

# GETTING TO KNOW YOUR ADSL BUSINESS NETWORK GATEWAY

IT'S HOW  
WE CONNECT



# LET'S GET THIS SHOW ON THE ROAD

This guide is designed to help you get started and get the most out of your Telstra Business Broadband service. Please make sure you keep it in a safe place, as you may need to refer to it again at a later date - we suggest you save a copy to your computer.

As a Telstra Business Broadband customer you'll be able to access a range of web and mail services, including state-of-the-art security options, account management tools and flexible plans.

# WHAT'S INSIDE

- 03 Getting started
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- 12 Using business mail
- 16 Problem solving
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# LET'S GET STARTED

## YOUR PACKAGE CONTAINS THE FOLLOWING:

- Business Network Gateway - TG797n V3
- Power adapter
- Yellow Ethernet cable
- Grey telephone cord
- Filter/splitter
- Self Install CD
- Telstra Business Broadband welcome letter
- Wireless security card

## MAKE A NOTE OF YOUR TELSTRA DETAILS:

### Email Address

(This is your Business Mail address)

### Wi-Fi SSID

(This is the name of your wireless network)

### Wi-Fi WPA

(This is the unique wireless security key set during install)

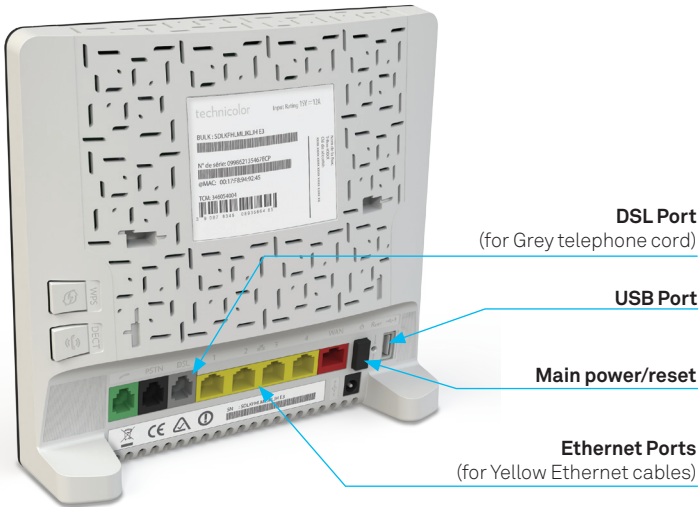
### Username for Broadband Access










(This is the username for configuring your router to access to the internet)

### Password for Broadband Access

(This is the password for configuring your router to access the internet)

# YOUR ADSL BUSINESS NETWORK GATEWAY- TG797N V3:



INDICATOR LIGHT	DESCRIPTION
<b>1 Ethernet</b> Green LED	<div>  <b>Solid Green</b> - Ethernet connection detected, no activity. </div> <div>  <b>Flashing Green</b> - Ethernet connectivity detected and network traffic is ongoing. </div> <div> <b>Off</b> No Ethernet connection detected. </div>
<b>2 Wireless</b> Green LED	<div>  <b>Solid Green</b> - A wireless device is paired, no activity. </div> <div>  <b>Flashing Green</b> - A wireless device is paired and network traffic is ongoing. </div> <div> <b>Off</b> No device is paired. </div>
<b>3 Voice</b> Green LED	<div>  <b>Solid Green</b> - VoIP service is registered and no traffic running. </div> <div>  <b>Flashing Green</b> - VoIP service is registered and traffic is running. </div> <div> <b>Off</b> No serviced is registered. </div>
<b>4 WAN</b> Green LED	<div>  <b>Solid Green</b> - DSL line is synchronised and working. </div> <div>  <b>Slow Flashing Green</b> - Trying to detect a DSL carrier signal. </div> <div>  <b>Fast Flashing Green</b> - DSL carrier detected and trying to synchronise. </div>

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## 5 Internet

Green LED



**Solid Green** - Internet connected, no activity.



**Flashing Green** - Internet connected and activity is ongoing.

**Off**

No Internet is connected.

