TELSTRA GATEWAY PRO™ USER GUIDE
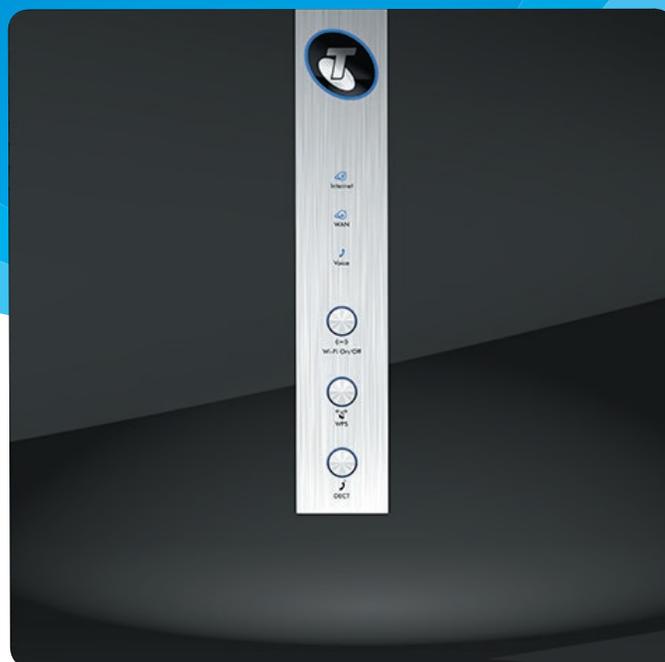
IT'S HOW
WE CONNECT

CONTENTS

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1. INTRODUCTION

1.1. Getting to know your Telstra Gateway Pro™

Telstra has worked with our partner Netgear to bring you the Telstra Gateway Pro™ (Netgear™ model number v7610). The Telstra Gateway Pro™ is an advanced Gateway, providing high speed Wi-Fi and connectivity for a variety of business devices. It can connect to the Internet using:

• ADSL

• VDSL (including NBN Fibre to the Basement and NBN Fibre to the Node connections)

• NBN Fibre to the Premises

The Gateway is compatible with optional USB mobile broadband device for peace of mind in case of an unlikely service interruption.

The Telstra Gateway Pro™ features world leading Wi-Fi and the best connectivity available so you get the most out of your Telstra fixed Broadband service.

• Enjoy faster Wi-Fi with the latest Wi-Fi AC technology

• Experience seamless dual band connectivity of multiple devices on your network

• Make calls on your new business phone with Telstra's Digital Voice service

• Securely access your business files from home with our remote access feature

1.2. What's in the box?

The **Quick Start Guide** outlines all the components that are included with the Telstra Gateway Pro™ and can be found on Telstra.com using the following link: http://business.telstra.com.au/t5/DOT -Bundle-Help/ct-p/bundles_and_dot. Note the reference letters for the bundled cables, which will be used later in this guide.

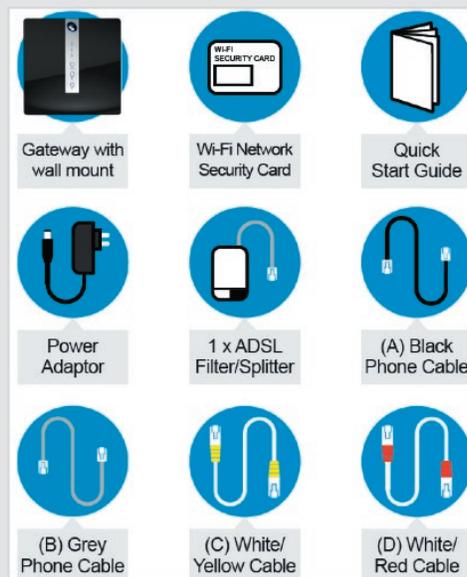|		
Gateway with wall mount	Wi-Fi Network Security Card	Quick Start Guide
Power Adaptor	1 x ADSL Filter/Splitter	(A) Black Phone Cable
(B) Grey Phone Cable	(C) White/ Yellow Cable	(D) White/ Red Cable

Figure 1: What's In The Box?

1.3.   Features and Benefits

1.3.1.   Faster Wi-Fi with the latest AC technology

The Telstra Gateway Pro™ is a world leading Gateway using the best Wi-Fi standard available, Wi-Fi 802.11 AC, to maximise your Wi-Fi experience in the office. The Telstra Gateway Pro™ also has 4 x 4 Wi-Fi streams to deliver the best possible coverage for your network.

1.3.2.   Connect multiple devices via dual band Wi-Fi

This Gateway enables connection of devices such as laptops, smart phones and tablets to the Internet via two separate Wi-Fi bands:

• 2.4GHz band for 802.11 B/G/N devices
• 5GHz band for 802.11 A/N/AC devices

This allows you to spread your devices across both bands (depending on device compatibility) to make the best use of your Wi-Fi network coverage. The Wi-Fi Network Security Card provided with your Gateway provides the Wi-Fi Network (SSID) name for both the 2.4GHz and 5GHz bands. The Wireless Security Key (WPA password) is also provided on this card.

Figure 2: Wi-Fi Network Security Card

1.3.3.   Make phone calls with Telstra's Digital Voice Service

Digital Office Technology (DOT) customers can use one of Telstra's IP Phones, compatible with this Gateway, to deliver digital calls over the Fixed Broadband service. Telstra's Digital Voice service supports up to 10 services/lines at one site and provides a number of useful calling features to enable smart call management including:

• Fixed MessageBank
• Simultaneous and Sequential Ring
• Call Forwarding when not reachable
• Virtual Receptionist (Auto-attendant)

There are a number of compatible business IP phones to choose from including:

• Panasonic Cordless IP DECT Handset with Base Station (KK-TPG600)

• Telstra (Yealink) T42G IP Handset

• Telstra (Yealink) T48G IP Handset

Refer section 7.1 for a full list of compatible IP phones.

For more information about DOT Digital Voice services or the handsets outlined above refer to the following link: http://business.telstra.com.au/t5/Office-Business-Phones/ct-p/office_phones

1.3.4. Secure Remote Access Feature

The Gateway's Remote Access feature enables secure access to your business files from home. Refer to the VPN configuration guide available at: http://www.telstra.com.au/content/dam/tcom/small-business/bundles/pdf/telstra-gateway-pro-v7610-configuration-guide.pdf

1.3.5. Always connected with Telstra's Mobile Broadband USB

The Mobile Broadband USB back up feature provides piece of mind in case of an unlikely Fixed Broadband service interruption. This feature ensures that the Gateway is always connected to the Internet via the Telstra Mobile Network USB in the unlikely event that the Broadband service is unavailable.

The Gateway supports the use of a compatible Telstra Mobile Broadband USB device providing 2 USB 3.0 ports, one port on the side of the device and the other port can be found on the back of the device. The following USB Mobile Broadband devices are compatible for use with the Telstra Gateway Pro™:

• Netgear 320U (Sierra Wireless).

• Telstra 4Gx e8372 (Huawei).

1.4. Getting To Know the Gateway

1.4.1. Understanding the lights and what they mean

Power LED around
the Telstra Logo

Internet LED

WAN LED

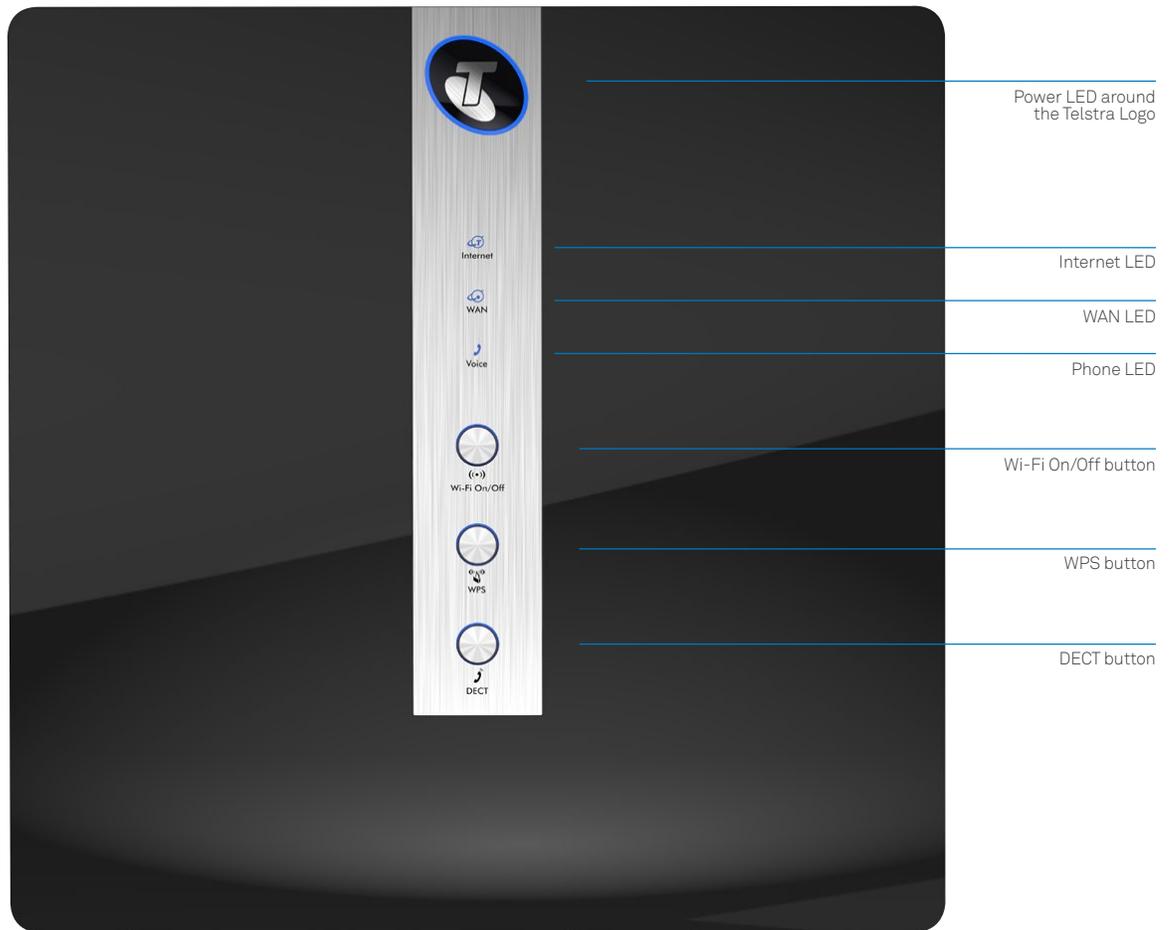Phone LED

Wi-Fi On/Off button

WPS button

DECT button

Figure 3: Telstra Gateway Pro™ Front Panel

On the front of the Gateway there are 3 LEDs and 3 buttons.
The meaning of the various light sequences and buttons are listed in the following table:

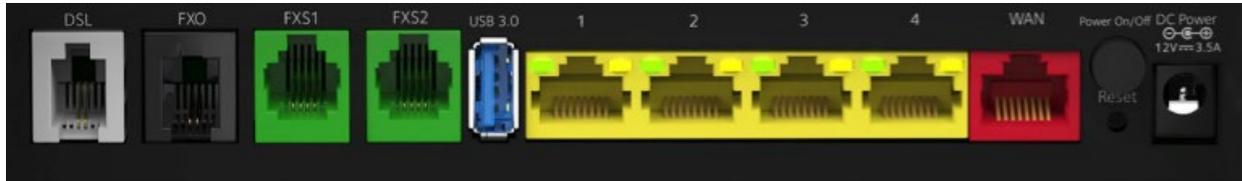| Front Panel LED & button description	LED Activity	Description
Power LED around the Telstra Logo	Solid blue	Indicates power is on and the Gateway is operating
	Off	No power is being received by the Gateway.
Front Panel LED & button description	LED Activity	Description
Internet LED	Solid blue	Physical WAN port is connected successfully, authentication of username and password is successful and a public IP address has been assigned
	Flashing orange	Authentication of username and password in progress
	Off	Physical WAN port is not connected or Mobile Broadband not active
	Solid red	Physical WAN port is connected but authentication of username and password was unsuccessful.
	Flashing red	LED is illuminated red and turns off briefly every 5 seconds when operating in mobile fail over mode
WAN LED	Solid blue	WAN port is connected successfully to DSL or NBN
	Flashing orange	In progress, layer 2 WAN interface connecting
	Off	Physical WAN port is not connected (Note: individual LED on the physical Ethernet port at the back panel to indicate: Amber = 10/10Mbps, GREEN = 1Gbps)
Phone LED	Solid blue	Phone service is working between the Gateway and Broadworks voice platform. Registration/authentication has been successful on ALL the configured SIP accounts (FXS and DECT).
	Flashing orange	Establishing a new SIP registration to the Broadworks platform for any one or more configured SIP accounts.
	Off	Phone service registered. Phone service disabled.
Wi-Fi On/Off button	2.4GHz and 5GHz status and configuration will be available in the Gateway Control Panel. **Important Note:** To switch Wi-Fi on or off, press the Wi-Fi button for at least **3 seconds**. The Wi-Fi button LED will either switch on or off.	
	Solid blue	Inbuilt Wi-Fi access point for 2.4GHz and 5GHz is up and operating
	Flashing orange	Packets are transmitting
	Off	Inbuilt Wi-Fi access point for both 2.4GHz and 5GHz is disabled
WPS button	Press this button to open a 2-minute window for the Gateway to connect with other WPS-enabled devices.	
	Solid blue	Connection succeeded under Wi-Fi Protected Setup (WPS)
	Flashing orange	WPS is active, pairing has been initiated and in progress (Negotiation is in progress under WPS)
	Solid red	WPS has not connected successfully
	Off	WPS is disabled or not initiated
DECT button		This functionality will be available in a future software update of the Gateway.

