

TELSTRA Smart Modem DJA0230

Disclaimer

This is not an official document. I am not employed by Telstra nor am I an IT professional. I wrote this document because of the lack of a manual or any set up information on Telstra's Web Site. I don't guarantee the accuracy of its content. What worked for me might not work for you.

Table of Contents

1. [Lights and Buttons](#)
2. [Gateway Connections](#)
3. [Login and Home Screen](#)
4. [Change Gateway's Login Password](#)
5. [Telstra's Internet User Name and Password](#)
6. [Parental Control](#)
7. [Connecting Wi-Fi devices](#)
8. [Address Reservation \(Static LAN IP Address\)](#)
9. [Port Forwarding](#)
10. [Inbuilt Help](#)
11. [Firewall](#)
12. [Reset Gateway or Reboot Gateway](#)
13. [Turn WI-FI OFF or ON](#)
14. [Bridge Mode](#)
15. [Dynamic DNS](#)
16. [Register and De-register a DECT handset](#)
17. [Telephony \(Information and Call Log\)](#)
18. [Remote WEB Access](#)
19. [Wi-Fi MAC Filtering](#)
20. [Management \(Add extra Gateway Logins\)](#)
21. [Change Wi-Fi Channel SSID and Password](#)
22. [Third Party VDSL Modem /Router](#)
23. [DLNA Server and Mass Storage](#)
24. [Traffic Monitor](#)
25. [4G Cellular Backup](#)
26. [Diagnostics \(Fault Finding\)](#)
27. [Change IP Address of Gateway](#)
28. [Gateway Firmware / Software](#)
29. [Gateway's Time Settings](#)
30. [Connecting USB Printer](#)
31. [WiFi Tools](#)
32. [DNS Selection](#)
33. [Specifications](#)
34. [Known Limitations and Bugs](#)

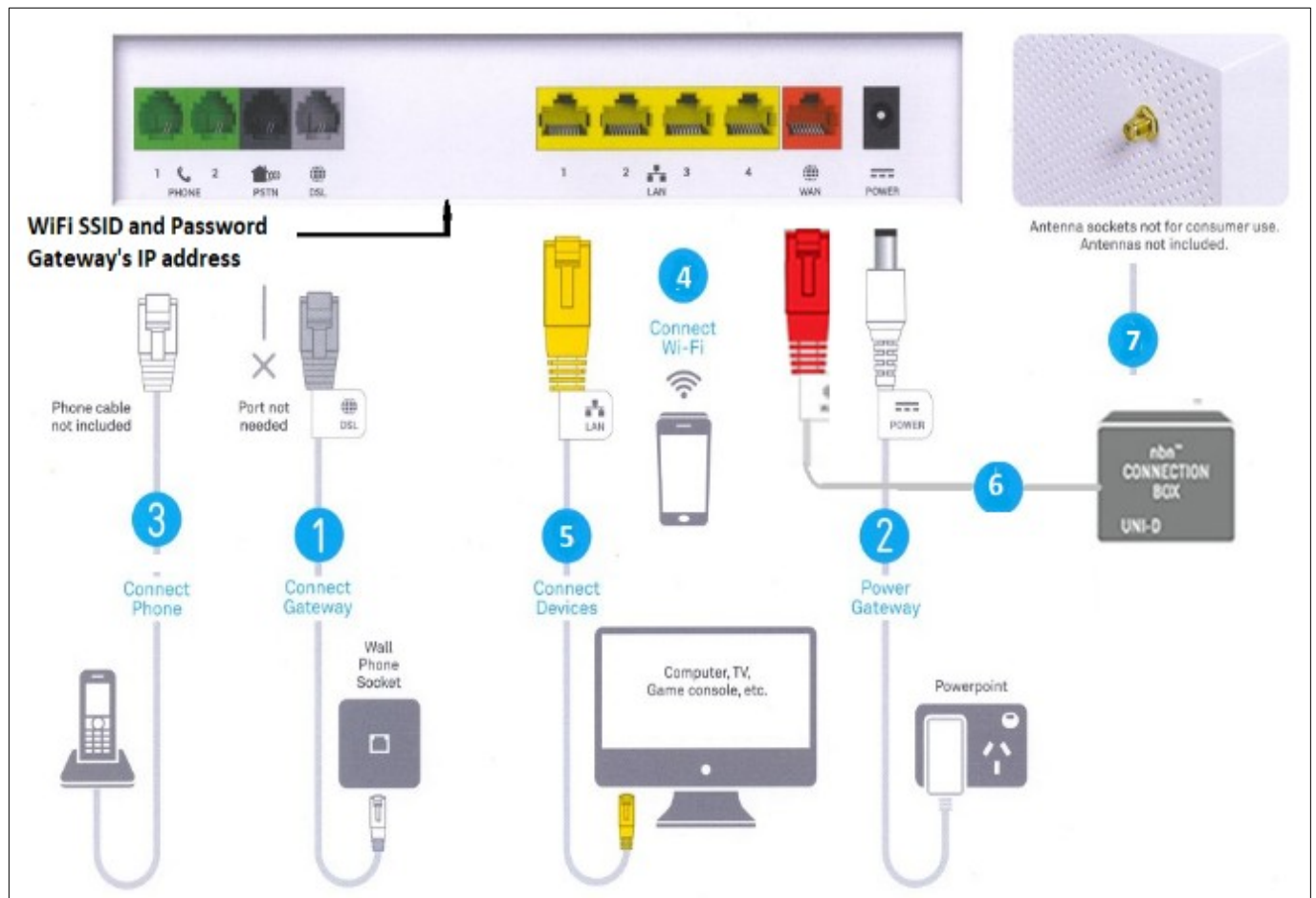
NB: 1. Document needs to be downloaded for internal links to work.
2. IP Address of my gateway has been changed to 192.168.178.1

1. Lights and Buttons:



1. Phone (NBN connections only)
Off: VOIP Phone line not registered
Green: VOIP Phone line registered.
Blue: VOIP Phone in use.
Red: Fault (Reboot gateway)
2. On Line
Off: Not connected to Telstra Server
Mauve: Connected to Telstra Sever via 3G/4G backup
Green: Connected to Telstra Server.
NB: ([See changing Telstra User Name and Password](#))
3. Link
Green: ADSL or VDSL link synchronised. (Working)
Blue: Gateway trying to sync with DSLAM (ADSL) or Node (FTTN).
White: Initialising DSL connection.
Off: ADSL and FTTN connections indicates Gateway can't communicate with DSLAM / Node. (Check connection from Gateway to Telephone Wall Socket).
FTTP or Cable, WAN port not connected.
4. Back Up
Green: Great 4G signal
Orange: Good 4G signal
Red: Limited access
Off: Check Internal Antenna Selected ([4G](#))
5. Wi-Fi
Off: All Wi-Fi Bands turned off.
Green: At least one Wi-Fi Band is turned on.
Press for 5 seconds to turn all Wi-Fi Bands Off.
Press again to turn all Wi-Fi Bands On.
6. Pair
Off: No DECT handset paired to Gateway.
Green: DECT handset or WPS device registered to Gateway
White Blinking: Ready to pair with handset or WiFi device
Red Blinking: Registration unsuccessful
Blue Blinking: Paging paired handsets
To pair a handset or connect to a WPS enabled Wi-Fi device press for 5 seconds. The light will blink White for 2 minutes. During this time the gateway can be paired with a handset or connect to a WPS enabled Wi-Fi device.
To page paired handset press for less than two seconds.
7. Power
Off: Gateway powered Off
Green: Gateway powered On
White: Gateway initialising or updating software.
Press button to toggle between Off and On.
8. Reset
Use a paper clip and press for 10 seconds to reset Gateway
9. USB 3.0 Port for connecting USB flash drives and external hard drives the files of which can be accessed by devices connected to gateway's LAN using DLNA or SMB

2. Gateway Connections

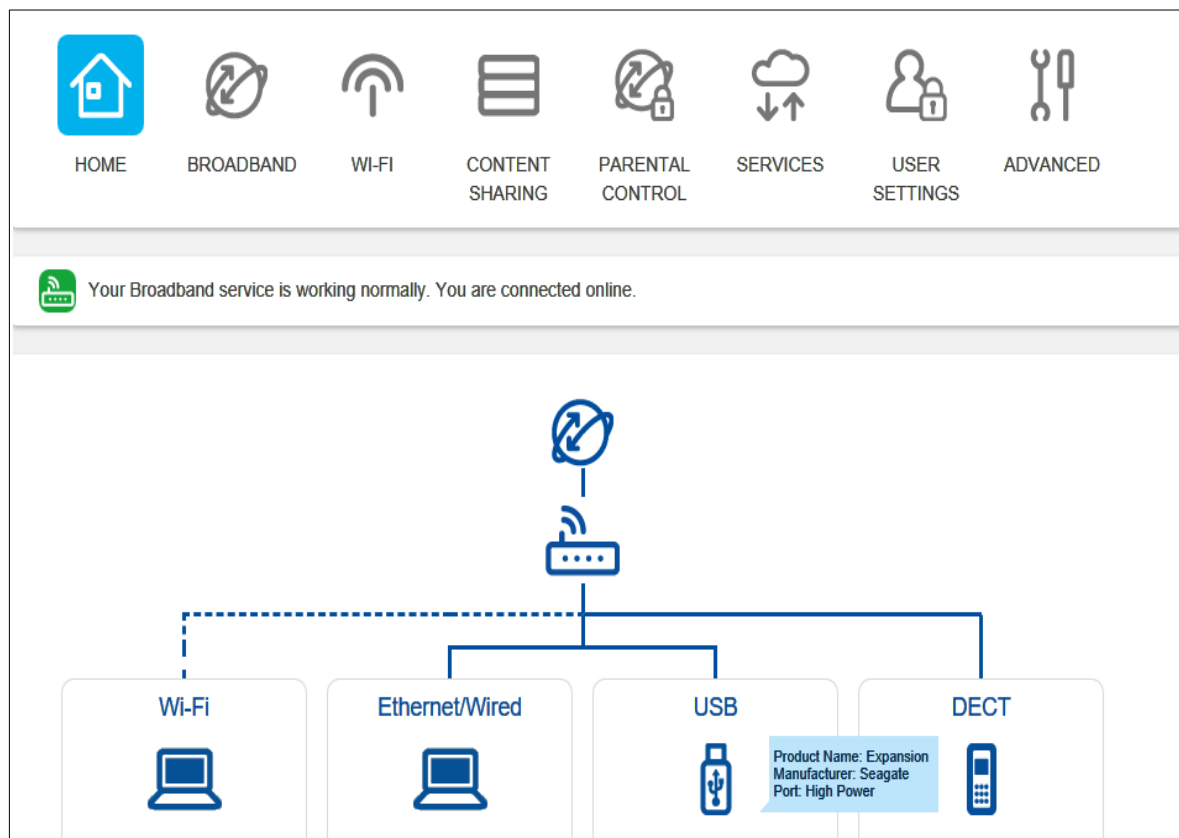


1. DSL Port connected directly to phone socket for FTTN, and FTTB connections and to phone socket via ADSL Filter / Splitter for ADSL connections.
2. Power
3. Two RJ12 phone port for normal phones. Maximum load 3 REN
4. Devices connected to Gateway by Wi-Fi. (Default SSID and Wi-Fi password located on label base of gateway)
5. Four 1 Gigabit LAN port for connecting devices with Ethernet ports
6. 1 Gigabit WAN port for connection to NBN connection Box (FTTP FTTC and Fixed Wireless) NBN Cable Modem (NBN HFC), Cable Adaptor (Telstra Cable) or Optical terminating equipment (Telstra Velocity).
7. External antennae socket for connection 4 G Cellular backup antennae in areas of poor reception. An example antenna is shown below.
<https://www.telcoantennas.com.au/site/9dbi-magnetic-base-antenna>
If using single vertical antenna use back socket on gateway.



3. Login and Home Screen

Open a Web browser and type <http://192.168.0.1> into the address bar and press enter.

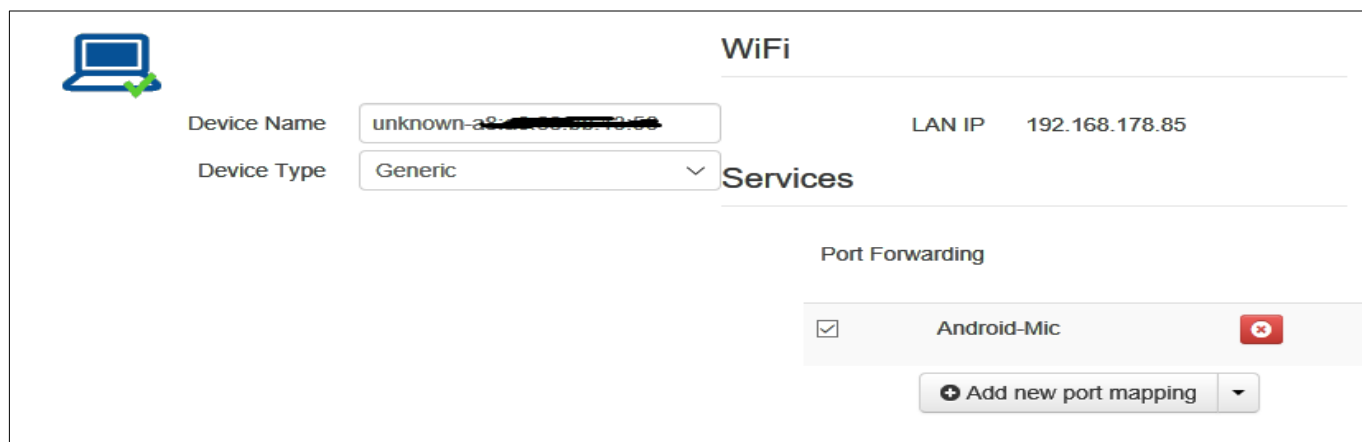


The Basic Home screen has a list off all the connected devices.

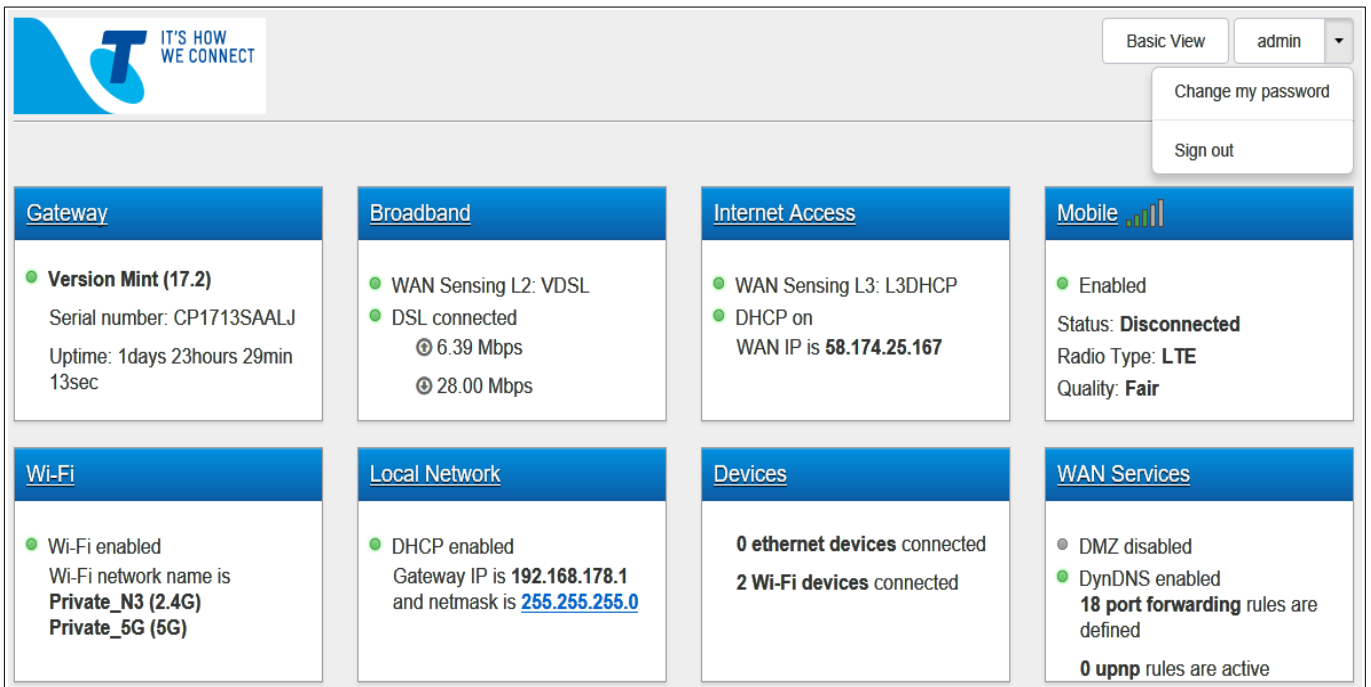
Across the top of the Basic are links to the pages for settings up the main functions on the gateway

If you hover over a device with the mouse pointer information about the device will be displayed.

To learn more or change some settings on a device connected to WiFi or LAN click on the device.



Clicking on “Advanced” top right displays the Advanced Home page



Clicking on “Basic View” takes you back to Basic Home screen.

To log out click on the down arrow to the right of “Admin” and select “Sign Out”

4. Change Gateways Login Password

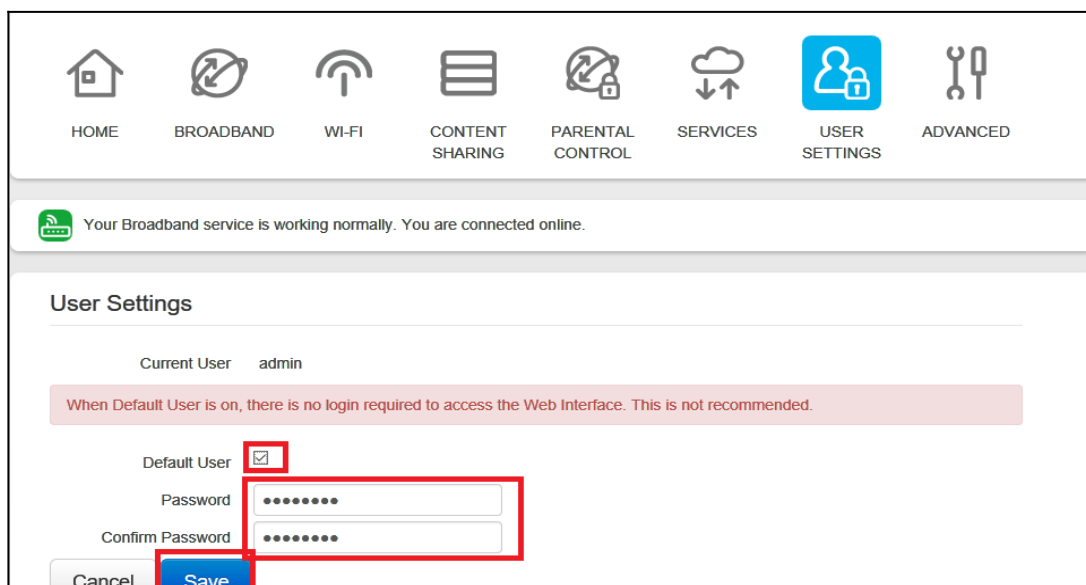
The Gateway by default has no password. It is recommend after log in to the gateway you change the password. If you forget the password gateway will need to be [reset to factory defaults](#)

Click on ‘User Settings’

Remove Tick from “Default User”

Enter a password in “Password” field

Enter the same password in “Confirm Password” field and click on Save



5. Telstra's Internet User Name and Password

If Link Light is green and the On Line light doesn't turn green these are the first settings you should check if you have a **non** NBN service.