Red LED



**Solid Red** - Internet connection failed.

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## 6 DECT

Green LED



**Solid Green** - DECT is paired and ready for use.

Orange LED

**Off**

DECT is not paired.



**Flashing Orange** - DECT is in pairing mode and is registering.

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## 7 WPS

Green LED



**Solid Green** - WPS setup successful.

**Off**

Idle mode.

Red LED



**Fast Flashing Red** - WPS error detected.



**Intermittent Flashing Red** - WPS session overlap.

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## 8 Status/Eco Power

Green LED



**Solid Green** - Power on, all required services are up and running.

Red LED



**Flashing Red** - Device is booting up.



**Solid Red** - One of the required services has failed.

Blue LED



**Solid Blue** - Device is in Eco mode (Wi-Fi disabled) and is operating normally.

No LED

Power off.

# GETTING CONNECTED

Once the self install CD has been inserted into your computer, follow the prompts to complete installation. You will be guided through the following steps:

1. Setting up your new router
2. Router Configuration
3. Connecting the router to the internet
4. Setting up your Wi-Fi (optional)
5. Installing a Mobile Broadband USB modem (Optional)

**Important:** If you are using a telephone on the same line as your Telstra Business Broadband service, you will need to install a filter/splitter.

This also applies to any other devices, such as a fax, answering machine, dial-up modem, alarm system and FOXTEL digital tuner. Turn to page 9 for instructions.

## TIPS FOR SETTING UP YOUR WI-FI (OPTIONAL)

- You will need to have your wireless security card with you when you complete the set-up process.
- The wireless card contains default settings for your SSID and Wi-Fi WPA (wireless security key).
- If you wish to change the SSID and Wi-Fi WPA (wireless security key) details to something that is easier for you to remember, you can select to do this as part of the Self Install CD. Make sure you write these new details at the beginning of this guide for safe keeping.

**Please note:** if you factory re-set your device at any stage, the Wi Fi SSID and Wi Fi WPA (wireless security key) will return to the original default settings supplied on your wireless security card.

Your username and password for broadband access will also be factory re-set meaning you will need to re-enter these details to connect to the internet.



## TIPS FOR INSTALLING A MOBILE BROADBAND USB MODEM (OPTIONAL)

As part of the Self Install CD you will have the option of connecting a Mobile Broadband USB Modem to your ADSL Business Network Gateway.

- If your device is not connected to the internet via ADSL, the USB device will enable you to stay connected to the internet via the Next G® network.  
Note: Mobile broadband usage charges will apply.
- Before installing your mobile broadband device you will need to ensure that it is compatible. The Self Install CD will confirm which options are available to you. You will also need to have your SIM PIN (provided with the USB device) ready when installing the device.

# INSTALLING ADSL FILTER/SPLITTER

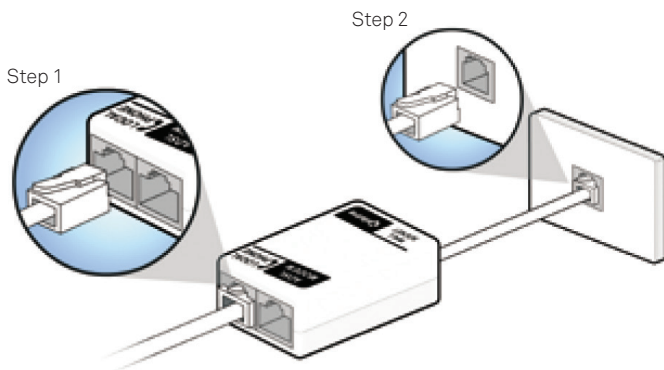
## FOR A STANDARD PHONE SOCKET

### 1. Connect filter/splitter to phone

- Disconnect the phone cable from the wall socket and connect it into the socket labelled 'Local Phone' on the filter/splitter.

### 2. Connect filter/splitter to wall socket

- Connect the short cable from the socket labelled 'Wall Socket' on the filter/splitter to the wall socket.



