b> n <b>O</b> ff
Save	

Figure 66 - Management – LED display controls



To allow the LEDs to display select the **O** On radio button.

To turn off the LED display select the  $\bigcirc$  Off radio button.

Click the Save button to apply the setting.

# Diagnostics

To check the connection automatically, type in a host name or an IP Address and the perform either a **Ping** or **Traceroute** diagnosis and click the **Start** button.

To diagnose any connection issues, select **Management** from the menu on the left, then choose **Diagnostics** from the submenu.

liagnostics		
'lease type in a host name or a utomatically.	n IP Address. Click Ping	or Traceroute to check the connection
Diagnostics Mode	🗿 Ping 🔵 Tracerou	ute
Host Name or IP Address	192.158.1.38	
Ping Number	4	1-50
Ping Size	64	4-1472 Bytes
Ping Timeout	2	1-3s
Start		
PING 192.158.1.38 (192.158. ping: sendto: Network unre		

Figure 67 - Management – Diagnostics

The following progress indicator will appear while the test is in progress.



Figure 68 – Diagnosis in progress icon



# System Log

The Systems Log records a range of types of the device's operation and equipment exceptions

To access this page, select **Management** from the menu on the left, then choose **System Log** from the submenu.

Log	Enable		
External Server	Disable	Ţ	
Save			
Log Level	Info		
Dat	e	Level	Content
Wed Oct 19 05:	39:02 2022	Notice	daemon.notice netifd: wan6_2 (2292): Get return 5120ct/19/2022 05:
Wed Oct 19 05	:39:14 2022	Notice	daemon.notice netifd: wan6 (2286): Get return 5120ct/19/2022 05:39
Wed Oct 19 05	39:14 2022	Notice	daemon.notice netifd: wan6_2 (2292): Get return 5120ct/19/2022 05:
Wed Oct 19 05	39:27 2022	Notice	daemon.notice netifd: wan6_2 (2292): Get return 5120ct/19/2022 05:
Wed Oct 19 05	39:27 2022	Notice	daemon.notice netifd: wan6 (2286): Get return 5120ct/19/2022 05:39
Wed Oct 19 05:	39:39 2022	Notice	daemon.notice netifd: wan6_2 (2292): Get return 512Oct/19/2022 05:
۲			•

Figure 69 - Management – System Log

This page allows you to **Enable** or **Section** disable the log and to specify what **Log Level** (type of information) you want to display in the table (**Debug**, **Info**, **Notice**, **Warning**, **Error**, **Critical**, **Alert** or **Emergency**).

Three buttons at the bottom of the page control logging operations:

		Export system log	Refresh Logs	Clear Log
		4m		
NETCOMM-CF40log	~			

*Figure 70 - Management – Logging option buttons* 



## Refresh

After changing the Log Level click the Refresh Logs button to update the log with the most recent data for that type of data.



Figure 71 – Refreshing logs progress indicator

## **Export System Log**

Once the logging is complete, click the Export System Logs button to save a text .log file into your browser's default **Download** folder.

### Clear

Click the **Clear Logs** button to delete all current logged data.





# **Appendix A – Safety and Compliance**

<b></b>

### Location

- The device is designed for indoor use only.
- Place the device in a central location for the best WiFi performance.

### Airflow



- Do not restrict airflow around the device.
- The device is air-cooled and may overheat if airflow has been restricted.
- Always allow minimum clearance of 5cm around all sides and the top of the device.
- The device may become warm during normal use.
- Do not cover, do not put in an enclosed space, do not put under or behind large items of furniture.

### Environment

- Do not place the device in direct sunlight or any hot areas.
- The safe operating temperature of the device is between 0° and 40°C
- Do not allow the device to come in contact with any liquid or moisture.
- Do not place the device in any wet or humid areas such as kitchen, bathroom or laundry rooms.



#### **Power Adaptor**

- Always use the power adaptor that came with the device.
- You should immediately stop using the power adaptor if the cable or power adaptor is damaged.



#### Service

- Do not attempt to disassemble, repair, or modify the device.
- There are no user-serviceable components in the device.









### Small Children

- Do not leave the device or its accessories within the reach of small children or allow them to play with it.
- The device may contain small parts with sharp edges that could cause an injury or which could become detached and create a choking hazard.

### **RF Exposure**



- The device contains a transmitter and a receiver. When it is on, it receives and transmits RF energy.
- The device conforms with the radio frequency (RF) exposure limits adopted by the Australian Communications and Media Authority (ACMA), when used at a distance of not less than 20 cm from the body.

## **Product Handling**

- Always treat the device and its accessories with care and keep them in a clean and dust-free place.
- Do not expose the device or its accessories to open flames.
- Do not drop, throw or try to bend the device or its accessories.
- Do not use harsh chemicals, cleaning solvents, or aerosols to clean the device or its accessories.
- Do not paint the device or its accessories.
- Please check local regulations for disposal of electronic products.
- Arrange power and network cables in a manner such that they are not likely to be stepped on or have items placed on them.