Click on Broadband

The User Name is the one provided by Telstra for the internet connection. Example someone@bigpond.com. It is usually is but might not be the same as your Telstra My Account User Name and Password.

The screenshot shows the gateway's broadband settings page. At the top, there is a navigation bar with icons for HOME, BROADBAND, WI-FI, CONTENT SHARING, PARENTAL CONTROL, SERVICES, USER SETTINGS, and ADVANCED. Below this is a status bar indicating "Your Broadband service is working normally. You are connected online." The main content area is divided into two sections: "Connection Information" and "Connection Settings".

Connection Information		Connection Settings	
Status	IPv4 connected	Type	IPoE
	IPv6 disconnected		
Uptime	01:35:11	PPPoE Settings	
Data Transferred	41.57 MB(Sent)	Username	luser@bigpond.com
	16.07 MB(Received)	Password
IPv4 Address	58.174.19.235	Confirm Password
Primary DNS	61.9.226.33	Mode	Always On
Secondary DNS	61.9.226.1		
IPv6 Address	::		

At the bottom of the settings area, there are "Cancel" and "Save" buttons.

6. Parental Control

Log in to gateway and click on Parental Control

The screenshot shows the gateway's parental control settings page. At the top, there is a navigation bar with icons for HOME, BROADBAND, WI-FI, CONTENT SHARING, PARENTAL CONTROL, SERVICES, USER SETTINGS, and ADVANCED. The "PARENTAL CONTROL" icon is highlighted with a red box. Below this is a status bar indicating "Your Broadband service is working normally. You are connected online." The main content area is titled "Time of Day Access Control" and contains a table with columns for Status, Hostname, Start Time, Stop Time, Mode, and Day of week. A red box highlights an "Add New Rule" button at the bottom of the table.

Status	Hostname	Start Time	Stop Time	Mode	Day of week
Add New Rule					

Click on “Add New Rule”

Time of Day Access Control

Status Hostname Start Time Stop Time Mode Day of week

Mon. Tue. Wed. Thu. Fri. Sat. Sun.

Time of day access control

Enabled ON

MAC address

Mode **Allow**
Block

Start Time 00:00

Stop Time 23:59

The DUT will block/allow all the time if none of the days are selected

Day of week Mon. Tue. Wed. Thu. Fri. Sat. Sun.

Add

Make sure enabled is on.

Start typing the MAC or IP address of device in the MAC address field. A list of connected devices is displayed. Select the device you wish to apply a time of day rule to.

Select the Mode. “Allow” will only allow the device internet access during times specified. “Block” will block internet access to device during times specified.

Select “Start Time” and “End Time”.

Place a tick on the left of the days of the week that the rule will apply.

Click on add

Status	Hostname	Start Time	Stop Time	Mode	Day of week	
<input checked="" type="checkbox"/>	Dell-Notebook	00:00	08:45	block	<input checked="" type="checkbox"/> Mon. <input checked="" type="checkbox"/> Tue. <input checked="" type="checkbox"/> Wed. <input checked="" type="checkbox"/> Thu. <input checked="" type="checkbox"/> Fri. <input checked="" type="checkbox"/> Sat. <input checked="" type="checkbox"/> Sun.	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input checked="" type="checkbox"/>	Unknown-	12:00	20:45	allow	<input checked="" type="checkbox"/> Mon. <input checked="" type="checkbox"/> Tue. <input checked="" type="checkbox"/> Wed. <input checked="" type="checkbox"/> Thu. <input checked="" type="checkbox"/> Fri. <input checked="" type="checkbox"/> Sat. <input checked="" type="checkbox"/> Sun.	<input type="button" value="Delete"/> <input type="button" value="Delete"/>

The image above shows two Time of day rules.

The first blocks internet access between midnight and 8.45 am Monday to Sunday.

The second only allows internet access between midday and 8.45 pm Monday to Sunday. Internet access is blocked at all other times.

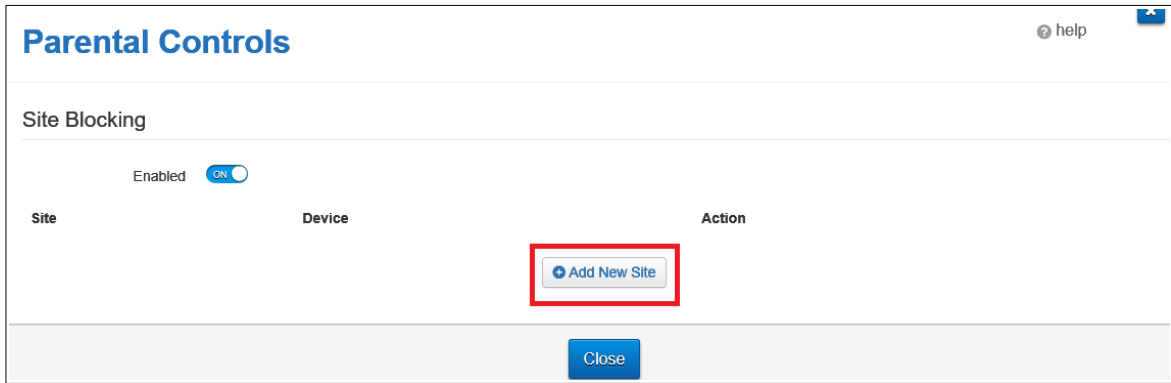
To edit rule click on edit

To delete a rule click on Delete. Note clicking on delete deletes rule immediately with no confirmation message.

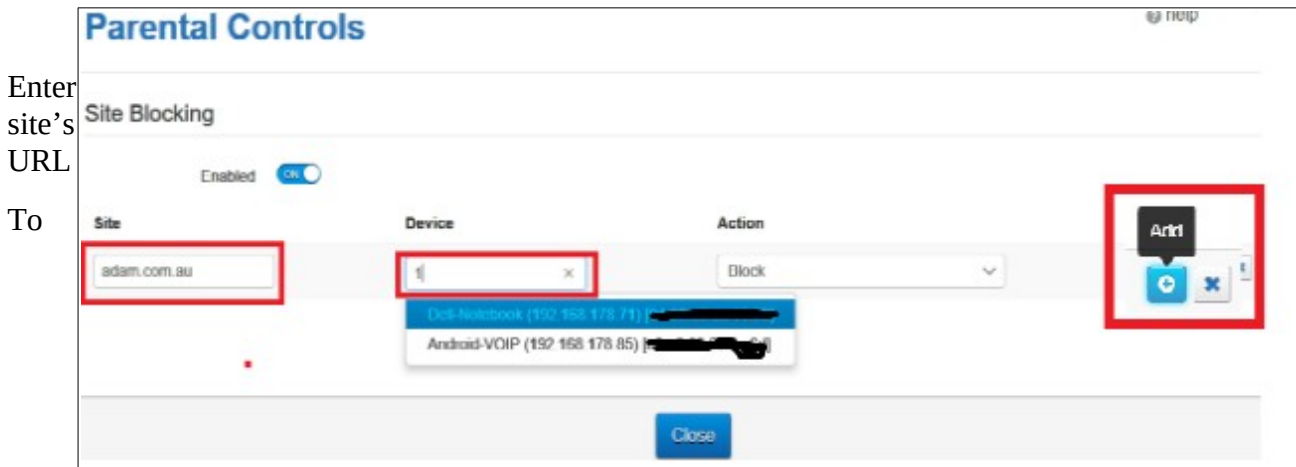
Time of day rules only effect internet access they don't prevent devices connecting to WiFi.

Parental Controls Site Blocking

Log into Gateway and go to Advanced > Parental Controls

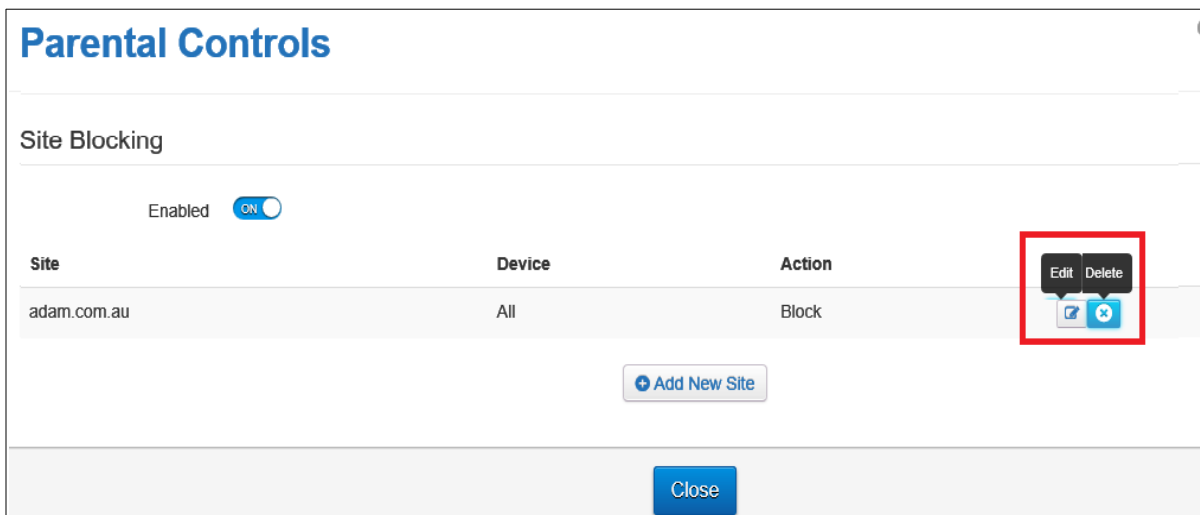


Click on “Add New Site”



block access to all devices enter “All” in Device field. To block access to a single device type 1 and its MAC address should appear in the list, If Device is not listed enter its address manually.

Click on “Add”



Rules can be edited or deleted by clicking on edit or delete.

Toggle Enabled to on and click on save.

If rule is successful will be redirected to <http://mygateway.gateway/parental-block.lp> when trying to navigate to site.



7. Connecting Wi-Fi Devices.

1. Using WPS

Press and hold the Pair button on the front of the gateway until it starts flashing blue. The light will flash for 3 minutes during this time a WPS device can be connected, Follow the instructions supplied with the Wi-Fi device.

Note WPS has to be enabled in GUI ([See Change Wi-Fi SSID and Password](#))

2. Manually using SSID and Network Key.

There is a label with the SSID and Network key located on the bottom of the gateway. The SSID and Network key are also displayed on the home page of the gateway. Follow the Wi-Fi device's instructions for manually connecting to a Wi-Fi network.

8. Address Reservation.

Hint Before reserving an IP open a new WEB browser tab, log into gateway and go to **Advanced > Devices. You will be able to copy MAC address and paste them into the IP address reservation table.**

Status	Hostname	IP address	MAC address	Type	Port
●	Dell_Notebook	192.168.178.71	04:00:5E:00:53:53	wireless - 2.4GHz	
●	android-	192.168.178.85	08:00:27:00:00:00	wireless - 2.4GHz	
●	Dell_Notebook	192.168.178.144	08:00:27:00:00:00	ethernet	4

To reserve a LAN IP address for device. (Static IP address) log into gateway and go to Advance > Local Network

Local Network

DHCP End address 192.168.178.254

New start

New limit

Lease time

DNS server

Static leases

Hostname	MAC address	IP
+ Add new static lease		

Click on “Add new static lease “

Hostname	MAC address	IP	
Telstra-4GX-Plus	[REDACTED]	192.168.178.86	Add
IP-Camera	[REDACTED] custom	192.168.178.114	Add

Start typing the IP address of device into IP field.

A list of all connected devices is displayed.

Click on the device that requires a fixed IP address.

The devices current IP address will automatically be entered into the table. This IP address can be changed to any unused IP address within address range of router.

Fill in Host name

Click on the down arrow in the MAC column to display a list of the connected devices.

If the device is listed click on it to automatically add its MAC address.

If the devices does not appear in the list of connected device click on custom and paste in the MAC address copied from the devices page or enter the MAC address manually

Click on apply

Note: If you changed the IPv4 Address the device will have to disconnect and reconnect for the new IP address to take effect.

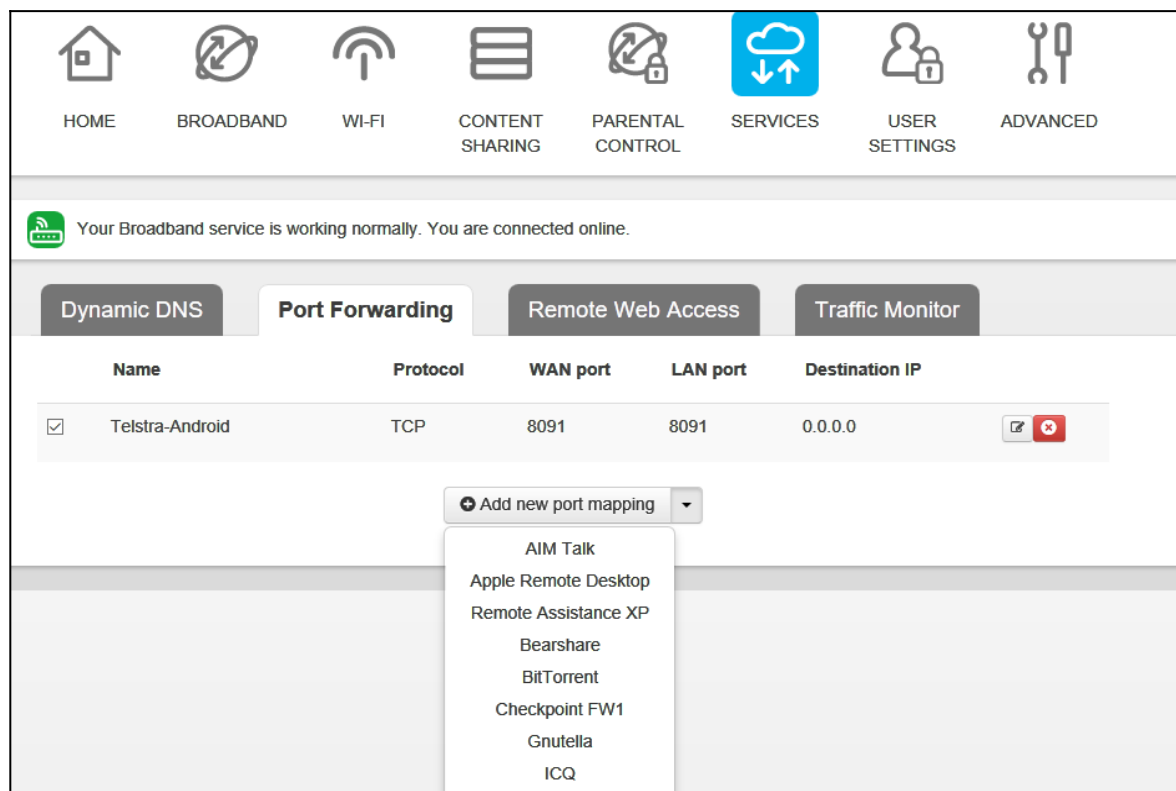
9. Port Forwarding

For port forwarding to work you need a fixed IP LAN address. (See [Address Reservation](#) for how to do this)

Log in to Gateway and go to Services > Port Forwarding

If adding a standard port click on down arrow on the right of “Add new port mapping” to display a list of common services.

Select a service from the drop down list.



If mapping a non standard port click on “Add new port mapping”

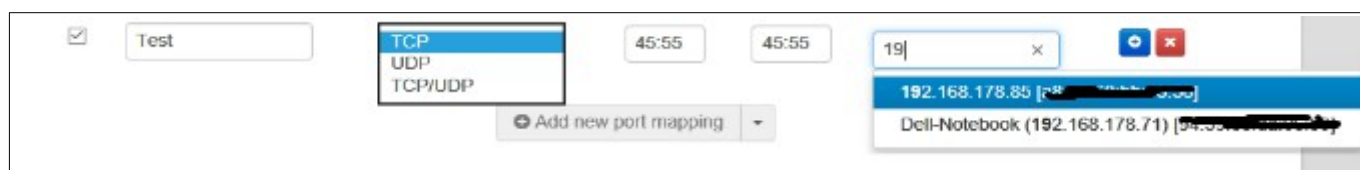
Enter a meaningful name

Select protocol (TCP, UDP or TCP/UDP (both)). If in doubt select TCP/UDP

Type port number in WAN port and LAN port field. Best to use same port number. If there is a range of ports enter the first and last port numbers separated by a colon (eg 45:55)

Enter LAN IP address of device. A list of all currently connected device will be displayed.

Click on apply



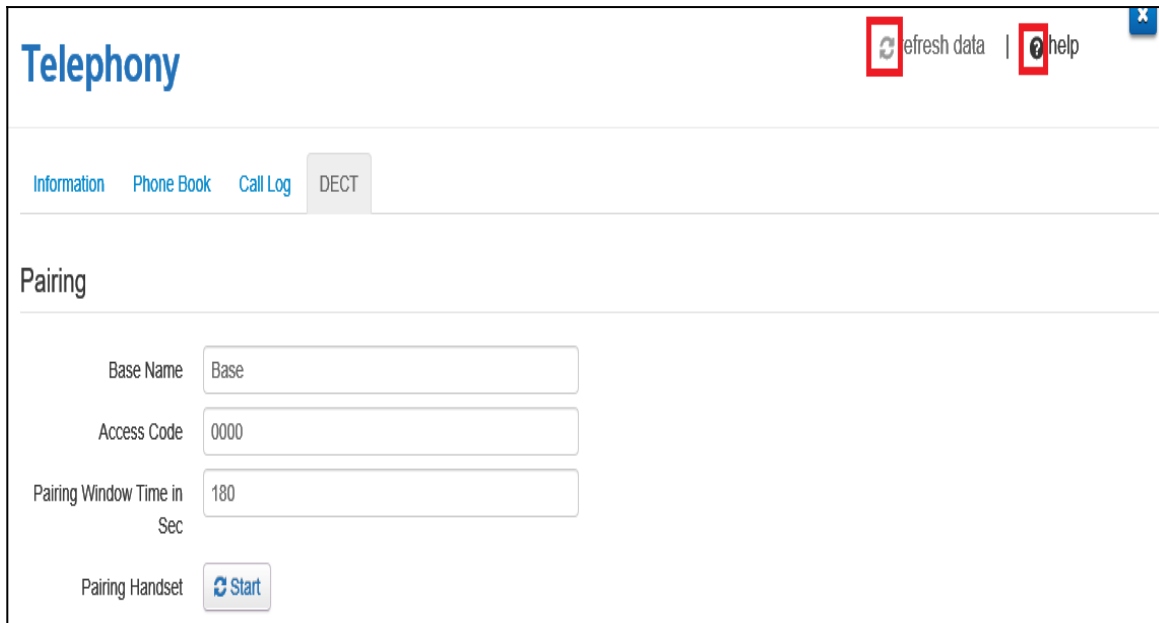
The port forwarding tool at <http://www.yougetsignal.com/tools/open-ports/> can be used to check if the port is open.