### 3. Ensure phone line is connected

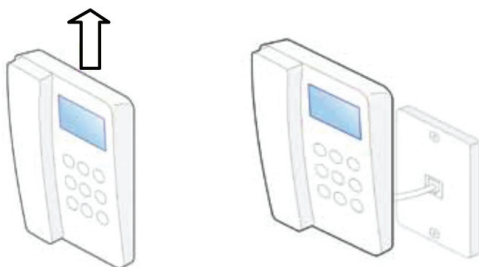
- After you have installed the filter/splitter, we recommend that you test the phone to make sure it works the same way as it did before the installation.
- To test your phone connection check if you have a dial tone and that there is no interference on your phone line.
- If you don't have a dial tone or there is interference on the line, please review and repeat the steps above. If your router will be sharing the same socket as the phone, you can plug it into the socket on the filter/splitter marked 'ADSL Modem' when the Install CD asks you to. Otherwise, just leave this socket empty.

## FOR A WALL-MOUNTED PHONE AND SOCKET

You will need a special filter/splitter if any wall-mounted phones share the same phone number as your ADSL service.

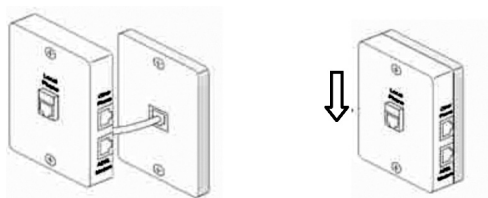
### 1. Remove phone from wall

- Apply firm upwards pressure on the telephone until it is released from the mounting screws on the wall plate.
- Then remove the short cable from the wall plate, leaving it attached to the phone.



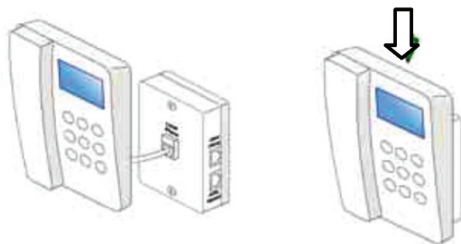
## 2. Connect filter/splitter to wall socket

- Plug the short cable (labelled 'Line') on the back of the filter/splitter into the socket on the wall plate.
- Next, align the mounting screws on the filter/splitter with the mounting screws on the wall plate. Then slide the filter/splitter downward until it stops sliding and is secured firmly.



## 3. Connect phone to filter/splitter

- Plug the short cable on the phone into the socket on the front of the filter/splitter that is labelled 'Local Phone'.
- Next, align the mounting holes on the phone with the mounting screws on the filter/splitter. Then slide the phone downward until it stops sliding and is secured firmly.
- Finally, to connect the router to the filter/splitter, plug it into the socket labelled 'ADSL Router'
- The wall phone filter/splitter also includes an additional socket for other phone devices.



# USING BUSINESS MAIL

## BUSINESS MAIL POP

- Business Mail POP is a 'store and forward' mail service, where messages sent to your email address(es) are received and stored on your behalf in individually addressed mailboxes (customer\_name@companyname.com.au).
- With Business Mail POP your mail is stored on servers within Telstra's partner Data Centre. The messages are then forwarded (downloaded) to your email client software upon request – via an authenticated session based on a username and password – using the industry standard mail protocol.

## BUSINESS MAIL POP FEATURES

- Your service includes ten free Business Mail POP mailboxes. Once your Business Mail service is set up (refer to page 14 to set up Business Mail), it can be accessed through the same computer all the time (subject to outages and routine maintenance) or at any computer with internet access by using the Webmail function.
- Each POP mailbox comes with basic virus and SPAM filtering. This will reject known unsolicited bulk email SPAM, messages that may contain viruses or other potentially malicious content "malware", and certain attachments such as .exe, .bat, .pif and .cmd files.

This will prevent potentially harmful content not yet handled by virus filtering updates from reaching your inbox or computer. There are no changes required to the computer or email programs to utilise these filters, as they operate upon the creation of the POP mailbox in Mission Control – Telstra's online portal for business mailbox management.