1.4.2.   Getting to know the back panel

Figure 4: Telstra Gateway Pro™ Back Panel

In the diagram above there are a number of ports and buttons on the back of the Gateway.
These ports and buttons are described in the table below:

Back Panel LED & port description	LED Activity	Description
DSL port	None	The DSL port is connected for ADSL and VDSL connections
FXO port	None	N/A
FXS1 port	None	Plug an analogue phone / device into this port when voice is enabled on the Gateway
FXS2 port	None	If enabled plug a second analogue device into this port
USB (3.0) port	None	To plug a Mobile Broadband backup device and/or a storage device to share on the network. There is one USB port on the back and one USB on the side of the Gateway.
LAN ports 1–4	Solid Green	LAN port is connected at 1000Mbps
	Flashing green	LAN port is connected at 10/100Mbps / packets are transmitting
	Off	No traffic transmitted or no Ethernet cable plugged in
WAN port	Solid green	WAN port is connected successfully
	Blinking green	Packets are sending and receiving
	Off	Physical WAN port is not connected (Note: individual LED on the physical Ethernet port at the back panel to indicate: AMBER = 10/10Mbps, GREEN = 1Gbps)
On/Off button	None	Turns on the power to the Gateway
Reset button	None	Using a paperclip to initiate the reset function. This will take the device back to default factory settings. Refer 6.4.1 for more detail.
Power port	None	Plug in power pack/cable supplied to the power point and turn power point on from the wall to turn on power to the Gateway.

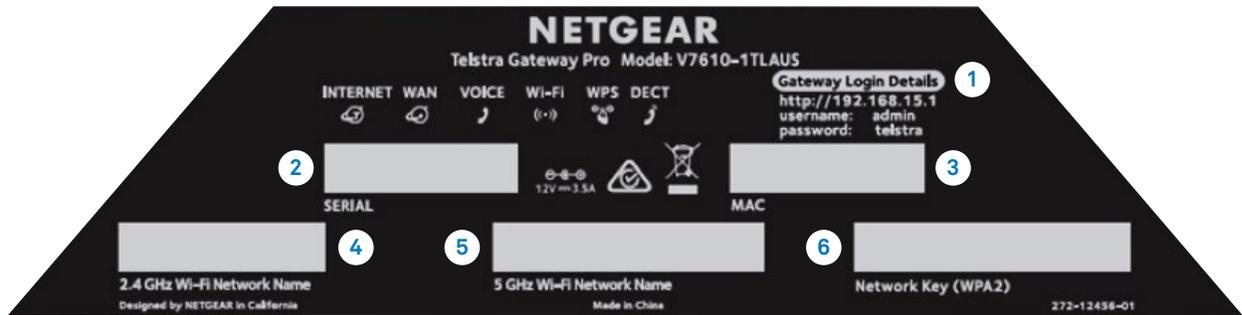### 1.4.3.   Product label on the bottom of the Gateway

Figure 5: Telstra Gateway Pro™ Label

You will find a number of important pieces of information on the product label on the bottom of the Gateway including:

Label	Description
1. Gateway Login Details	Enables you to access the Gateway Control Panel to manage and customise your Gateway settings. Please refer to Section 3 of this Guide for more detail on how to manage your Gateway settings.
2. Serial Number	Number supplied by the manufacturer and vendor.
3. Mac Address	Registered identified number which interfaces with the Telstra network.
4. 2.4GHz Wi-Fi Network Name	Broadcast name for the 2.4GHz band of the Wi-Fi Network enabling you to connect your devices via Wi-Fi.
5. 5GHz Wi-Fi Network Name	Broadcast name for the 5GHz band of the Wi-Fi Network enabling you to connect your devices via Wi-Fi.
6. Network Key (WPA2)	Password that authenticates the use of devices with the Gateway's Wi-Fi Network.

2. SETTING UP YOUR TELSTRA GATEWAY PRO™

The **Telstra Gateway Pro™ Quick Start Guide** provides a full set of instructions on how to set up your Gateway. Please refer to the link below to access the Telstra Gateway Pro™ Quick Start Guide: http://business.telstra.com.au/t5/DOT-Bundle-Help/ct-p/bundles_and_dot

This section will provide detailed information on setting up your Telstra Gateway Pro™ for a variety of internet connection types.

Important Note:	Place your Telstra Gateway Pro™ vertically on a surface in a central location to your other Wi-Fi devices to optimise Wi-Fi performance.

2.1. Alternative placement methods for the Gateway

The Gateway's mounting location can affect wireless connections. For best results, place your Gateway:

• Near an AC power outlet, close to computers you plan to connect with Ethernet cables, and near locations where you use wireless computers.

• In an elevated location, keeping the number of walls and ceilings between the Gateway and your wireless computers to a minimum.

• Away from electrical devices that are potential sources of interference, such as ceiling fans, security systems, microwaves, or the base for a cordless phone.

2.1.1.   Wall Mount the Gateway

• Drill holes in the wall where you will wall-mount the Gateway. Put wall anchors in the holes.

• Insert screws into the wall anchors, leaving 3/16 in. (0.5 cm) of each screw exposed.
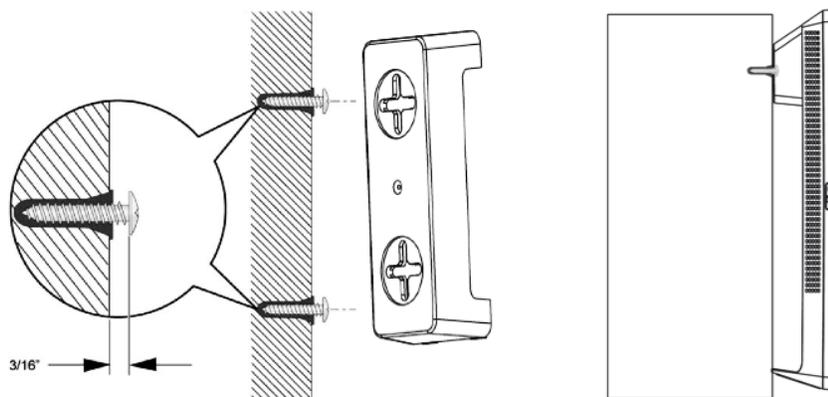

Figure 6: Gateway Wall Mounting and Adaptor Plate

• Attach the mounting plate securely to the Gateway and attach to the wall. The Gateway should be mounted securely and flush against the wall.

2.1.2.   Horizontal Mounting

Important Note:	It is recommended that the Gateway is **not placed in a horizontal position.**

2.2. Setting up your Telstra Gateway Pro™ for ADSL and VDSL

If you don't have an NBN box at your premises you will be using one of the following connection types:

• ADSL (ADSL, ADSL2 and ADSL2+)
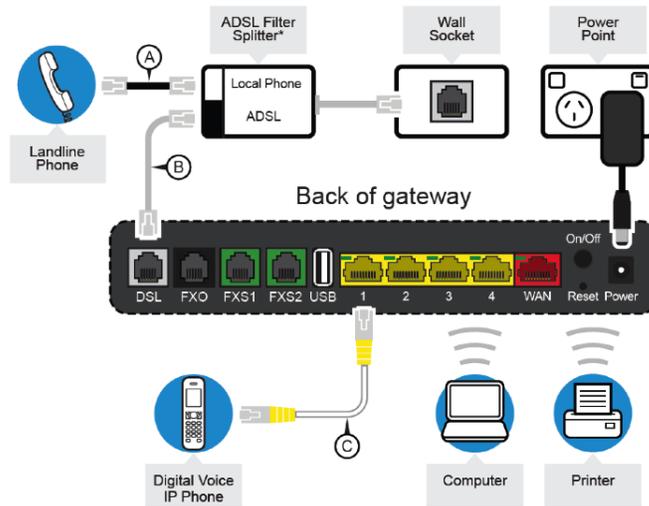• VDSL (this includes NBN Fibre to the Node and NBN Fibre to the Basement connections)
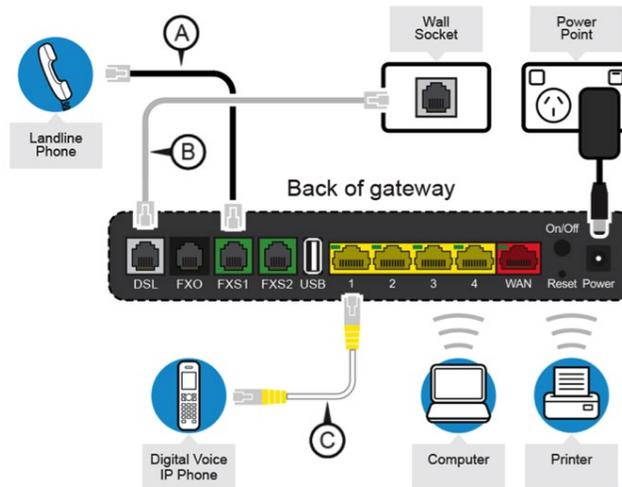

Figure 7: Telstra Gateway Pro™ Setup for ADSL

Figure 8: Telstra Gateway Pro™ Setup for VDSL

You will need a copy of your order completion email and your Wi-Fi Network Security Card to get started.

Your Gateway can be set up in **3 easy steps:**

Step 1: Connect the cables as in Figure 7 or Figure 8, depending on your connection type.

Step 2: Connect your devices to the Gateway, either using an Ethernet cable or via Wi-Fi.

How to:	Your Wi-Fi Network Security card contains the Network names and Network Key to connect your devices to both the 2.4GHz and 5GHz bands.

Step 3: Activate your Internet service and voice service using the Setup Wizard.

How to:	The Setup Wizard can be accessed by either Ethernet or Wi-Fi by typing the Telstra default IP address, 192.168.15.1, into your preferred browser. This will start the wizard and you can follow the screens and prompts to complete.

For more detail on the Setup Wizard screens refer to section 3.1 of this Guide.

2.3. Setting up your Gateway with an NBN box (Fibre to the Premises)
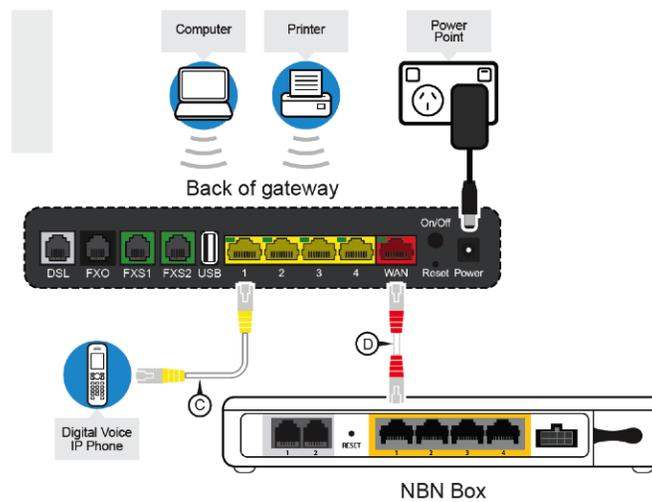
Figure 9: Telstra Gateway Pro™ Setup for NBN (FTTP)

If you do have an NBN box at your premises you will have an NBN Fibre to the Premises (FTTP) connection. You will need a copy of your order completion email and your Wi-Fi Network Security Card to get started.

Your Gateway can be set up in 3 easy steps:

Step 1: Connect the cables as per Figure 9.

Step 2: Connect your devices to the Gateway, either using an Ethernet cable or via Wi-Fi.

How to:	Your Wi-Fi Network Security card contains the Network names and Network Key to connect your devices to both the 2.4GHz and 5GHz bands.

Step 3: Activate your Internet service and voice service using the Setup Wizard.