10. Inbuilt Help

At the Top right of each dialogue box is a **refresh** and **help** icon.

Clicking on refresh refreshes the data on the page.

Clicking on the help icon opens the inbuilt help open at the relevant page.



Example Help displayed when on DECT page

Advanced View

- Gateway
- Broadband
- Internet Access
- Wi-Fi
- Local Network
- Devices
- WAN Services
- Firewall
- Telephony
 - Information
 - DECT**
- Diagnostics
- Telstra Air
- Mobile
- Management
- Content Sharing
- Printer Sharing
- Parental Controls
- Time of Day

DECT

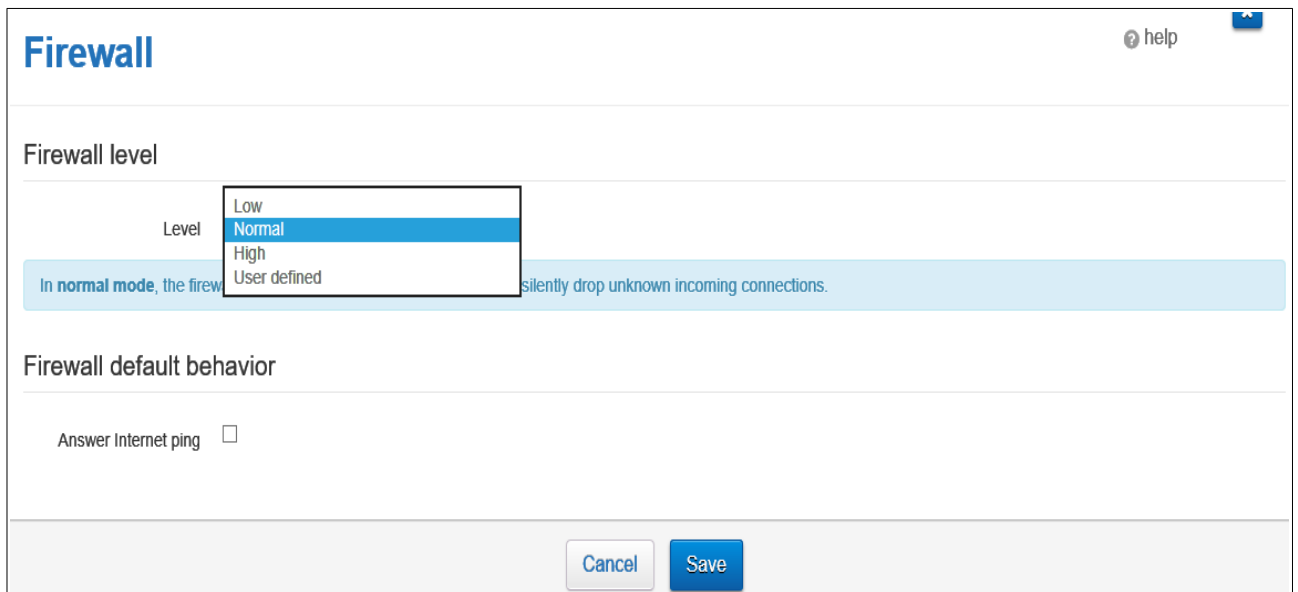
The DECT tab on the Telephony page contains the following sections:

- **Pairing**
Allows you to connect a DECT phone to the Gateway's DECT base station. Proceed as follows:
 - 1 If desired, change the access code. This is the PIN code that you will have to enter on the DECT handset.
 - 2 Click **Start**.
 - 3 Start registration mode (pairing) on your DECT handset.
 - 4 If prompted for a PIN code, enter the access code.
- **Paging**
When you start the paging function, all registered DECT handsets will start to ring (if the sound is not muted) and display a paging message. This function is very useful for finding back a misplaced DECT handset.
To start the paging function, click **Start** under **Paging**. As soon as you located the phone, click **Stop**.
- **Device List**
 - Provides an overview of the available DECT connections. The Gateway allows you to connect up to 6 DECT phones.
 - Allows you to unregister a DECT phone. Proceed as follows to do this:
 - 1 In the **Handset Name** list, select the DECT phone that you want to unregister or select **ALL** to unregister all DECT phones.
 - 2 Click **Unregister**.
 - 3 The DECT handset is no longer connected to the Gateway. No calls can be made with it.

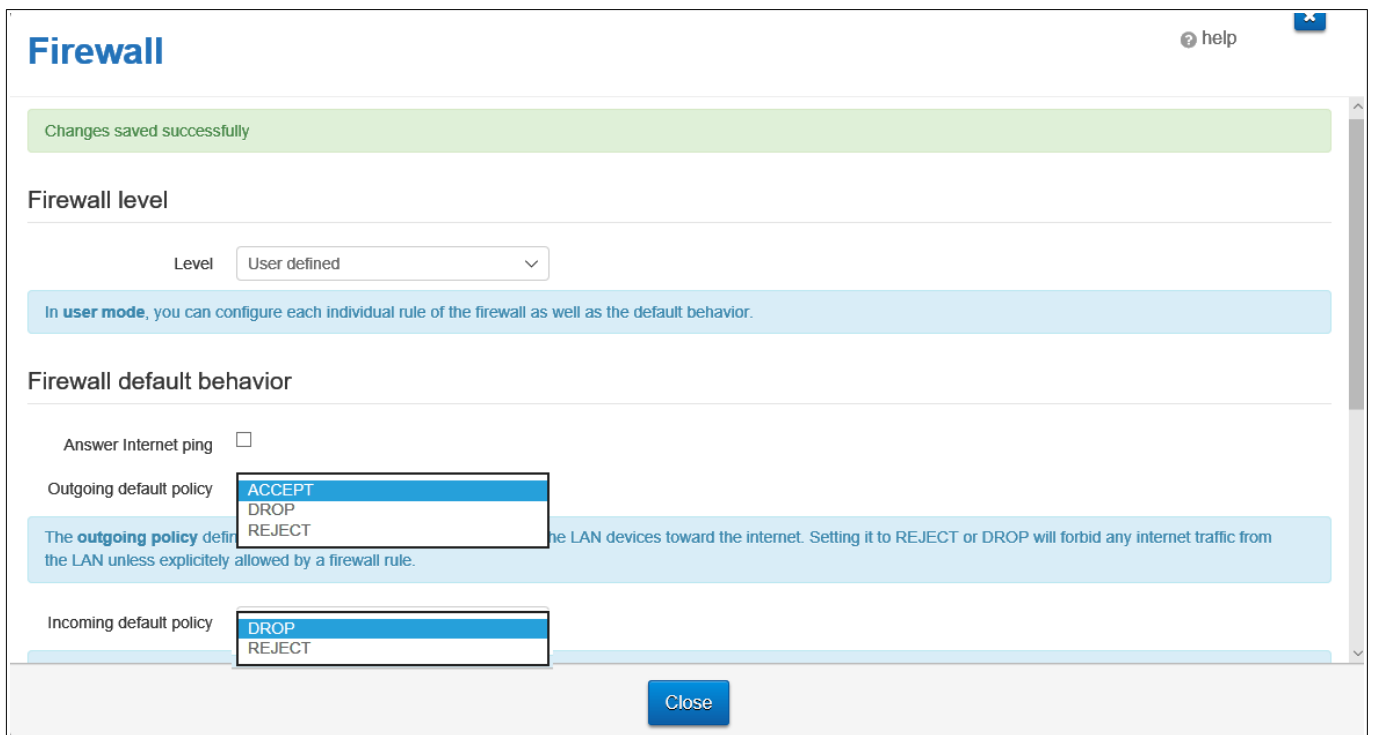
11. Firewall

Go to Advanced > Firewall

Select the level of protection and click on save



If User defined firewall is selected can select default incoming and outgoing policy.



Can also configured individual rules depending on source, destination and port by clicking on "Add new firewall rule"

Firewall help

Incoming default policy DROP

The **incoming policy** defines what is done with packets destined to the gateway. They can be either REJECTED (the gateway will notify the sender they were rejected) or DROPPED (the gateway will silently discard those packets).

Firewall rules

Action	Protocol	Src IP	Src port	Dst IP	Dst port
<input checked="" type="checkbox"/> DROI	TCP	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
+ Add new firewall rule					

Firewall rules for IPv6

Action	Protocol	Src IP	Src port	Dst IP	Dst port
+ Add new IPv6 firewall rule					

12. Reset Gateway.

There are two methods for resetting the gateway.

1. Using a paper clip press the gateway's reset button for about 10 seconds. The reset button is located below the power button on front of gateway.
2. Log into the gateway, go to Advanced > Gateway > Click on reset.

Tickling "Retain Contacts" will retain contact information in phone book.

Gateway

Global Information

Product Vendor	Technicolor	Restart Device	Restart
Product Name	Technicolor DJN2130	Factory Defaults	Reset
Software Version	17.2	Retain Contacts	<input type="checkbox"/>
Firmware Version	17.2.0219-820-RA		

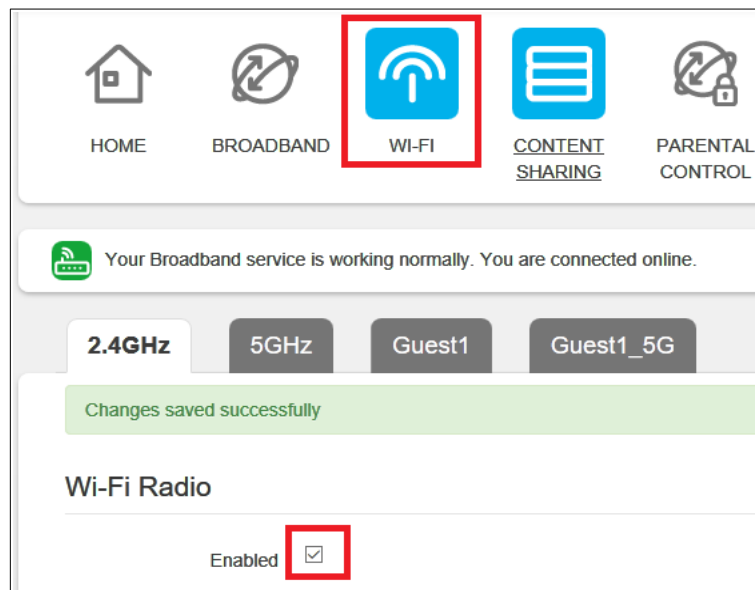
To reboot Gateway click on Restart

13. Turn Wi-Fi OFF or ON.

There are two methods

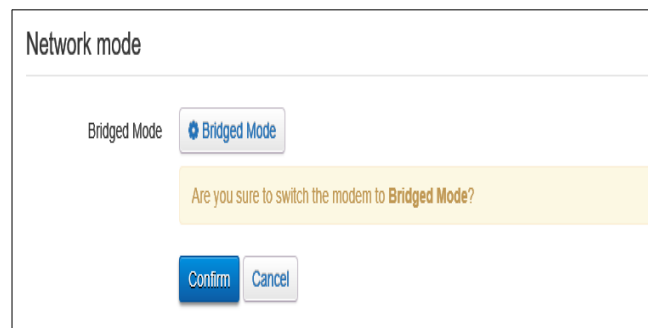
1. Wi-Fi Switch front of gateway
To turn Wi-Fi off press and hold the Wi-Fi switch located on the front panel for a couple of seconds. When released the light will turn off indicating all Wi-Fi bands have been turned Off

To turn Wi-Fi back on pressing the Wi-Fi button for a few seconds the light turns green.
2. GUI interface.
Connect to Gateway via a LAN port.
Log into the gateway and click on Wi-Fi
The 2.4Ghz band is preselected.
Click on the Enable box Below Wi-Fi Radio to toggle it to Off This disables all 2.4 GHz SSIDs
Click on Save
Repeat the procedure for 5Ghz
The Enable box below Wi-Fi Network is used to turn of the normal Wi-Fi band and leaves Guest Telstra Air and FON WiFi networks on.



14. Bridge Mode.

Log into the gateway and go to Advanced > Local Network and scroll down to Network Mode



Click on *Bridge Mode and the click on confirm. Gateway will reboot.

When Gateway has rebooted phone light and the online light will be off. Link light will be green

Note: In bridge mode the phone and backup 4G will no longer work, and a factory reset is require to disable bridge mode resulting in loss of all settings.

Before Bridging Modem Turn off WiFi section 13 to prevent WiFi devices grabbing public IP

15. Dynamic DNS

There are two locations for setting up Dynamic DNS.

1. Services/Dynamic DNS
2. Advanced /WAN Services / DynDNS

I will use the second location because it gives an indication when the service is working.

Click on the Enable switch to toggle it on.

Start typing the name of your provider and select provider from drop down list that appears.

Enter the DDNS URL without the http:// in domain box

Enter the DDNS Username.

Enter the password.

Click on Save.

Status will change from disabled (Grey) to updating (Orange).

Select refresh icon top right to refresh information.

WAN services refresh data

DynDNS IPV4

Status ● updated

Enabled

Service Name

HTTPS

Note: HTTPS mode will enable encryption but not certificate-based authentication of DynDNS service

Domain

User Name

Password

DynDNS Information Domain's IP updated

DynDNS IPV6

If successful DynDNS Information will display “Domain’s IP updated” and status will have changed to updated (Green)

Repeat for IPv6 if your Dynamic DNS service also supports IPv6.

16. Register and De-Register a DECT Handset

Can only register DECT CAT-iq2.0 handset. DECT 6 handsets will not register.

Press the Pair button on the front panel between the Power and Wi-Fi buttons for at least five seconds. The button will start flashing blue. The button will flash blue for 3 minutes.

While button is flashing the gateway is ready to pair with the handset.

Follow the handset's documentation for pairing the handset. (Default Pin is 0000)

When the handset is paired the Pair light will turn green,

The screenshot shows the 'Telephony' configuration page with the 'DECT' tab selected. It contains two sections: 'Pairing' and 'Paging'. The 'Pairing' section has input fields for 'Base Name' (Base), 'Access Code' (0000), and 'Pairing Window Time in Sec' (180), along with a 'Start' button. The 'Paging' section has a 'Start' button.

Can also pair handset and change pin from within GUI (Advanced > Telephony > DECT)

To register or pair a handset click on "Pairing Handset" Start

To page a handset press pair button on front of gateway for less than 2 seconds. To stop paging press pair button again.

To de-register (un-pair) a handset log into the gateway and go to Advanced > Telephony > DECT.

The screenshot shows the 'Telephony' configuration page with the 'Paging' tab selected. It features a 'Paging Handset' section with a 'Start' button and a 'Device List' table. The table lists six handsets with their names, IDs, and states. Below the table is a dropdown menu for 'Handset Name' with options 'ALL', 'Handset 1', and 'Handset 2', and an 'Unregister' button. A 'Close' button is at the bottom.

Name	Handset ID	State
Handset 1	014441D222	Located
Handset 2	014441D223	Located
Handset 3	0000000000	Unknown
Handset 4	0000000000	Unknown
Handset 5	0000000000	Unknown
Handset 6	0000000000	Unknown

Scroll down to bottom of page

Select handset from drop down list and click on "Unregister"

The handset is de-registered.

17. Telephony (Information and Call log)

Log in to Gateway and go to Advanced > Telephony

Information

Telephony

refresh data | help

Information **Call Log** DECT

Service Configuration

Enable Telephony Yes

Telephone Numbers

SIP Profile	UserName	URI	DisplayName	SIP Network	Port	Registered	Line Status
sip_profile_0	[REDACTED]	[REDACTED]	[REDACTED]	SIP network	Phone 1, Phone 2, Handset 1, Handset 2, Handset 3, Handset 4, Handset 5, Handset 6	●	On hook
sip_profile_1	profile2	profile2	profile2	SIP network		●	Idle
sip_profile_2	profile3	profile3	profile3	SIP network		●	Idle

Call Log

Telephony

refresh data

Information **Call Log** DECT

Call Log

Time	Call Type	Local Number	Remote Number	Duration	Port
2018-08-03 15:52:50	Incoming Successful	[REDACTED]	[REDACTED]	00:00:20s	Handset 1
2018-07-31 14:23:54	Outgoing Successful	[REDACTED]	[REDACTED]	00:00:04s	Handset 1

[Clear call logs](#)

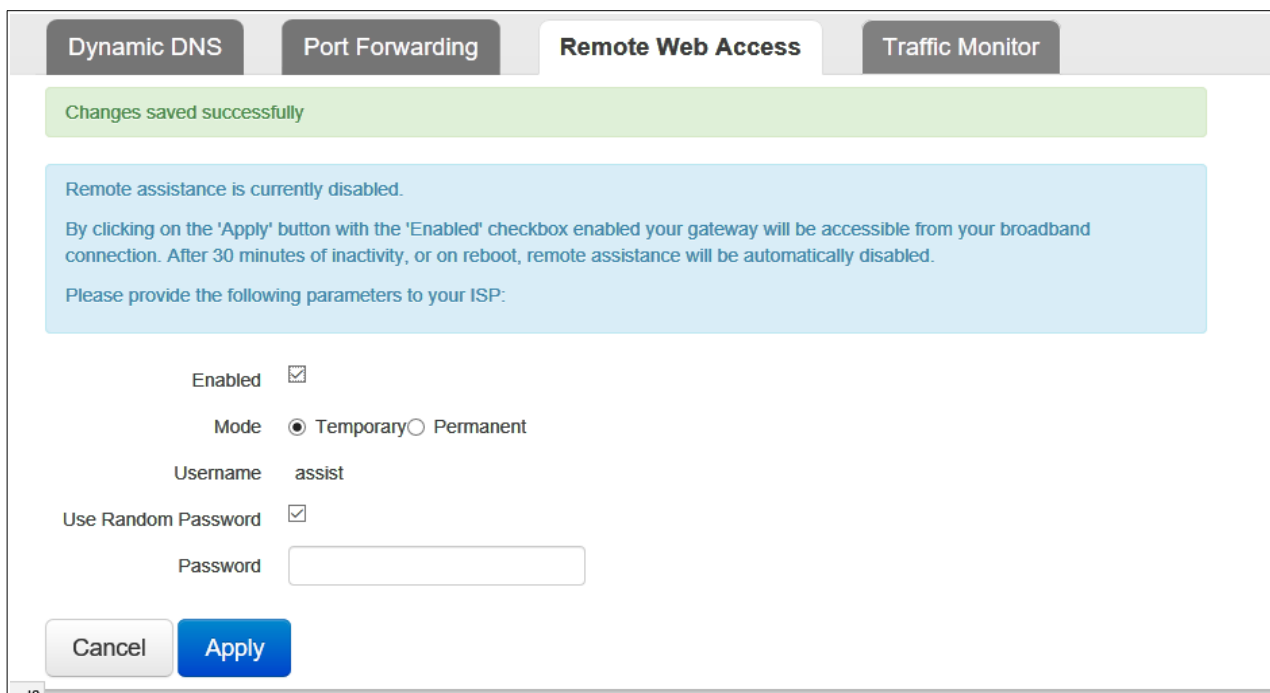
Call Statistics

Device Name	Incoming Successful	Incoming Missed	Outgoing Successful	Outgoing Failed
Phone 1	0	0	0	0
Phone 2	0	0	0	0

The Log can be cleared by tapping or clicking on the clear call logs.