**Important:** These filters do not provide complete protection and may reject some email which is legitimate. If you are seeking a higher level of protection and the added benefit of features such as calendar, meeting planner and other email options, contact Telstra on 13 2000 or refer to our T-suite® product offerings at <http://www.telstra.com.au/T-suite>

- POP mailboxes also come with web access via 'desk control' so that you can remotely access your email.
- Go to <https://deskcontrol.pm.telstra.com> for this option
- The Business Mail POP service is designed to only handle the receipt, storage and downloading of email messages. To send email, a SMTP facility is required which Telstra provides. This is available by setting your email client to <smtp.telstrabusiness.com> or an alternate address we may specify.

**Important:** Telstra may vary the size and volume of emails that may be sent using the Telstra Business SMTP Mail Server to reduce the impact of SPAM.

## HOW TO SET UP BUSINESS MAIL SERVICE

The Install CD will guide you through the set up for your local email client.

### **1. Creating your Business Mail POP mailboxes in Mission Control**

- You will need to have your Business Mail welcome letter with you in order to set up your email mailboxes. This letter will be sent to the email address or fax you nominated on your Telstra Business Broadband order. It is important that you specified an active email account that would not have been affected in the transition from your old email to your new email address.

**If you have not received this letter, please contact Telstra Business Technical Support on 13 2999 to have a new letter issued.**

- When you have your Business Mail welcome letter, go to the website <https://missioncontrol.pm.telstra.com> and follow the instructions in your Business Mail welcome letter.

## 2. Accessing your Business Mail POP Mailboxes

To access your newly created mailboxes, you have two options:

- Webmail

To access your mailbox using Webmail visit [deskcontrol.pm.telstra.com](https://deskcontrol.pm.telstra.com) and enter the mailbox name and password created as part of the mailbox set up.

- Mail Client

1. Go to <https://missioncontrol.pm.telstra.com>
2. Go to the Help Me tab
3. Click on Help Documents
4. Click on Business Mail
5. Open the Business Mail Quick Reference Guide (or Administrator Guide for in depth instructions)
6. Follow the instructions provided

**Important:** if you are not an experienced computer user, you may need some assistance from your IT Specialist when setting up your email client. Otherwise, contact your account representative to discuss our Business Support Services.



# PROBLEM SOLVING

## HAVING TROUBLE GETTING CONNECTED?

- Turn everything off, count to five, and then turn it on again. The technical term for this is 'cycling the equipment'. Please remember, where possible, to follow the correct procedure for turning off your computer, router or other equipment, according to the instructions.
- Check that your equipment is set up correctly. Carefully check that every plug and wire is in the right place, the right way round, and is switched on.

## FILTERING IS NECESSARY

- If you have ADSL installed, you need filters to attach to the outlets that don't provide the signal to your ADSL router. As all voice conversations take place below 4 KHz, the filters are built to block everything above 4 KHz, preventing the data signals from interfering with standard phone calls.
- Any of the following devices that share the same telephone line as your Telstra Business Broadband service need to have a filter/splitter connected.

### **You'll need a filter/splitter for every:**

- Telephone
- Cordless phone base unit
- Answering machine
- Fax machine
- Internal or external dial-up modem
- FOXTEL Digital uplink line

- Each filter/splitter should be connected between the wall outlet and the device in question. The only thing that doesn't need a filter is your router, unless it's sharing an outlet with a phone or other device.
- You'll also need to make sure there are no extension leads on any of the devices connected to the ADSL phone line. Extension cords often cause more interference than a broadband ADSL connection can manage.
- If you have two telephone lines (that is, two different telephone numbers), only devices on the same line as the router will need filtering. Anything connected to the other line can stay unfiltered.

**Please Note:** If you have more than four outlets on the line or any 'hardwired' devices, like a back-to-base alarm or wall phone that doesn't come off the wall, you will need to have a central splitter fitted as part of an onsite installation.