How to:	The Setup Wizard can be accessed by either Ethernet or Wi-Fi by typing the Telstra default IP address, 192.168.15.1, into your preferred browser. This will start the wizard and you can follow the screens and prompts to complete.

For more detail on the Setup Wizard screens refer to Section 3.1 of this Guide.

2.4. Telstra Gateway Pro™ Quick Start Guide

The **Telstra Gateway Pro™ Quick Start Guide** provides a full set of instructions on how to set up your Gateway. Please refer to the link below to access the Telstra Gateway Pro™ Quick Start Guide: https://www.telstra.com.au/small-business/bundles/dot

Steps 4 and **5** of the **Telstra Gateway Pro™ Quick Start Guide** provide details about how you can manage and troubleshoot your Gateway.
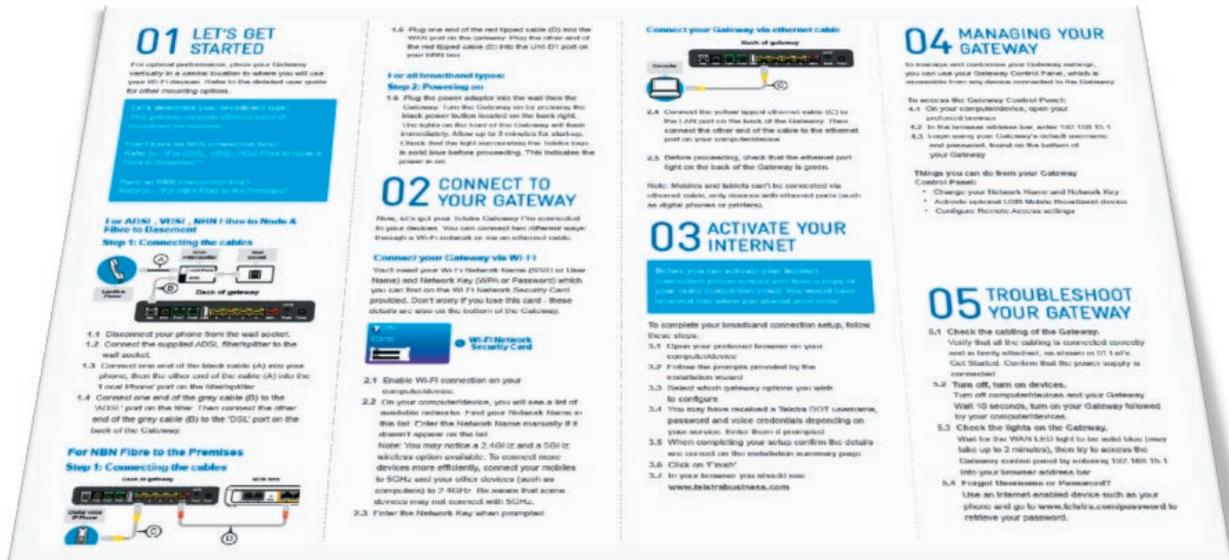
Figure 10: Quick Reference Guide

3. INITIAL TELSTRA GATEWAY PRO™ CONFIGURATION

You may need to setup or reconfigure your Telstra Gateway Pro™, for example when moving premises, connecting to a new internet service, or after a factory reset. The Telstra Gateway Pro™ can be configured in 2 ways:

• Using the Installation Wizard immediately after setup.

• Manually through the Control Panel Graphical User Interface (GUI).

In this section, step by step instructions are provided for both methods of setting up the Telstra Gateway Pro™. The Telstra Gateway Pro™ Control Panel (GUI) is a site that allows you to manage and customise Gateway settings and features.
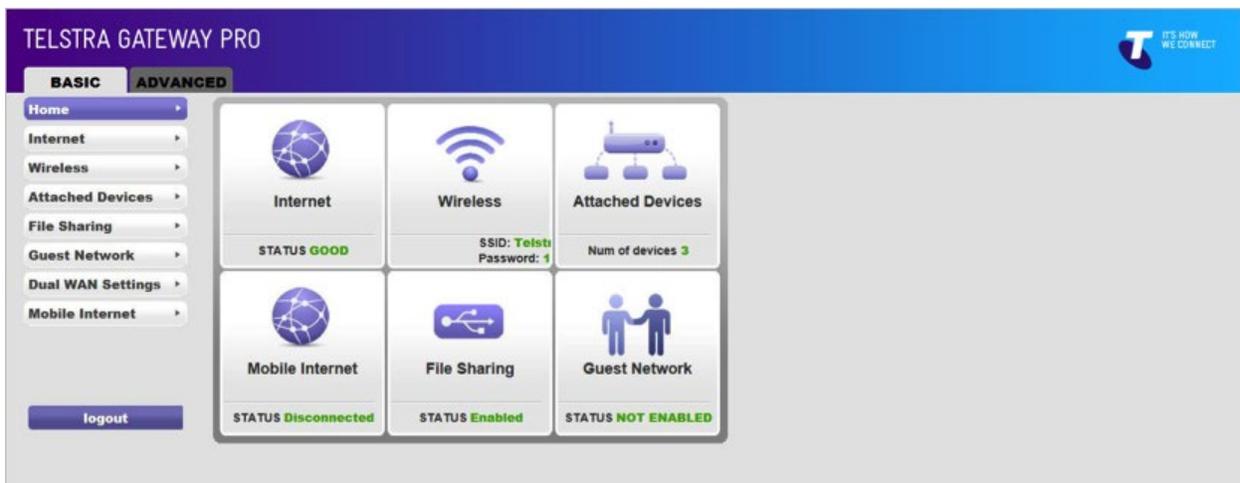
Figure 11: Telstra Gateway Pro™ Control Panel

When the Telstra Gateway Pro™ is first set up, either out of the box or after a factory reset (see Section 6.4), it will detect which network you are on and present you with an installation wizard that guides you through your internet setup. If you have previously configured your Gateway you will be presented with a login in screen to the Gateway control panel.

For either an ADSL or VDSL connection ensure your DSL line is plugged into the grey **DSL port** on the back of the Telstra Gateway Pro™ and check for sync, the blue WAN LED on the front of the Gateway should be lit.

For an NBN connection, ensure you have connected your NBN box to the red **WAN port** on the back of the Telstra Gateway Pro™ and check the blue WAN LED on the front of the Gateway is lit.
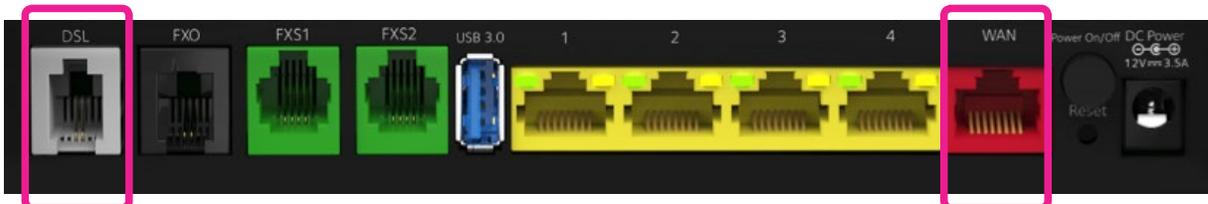

Figure 12: Telstra Gateway Pro™ WAN and DSL Ports

3.1. Initial Setup Using The Installation Wizard

The Installation Wizard can be accessed from any connected device using an internet browser when visiting any website for the first time (e.g. www.telstra.com) or by loading the Telstra Gateway Pro™ default IP address http://192.168.15.1.

This will start the auto WAN (internet connection) sensing immediately (Figure 13) on the Gateway and determine which WAN interface is being used; ADSL, VDSL or Ethernet WAN (NBN FTTP).
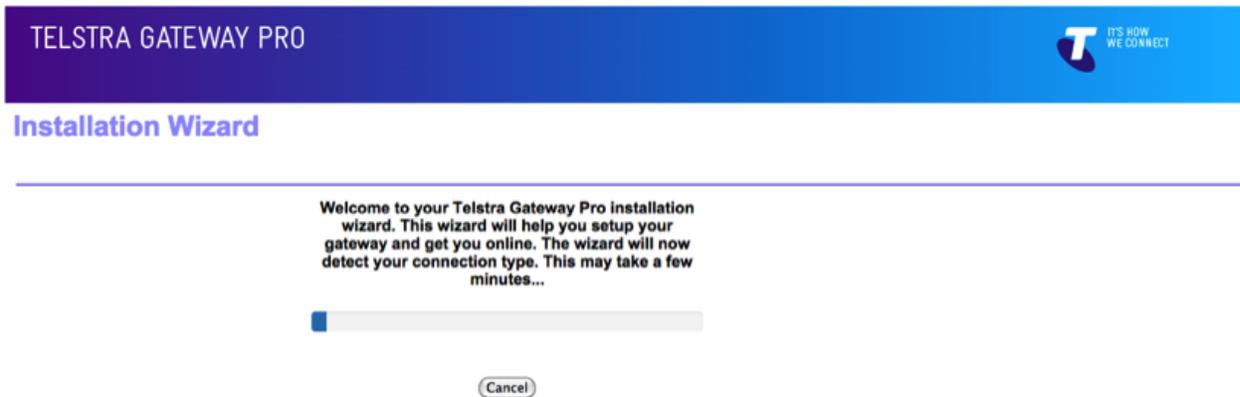

Figure 13: Installation Wizard WAN Sensing

- If no Internet Connection is detected the Installation Wizard will show the following screen. Check that the cabling to the Gateway is correct, and click **Retry**.

Figure 14: Internet Connection Setup Error Screen

- You will now need to select which options you want to configure (Figure 15).

Important Note:	It is not necessary to set up any of these options for a Telstra Business Broadband (T-Biz) service unless you want to customise the Wi-Fi settings and/or Admin password.

- When setting up the Gateway for the first time, click **Next**.
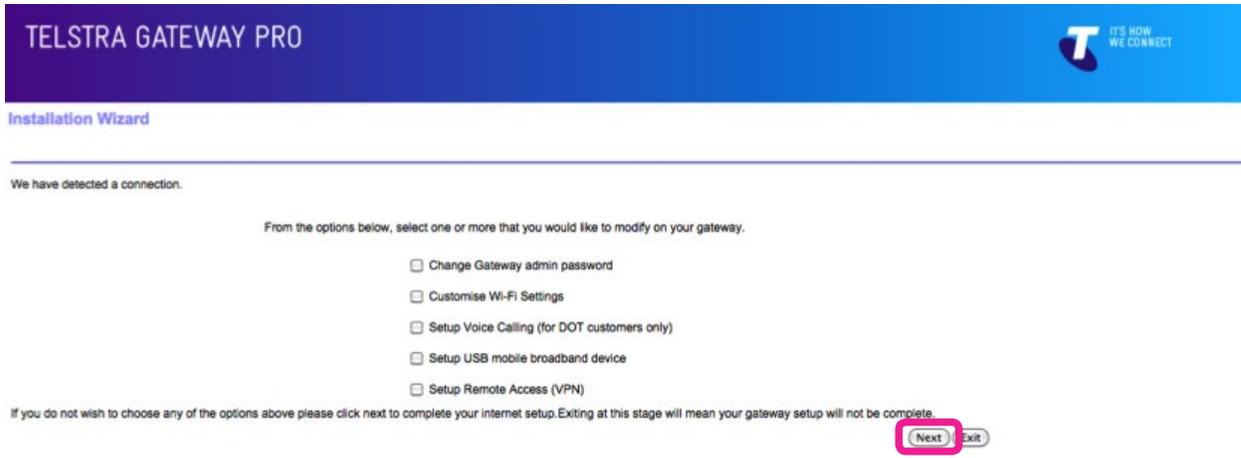
Figure 15: Installation Wizard Setup Options

For further information on these options review **Section 4** and **5** of this guide before selecting any additional options you would like to configure and continuing with the installation process.

• For ADSL you now need to enter your ADSL credentials (username & password) which you can find in your order completion email from Telstra and click **Next**.

Figure 16: Username and Password Fields For ADSL

• For NBN/ VDSL the Gateway will now attempt to establish a connection to the Internet, once successful it will show you a success page informing you are connected and will then show you an installation summary page with additional details.

Figure 17: Successful Connection Page

If you have selected items to configure follow the wizard through to the summary screen.

• You will now see a summary of the setup. Review any changes you have made and click **Finish**.