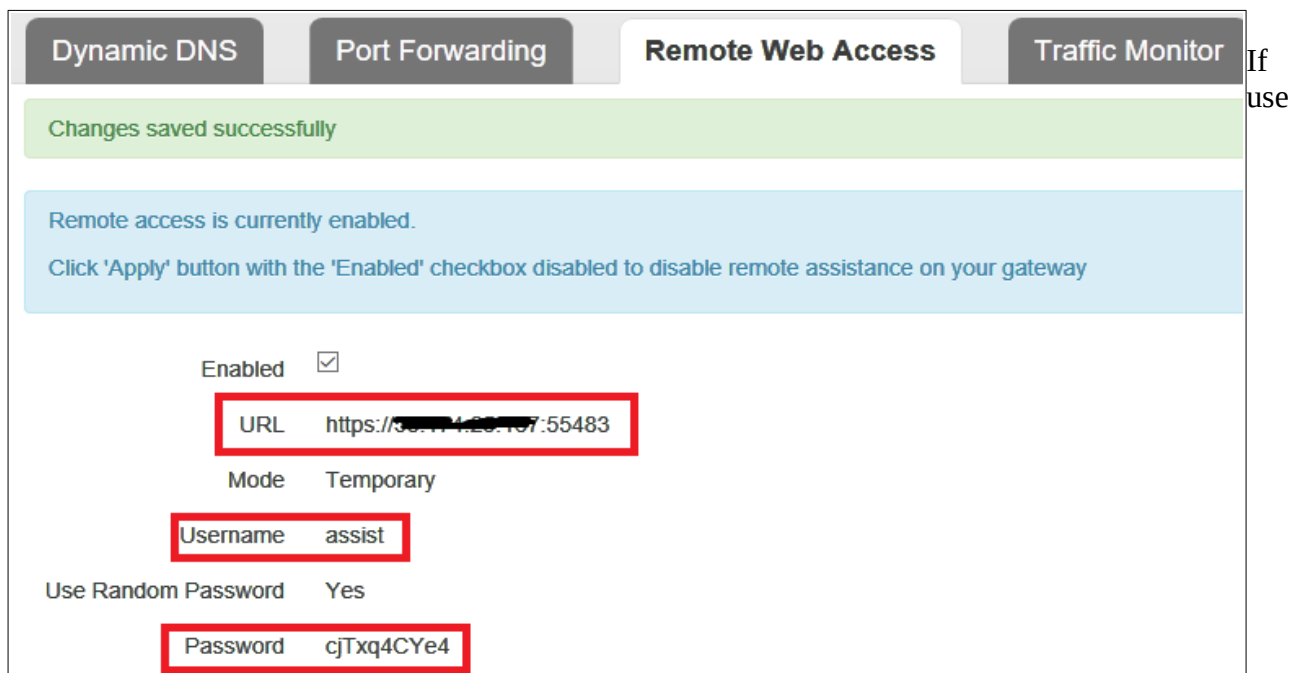
18. Remote Web Access.

To turn Remote Web Access on log into gateway and go to Basic > Services > Remote Web Access



Place a tick next to “Enabled”

Select “Temporary” or “Permanent” and click on “Apply”



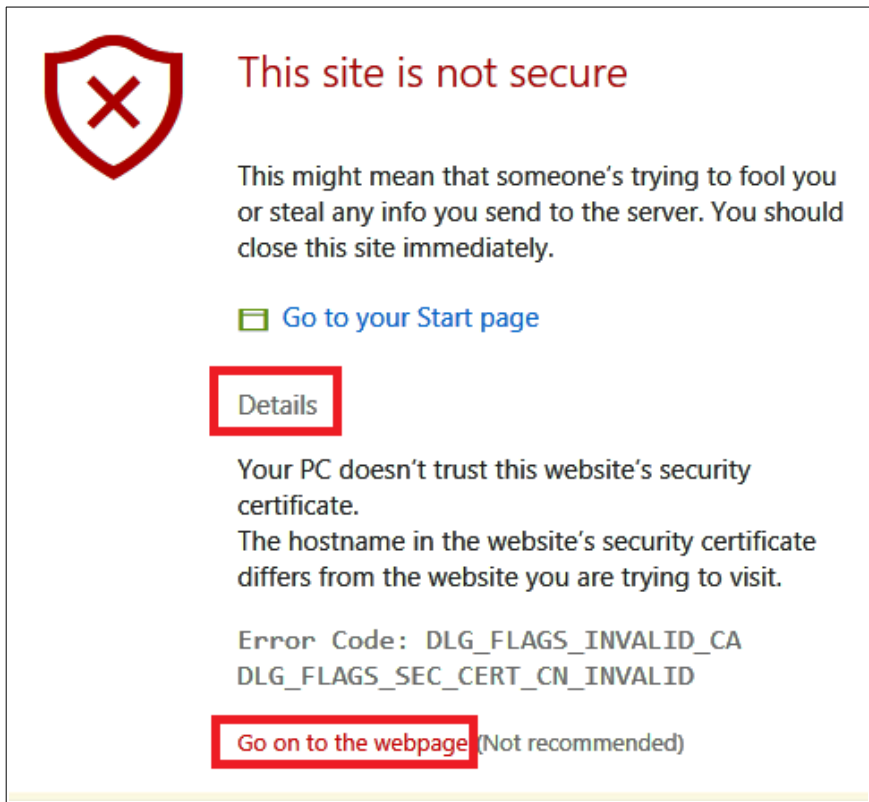
random password is ticked, a random password will be generated.

To connect remotely open a browser and navigate to the URL

A warning message will be displayed.

Below is the warning message displayed using the Edge Browser.

Click on “Details” and then click on “Go on to WEB page” to display log in screen.



This site is not secure

This might mean that someone's trying to fool you or steal any info you send to the server. You should close this site immediately.

[Go to your Start page](#)

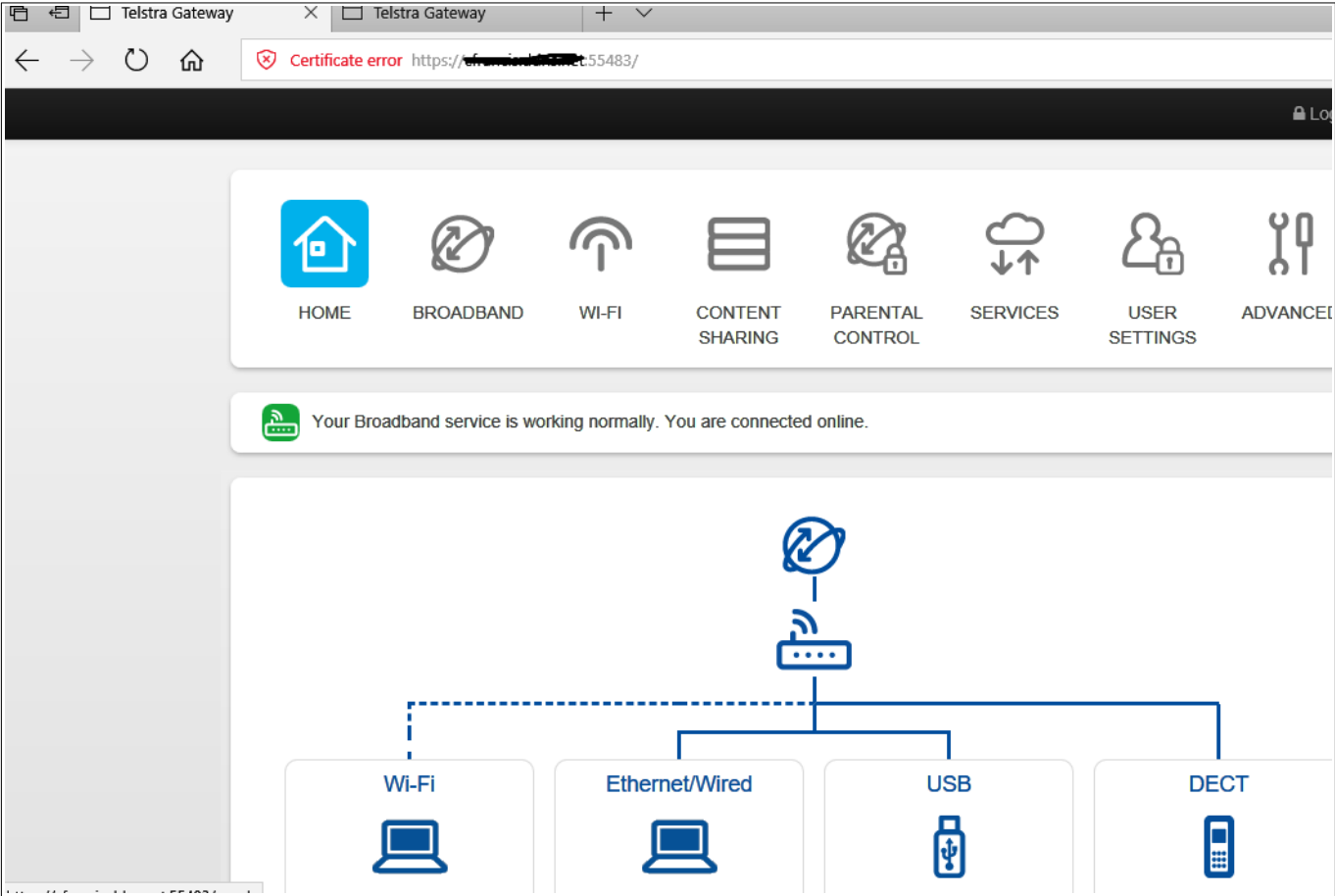
Details

Your PC doesn't trust this website's security certificate.
The hostname in the website's security certificate differs from the website you are trying to visit.

Error Code: DLG_FLAGS_INVALID_CA
DLG_FLAGS_SEC_CERT_CN_INVALID

[Go on to the webpage](#) (Not recommended)

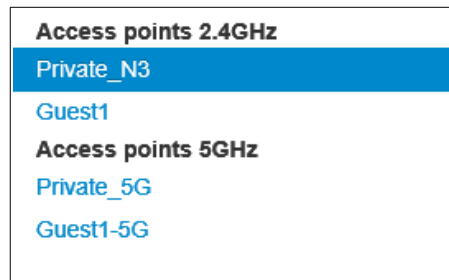
Use the User name assist and the password displayed in the Password field to log in to GUI of gateway.



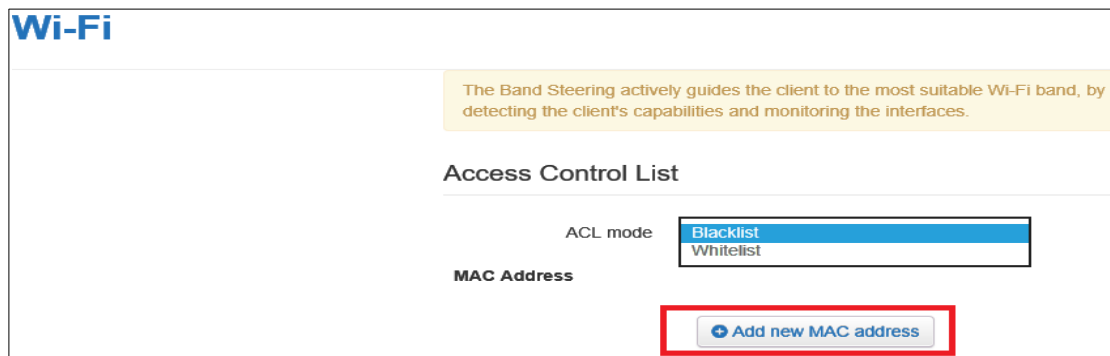
19. Wi-Fi MAC Filtering

Log into gateway, go to Advanced > WiFi

Select Access Point



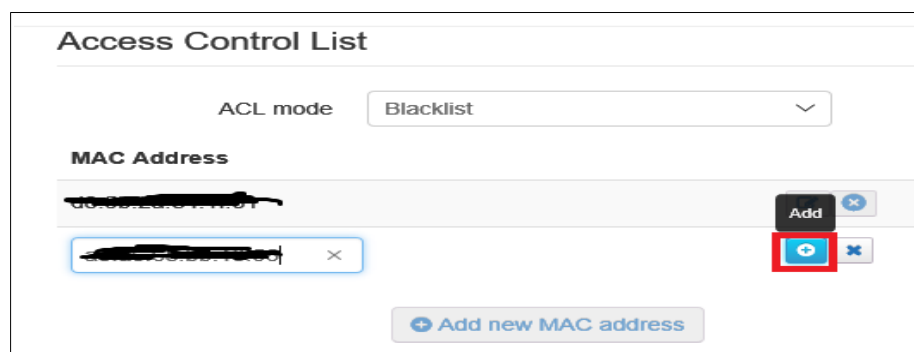
Scroll down to Access Control List



There are two Modes:

1. Blacklist: Listed devices will not be able to connect to WiFi
2. White list: Only devices in list will be able to connect.

Select mode and click on Add new MAC address.



Enter Mac Address and click on Add

Hint: Open a new Web Browser tab, log into Gateway and go to Advanced > Devices Can then copy MAC address from Devices page and paste into Access Control List

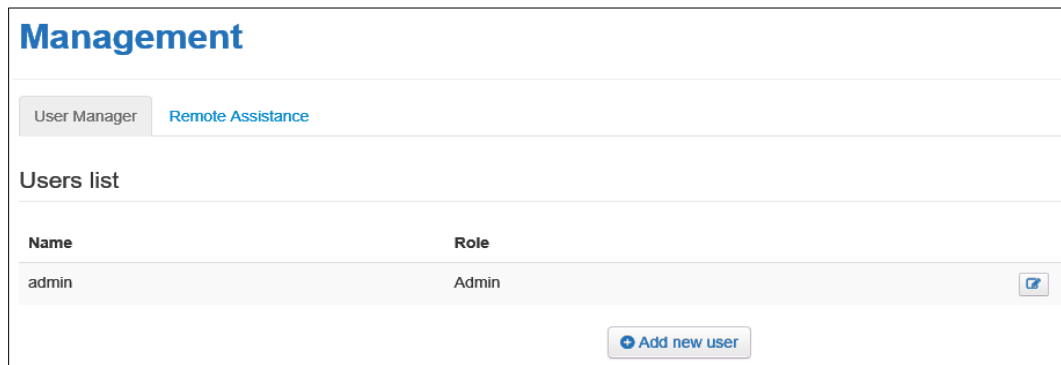
Note If using White list modem automatically populates list with all connected devices after first MAC address has been entered. These are only displayed when screen is refreshed.

Repeat for all devices that are to be added to list.

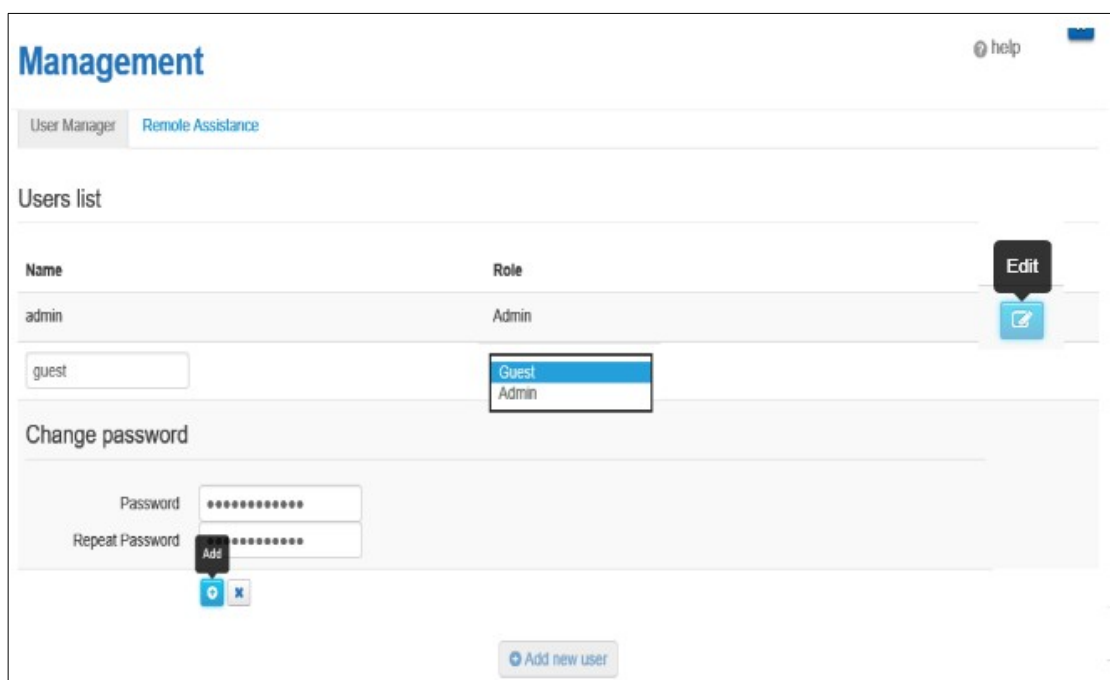
Repeat for all Access Points. (2.4G, Guest, 5G and Guest_5G)

20. Management

To add a new Gateway user go to Advanced > Management > User Manager



Click on “Add new user”




Fill in the name

Select type of user. Admin user can edit settings, Guest user can only view settings

Fill in the password and repeat password field and click on “Add”

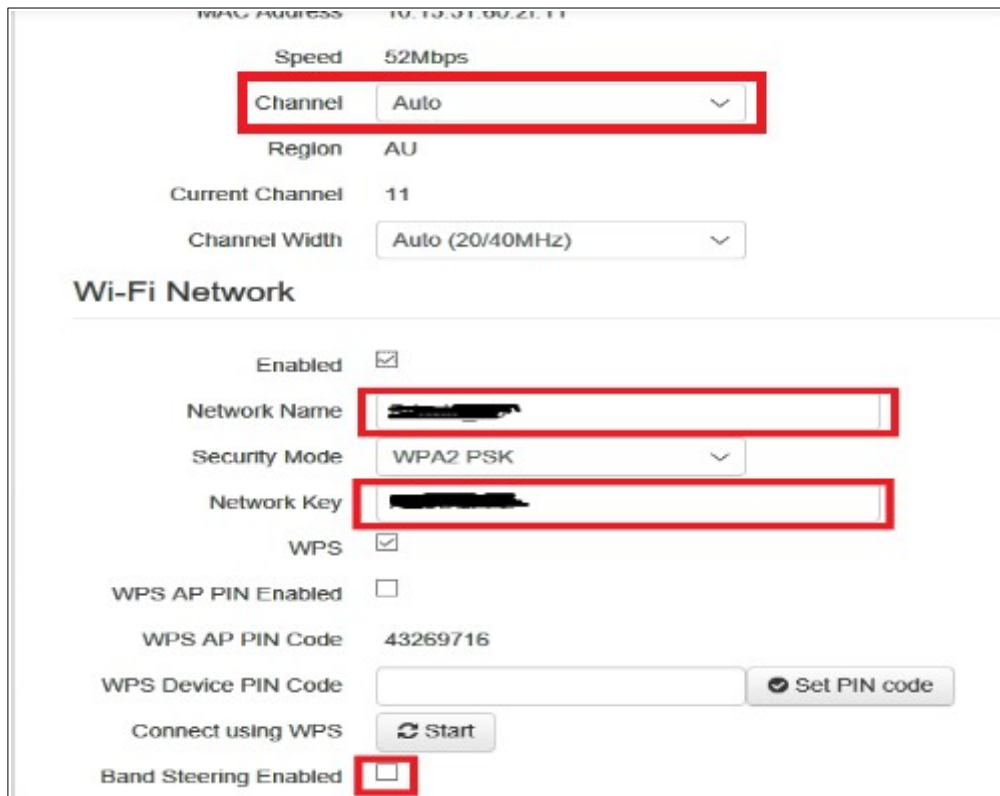
To edit an existing user click on “Edit”.