## NETWORKING TROUBLE

- If your computer is part of an existing network (eg LAN), this Install CD may change some of your computer's network settings (eg DHCP, DNS, Proxy settings etc).
- Please ensure that any computers that you want to connect to your Telstra Business Broadband service via this Install CD are not part of an existing network.
- Computer networks require an IP address to be allocated to your computer's network card. When connecting to Telstra Business Broadband using the Install CD, you must allow the router to allocate you an IP address automatically – this is known as a dynamic IP address (or DHCP).
- If you are not sure how your business network is set up, and you are not sure if changing these settings will affect your existing network, we recommend that you engage your IT Specialist or a Telstra IT specialist before running this CD and installing Telstra Business Broadband.
- Telstra Business offers a range of specialist IT assistance through its Business Support service. You can apply for Business Support by contacting your Telstra Account Representative or calling 1800 655 744.

## THIRD-PARTY WIRELESS MANAGEMENT SOFTWARE

- You will need to close or disable any third-party wireless management software. If you leave it enabled you may not be able to successfully install your Telstra Business Broadband Service with a wireless connection.
- If you require assistance, please call Telstra Business Technical Support on 13 2999.

## HAVING ISSUES WITH YOUR ROUTER?

If you're having trouble with your router, try to establish what the issue may be:

- Check the power supply from the socket to the router is plugged in properly and switched on at the wall.
- Check the phone service to see if you get a dial tone, and if you can make and receive calls. If not, you may have a problem with your phone line. For assistance contact Telstra Business Technical Support on 13 2999.

This should give you a good idea of whether the problem is in the router or elsewhere. A few examples of issues are provided below and on the following pages.

### **If the light on the router is not solid green when using your Ethernet connection:**

- The Ethernet light on your router will be solid green when connected and will flash when communicating with your computer.
- If the Ethernet light on the router is not solid green or flashing, please check that the Ethernet cable is plugged in correctly.
- If the light still does not show a solid green or flashing light, for assistance call Telstra Business Technical Support on 13 2999.

**The Internet Light on the router will not come on:**

The Light on your router will be solid green when your ADSL line is connected and synchronised. If it isn't solid green, then there could be an issue with the filtering of your telephone devices, or a problem with the telephone line at your exchange.

Please check:

1. That every telephone device sharing the line with your ADSL router has a filter on it. Affected devices can include any telephones, dial-up computer modems (including internal modems), fax machines, answering machines, back-to-base alarm systems and FOXTEL Digital installations.
2. That you have not connected the router into a filtered socket.
3. Whether there are any telephone extension leads connecting any device on the telephone line, including your ADSL router (extension leads can cause problems on the line).
4. Whether there is work being done on your line at the exchange. Please wait 30 minutes and check again.

If the light still does not come on solid green, call Telstra Business Technical Support on 13 2999 and advise that you may have a 'Sync Fault'.

**If all of the above fails, you can restore your router to the factory default setting by following the below “Reset” steps. Remember that resetting your router will mean that your existing WAN, Mobile Broadband, LAN and Wi-Fi settings will be lost. Before you begin, make sure you have your Install CD and Telstra Business Mail Welcome Letter. If you’re using a Next G® Mobile Broadband for backup, you may also need your PIN:**

First, Turn your router on then insert a pointed object (like a straightened paperclip) into the hole at the back of the router labelled ‘reset’. Do not touch any of the other buttons or ports on the back of the router.

Next, press and hold the reset button for at least 10 seconds, then release the button. The router will follow the boot-up sequence and the Status/Eco Power light will flash red and green for up to 60 seconds. Wait until it turns solid red again. Your router is now reset to its factory defaults.

Once you have factory reset your router, please run the Install CD selecting Installation Type; “I want to set up Business Broadband for the first time”. You will only need to run the Install CD on one computer. All other computers you have run the Install CD on will continue to work after the router is configured. Sometimes our services do ‘go down’ or experience difficulties - but it’s a rare event. You should only suspect a service failure if your service has worked in the past (ie it’s not a new connection).

The Telstra 'CustData' facility provides access to many tools and reports for your Telstra Business Broadband service. You can check your 'Service Status' by visiting <https://www.telstra.net/cgi-bin/custdata/index.pl>

To login, you will need to enter your username and password.

Your username can be any of the following:

- Account number
- Service ID
- Telephone number including area code (FNN)
- 'opshandle' (the ID given to you as an alternative to your FNN)

Your password was initially issued to you when you connected to Telstra. If you have forgotten your password or need assistance, please call Telstra Business Technical Support on 13 2999.