  The changes will now be made to the Gateway and additional configuration for voice setup (if applicable) will be downloaded.
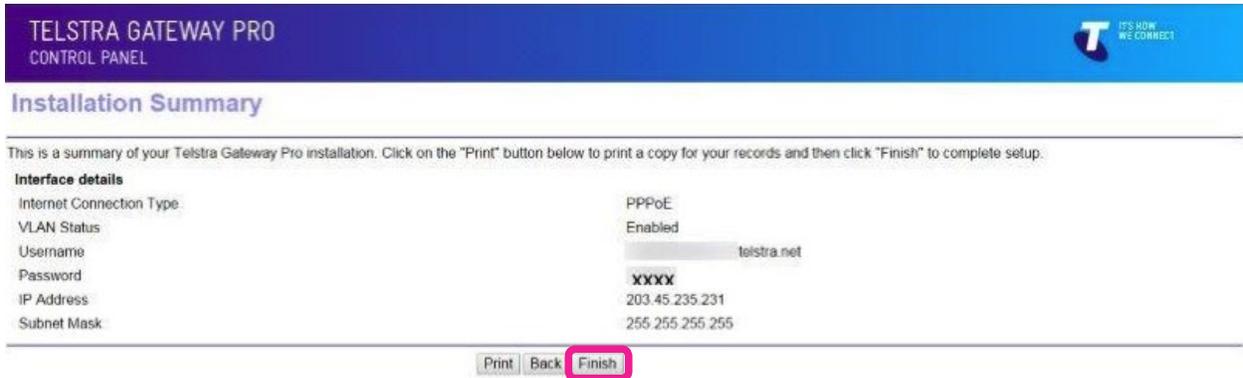
Figure 17: Installation Summary Page

• When installation is complete the Telstra Business Website will load. You are now connected to the Internet.
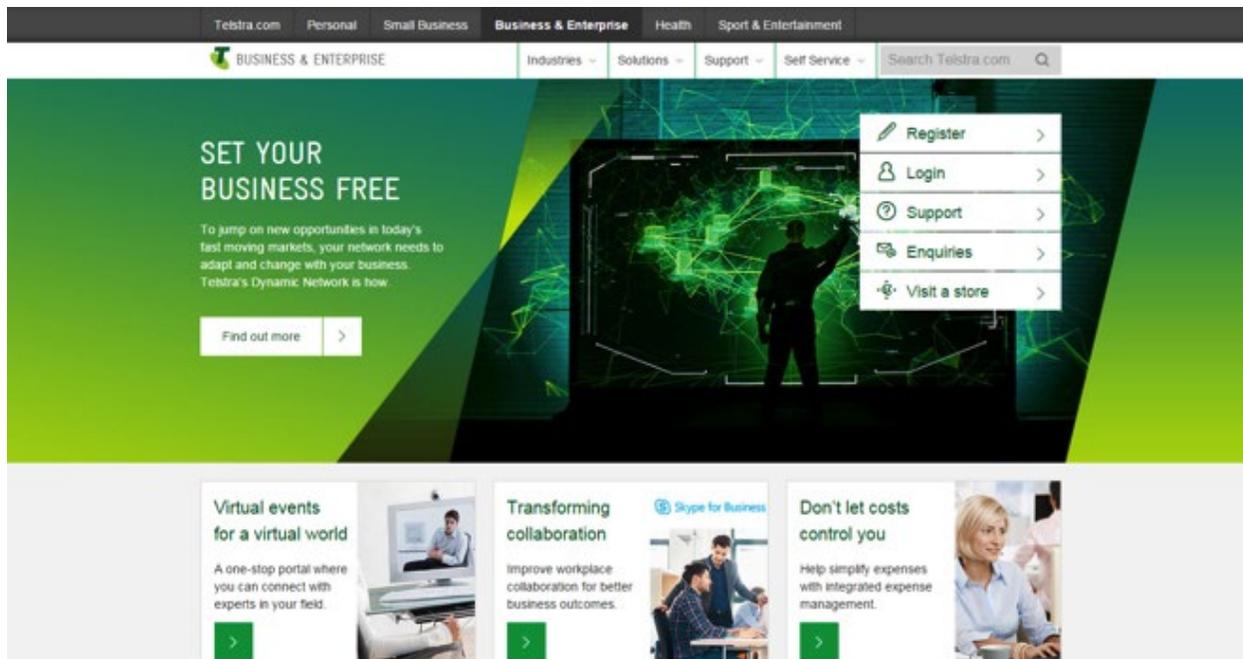
Figure 18: Telstra Business Website

To configure your Telstra Gateway Pro™ after the initial setup, follow the steps in Section 3.2.

3.2. Configuring Telstra Gateway Pro™ Using the Control Panel (GUI)

The Gateway Control Panel can be accessed through your internet browser via an Ethernet or Wi-Fi connection using the Telstra default IP address **192.168.15.1.** This will bring up the Login screen (Figure 21) and from here you will be able to configure the Telstra Gateway Pro™ to meet your requirements.

To access the Control Panel you need to login with the following details:

• Username: admin

• Password: telstra

Then click **Continue**.

Figure 19: Gateway Control Panel Login

The Control Panel has two main menu types, **Basic** and **Advanced.**

Control Panel Basic Menu
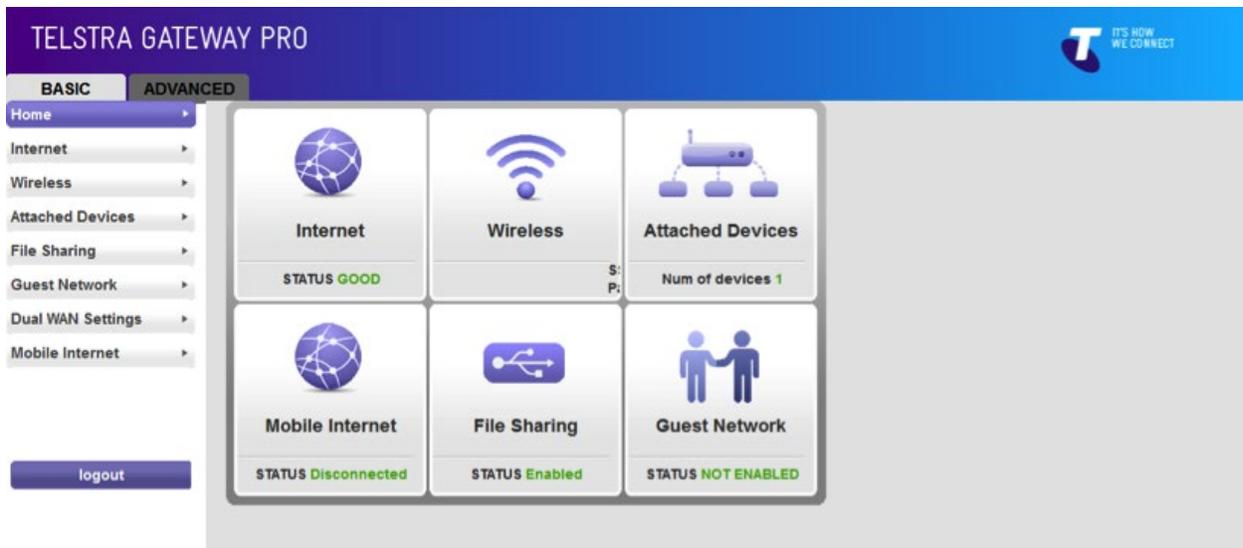
Figure 20: Control Panel Basic Menu

Control Panel Advanced Menu

Figure 21: Control Panel Advanced Menu

From each of these menus you will be able to view sub-menus which will provide current details about the device and also give you the ability to configure changes where appropriate.

4. FURTHER CONFIGURATION OF GATEWAY SETTINGS

There are a number of configuration items you can change to manager security, connected devices and update your connection details. This section provides instructions to complete:

- Changing your Gateway login password.
- Customising your Internet (WAN) connection.
- Customising your Wi-Fi settings to connect new or existing devices.
- Setting up voice calling on your Gateway.
- Connecting devices to your Gateway.
- Setting up a mobile broadband back up device.

4.1. Changing your Gateway login Password

As a security measure you may wish to change your Control Panel username and password settings. This provides an additional layer of security for your Gateway and business network. You can follow the steps below to complete this process.

There are two ways to change your Gateway login password, via the Installation Wizard, or in the Control Panel.

4.1.1. Change Gateway Password Using the Installation Wizard

If you have selected change admin password as part of the installation process using the installation wizard, complete the following steps:

- Enter the old password into the **Old Password** field (the default password is **telstra**).
- Enter your new password into the **New Password** and **Confirm New Password** fields.
- Click **Next** to continue the Installation Wizard process.

Figure 22: Wizard Password Screen

Important Note:	If your new Gateway password is lost, you will need to reset the device and complete the initial configuration again. **ADSL users:** Before you reset the Gateway ensure you also have your ADSL log in details to assist with reconnection to the Internet.

4.1.2. Change Gateway Password Using the Control Panel

The second method to change the admin password is via the Control Panel Advanced menu.

• To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to **Advanced->Administration -> Set Password.**
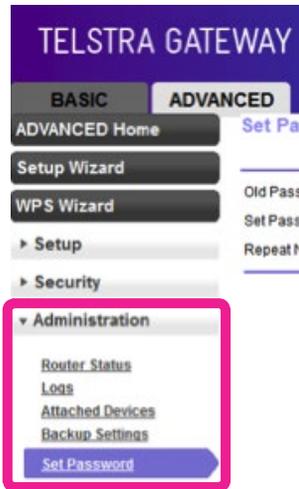

Figure 23: Set Password Advanced Menu Item

Complete the following steps to update your password in this process:

• Enter the old password in the **Old Password** field (the default password is **telstra**).

• Enter your new password into the **New Password** and **Repeat New Password** fields.

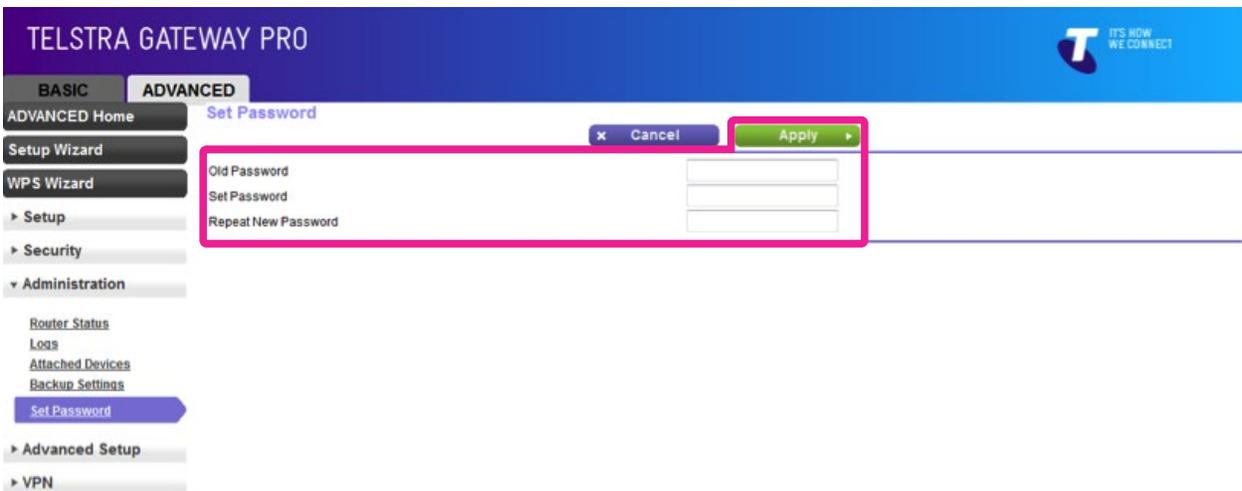• Click **Apply** to confirm these changes.

Figure 24: Advanced Menu Set Password Screen

4.2. Customising your LAN/WAN Settings

If you credentials change (for example if you have moved to new premises) you may need to update your username and password details for your ADSL connection. You may also need to change your connection type, if you switch from ADSL to an NBN service. The following steps provide you with an overview of how to complete these changes.

4.2.1.   DSL – Connection and Username/Password

To configure the ADSL connection you will need to enter your Username and **Password** into the Telstra Gateway Pro™ Control Panel.

- To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to **Basic>Internet.**
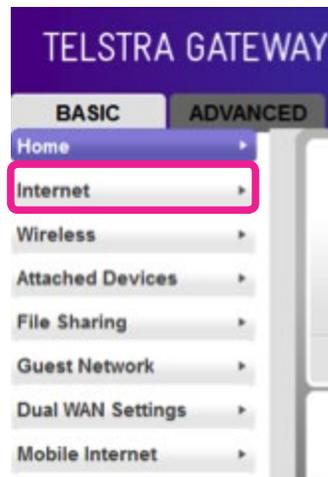

Figure 25: Control Panel Basic Screen

- Ensure the **Does your internet connection require a login?** has **Yes** selected and **Internet Service Provider** has **PPPoE** selected.
- Enter your full **Username (Login)** and case sensitive **Password** into the correct fields and click **Apply.**

Figure 26: Internet Settings

• Click **Home.** The Internet icon should show STATUS: **GOOD.** The Internet LED will also change to **blue.**

Figure 27: Control Panel Basic Menu- Good Internet Connection

4.2.2.   WAN – Connection (NBN)

To configure the NBN connection you will need to access the Telstra Gateway Pro™ Control Panel.