To delete a user click on “Delete”

Name	Role	
admin	Admin	
guest	Guest	 

21. Change Wi-Fi Channel, SSID or Password.

In Basic Mode click on Wi-Fi



Select Wi-Fi Band you wish to change

To change Channel select a channel from the drop down list

To change the WiFi SSID enter new SSID in Network name field.

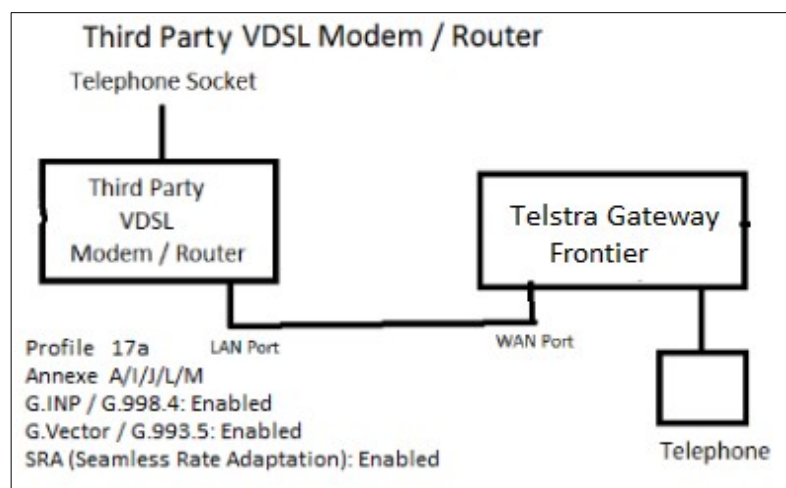
To change password enter new password in the Network Key.

To us separate SSID for 5G Band Band steering must be turned of in 2.4G Band tab.

When all changes have been made click on save.

Note: If you use your old Gateways SSID and Password you don't need to reconfigure Wi-Fi settings on Wi-Fi devices that could connect to the old Gateway.

22. Third Party VDSL Modem Router



Connect as per diagram.

No special settings required in Frontier Gateway.

Turn Wi-Fi Off on Frontier Gateway

In third party gateway set connection type as DSL and no login ID or password required (IPOE).

If you have trouble with phone change SIP/ALG settings and or set a static address for Frontier in Third party VDSL and port forwarding (TCP/UDP 5060-5061, 3478 and UDP 5004, 10000-20000) to Frontier Gateway

Note Before using this set up Frontier Gateway must be connected directly to NBN to enable registration of VOIP in Gateway.

23. DLNA Server and USB Mass Storage.

The Gateway acts as DLNA server for media files on drives connected to USB ports.

A powered USB Hub can be plugged into the USN port to allow the connection of several drives

To turn DLNA on or off go to Advanced > Content Sharing and place or remove tick next to “DLNA Enabled” and click on save.

Content Sharing refresh data | help

General status

File Server Enabled Enabled allows access to attached hard drives using SMB 1.0

File Server name: Telstra-Gateway

File Server workgroup: WORKGROUP

File Server description: Telstra Gateway

DLNA Enabled Enabled allows DLNA clients to access media files on attached USB hard drives

DLNA name: Telstra Gateway

Hard Disk Information

Currently there is 1 connected device

Port	Product Name	Manufacturer	Power	Version	File System	Total Space	Used Space	Free Space	Volume	Share	Eject
1-1	Expansion	Seagate	High Power	3.00	ntfs/hfs+	1863.01GB	545.80GB	1317.22GB	sda1	W192.168.178.1 \\Seagate_Expansion_1_b972	Eject

Click to safely remove USB drives

Path to access USB drives using SMB

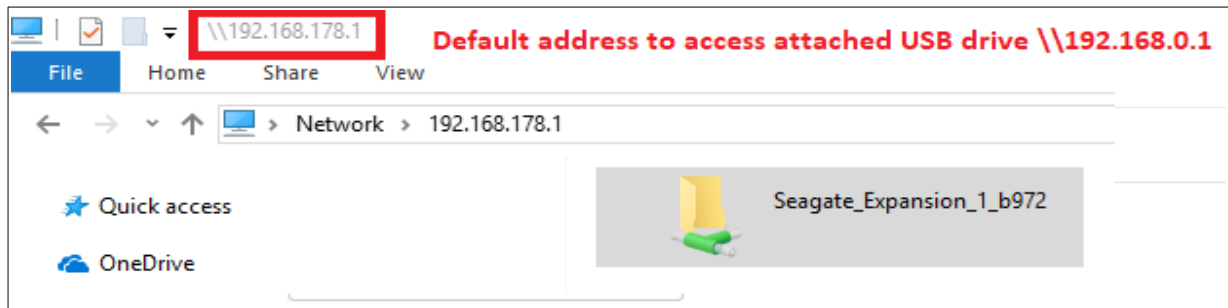
Cancel Save

Mass Storage

To turn File sharing on or off go to Advanced > Content Sharing and place or remove tick next to “File Server Enabled” and click on save.

Before removing a USB drive click on Eject

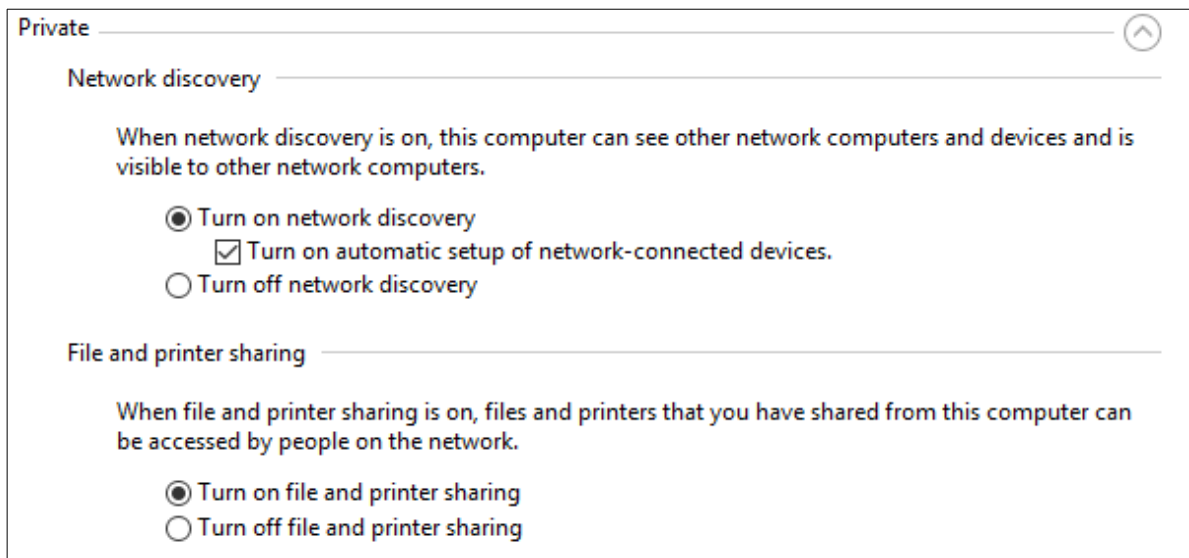
On a Windows PC can connect to drives connected to the USB ports by opening File Explorer and typing the address shown at the bottom right of the Content sharing page into the address bar of File explorer. (Your address will be different depending on IP address off you gateway and the name of the attached USB drive)



If you cannot access the drive check that Network is set to Private, Network Discovery is on and SMB 1.0 file sharing support is enabled

To check Network discovery is on

Go to Control Panel > All Control Panel Items > Network and Sharing Centre > \Advanced sharing settings and “Turn on Network Discovery” and “Turn on File and Printer Sharing”



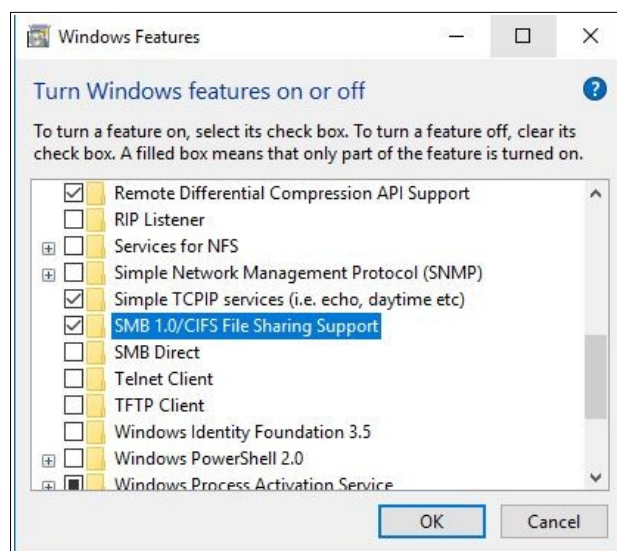
To ensure that SMB 1.0 file sharing support is on

Clicking on Start

Start typing Turn Windows Features On or Off

When “Turn Windows Features On or Off” appears in list of suggestion click on it.

Scroll down to “SMB 1.0 file sharing support” and place a tick in the box.



24. Traffic Monitor

To view traffic meters log into Gateway and go to > Services > Traffic Monitor

HOME BROADBAND WI-FI CONTENT SHARING PARENTAL CONTROL **SERVICES** USER SETTINGS ADVANCED

Your Broadband service is working normally. You are connected online.

Dynamic DNS Port Forwarding Remote Web Access **Traffic Monitor**

Internet Traffic

Total Send/Receive (in MB)	7367.186
Total Send (in MB)	620.194
Total Receive (in MB)	6746.992

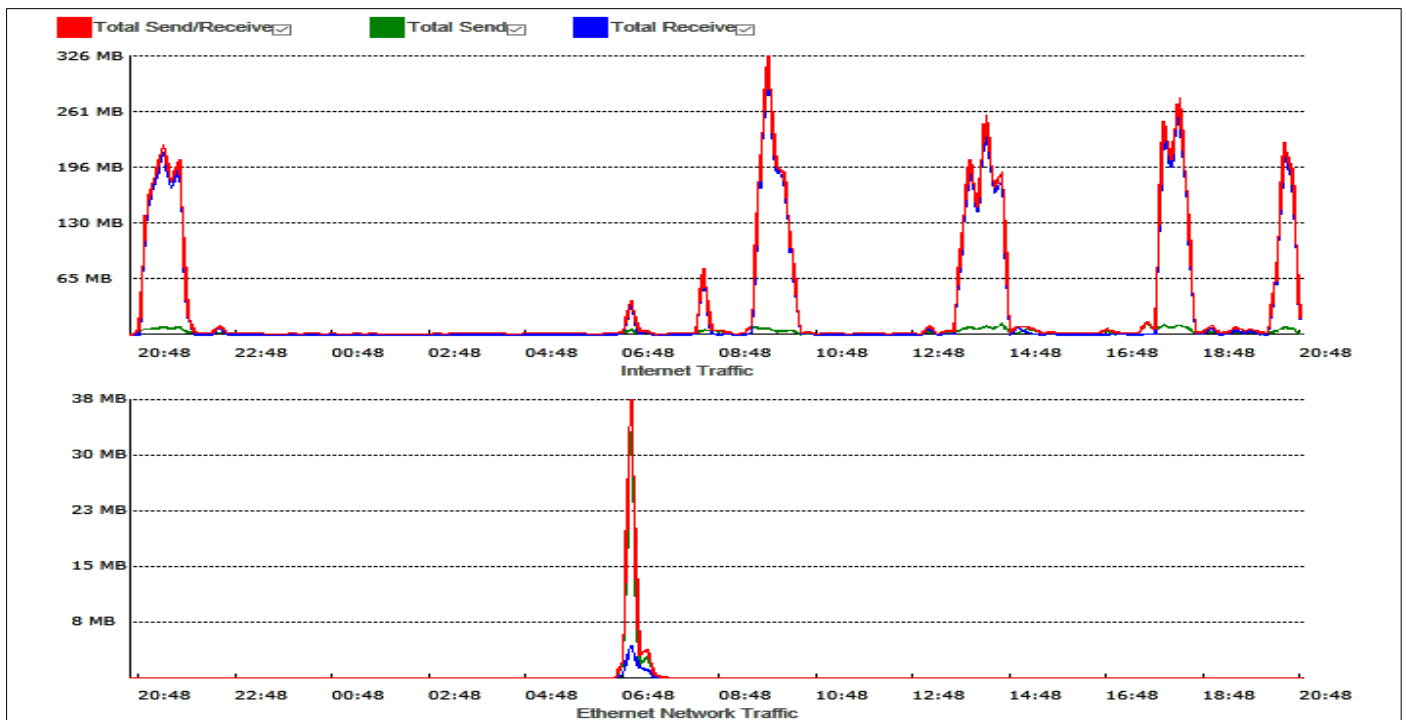
Ethernet Network Traffic

Total Send/Receive (in MB)	323.301
Total Send (in MB)	297.998
Total Receive (in MB)	25.303

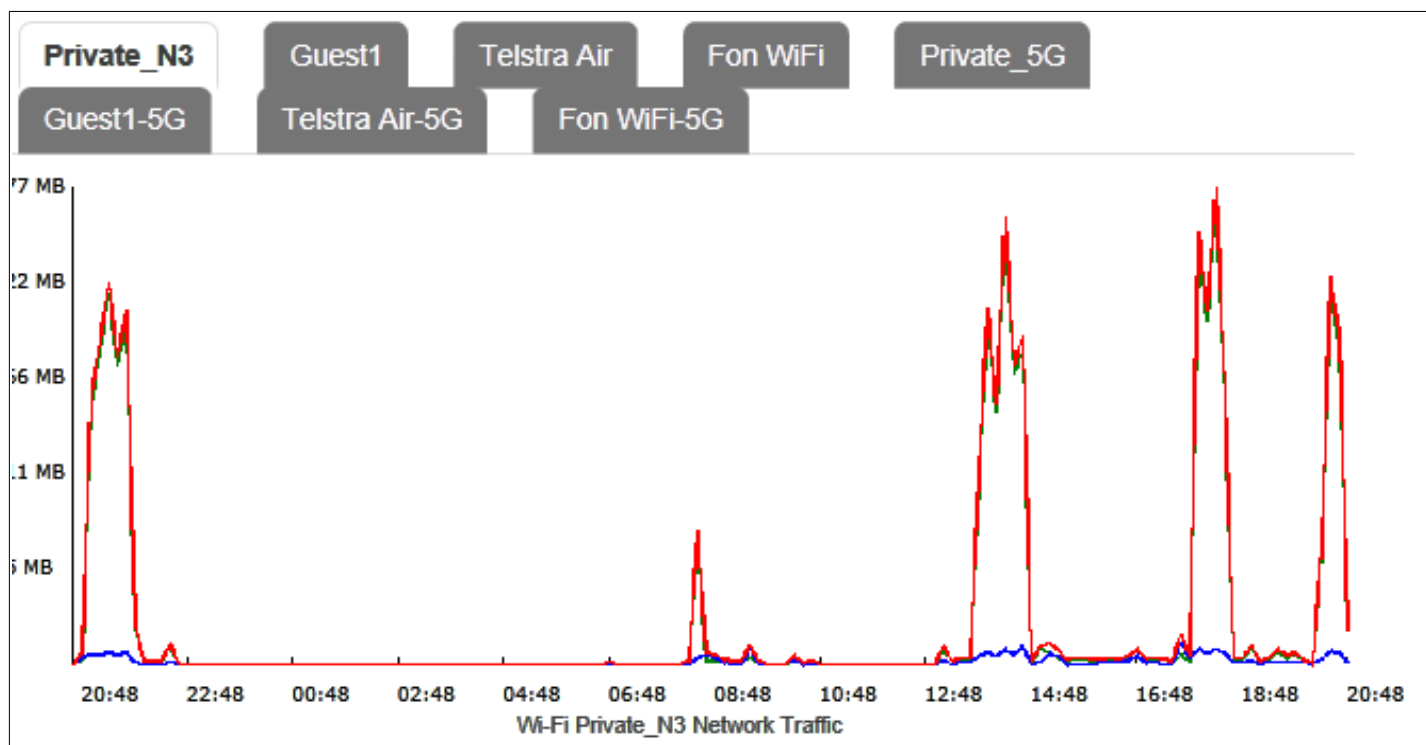
Wi-Fi Network Traffic

Total Send/Receive (in MB)	7077.216
Total Send (in MB)	6756.704
Total Receive (in MB)	320.512

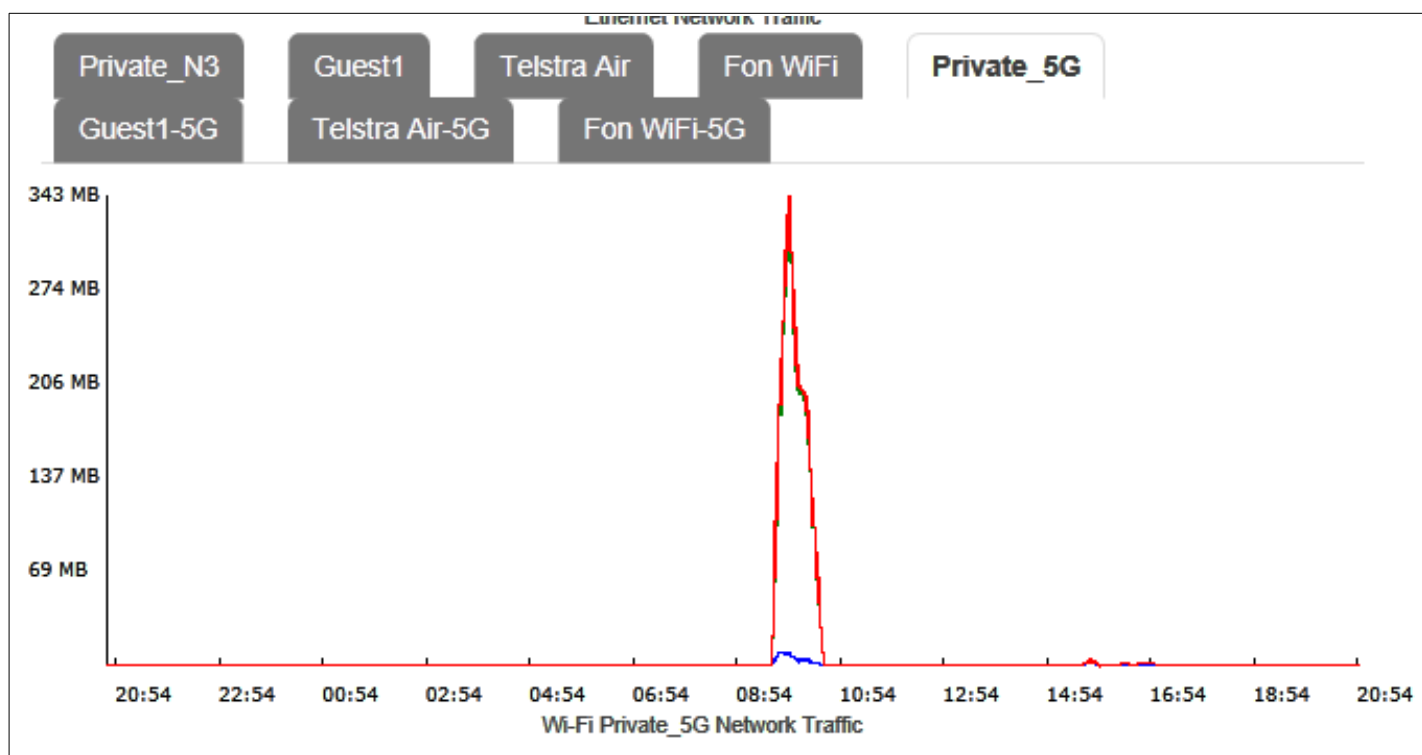
Internet and LAN Ethernet Traffic past 24 hours



2.4G WiFi Band Traffic past 24 hours



5G WiFi Band Traffic past 24 hours



The traffic data figures are for the data transmitted and received since modem was rebooted.