If a problem is reported on the Service Status page, this indicates Telstra is aware of the problem and is working to fix it as quickly as possible.

### **Your connection speed**

Your service speed is affected by a number of factors, including the capacity and popularity of websites, your computer configuration, network congestion and your plan's maximum speed.

If you do find that your broadband speeds aren't very fast, it may be that your computer is trying to do too much at once. Try shutting down any applications that you're not using so that the computer can process internet data more efficiently.

If the problem persists, please contact Telstra Business Technical Support on 13 2999.

## YOUR BUSINESS MAIL

### Checking your email settings:

For help with configuring your Business Mail email accounts, please login to the Mission Control at <https://missioncontrol.pm.telstra.com>

Go to the Help Me tab, click on Help Documents then click on Business Mail.

Here you will find the following useful documents on configuring your email accounts:

Business Mail Quick Reference User Guide.

Business Mail Administrators' User Guide.

**Please note:** You will need your Mission Control username and password handy. You would have received these details in your Business Mail welcome letter.

### If you can receive email but cannot open any web pages:

This usually happens if your browser is configured with some proxy settings. Telstra Business Broadband doesn't use proxy settings, so they need to be removed. If you're running Internet Explorer, just follow these steps:

Step 1: Click Start > Run, then type inetwiz into the text box and click OK.

Step 2: On the first screen that appears, choose the lower option Connect using my local area network (LAN) and then click Next.

Step 3: On the next screen, untick all the boxes and then click Next.

Step 4: Select No if you are asked to create a mail or news account, and then click Next.

Step 5: Click Finish, then relaunch Internet Explorer and try launching website.

### Setting up your Email

To receive and send email you will need to set up your Business Mail POP service. Follow the instructions on pages 12-13 'How do I set up my Business Mail service?'

## WHERE TO FIND HELP

- Contact Telstra Business Technical Support on 13 2999
- The FAQs section of this user guide
- The Telstra Business website 'Help' section.

## FREQUENTLY ASKED QUESTIONS

### How do I make changes to my router?

It is recommended that your IT Specialist or a Telstra IT specialist make changes, or 'configures' your router. Some changes may include changing your service details, username/password, firewall settings or wireless settings.

It is important to be aware that Telstra may not support any changes you make to your router's configuration. You may have to remember and be responsible for any changes you make.

The only way you can access or make changes to your router settings is when you run your Install CD, or by accessing the Web Graphical User Interface (GUI) on the router.

To access your GUI, you need to open a web browser, eg Internet Explorer, and type <http://10.0.0.138> into your address bar. This will take you to the Web GUI on your router.

**Please note:** The GUI is not on the internet, but is actually a web page that sits on and runs from your router.



### **Why do I need to disable my firewall software before starting the Telstra Business Broadband installation?**

Your firewall software may think that the Telstra Business Broadband installation program is an intruder because it is changing settings and writing information to your hard drive.

Temporarily disabling your firewall prevents it from interrupting or even stopping the installation software from doing its job. If you have any trouble disabling your firewall, you should ask the software retailer or check the software company's website for help/FAQ information.

### **I have an email account from my dial-up connection. Can I still use that email address in addition to my Business Mail POP Account?**

If you continue to maintain your dial-up account after connecting Telstra Business Broadband, and you are intending to use a different domain name (eg yourname@companyname.com.au) for Business Mail, then you will still be able to access your dial-up email.

However, if you cancel your dial-up account or wish to use the same domain name for Telstra Business Broadband, your dial-up email account will no longer be available to you.

To ensure you do not lose any email in the transition, please ensure that you create all of your required mailboxes using Business Mail before you apply to have your domain name re-delegated or cancel your dial-up connection.

Alternatively, if you are cancelling your dial-up connection and moving to a new domain name at the same time, your existing provider might be able to maintain your email accounts for a short period after disconnection. You will be able to access your old dial-up email accounts using webmail, or by having all email forwarded to your new business mail accounts.