• To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to **Basic>Internet.**

Figure 28: Control Panel Basic Screen

• Tick **Use Wan Uplink Mode** and ensure **Does your internet connection require a login?** has **No** selected. Then click **Apply.**
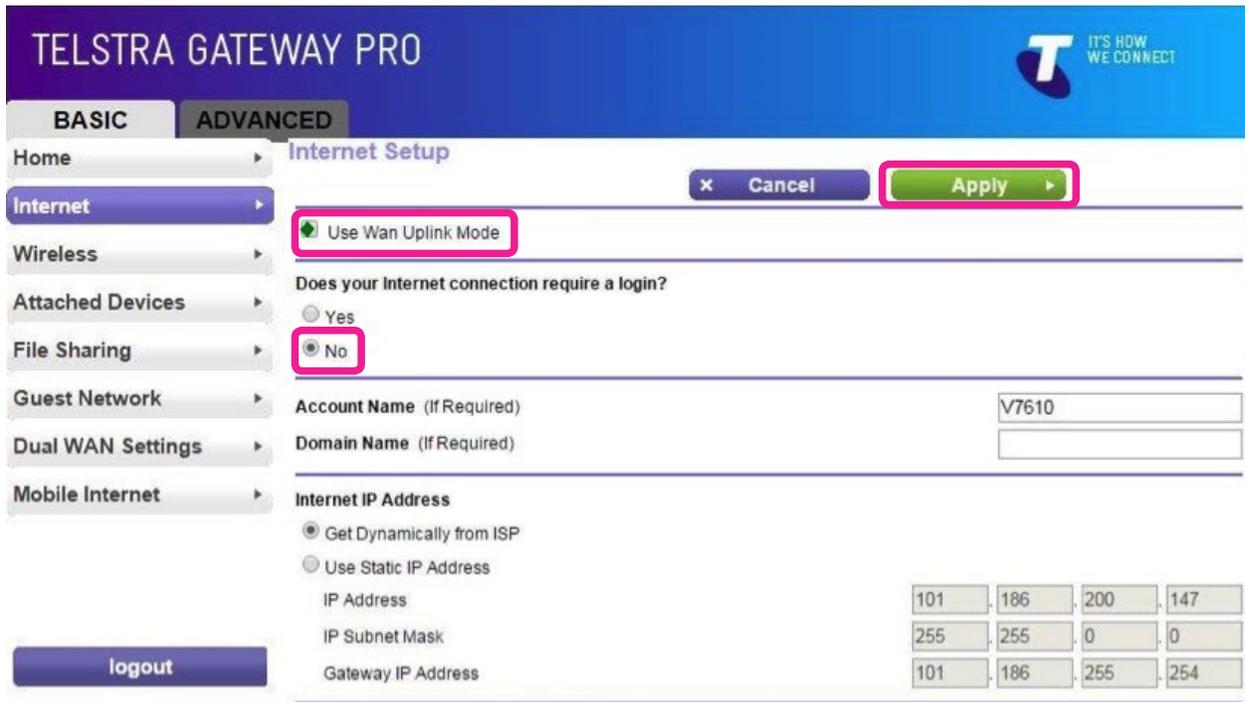

Figure 29: WAN Setup for NBN

• Click **Home.** The Internet icon should show STATUS: **GOOD.** The Internet LED will also change to **blue.**

Figure 30: Control Panel Basic Screen

4.3. Configuring your Gateway Wi-Fi

You may wish to change the default names and passwords for your Wi-Fi network, to reflect your business name. The following information will assist with this process.

4.3.1. Customising Wi-Fi Settings

• To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to **Basic->Wireless.**

Figure 31: Basic Menu Wireless Settings

On this screen you can update settings for both the 2.4 GHz and 5 GHz Wi-Fi channels including:

• Change the SSID (Gateway's Wi-Fi name).

• Enable / Disable SSID Broadcast

• Change the 2.4 GHz Channel to reduce interference from other 2.4 GHz devices (e.g. cordless phones).

• Change Encryption Key.

• Change Security Settings.

Important Note:	It may be easier to change the Wi-Fi SSID and channel settings in the Telstra Gateway Pro™ to match those of the Gateway or router you're replacing. Doing this will avoid you having to change all the Wi-Fi settings on devices at your premises. To find the existing Wi-Fi credentials from the old Gateway or router, refer to the instruction manual for that device.

To configure the Main Wireless LAN settings you will need to make any changes that may be required in the Wireless Setting screen. Refer to the numbered sections in **Figure 34** and the **Wireless Settings** table for detailed information about these settings and how to change them:

Figure 32: Basic Menu Wireless Configuration Items

4.3.2. Wireless Settings

Item Number	Wireless Settings Items	Description
1	Enable SSID Broadcast	If this feature is enabled, the wireless router will broadcast its name (SSID) to all wireless stations. Stations that have no SSID (or a null value) can then adopt the correct SSID for connections to this access point.
	Enable Wireless Isolation	If checked, the wireless client under this SSID can only access internet and it can't access other wireless clients even under the same SSID, Ethernet clients or this device. Other clients can't access the wireless client, either.
	Enable WPS	WPS is a network security standard allowing users to easily secure a wireless home network, and connect wireless client devices to it, without accessing the device or Gateway configuration screens, and without even knowing the wireless network's security key/passphrase.
	Name (SSID)	Enter a value of up to 32 alphanumeric characters. The same name (SSID) must be assigned to all wireless devices in your network.
	Channel:	This field determines which operating frequency will be used. It should not be necessary to change the wireless channel unless you notice interference problems with another nearby access point or wireless device.
	Mode:	Select the wireless mode you want to use. The options are: • Up to 54 Mbps. Legacy Mode, with a maximum speed of up to 54 Mbps for b/g networks. • Up to 289 Mbps. Neighbour-Friendly Mode, the default, with a speed of up to 289 Mbps in the presence of neighbouring wireless networks. • Up to 600 Mbps. Performance Mode, with a maximum Wireless-N speed of up to 600 Mbps.
2	Security Options	Select the security option you want to use: • None - no data encryption (not recommended) • WEP - Wired Equivalent Privacy, use WEP 64- or 128-bit data encryption **Note:** Wi-Fi Protected Setup function is disabled when the security setting is WEP authentication • WPA2-PSK [AES] - Wi-Fi Protected Access version 2 with Pre-Shared Key, use WPA2-PSK standard encryption with the AES encryption type • WPA-PSK [TKIP] + WPA2-PSK [AES] - Allow clients using either WPA-PSK [TKIP] or WPA2-PSK [AES]
3	Security Options (WPA2-PSK)	Normally this can be left at the default value of Automatic. It allows adaptors to use either Open System or Shared Key to do the authentication. If you want to have better secure authentication, then you can select Shared Key and your wireless adaptors can only use Shared Key to connect to this network.

After making any changes click **Apply** at the top of the Wireless Settings screen and test your connection with a Wi-Fi connected device.

4.4. Setup Voice Calling

The Telstra Gateway Pro™ supports Voice calling for DOT customers. There are two methods to setup voice calling on the Telstra Gateway Pro™, via the Installation Wizard or in the Gateway Control Panel.

Important Note:	Device ID and Password information for Voice Calling can be found on your order completion email.

4.4.1. Method One: Using the Installation Wizard

- During the installation process, select the **Setup Voice Calling (for DOT customers only)** option on the Installation Wizard screen. Then click **Next**.
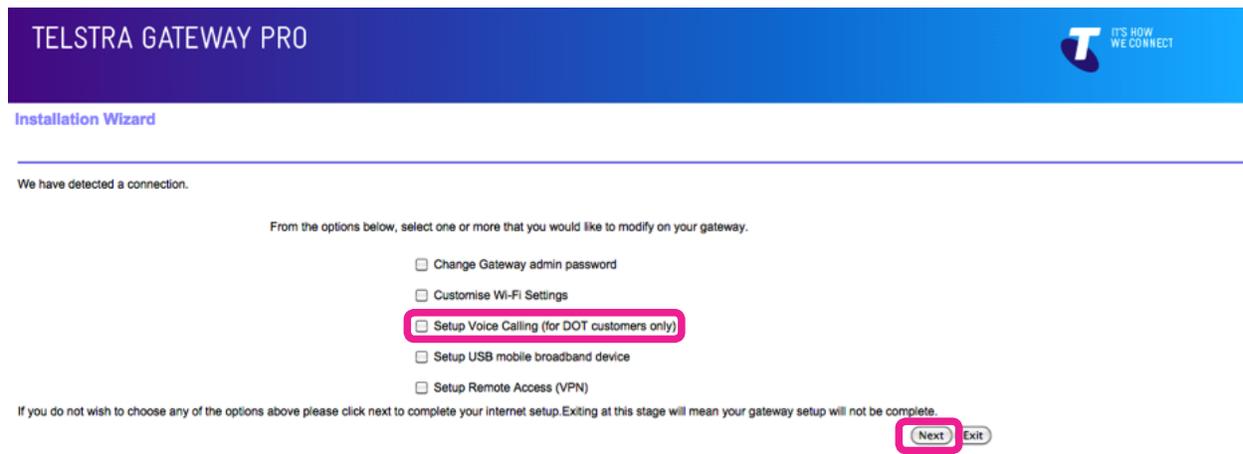

Figure 33: Installation Wizard Menu

- Enter your **Device ID** and **Password** details on the Setup Voice Calling screen. Then click **Next**. Complete the Installation Wizard process (Section 3.1).
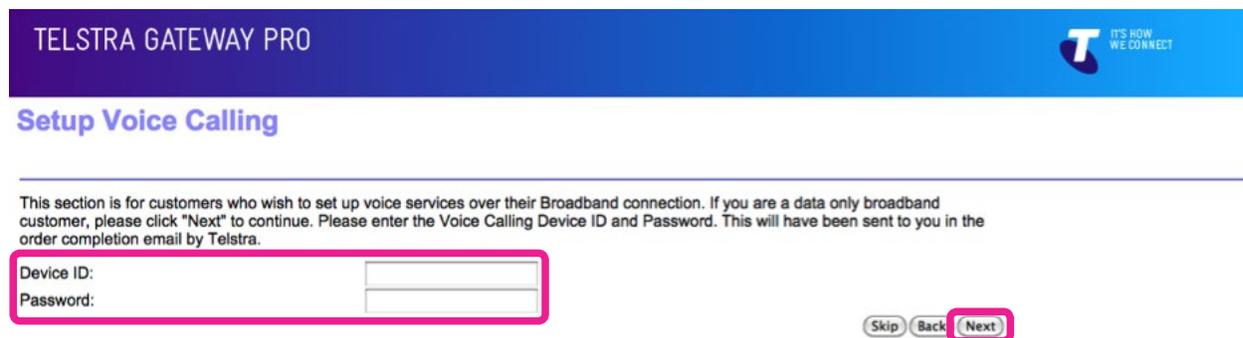

Figure 34: Device ID and Password Fields For Voice Calling

4.4.2.   Manual Setup in the Gateway Control Panel

The second method to set up voice calling is in the Gateway Control Panel.

• To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to
Advanced -> Setup -> Voice Calling.

Figure 35: Control Panel Advanced Menu

• Enter your **Gateway ID** and **Gateway Password** details on the Voice Calling Settings screen.
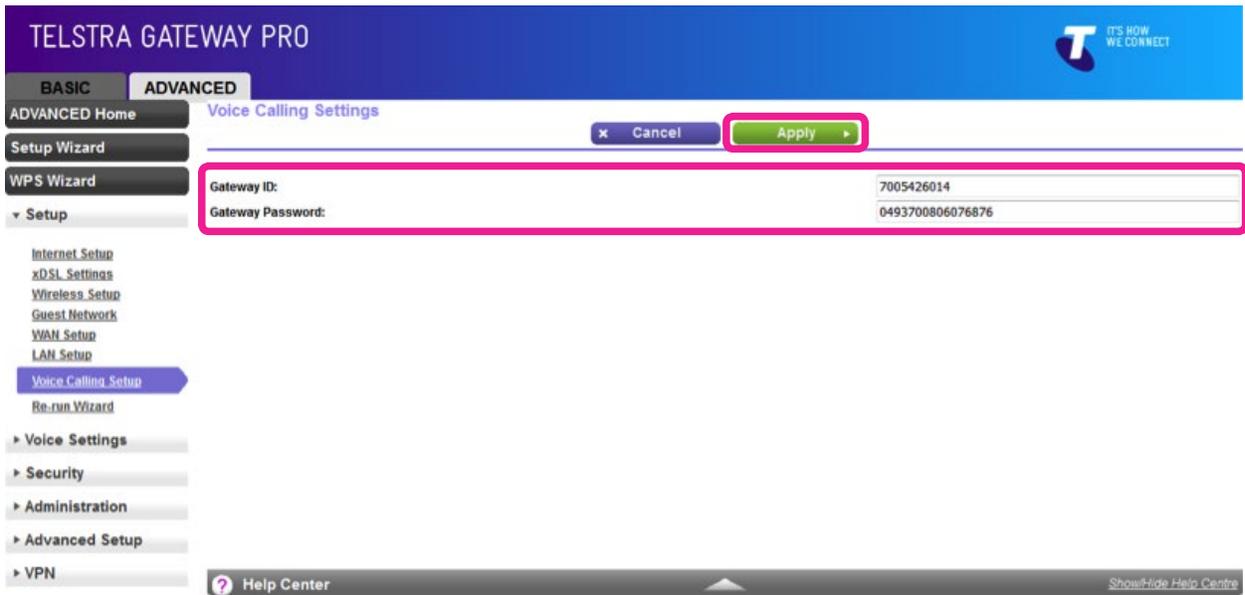Click **Apply** to save your settings.