The Internet data figures are for the connection currently in use. (DSL, WAN or LTE)

The data graphs show the rate of data transmitted or received over the last 24 hours. From what I can determine the data graph measure the bytes transmitted or received over a 10 minute period. The 10 minute periods start from when modem was last rebooted.

25. 4G Cellular Backup

Log into Gateway and go to Advanced > Mobile >

For backup to work ensure “Enabled” is On.

If no external Antenna is connected make sure that “Selected Antenna is set to Internal. If using external set to “External”. In poor 4G reception areas some people have had trouble leaving on Auto

The screenshot shows the 'Mobile' configuration page. At the top, there are tabs for 'Configuration', 'SIM', 'Diagnostics', and 'Profiles'. The 'Configuration' tab is active. Below the tabs, the page is titled 'Device Status And Settings'. There are two red boxes highlighting specific settings: one around the 'Enabled' checkbox which is checked, and another around the 'Antenna Selection' dropdown menu which is set to 'Auto'. Other visible settings include 'Device Status: Disconnected', 'Access Technology: LTE', and 'Selected Antenna: Internal'. Below this section is the 'Interfaces' section, which contains a table with columns for 'Interface', 'Linked Profile', and 'Connect'. The table has one row for the 'wwan' interface, with 'default' as the linked profile and 'Off' as the connect status. A 'Close' button is located at the bottom of the page.

Interface	Linked Profile	Connect
wwan	default	Off

This screenshot shows the 'Mobile' configuration page with the 'Interface wwan' section expanded. It displays the following information:

- Status:** Disconnected
- Device Information:**
 - IMEI:** [REDACTED]
 - Manufacturer:** Huawei Technologies Co., Ltd.
 - Model:** ME906s-158
 - Firmware version:** 11.617.10.10.302
 - Hardware version:** ML1ME906SM
 - Temperature:** 45.1 °C
 - Power mode:** Online

When main link is down and working on 4G backup Device Status will change to Connected.

The screenshot shows the 'Mobile' settings page with the 'Device Status And Settings' section. The 'Device Status' is 'Connected', which is highlighted with a red box. Other settings include 'Access Technology: LTE', 'Antenna Selection: Auto', and 'Selected Antenna: Internal'. Below this is the 'Interfaces' section with a table:

Interface	Linked Profile	Connect
wwan	default	Off

A 'Close' button is located at the bottom of the interface.

Diagnostics

Advanced > Mobile > Diagnostics

The radio signal quality can be viewed over a 5, 20 or 60 minute period.

The screenshot shows the 'Mobile' Diagnostics page. It features a graph of signal quality metrics over time. The legend indicates three metrics: RSSI (dBm) in blue, RSRQ (dB) in purple, and RSRP (dBm) in dark purple. The graph shows RSSI fluctuating around -75 dBm, RSRQ around -12 dB, and RSRP around -104 dBm. Below the graph are two summary sections:

Status

Network Status	Registered
Service Status	Normal service

Signal Quality

RSSI	-71 dBm
RSRP	-104 dBm
RSRQ	-12 dB
SINR	10 dB

Operator Info

Operator	Telstra Mobile Telstra
MCC	505
MNC	01

Cell Info

Cell ID	148538145
Physical Cell ID	330
Access Technology	LTE
Radio Bearer	FDD LTE
Tracking Area Code	32768
Downlink EARFCN	3148
Active Band	7
Uplink Bandwidth	20 MHz
Downlink Bandwidth	20 MHz

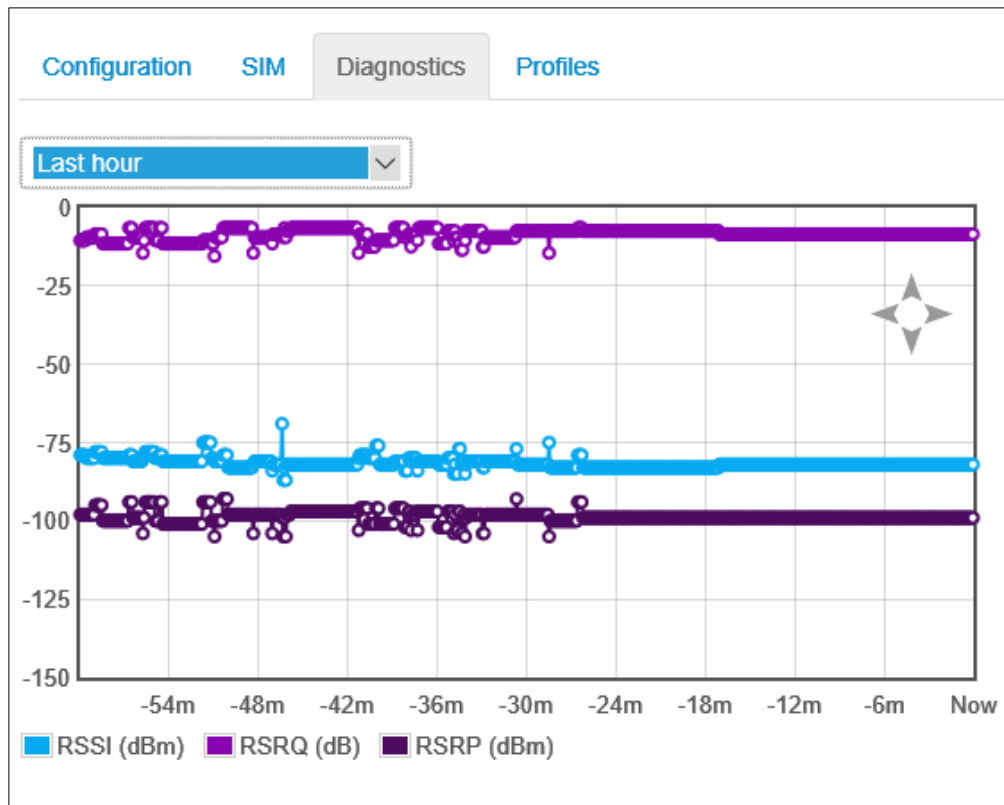
A 'Close' button is located at the bottom of the interface.

GSM & 3G networks (RSSI)

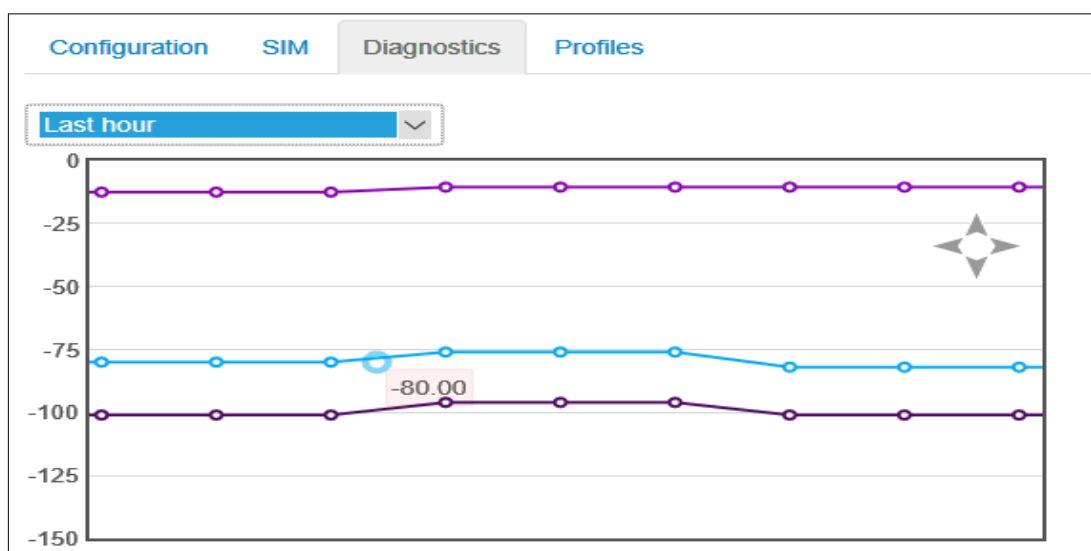
- -50dBm to -75 dBm – High Signal (good voice and data)
- -76dBm to -90 dBm – Medium Signal (good voice and data)
- -91dBm to -100 dBm – Poor Signal (good voice data, marginal data with drop-outs)
- -101dBm to -109 dBm – Very poor Signal (voice may be OK, no data)
- -110dBm to -113 dBm – No signal

4G/LTE (RSRP)

- -70dBm to -90dBm is a strong signal with fast data speeds. Stronger signals are possible. **(Green)**
- -91dBm to -105dBm is a good signal with fast data speeds **(Green)**
- -106dBm to -112dBm is fair but useful and fast and reliable data speeds may be attained **(Orange)**
- -113dBm to -125dBm reliable data, but performance may be slower and latency increased **(Red)**
- -126dBm to -136dBm performance will drop dramatically
- -136dBm to -140dBm disconnection



If the mouse cursor is placed over an area of interest that area can be expanded by rotating mouse wheel. (See image below).



Profiles

Advanced > Mobile > Profiles

The screenshot shows the 'Mobile' configuration page with the 'Profiles' tab selected. It features a table with columns for Name, APN, PDP Type, Username, Password, and Authentication Type. Three profiles are listed: 'default', 'telstra.hybrid', and 'telstra.internet'. A '+ Add new profile' button is located at the bottom.

Name	APN	PDP Type	Username	Password	Authentication Type
default		IPv6			None
telstra.hybrid	telstra.hybrid	IPv4v6			None
telstra.internet	telstra.internet	IPv4v6			None

26. Diagnostics (Fault Finding)

To view diagnostic information log in to gateway and go to Advanced > Diagnostics

The screenshot shows the 'Diagnostics DSL' page. It includes a navigation menu with 'xDSL', 'Ping & Traceroute', 'Connection', 'Network', and 'Log viewer'. The 'DSL information' section displays various modem and DSL parameters. Below this is the 'DSL stats' section with a table for parameters over different time periods. A 'Close' button is at the bottom.

DSL information

- Modem Time: 5days, 05:41:54
- Current Day Start: Tue Jan 30 2018 13:33:17 PM, 05:41:13 ago
- Showtime: 5days, 05:38:05
- DSL Standard: VDSL2
- Max Bandwidth Down: 36.59Mbps
- Max Bandwidth Up: 11.87Mbps

DSL stats

Parameters	Last 15 min	Current Day	Prior Day	Showtime
------------	-------------	-------------	-----------	----------

Ping

Advanced > Diagnostics > Ping & Trace Route

Enter a IP address or URL and click on “Send Ping Request”. A green Status tick indicates success.

Diagnostics Ping/Trace

[xDSL](#) | **Ping & Traceroute** | [Connection](#) | [Network](#) | [Log viewer](#)

Ping Statistics

Send Ping Request

Status: ✔ Success

Success Count: 3

IP address:

Number of pings:

Size (bytes):

Min Resp Time: 29 ms

Max Resp Time: 30 ms

Avg Resp Time: 29 ms

Trace Route

Advanced > Diagnostics > Ping & Trace Route and scroll down to Trace Route.

Enter the IP address or URL and click on “Trace Route”.

During the test the Status will show “Ongoing”

Trace Route

Stop Trace Route

Status: ✳ Ongoing

IP address:

Max Hop Count:

Size (bytes):

Hostname	IP	Error code	RTT (ms)
*	*	*	*
	144.130.215.209	0	7,7,7
bundle-ether8.fii-core1.adelaide.telstra.net	203.50.11.154	0	10,9,7
bundle-ether9.win-core10.melbourne.telstra.net	203.50.11.91	0	16,16,16
tengigabitethernet7-1.win22.melbourne.telstra.net	203.50.80.162	0	15,15,15
telstr745.lnk.telstra.net	139.130.39.114	0	15,15,15

When Status shows Finished

All the hops are displayed and the latency between hops.

Connection

Advanced > Diagnostics > Connections

Shows state of connections

Diagnostics Connection

[xDSL](#)
[Ping & Traceroute](#)
[Connection](#)
[Network](#)
[Log viewer](#)

Connection Check

Restart all Tests [Restart](#)

DSL Status ✔ Up

ATM Ping Test ✘ PVC 8/35 Not all ping request were answered

IP Version 4 Address ✔ 58.174.49.224

IP Version 6 Address ✘ No Address Assigned

Next Hop Ping ✔ Success

First DNS Server Ping ✔ Success

Second DNS Server Ping ✔ Success

LAN, WAN port and WLAN Statistics

Log in to gateway and go to Advanced > Diagnostics > Network


Diagnostics

[help](#)


[xDSL](#)
[Ping & Traceroute](#)
[Connection](#)
[Network](#)
[Log viewer](#)

Ports state


Type supported




Not connected




Not connected



Not connected



Not connected



Not connected

Network Statistics

Interface	Rx Bytes	Tx Bytes	Rx Packets	Tx Packets	Rx Errors	Tx Errors
Port 1	51341856	808198986	365567	616101	0	0
Port 2	14566972	43650226	59062	49554	0	0
Port 3	149801188	4026862469	1428056	2746278	0	0
Port 4	47171130	949493632	356278	716854	0	0

[Close](#)

DSL link status

Log in to gateway and go to advanced > Broadband > DSL link status

DSL link status	Ethernet link status	DSL Diagnostics
DSL Status	● Up	
DSL Uptime	4 days 7 hours 4 minutes 5 seconds	
DSL Type	VDSL2	
DSL Mode	Fast	
Maximum Line rate	⬆ 12.55 Mbps	⬇ 37.73 Mbps
Line Rate	⬆ 12.19 Mbps	⬇ 37.93 Mbps
Data Transferred	⬆ 1398.99 MBytes	⬇ 2511.94 MBytes
Output Power	⬆ 7.9 dBm	⬇ 14.4 dBm
Line Attenuation	⬆ 7.0, 43.6, 65.8 dB	⬇ 18.6, 55.6, 82.4 dB
Noise Margin	⬆ 7.8 dB	⬇ 5.8 dB

Maximum Line rate is the maximum speed the link is capable of and is limited by the physical characteristics of the line.

Line Rate is the actual speed data is transferred. The line rate can not be faster than maximum Line rate but can be less due to speed limitations on your connection. Example Maximum line rate might be 98 Mbps but if you are on NBN 50 plan Line rate will be 62 Mbps and if Maximum line rate is 36 Mbps and you are on NBN 50 plan Line rate would be 36 Mbps

Line Attenuation is the amount the signal get decreased due to the attenuation of the line. There are several value as the attenuation increases with frequency. The greater the attenuation the lower the maximum speed.

Noise Margin is the margin between the received signal and the signal to noise ratio at which the signal can no longer be accurately decoded. Normally 6dB but can be higher if noise profile has been implemented.

Statistics for VDSL or ADSL connection

Log into gateway and go to Advanced > Broadband > DSL Diagnostics

Diagnostics DSL		refresh data	help	
DSL stats				
Parameters	Last 15 min	Current Day	Prior Day	Showtime
Link Retrain Count	0	0	0	0
Sync Bandwidth(Down/Up)	-	-	-	37.93M/12.19M
Loss of Sync,LOS(Local/Remote)	0/0	0/0	0/0	0/0
Loss of Framing,LOF(Local/Remote)	0/0	0/0	0/0	0/0
Loss of Margin,LOM(Local/Remote)	0/0	0/0	0/0	0/0
Forward Error Correction,FEC	6057/5364	18/131	6057/5364	12111/23796
Cyclic Redundancy Correction,CRC	0/0	0/0	0/1	0/3
Errored Seconds,ES	0/0	0/0	0/1	0/3
Severely Errored Seconds,SES	0/0	0/0	0/0	0/0
Unavailable Seconds,UAS	0/0	0/0	0/0	0/0

Above
is an

example of a normal DSL link

1. **Link Retrain count:** Number of times link has had to disconnect to re-synchronise.
2. **Sync Bandwidth (Down/Up):** Speed of link Mega bits per second (Mbps)
3. **Loss of Sync, LOS (Local / Remote)** Number of times Node or modem has lost sync
4. **Loss of Framing, LOF (Local / Remote):** Number of times there has been a loss of frame error.
5. **Loss of Margin, LOM (Local / Remote):** Number of times Signal to noise margin is too small for signal to be accurately detected due to high noise or high attenuation.
6. **Forward Error Correction, FEC:** Number of errors that were detected and corrected.
7. **Cyclic Redundancy Correction, CRC:** A CRC error indicates that part of the data packet is corrupt and requires retransmission.
8. **Errored Seconds, ES:** The number of seconds during which an CRC error was detected
9. **Severely Errored Seconds SES:** The number of seconds during 30% or more of the data blocks had CRC errors
10. **Unavailable Seconds UAS:** The number of seconds the link was unable to transmit. Usually indicate loss of the link.

Below is an example of a DSL link suffering frequent dropouts.

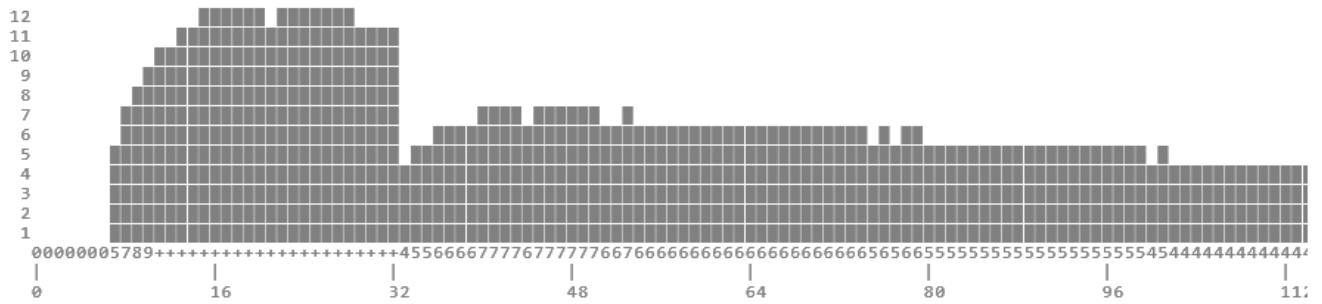
DSL stats

Parameters	Last 15 min	Current Day	Prior Day	Showtime
Link Retrain Count	0	13	0	0
Sync Bandwidth(Down/Up)	-	-	-	4.4M/0.74M
Loss of Sync,LOS(Local/Remote)	0/36	0/136	0/0	0/1
Loss of Framing,LOF(Local/Remote)	0/36	0/136	0/0	0/1
Loss of Margin,LOM(Local/Remote)	0/32	0/92	0/0	0/3
Forward Error Correction,FEC	0/0	3/3207	0/0	0/124118
Cyclic Redundancy Correction,CRC	0/6945	0/27627	0/0	0/1042
Errored Seconds,ES	0/255	0/1386	0/0	0/70
Severely Errored Seconds,SES	0/133	0/537	0/0	0/17
Unavailable Seconds,UAS	190/290	863/1273	0/0	0/0

Close

DSL Bit Loading

DSL Bit Loading



Close

The frequency bandwidth of the link is divided into tones of 4.3125 KHz bandwidth.

The tones are displayed along the horizontal axis.

Each tone can carry up to 56kbps of data.

On a perfect line each tone would carry 56kbps of data at lower frequencies. As the frequency increases the number of bits per second will gradually decrease.

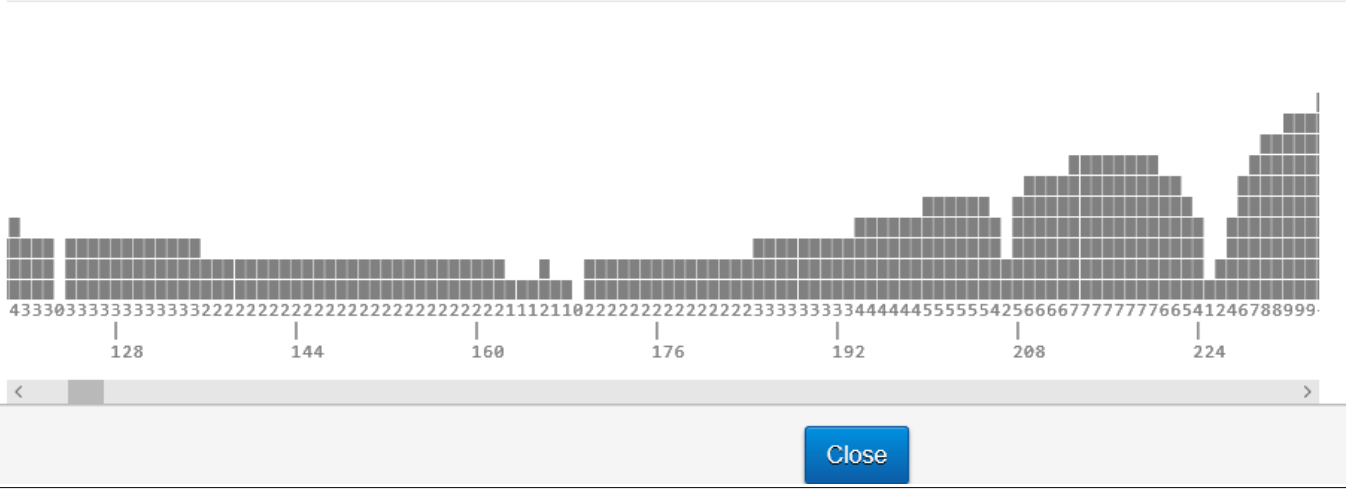
If there is noise on the line at a particular frequency the bits per tone will be less at that frequency as indicated in image below.

Diagnostics DSL

refresh

Cyclic Redundancy Correction,CRC	0/0	0/0	0/0
Errored Seconds,ES	0/0	0/0	0/0
Severely Errored Seconds,SES	0/0	0/0	0/0
Unavailable Seconds,UAS	0/0	0/0	0/0

DSL Bit Loading



Log

The log shows events that have occurred in the last 15-50 minutes

The filter can be used to show all events or only those of a particular type.

Event Log

refresh data | help

xDSL Ping & Traceroute Connection Network Log viewer

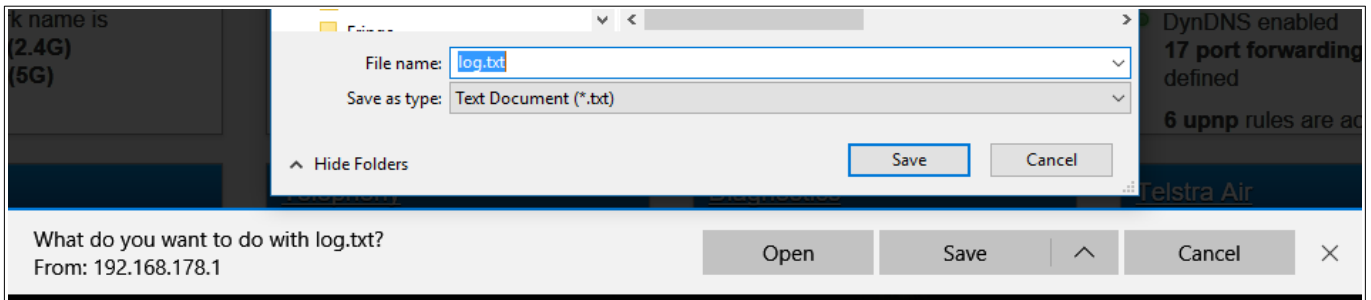
Filter: Everything

Export All

Date	Facility	Message
Jan 30 18:50:12	daemon.info	registration state changed to: registered
Jan 30 18:50:00	cron.info	2 cmd /sbin/trafficmon.lua
Jan 30 18:50:00	cron.info	1 cmd /usr/bin/thermalProtection
Jan 30 18:49:57	daemon.notice	Idle-Main.check(timeout, 1)
Jan 30 18:49:54	user.info	mmpbxd[19269] SIP Registration: SIP: 618871010 : Register Success
Jan 30 18:49:54	user.debug	[MMRVSIPIPL::NETWORKOBJ]:C: onStackLogEvent:1936 - TRANSACTION - RvSipTransactionSetLocalAddress Transaction 0x0x570010, Failed to sel local address to transmitter 0x0x529008 (rv=-3)

All the events for past 80 hours can be exported as a text file by clicking on the “Export all” button.

By default the file is downloaded to the default download folder as log.txt



Extract from log at beginning of link loss

```
Tue Oct 23 09:46:38 2018 daemon.notice netifd: Network device 'ptm0' link is down
Tue Oct 23 09:46:38 2018 daemon.notice netifd: Interface 'wan6' has link connectivity loss
Tue Oct 23 09:46:38 2018 daemon.debug ledfw[1640]: setting device_name to eth4
Tue Oct 23 09:46:38 2018 daemon.debug ledfw[1640]: setting mode to link
Tue Oct 23 09:46:38 2018 daemon.info odhcpd[3376]: Raising SIGUSR1 due to default route change
Tue Oct 23 09:46:38 2018 daemon.notice netifd: Interface 'wan' has link connectivity loss
Tue Oct 23 09:46:38 2018 daemon.info odhcpd[3376]: Raising SIGUSR1 due to address change on wll_1
Tue Oct 23 09:46:39 2018 daemon.notice miniupnpd[30444]: ProcessInterfaceWatchNotify RTM_DELADDR index=19 fam=2
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: applying action on internet:green
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: writing to /sys/class/leds/internet:green with action none
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: setting brightness to 0
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: applying action on internet:red
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: writing to /sys/class/leds/internet:red with action none
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: setting brightness to 0
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: applying action on internet:blue
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: writing to /sys/class/leds/internet:blue with action none
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: setting brightness to 0
```

Example of events to look for during loss of internet connections

Start of loss off internet.

```
Tue Oct 23 09:46:38 2018 daemon.notice netifd: Interface 'wan' has link connectivity loss
```

Online light goes off

```
Tue Oct 23 09:46:39 2018 daemon.debug ledfw[1640]: applying action on internet:red
```

Online light purple

```
Tue Oct 23 09:48:50 2018 daemon.notice netifd: Interface 'wwan_6' has link connectivity
```

Link light green (This is for DSL connection will be different for connections using modem's WAN port)

Tue Oct 23 09:51:18 2018 kern.warn kernel: [661451.751000] bcmxtmcf: Connection UP, LinkActiveStatus=0x1, US=12439000, DS=38565000

Online light green (Internet reconnected end of outage)

Tue Oct 23 09:51:23 2018 daemon.debug ledfw[1640]: applying action on internet:green

Tue Oct 23 09:51:33 2018 daemon.notice netifd: Interface 'wan' is now up

Phone light green (Phone service reconnected)

Tue Oct 23 09:51:46 2018 user.info mmpbxd[11841]: SIP Registration: SIP: +61xxxxxxxxx : Register Success

27. Change IP Address of Gateway

Go to Advanced > Local Network

The screenshot shows the 'Local Network' configuration page. On the left, under 'LAN INTERFACES', the 'lan' interface is selected and highlighted with a red box. The 'Global Information' section shows 'Local Device IP address' set to 192.168.178.1 (highlighted with a red box), 'Local Network subnet' set to 255.255.255.0, and 'IPv6 state' set to OFF. The 'DHCP Settings' section shows 'DHCP Server' is ON, 'Network address' is 192.168.178.0, 'DHCP Start address' is 192.168.178.2 (highlighted with a red box), 'DHCP End address' is 192.168.178.254 (highlighted with a red box), and 'Lease time' is 1h.

To change the IP address off Gateway for LAN and normal WiFi access points select LAN as interface.

Type in New Ip Address,

Change the DHCP Start and End address so that in same subset as Gateways IP address. (First three group of integers are the same.

Click on Save.

Disconnect and reconnect to gateway and log in using gateway's new IP address.

Note: Cannot use 192.168.2.1 as this is address range of guest network.

The Guest networks IP address can also be change by select the guest network you wish to change.

Local Network

LAN INTERFACES

- lan
- Guest1**
- Guest1_5GHz

Global Information

Local Device IP address: 192.168.2.126

Local Network subnet: 255.255.255.128

IPv6 state: OFF

DHCP Settings

DHCP Server: ON

Network address: 192.168.2.0

DHCP Start address: 192.168.2.1

DHCP End address: 192.168.2.125

Lease time: 1h

28. Gateway's Firmware Software

To check Firmware log in to gateway and go to Advanced > Gateway

The Firmware / Software can not be updated manually. When a new Firmware / Software becomes available it is pushed out to the Gateway between Midnight and 6.00am. The Gateway must be connected during this period to receive any Firmware / Software update.

Gateway

refresh data | help

Global Information

Product Vendor	Technicolor	Restart Device	Restart
Product Name	Technicolor DJA0230TLS	Factory Defaults	Reset
Software Version	17.2		
Firmware Version	17.2.0320-820-RA		
Hardware Version	VBNT-V		
DSL Version	A2pvfbH043g.d26q		
Serial Number	██████████		
MAC Address	██████████		
Uptime	21 hours 28 minutes 46 seconds		
System Time	2018-08-03 16:03:34		
Network Timezone	<input checked="" type="checkbox"/>		

[Close](#)

Firmware Version **17.2.0288-820-RA** Original Firmware.

Firmware Version **17.2.0320-820-RA** released March 2018

Firmware Version **17.2.0406-820-RC** released March 2019

- Mobile Voice Backup should now be implemented
- DECT pairing improvements
- Fix: Phone LED off and unable to make calls if modem is booted without a SIM
- Fix: Several VoLTE fixes
- Fix: Several General calling fixes
- Fix: DynDNS IPv6 LTE network fix
- Fix: Phone LED stays magenta for 15 minutes when SIM is inserted
- Fix: Telstra Voice Extender fixes
- Fix: Command injection vulnerability - Hard disk information
- Fix: Several DECT 503 issues resolved (mainly call waiting issues)
- Fix: LTE won't re-connect when switch to different profile on GUI
- Updates to some of the installed Additional Software

Firmware version **17.2.0468-820-RA** released August 2019

- DECT Fix (unlisted. Still not 100% confirmed though tested on 1 device and seems to be in)
- Time of Day GUI improvements
- Able to select from multiple DNS servers
- Expansion on special characters allowed for management passwords
- Basic UI DDNS Fixes
- IPv6 traceroute fix
- Front LED logic fixes for PPP failed auth attempts (no longer stays green)
- Several exploit fixes
- Several LTE/Voip/VoLTE bug fixes

Firmware version **18.1.c.0429-950-RA** October 2019

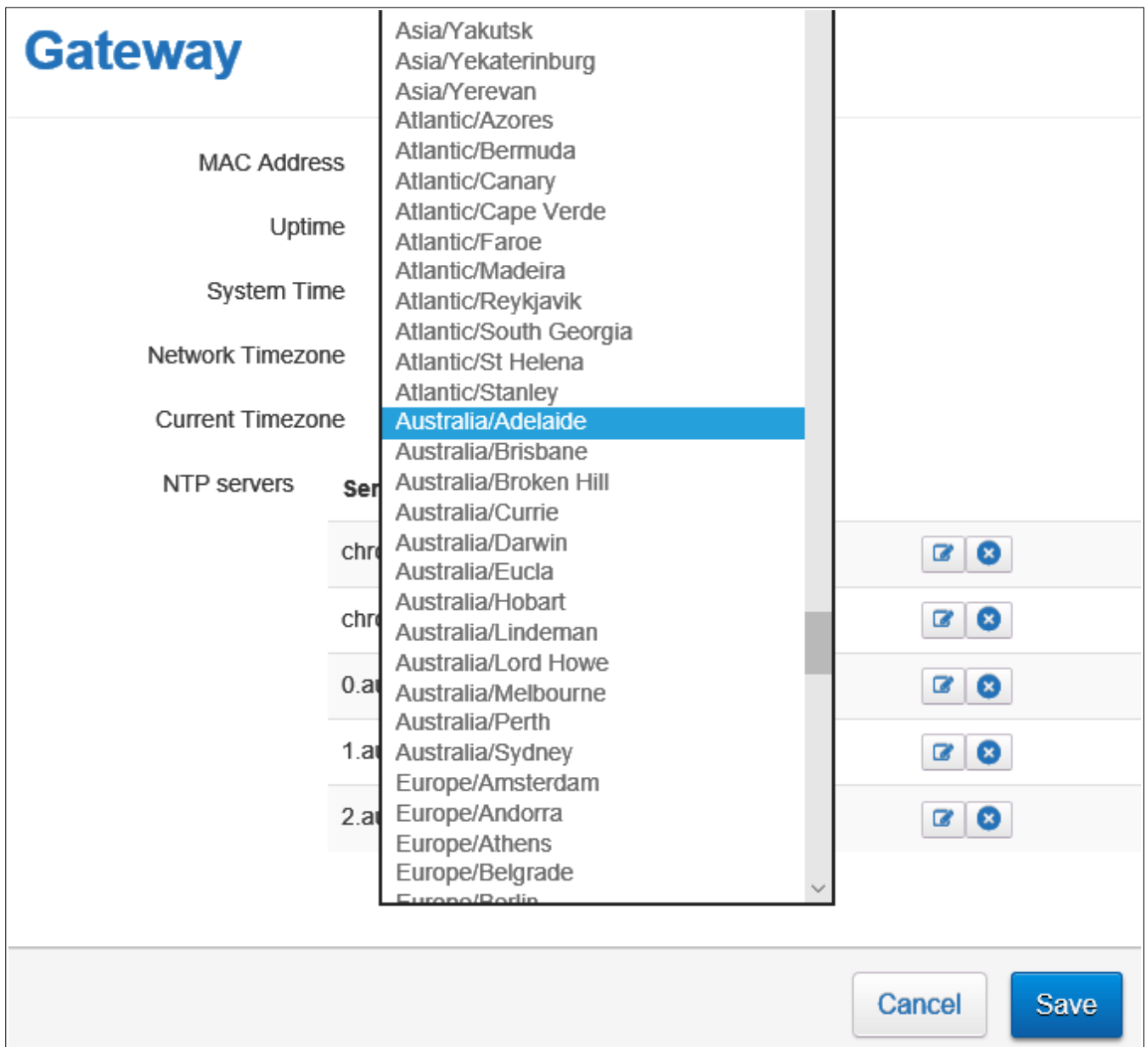
- DSL Firmware and Driver Update
- Fixed: LTE Module boot issue
- SUBSCRIBE SIP messages reduced
- **Fixed: Advanced GUI not showing IPv6 DNS servers**
- Message Waiting Indicator subscribe expiry changed to 1 day
- **Fix for parental control rules not able to be created**
- **Missed Calls Incorrectly Reported for Some Types of Phones on the FXS Port, when VMWI Messages are Received.**
- Fixed: Duplicate Time of Day Rule in Basic GUI
- Fixed: Destination MAC is empty in created Port Forwarding rule
- Minor traffic monitor quality of life changes
- Some DECT fixes TH89 and 503 improvements

Firmware Version **18.1.c.0443-950-RA** released November 2019

- WiFi Tools added to Advanced WiFi settings (2.4 GHz WiFi Analyser, 5 GHz WiFi Analyser and WiFi Device monitor)
- Drop down DNS server selection added to Advanced Local Network settings
- IPv6 DyDNS settings added to GUI

29. Gateway's Time Settings

To change Gateway's time settings log in to gateway and go to Advanced > Gateway and scroll down to Network time zone.



By default Network Timezone is ticked. The time zone is set automatically to time zone of Telstra server.