Figure 36: Gateway ID and Password Information

4.5. Connecting devices to the Telstra Gateway Pro™

You can connect a number of different devices to the Telstra Gateway Pro™ following the setup information in Section 2 of this guide. In addition Wi-Fi and WPS devices can be connected to the Gateway using the following instructions.

4.5.1. Connecting via Wi-Fi

The Telstra Gateway Pro™ is delivered with Wi-Fi turned on with a unique Wi-Fi Id and WPA2 Key (Password). The Id, also known as SSID, and the WPA2 Key, are available on a card provided in the packaging. Use this information to connect your Wi-Fi enabled devices.

4.5.2. Connecting via WPS

Wireless Protected Setup (WPS) allows you to connect your network devices such as PCs, printers and mobile devices wirelessly without using a password.

To connect using WPS, hold down the **WPS button** on the Gateway for three seconds. This temporarily enables WPS access. Next, enable WPS on your network device (such as your printer or mobile phone). The device will connect to the network allowing access to your Wi-Fi network.
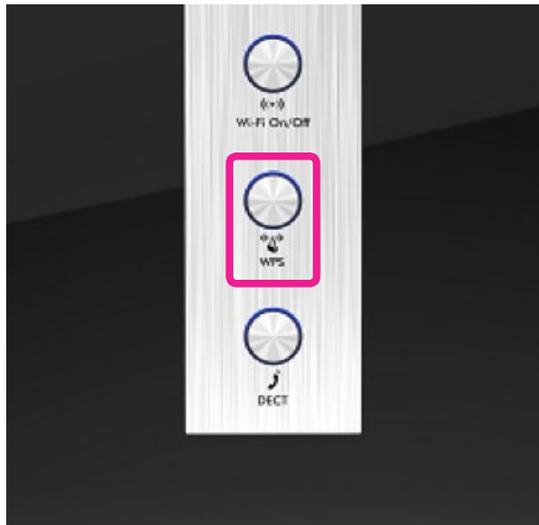

Figure 37: WPS Button

4.6. Setting up USB Mobile Broadband Backup

A dropout or loss of your internet connection can have consequences for your business such as a loss of access to internet sites and email. The Telstra Gateway Pro™ has a backup solution available that provides an alternative path in the unlikely event that your primary internet access is not available.

It is now possible to switch to 4G mobile access when internet connectivity is not available via the main WAN (ADSL, VDSL or NBN) connection.

By plugging a supported Mobile Broadband USB adapter into the USB port on the side or back of the Telstra Gateway Pro™, internet connectivity via a 4G network becomes possible. This provides continuous service while your WAN connection issue is investigated and resolved.
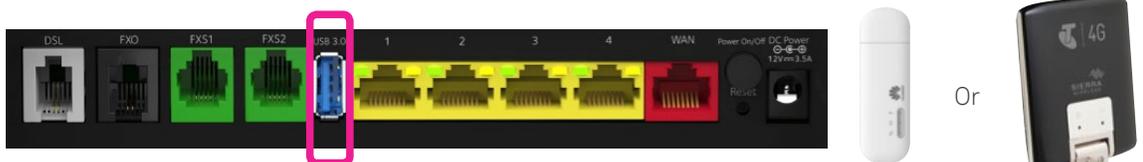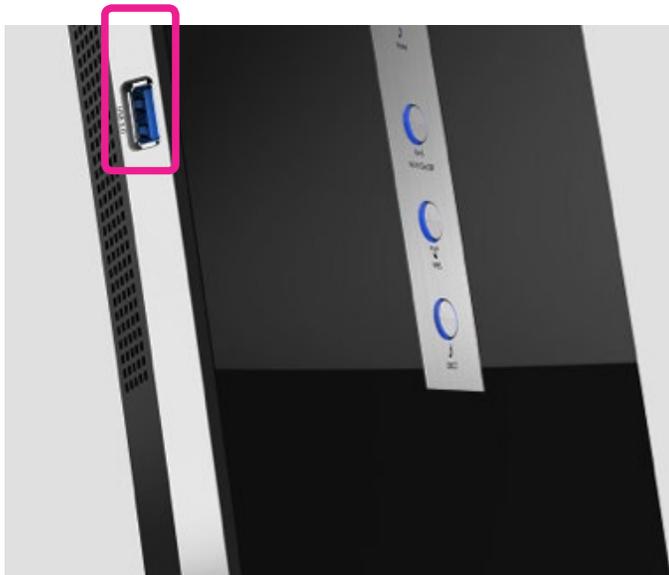
Figure 38: USB Port for Mobile Broadband Backup on side or back of device

Once you have connected your Mobile Broadband device to the USB port, access and configure it in the Telstra Gateway Pro™ Control Panel by completing the following steps:

• To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to **Basic ->Mobile Internet.**
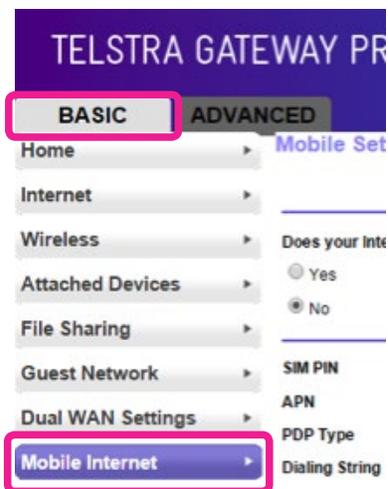

Figure 39: Basic Menu Mobile Internet

• If there is a SIM PIN enabled on your Mobile USB device, enter it into the **SIM PIN** field. Select the correct **APN** for your device then click **Apply**.

Figure 40: Mobile Internet Setup Information

• To check that the mobile broadband device has initiated, click **Mobile Info**.

Figure 41: Mobile Info Button

• A pop-up window will show the mobile device signal strength. Click **Close Window**.
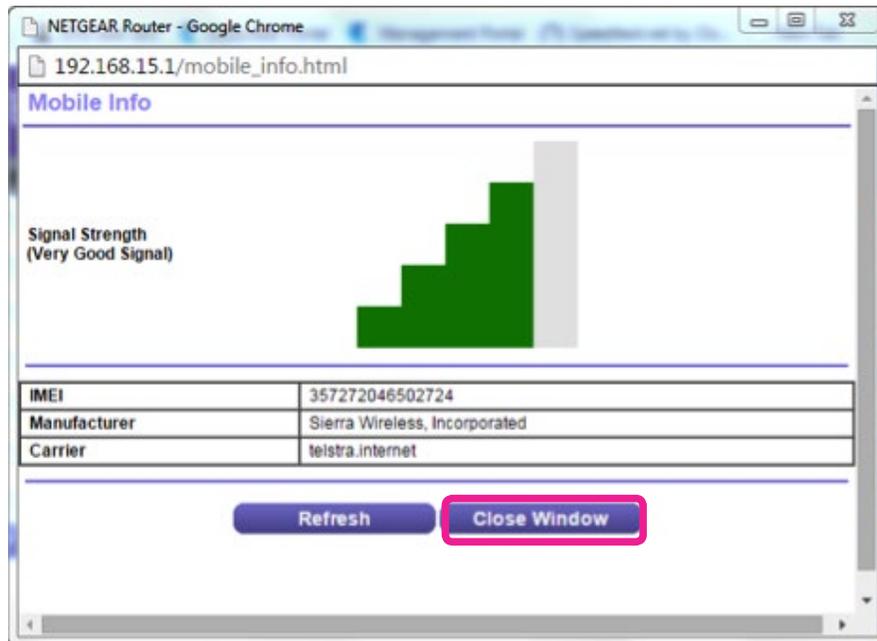

Figure 42: Mobile Internet Signal Strength

• To check the device status, click **Connection Status**.
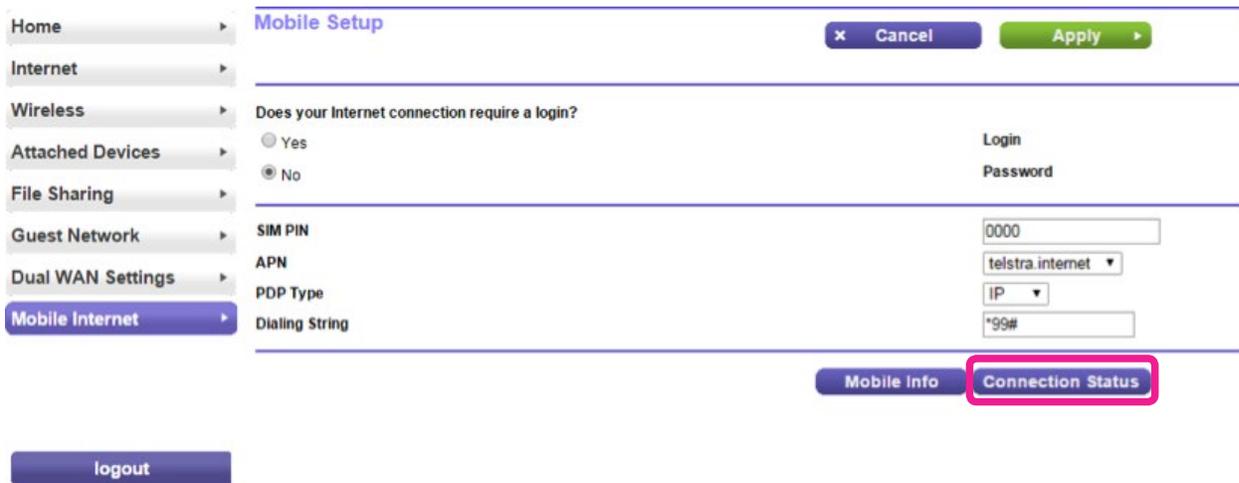

Figure 43: Mobile Internet Connection Status

• Click **Connection Status.** A pop up window will show the **Connection State** and assigned **IP address,** click **Close Window**.
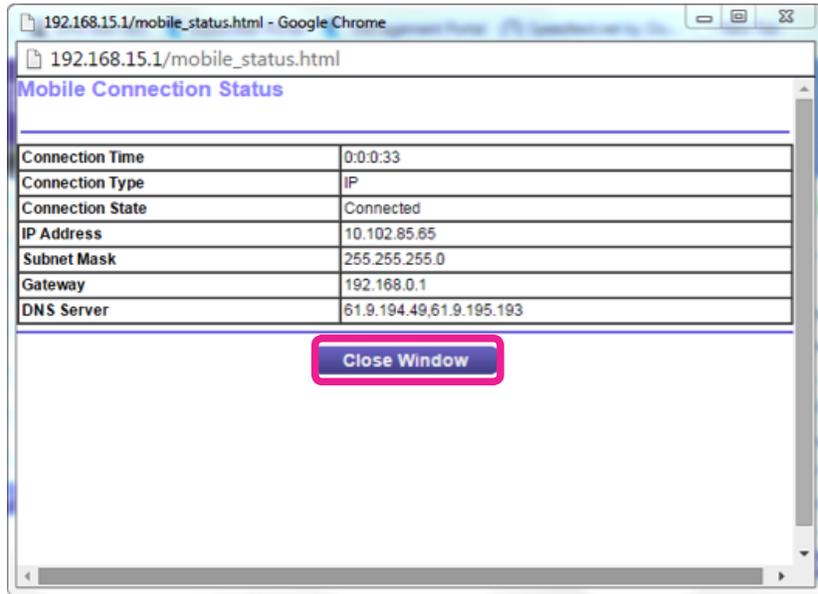

Figure 44: Connection Status Details

5. ADVANCED SETTINGS

There are a number of advanced configuration items you can change to make the most of your Telstra Gateway Pro™. These changes are most suitable for larger businesses, or those with many Wi-Fi and wired devices that are already configured to work with a modem or Gateway that the Telstra Gateway Pro™ will replace. This section provides instructions to assist with:

• Setting up guest Wi-Fi networks.

• Sharing content over your business network using the Telstra Gateway Pro™.

• Changing LAN pool and DHCP settings to match your devices.

• Setting up port forwarding.

• Where to find information about setting up a VPN.

5.1. Guest Wireless Network Setup

The Telstra Gateway Pro™ has the capability to set up three Wireless Guest networks. You can allow guest internet only access or internet & local network access to anyone that is provided the Guest SSID and Wireless Network Keys. These Guest Networks can be enabled and configured by completing the following steps.

• To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to the **Basic -> Guest Network.**

Figure 45: Basic Menu Guest Wireless

• Select either of the Network Profiles 1, 2 or 3 wireless access points then enable and configure as required.

To configure the Guest Wireless LAN settings you will need to make any changes that may be required in the Guest Network Setting screen. Refer to the numbered sections in the Figure 49 and the Guest Wi-Fi settings table for detailed information about these settings and how to change them.

Figure 46: Guest Wi-Fi Configuration

• Setting up the Guest Network follows a similar process to making changes to the Wi-Fi settings on the Telstra Gateway Pro™.

5.1.1. Guest Wi-Fi Settings

Item Number	Wireless Settings Items	Description
1	**Wireless Settings of Profile**	This shows the settings and status of the selected profile in the Guest Wi-Fi Settings screen
2	**Enable Guest Network:**	If this check box is checked, then this guest network is enabled. You and your visitors can connect to your network via the SSID of this profile.
	Enable SSID Broadcast	If enabled, the Wireless Access Point will broadcast its name (SSID) to all Wireless Stations. Stations which have no SSID (or a null value) can then adopt the correct SSID for connections to this Access Point
	Enable Wireless Isolation:	When enabled, devices connected to your guest network can only access the Internet. They won't be able to access any other devices or log into your router.
	Guest Wireless Network Name (SSID):	Enter a value of up to 32 alphanumeric characters. The same Name (SSID) must be assigned to all wireless devices in your network. The default SSID is SSIDN+1, N is the profile number, but Telstra strongly recommends that you change your network's Name (SSID) to a different value. This value is also case-sensitive.
3	**Security Options**	• None - no data encryption • WEP - Wired Equivalent Privacy, use WEP 64- or 128-bit data encryption **Note:** Wi-Fi Protected Setup function is disabled when the security setting is WEP authentication • WPA2-PSK [AES] - Wi-Fi Protected Access version 2 with Pre-Shared Key, use WPA2-PSK standard encryption with the AES encryption type • WPA-PSK [TKIP] + WPA2-PSK [AES] - Allow clients using either WPA-PSK [TKIP] or WPA2-PSK [AES]
4	**Password (Network Key)**	Enter a word or group of printable characters in the Passphrase box. The Passphrase must be constituted of either 8 to 63 ASCII characters or exactly 64 hex digits.

After making any changes click **Apply** at the top of the Wireless Settings screen and test your connection with a Wi-Fi connected device.

5.2. Content Sharing

The Telstra Gateway Pro™ allows you to share the content stored on your USB connected storage device with other users on your network. You can use the rear USB port or side USB port on the device.

Features

The Telstra Gateway Pro™ has two USB 3.0 ports.
The following file systems are supported:

• NTFS

• FAT32

• FAT16

The USB storage device can have up to 10 partitions. If your device has more partitions the extra partitions will be ignored.

The File Server is enabled by default. The only thing that you need to do is to plug your USB memory stick or external hard disk in one of the USB ports of your Gateway. The connected storage will be visible on your network. The table below provides a list of configuration options for connected devices:

	Network File Server	UPnP AV Media Server
Function	Store and access your data on your local network	Make media files available for UPnP AV capable devices like media players and set-top boxes from your local network.
Access	Read and write	Read-only
Accessible from	Local network	Local network
Type of content shared	All files from all partitions and disks that are connected*.	All files from the first partition of the connected disks*.

*Supported file type information: jpg, jpeg, jpe, png, wav, mp3, wma, m1a, m2a, m4a, mpa, mp4, ts, wmv, mpg, mpv, mpeg, asf, avi, divx, flv, mkv, m2ts, vob, m1v, m2v, m4v, mov, 3gp, pcm, tts. Maximum number of files displayed = 500 including thumbnail files.
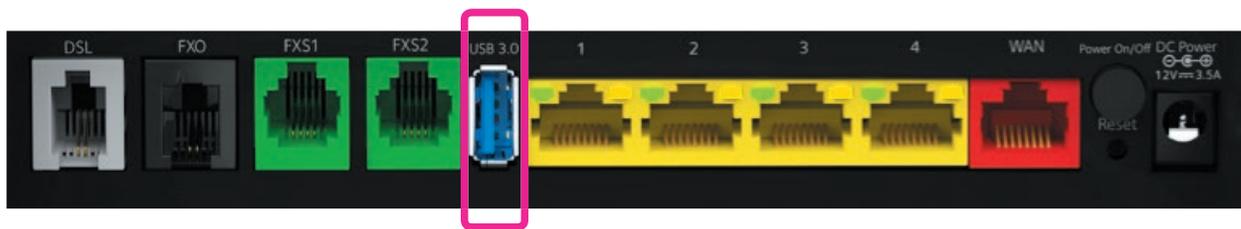

Figure 47: Telstra Gateway Pro™ Back USB Port

Figure 48: Telstra Gateway Pro™ Side USB Port

5.3. LAN IP Pool/DHCP Change

The Telstra Gateway Pro™ allows you to reconfigure the LAN IP pool if required. The following steps outline how to configure the Gateway to suit existing devices connected on a complex network. If you have an existing LAN IP range that does not match that of the Gateway's default LAN IP pool (192.168.15.1) the following will need to be completed to identify the required LAN IP range.

- **For Windows computers:**

– Open a command prompt, type in **ipconfig** and press **enter.**

– The number next to **Default Gateway** is your current router/gateway IP address.

- **For Apple computers:**

– Access **System Preferences** and select **Network.**

– Select the appropriate port (e.g. Ethernet / Airport) Click **Advanced** and then the **TCP/IP** tab.

– The number next to Router is your current router/gateway IP address.

Once you have noted down the new LAN IP address to be used, you are ready to update these details into the Gateway. Complete the following steps to change the LAN IP pool it in the Gateway:

- Connect your computer to the Gateway via an Ethernet connection. To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to **Advanced> Setup > LAN Setup.**

Figure 49: LAN Setup

- Under **LAN TCP/IP Setup** change **the IP Address/IP Subnet Mask** to the new range.

Figure 50: TCP/IP and DHCP Settings

Note: The **DHCP** starting & ending IP addresses may also be changed if necessary.

- Click **Apply** and then click **OK** on the notification pop-up to apply the new settings and reboot the Gateway.
- After the Gateway has rebooted test the new network settings by trying to log back into the Control Panel using the new IP address for the Gateway.

5.4. Port Forwarding

Port forwarding allows the Telstra Gateway Pro™ to forward traffic from the Internet to a specific device that is connected or a specific application on a device. You may require remote access to devices such as servers, cameras etc. The Gateway allows you to configure these.

Important Note:	The ports referred to in this section are virtual, not physical. You will need the port numbers that need to be forwarded and the IP addresses of the devices to be forwarded to. Refer to device documentation for how to access this information.

Complete the following steps to configure port forwarding on the Gateway:

- Connect your computer to the Gateway via an Ethernet connection. To access the Gateway Control Panel page go to **192.168.15.1** in your browser and navigate to **Advanced> Advanced Setup > Port Forwarding / Port Triggering.**

Figure 51: Port Forwarding

- From the **Service Name** dropdown box you can select from a number of common applications and devices. Select the appropriate name and then enter the **IP address** of the device and click **Add.**

Figure 52: Port Forwarding Configuration

- If the appropriate service is not in the **Service Name** list you can create a new service by clicking the **Add Custom Service** button.

Figure 53: Add Custom Service

- Enter the following Information:
  – **Service Name**
  – **Protocol** (either UDP, TCP or both)
  – **External Start** and **End Port** numbers (if only 1 port then the same for both)
  – If the same port numbers translate internally or if different port numbers need to be entered.
  – IP address of the device on the internal network
- Click **Apply.**

Figure 54: Custom Services

5.5. Secure Remote Access via VPN

The Gateway's Remote Access feature enables secure access to your business files from home. Refer to the detailed VPN setup guide for information on how to enable and configure this option: http://www.telstra.com.au/content/dam/tcom/small-business/bundles/pdf/telstra-gateway-pro-v7610-configuration-guide.pdf

6. TROUBLESHOOTING & GENERAL TIPS

6.1. The Internet is not working or WAN light is off

Sometimes a loss of service can occur and Broadband will temporarily be unavailable on your Telstra Gateway Pro™, you will presented with the following error screen and the WAN light will be off.

Figure 55: WAN Light

TELSTRA GATEWAY PRO

WARNING: Your Broadband service is not available and the Telstra Gateway Pro cannot connect to the Internet. Loss of service can occur due to network maintenance or other temporary service disruptions.

Please check your DSL cable has not been disconnected from the back of your Gateway and that the power cable is plugged in. The blue light around the Telstra logo on the front of the Gateway will be on and the Internet LED light will automatically turn blue once the problem has been resolved.

Figure 56: No Internet Connection Notification

Please check that your DSL line or WAN cable has not been unplugged from the Gateway.

Important Note:	If your Internet light is flashing red your Gateway is now operating in mobile broadband failover mode (if available), you can continue to use the Internet through mobile data.
	If your issue is not resolved for an extended period of time please call Telstra support on **132000** and we will assist you further with your issue.

6.2.   My devices aren't connecting

Please check that Wi-Fi has been switched on. The Telstra Gateway Pro™ Wi-Fi button will glow blue
if Wi-Fi is enabled.
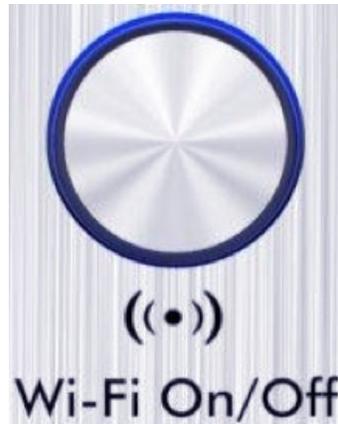
Figure 57: Wi-Fi Button

Important Note:	Ensure that your wireless connection setting is enabled on your connecting device. If you do not have a wireless adaptor on your connecting device, you may need to purchase a wireless adaptor.

6.3.   There is a red internet light (ADSL)

A red internet light indicates that your DSL port is connected but authentication was unsuccessful.

Figure 58: Front Panel Internet Light

• In the Gateway Control Panel, check if the Internet is connected. Click on the **Internet** button.
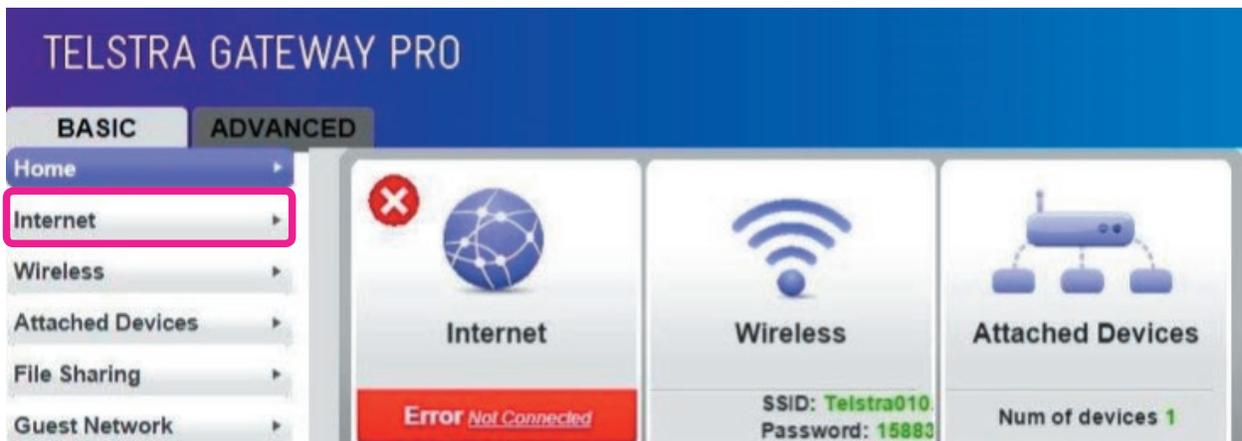
Figure 59: Internet Error