To set Time zone manually remove tick, select required time zone from Current Time zone selection box and click on save.

30. Connecting USB printer.

USB printer can be connected to USB port on the Gateway and can be accessed from devices connected to by LAN or WiFi to the modem.

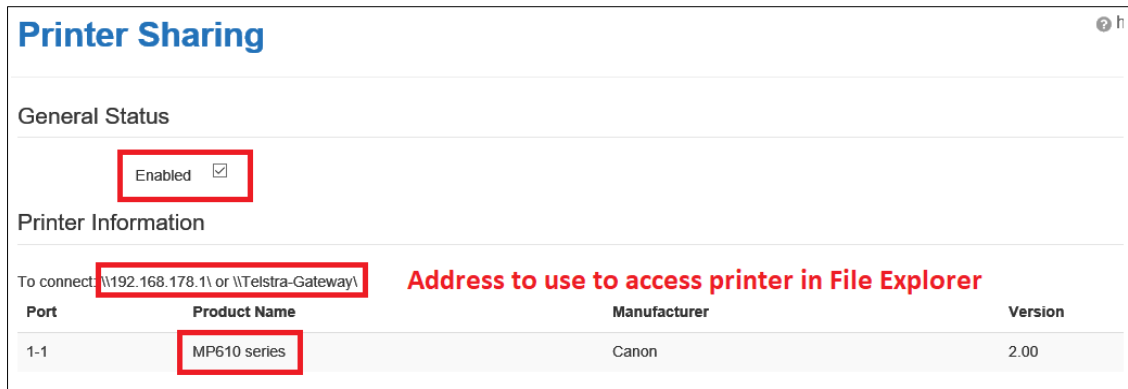
Plug the USB printer into the USB port on the Gateway.

Log into Gateway and go to Advanced > Printer Sharing

If printer is recognised its name will be displayed under Product Name.

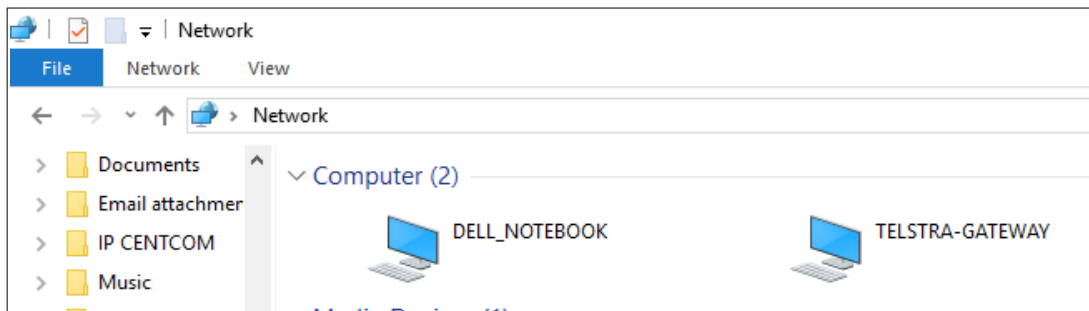
Make sure Enabled is ticked.

On a

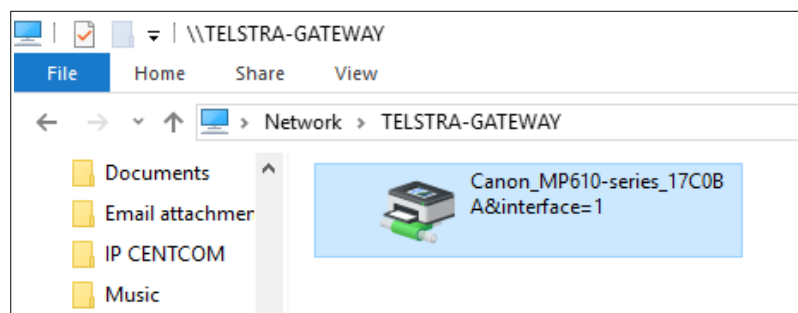


Windows PC open File Explorer and go to Networks.

Telstra-Gateway Should be listed as a computer.



Double click on Telstra-Gateway.



Your printer will be displayed.

Double click on the printer.

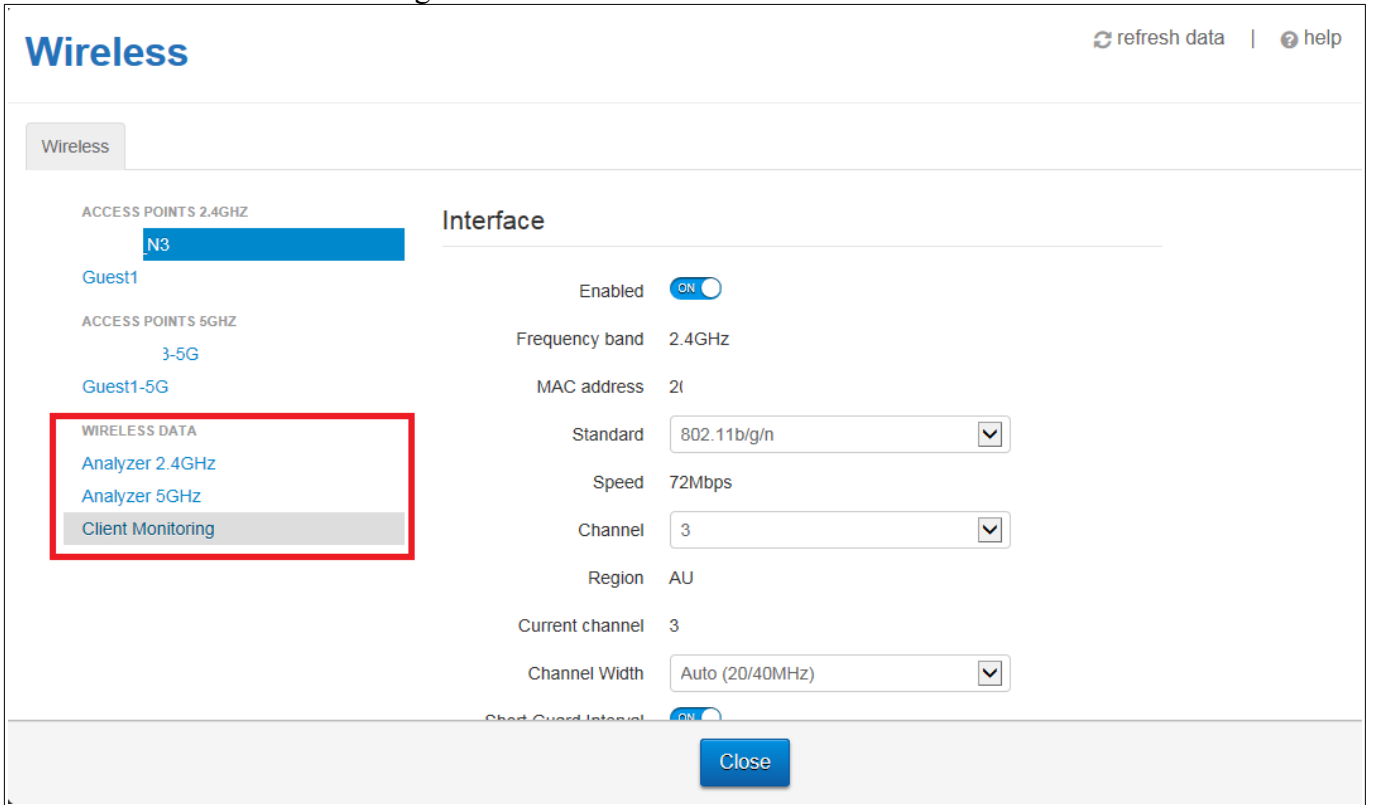
You will be prompted to install the device.

Click OK.

The printer probably want be recognised but you can install driver manually using Windows update, a disc or by selecting from a list of printers.

32. WiFi Tools

The modem has a set of WiFi Tools for monitoring WiFi devices and the strength of neighbouring networks. To access these tools go to Advanced > WiFi



1. Analyser 2.4GHz

If you use this tool, devices connected will be disconnected and will be able to connect after 1 minute.

To refresh scan select Re-Scan button and select accept.

ACCESS POINTS 2.4GHZ

- Private_N3
- Guest1

ACCESS POINTS 5GHZ

- Private_N3-5G
- Guest1-5G

WIRELESS DATA

- Analyzer 2.4GHz**
- Analyzer 5GHz
- Client Monitoring

Wifi Analyzer

Please press Rescan button to view the updated wifi list

The below chart shows the results of the latest scan of your local area from your modem.

Signal Strength (-dBm)

Channel

Re-scan

If you use this tool, devices connected will be disconnected and will be able to connect after 1 minute.

Cancel Accept

Network Name (SSID)	Channel	40MHz	Signal Strength (RSSI)
Telstra449BDF	13		-72
Telstra Air	13		-71
Fon WiFi	13		-72
NYPD	6		-71

2. Analyser 5GHz

If you use this tool, devices connected will be disconnected and will be able to connect after 1 minute.

To refresh scan select Re-Scan button and click on accept.

Wireless

ACCESS POINTS 2.4GHZ

- Private_N3
- Guest1

ACCESS POINTS 5GHZ

- Private_N3-5G
- Guest1-5G

WIRELESS DATA

- Analyzer 2.4GHz
- Analyzer 5GHz**
- Client Monitoring

Wifi Analyzer

Please press Rescan button to view the updated wifi list

The below chart shows the results of the latest scan of your local area from your modem.

Signal Strength (-dBm)

Channel

Re-scan

Network Name (SSID)	Channel	40MHz	80MHz	Signal Strength (RSSI)
iiNet1B8F19-5G	36		*	-82
Telstra449BDF-5G	153			-91
NYPD-5G	36		*	-86
dontstealmyinternet	149			-93

3. Client Monitoring

Wireless Client Monitor

Selection

Google-Home

Wireless Client Monitor

Device Details

All information is given from the Client perspective

Host Name Dell-Notebook

Frequency 2.4GHz

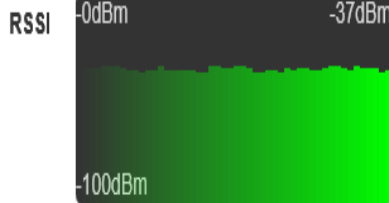
SSID Priv

MAC Address 94:

Device Capabilities 802.11n 1x1 WMM SGI20 AMPDU

Active WMM AMPDU

Power Transitions 511



PHY Rate 39 Mbps 52 Mbps

Data Rate 36 Kbs 9 Kbs

Packets Sent 2281937

Packets Received 1800450

Retransmissions 560

Time Connected 4 hours 59 minutes 38 seconds

Current Time 2019-10-26 20:26:31

Selected WiFi signal
Selected WiFi
Selected WiFi Signal

Select WiFi Device from drop down list.

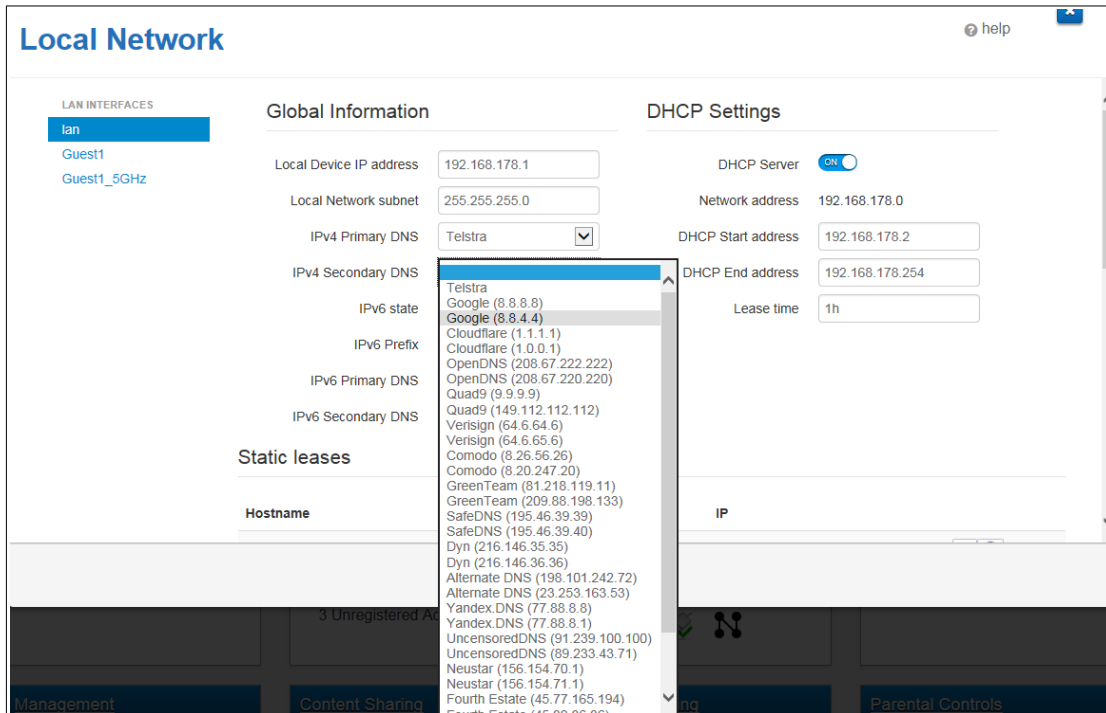
The Client Monitor is a very useful tool for monitoring the quality of the WiFi link between the modem and the WiFi device. It displays the following information.

- Host Name:** Name of WiFi device.
- Frequency:** Current WiFi Frequency Band used by device
- MAC address** of WiFi Device
- Device Capabilities.**
- Active:** Capability being used
- Power Transitions** (2.4 GHz WiFi Band only)
- RSSI:** Graph of RSSI of modem's received WiFi signal from WiFi device which is dynamically updated. The lower the RSSI the better the signal strength.
- Phy Rate:** The speed of the WiFi link between modem and device. These speeds are dynamically updated.

9. **Data Rate:** (2.4 GHz WiFi Band only): The speed of the data transmitted over the WiFi link. The speeds are dynamically updated,.

10. **Packets sent:** Packets sent by device. The packets are not updated dynamically

11. **Packets Received:** Packets received by device. The packets are not updated dynamically



12. **Retransmissions:** These are similar to CRC errors on a DSL link. The packet has to be retransmitted because it either did not arrive or had too many errors for the inbuilt error correction bits to correct.

13. **Time Connected:** Time the WiFi device has been continuously connected to the modem.

14. **Current Time:** Shows Time when monitoring started, does not update

33. DNS Selection

By default the modem uses Telstra as the DNS but has the option to select other DNS providers from a drop down list. To use a non Telstra DNS log into the modem and go to Advanced > Local Network.

Select a DNS provider from drop down list for IPv4 Primary DNS, IPv4 Secondary DNS, Pv6 Primary DNS and IPv6 Secondary DNS.

Local Network help

LAN INTERFACES

- lan
- Guest1
- Guest1_5GHz

Global Information

Local Device IP address: 192.168.178.1

Local Network subnet: 255.255.255.0

IPv4 Primary DNS: Google (8.8.8.8)

IPv4 Secondary DNS: Google (8.8.4.4)

IPv6 state: ON

IPv6 Prefix: 2001:8003:a886:b600::1/64

IPv6 Primary DNS: Google (2001:4860:4)

IPv6 Secondary DNS: Google (2001:4860:4)

DHCP Settings

DHCP Server: ON

Network address: 192.168.178.0

DHCP Start address: 192.168.178.2

DHCP End address: 192.168.178.254

Lease time: 1h

Static leases

Hostname	MAC address	IP
----------	-------------	----

Cancel Save

Save Settings and reboot modem or disconnect and then reconnect all devices for new DNS server selection to work.

33. Specifications

DJA0230 Smart Modem (Specs almost Identical to DJN2130)

Integrated LTE Module:

- **Quectel EC-25-AUTL (CAT-4)**
- External SIM slot
- External SMA antenna connectors
- Automatic switching to external antennas when connected, after rebooting the gateway. The external antenna is considered connected when the signal strength is above a threshold.
- Manual switching between the external and the internal antenna via the GUI

Main Chipset:

- BCM63138

Memory

- Non-Service-Affecting Platform Software upgrades (dual bank memory)
- 1GB RAM (DDR3)
- 512 MB Flash (2x256 Dual Bank)

Wireless capability:

- IEEE 802.11n 2.4 GHz using 2x2 BCM 4360 maximum 26dBm
- IEEE 802.11ac 5 GHz using 4x4 BCM 4366 maximum 30dBm

Ethernet Capability:

- 1xGigabit Ethernet WAN port
- 4x10/100Mbps/1Gigabit LAN ports

USB Master Capability

- x1 USB 3.0 Interfaces (1000mA)
- Supportive of 3G/4G UMTS dongle backup
- Hard Disk (FAT32 EXT2)
- NTFS, HFS+ supported
- Maximum Disk Size 2TB
- DLNA and SMB 1.0
- USB HUB

ADSL, ADSL2, ADSL2+ compliance:

- (Maximum Rate: 24 Mbps for downstream and 3 Mbps upstream)

VDSL2 compliance

- ITU G.993.2
 - SOS
 - SRA
 - INM
- Up to 17 MHz profiles (POTS)
- ITU-T G.993.5 (G.vector)
- ITU-T G.998.4 (G.inp)
- G.Fast g.9700, g.9701

NFC

- **No NFC for the DJA0230**

DECT

- CAT-iq™ 2.0 certification
- Up to 5 paired DECT handsets
- Up to 4 simultaneous DECT communication links

Voice

- 2 FXS ports with PSTN pass-through when operating in analogue voice mode
- 1 FXO port for PSTN requires external filter
- FXS 3 REN Equivalence

Temperature:

- 0° - 45° C (32 - 113 F) & Humidity: 20% to 80%

Power:

- Power consumption 10.4 Watts no drive attached to USB
- Power factor 0.43
- Volt Amps VA 24

34. Known Limitations and Bugs.

1. DLNA server does not sort media by folders
2. Modem does not support FTP access to USB drives.
3. VPN not supported.
4. UPNP does not work on all devices. Have to set port forwarding manually.
5. 4G backup mode only works on 4G not 3G, speed limited to 6 Mbps down 1 Mbps up.
6. When viewing Telephony information (Advance > Telephony > Information) Refresh button doesn't work
7. "Stop Trace Route" does not stop a trace route test.
(Advanced > Diagnostics > Ping & Trace Route)
8. Guest account does not work. Even when correct user name and password entered redirected to Log in page
9. WPS AP pin does not work. Can connect using WPS without having to enter pin when WPS pin is enabled in GUI.
10. WPS Device Pin can only enter 4 digits.
11. Devices connected to modem via switch or WiFi extender are grouped together with same MAC address. Have to enter MAC address manually if setting up static leases and if setting up port forwarding can't use Advanced > WAN Services > Port Forwarding. Not all switches and extenders have this problem.
12. Internet Traffic graph on DSL links is fault. Starts at zero 10 minutes before graph is viewed and rises to the total data received or transmitted since modem was rebooted.