• Check your login and password details, and update if required. **Apply** any changes.
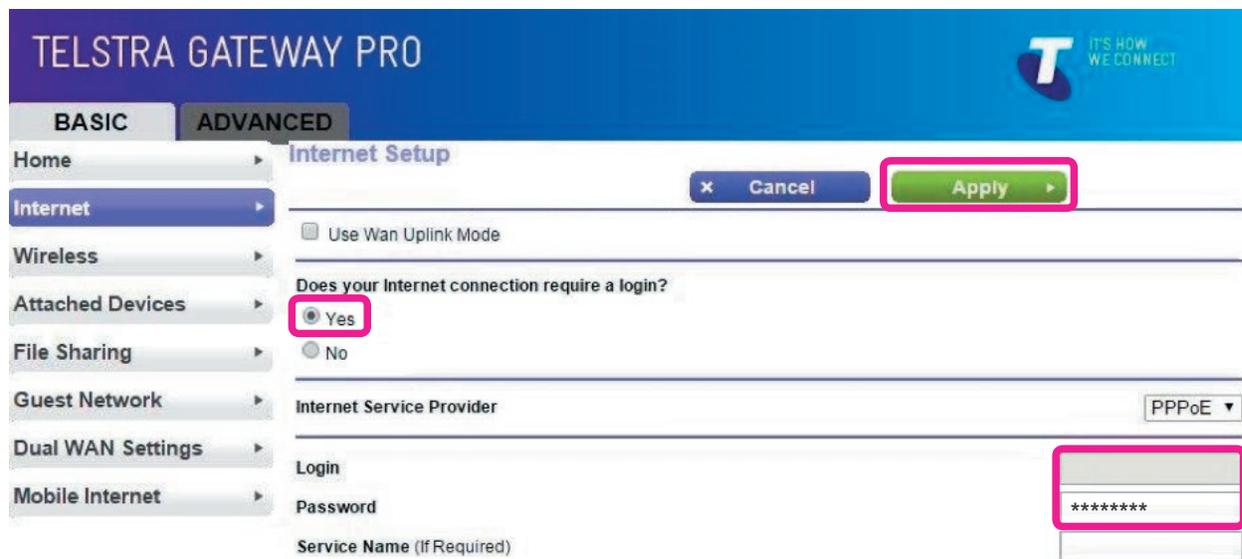
Figure 60: Login and Password Details

6.4.   Re-setting Telstra Gateway Pro™

Important Note:	You should only reset your Gateway as a last option. Try turning the device off and on again, to see if this resolves the issue first. A factory reset will **delete all saved information,** so ensure you have all of your network login and password information before completing the following steps.

There are 2 ways to perform a factory reset on the Telstra Gateway Pro™:

6.4.1. Method One- Hardware reset

• Insert a paper clip into the **Reset** hole and hold down for **10 seconds** until all the lights on the front panel start flashing. Then release the paper clip.


Figure 61: Reset Hole

• The Gateway will reset and reboot.

6.4.2. Method Two-Reset from the Gateway Control Panel

• Log in to the Gateway Control panel. Select **Advanced->Administration->Backup Settings** and click **Erase**.
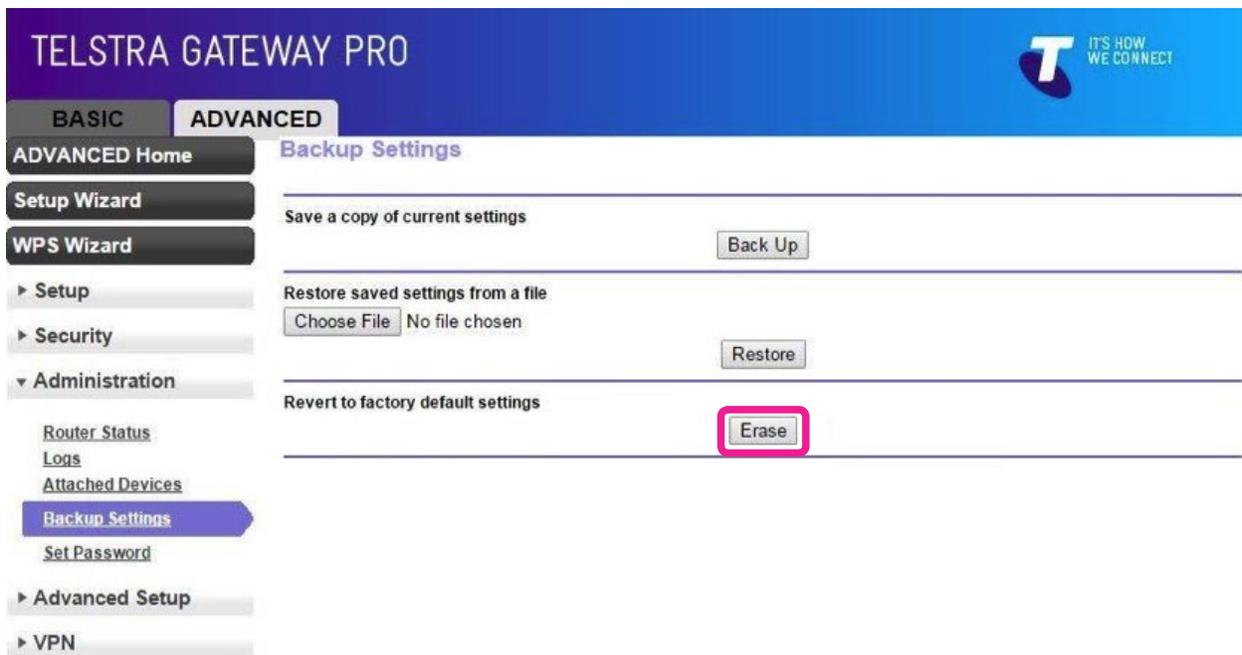
Figure 62: Revert To Factory Default Settings

• A confirmation screen will load. If you are sure you wish to erase all of the settings on the Gateway, and reset to factory settings, click **Yes.**

Figure 63: Revert To Factory Default Settings

• The **Reset Progress bar** will appear. Once this reset bar has completed, the Gateway will reset and reboot. You will be returned to the Gateway login screen.
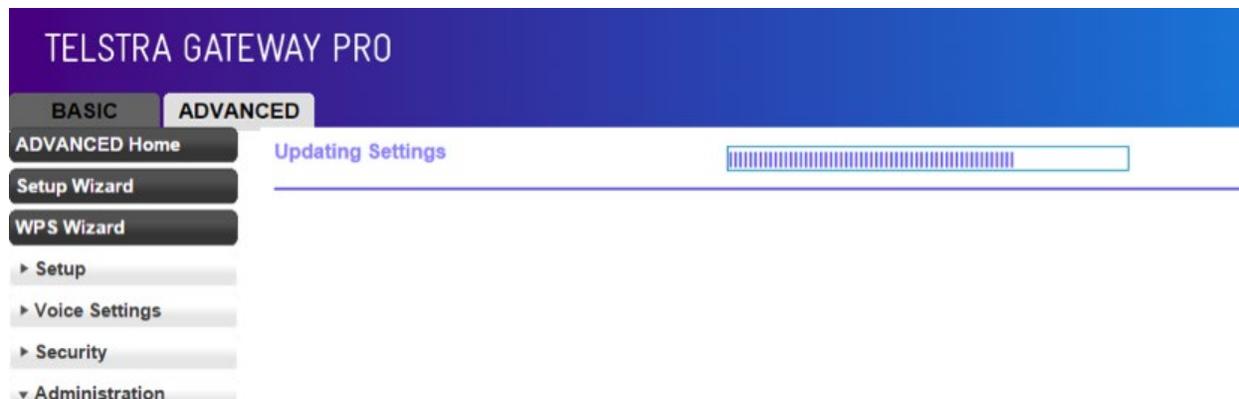

Figure 64: Reset Progress Screen

6.5. Wireless Adaptor Faults

6.5.1. General

Wi-Fi can be negatively affected by interference. Possible sources of interference or connection failure are listed below:

- A fish tank (or large body of water) between modem and wireless adaptor
- Interference to or from a cordless phone (any device operating at 2.4GHz)
- Interference from fridges, microwave ovens etc.
- Out of date or incorrectly configured Wi-Fi drivers on a PC
- Need to disable 'Centrino' (inbuilt wireless devices that some PCs have)
- If a PC has firewall software, it needs to be configured to allow the Wi-Fi connection. The firewall software may need to be deactivated or disabled.
- A wireless adaptor may be faulty

6.5.2. Lights Are Blinking Repeatedly

- The Wireless Adaptor is not associated with the Gateway. Check the SSID and WPA security settings or reconnect using WPS.
- The Gateway may be out of range. Try moving the device closer to the Gateway.

6.5.3. No Lights Are Lit On The Wireless Adaptor

- The Wireless Adaptor is not inserted securely in the USB port (or USB cable if used) or the A6200 software is not installed.
- Remove and reinsert the Wireless Adaptor.
- Check the Windows device manager to see if the Wireless Adaptor is recognized and enabled. Reinstall the A6200 software, if necessary.
- Insert the Wireless Adaptor in a different USB port on your computer if one is available

Figure 65: Netgear Wi-Fi USB Adaptor A6200

7. TECHNICAL SPECIFICATIONS

7.1. Devices compatible for use with the Telstra Gateway Pro™

The following devices are compatible with the Telstra Gateway Pro™:

Phones

Cisco SPA525G2 IP Phone

Cisco SPA504G IP Phone

Yealink T42G IP Phone

Yealink T48G IP Phone

Panasonic KX-TPA50 IP DECT Phone only *

Panasonic KX-TGP500 IP DECT Phone with Base

Panasonic KK-TPA60 DECT Phone only*

Panasonic KK-TGP600 IPDECT Phone with Base

Polycom VVX1500 Video Phone

*These phones will work as a secondary handset with a Panasonic TGP500 (TPA50) or TPA600 (TPA60) DECT base station.

Mobile Broadband USB

Netgear 320U

Huawei 8372

Accessories

Universal Wi-Fi Extender

Powerlink Extender Kit XAVB5401

Netgear Wi-Fi AC Extender MAX

Netgear Wi-Fi USB adaptor AC A6200

Cisco SG 300-10 Ethernet Switch (10-Port with 8 POE)

Netgear 8 Port POE Gigabit Switch

Cisco SPA122 Analogue Adaptor (2-Port ATA)

Cisco SPA8000 Analogue Adaptor (8-Port ATA)

Plantronics CS540A Wireless Headset

7.2. About the Telstra Gateway Pro™

The Telstra Gateway Pro™ (Netgear V7610) is VDSL Gateway using Wave 2 Wi-Fi with Quad Stream & MU-MIMO. This Gateway delivers Wi-Fi to multiple devices simultaneously for faster speeds and lower latencies. Additionally the Gateway offers integrated FXS ports and CAT-IQ 2.0 for SIP based VoIP connections. Integrated VPN server enables multiple VPN clients for secure connection for remote users or remote office locations.

Standard Interfaces

• One (1) VDSL2+/VDSL/ADSL2+/ADSL port

• One (1) Gigabit Ethernet WAN port

• Four (4) Gigabit Ethernet LAN ports

• 3x3 802.11 b/g/n 2.4GHz Wi-Fi

• 4x4 802.11 a/n/ac 5.0 GHz Wi-Fi

• Two (2) USB 3.0

• Two (2) FXS ports

• One (1) FXO port

• CAT-IQ 2.0

• Visual Indicators – Internet, WAN and Voice LEDs

• Buttons – Wi-Fi on/off; WPS; DECT

Broadband Internet Service

• VDSL/ADSL Broadband internet service

• Cable/Fiber via Ethernet WAN port

• Mobile Broadband using USB dongle

Physical Specifications

• Dimensions: 242.6 x 242.6 x 101mm

• Weight: 845g

• Mounting: Desktop or wall mount

Technical Specifications

• VDSL2+/VDSL/ADSL2+/ADSL compliant DSL interface

• IPoE, PPPoE, Mobile Broadband (for WAN failover)

• Auto-detect WAN interface

• IPV4/IPV6

• VLAN

• MU-MIMO for simultaneous streaming

• Quad-Stream Wave 2 Wi-Fi

• Wi-Fi Protected Access (WPA/WPA2 – PSK)

• Multiple SSID

• Guest Network access

• Broadsoft compliant SIP client

• IPSec VPN Server

• TR069, TR181 based remote confirmation and management

• QOS for Egress and Ingress traffic

• USB 3.0, 1.5A shared between two ports

• Memory: 128 MB Flash and 256 MB DDR

Package Contents

• Two (2) Ethernet Cables

• One (1) Phone Cable

• One (1) DSL Cable

• One (1) DSL Filter

• Quick Start Guide

• 12 V, 3.5 Amp Power Adaptor

• Wall Mount Brackets

• Wi-Fi Network Security Card

Netgear's product sheet on the Telstra Gateway Pro™ can be found on the Telstra DOT site: http://business.telstra.com.au/t5/DOT-Bundle-Help/ct-p/bundles_and_dot

500957_WEL0002_02/16