To set up your Business Mail POP email accounts, you will need the Business Mail welcome letter sent to the email address or fax number specified on your application.

If you do not have a copy of this letter, please contact Telstra Business Technical Support on 13 2999 to have a copy resent to the contact you specified on your original application form.

Once you have this letter, go to the 'Mission Control' website (below) to set up your Business Mail POP email.

<https://missioncontrol.pm.telstra.com>

## **What is Wi-Fi and how is it different from Wireless Broadband?**

There are two ways you can access the internet wirelessly:

- Telstra Business Broadband Wi-Fi uses your existing ADSL connection to create a private wireless network in the local area around your office (subject to range). It's quite useful if you have more than one computer in the workplace, or if your router needs to be plugged in somewhere other than where you want to use your computer. It means that you control who has access to your wireless network, so others won't be able to use your internet service just because they're in range!
- Telstra Business also offers a Wireless Broadband service via the Telstra Next G<sup>®</sup> network. This network, which you may use with your Telstra Next G<sup>®</sup> mobile phone, gives you the freedom of internet access via the Telstra Next G<sup>®</sup> network in most places across Australia using your laptop or handheld device. Please note that this is not a Wi-Fi network – it is much larger and uses different technology.

The difference between Wi-Fi and wireless is similar to the difference between a cordless phone and mobile phone. That is, a cordless phone will only connect to the base station at your home or business, whereas your mobile will connect to an available network in any area you happen to be.

Basically, Wi-Fi gives you local wireless connection/s around your office, and wireless broadband gives you a wireless connection to the internet, anywhere the Telstra Next G<sup>®</sup> network is available.

### **How do I configure my Telstra Business Broadband using Wi-Fi, or add another computer to my Telstra Business Broadband Wi-Fi network?**

You will be able to set up your Wi-Fi network on the router using the Self Install CD. If your PC or laptop does not have an inbuilt Wi-Fi adaptor, you can purchase one from selected retailers.

If you're using any other kind of Wi-Fi adaptor, please check the manufacturer's instructions, their website or FAQs for help. Please ensure that any computers that you want to connect to your Telstra Business Broadband service via this Install CD are not part of an existing network.

If your computer is part of an existing network (eg LAN), this Install CD may change some of your computer's network settings (eg DHCP, DNS, Proxy settings etc).

Computer networks require an IP address to be allocated to your computer's network card. When connecting to Telstra Business Broadband using the Self Install CD, you must allow the router to allocate you an IP address automatically – this is known as a dynamic IP address (or DHCP).

If you are not sure how your business network is set up, and you are not sure if changing these settings will affect your existing network, we recommend that you engage your IT Specialist or a Telstra IT specialist before running this CD and installing Telstra Business Broadband. Telstra Business offers a range of specialist IT assistance through the Business Support service. You can apply for Business Support by contacting your Telstra Account Representative or by calling 1800 655 744.

**Please Note:** The TG797n v3 comes with a Wireless security card which has the default SSID and Wi-Fi WPA (wireless security key) printed on it. This is the unique code that your router will use to secure your Wi-Fi network.

As part of the Self Install CD you can change these details to something that may be easier for you to remember. Record these new details at the front of this guide.

It's also important to remember that the number of computers connected to your router wirelessly and concurrently will affect your internet connection speed.

If you do want to connect additional computers to your router, you can follow the Standard Installation option on the Install CD which provides step by step instructions.

## **WPS**

For security purposes the WPS button on your TG797n v3 device has been disabled. This is to ensure that your Wi-Fi network cannot be made public by unauthorised parties.

**Where can I go for more information on Telstra Business Broadband?**

You can find more information on Telstra Business Broadband offerings at:

<http://www.telstra.com.au/business-enterprise/business-products/internet-data/index.htm>.

# WHAT IT ALL MEANS

## ADSL

ADSL stands for Asymmetric Digital Subscriber Line – a broadband service (digital) that's carried on normal copper phone wires (subscriber lines). It uses a higher frequency spectrum than voice traffic, which is why it doesn't interfere with your phone calls, even though they share the same line. It's called 'asymmetric' because it's configured so that downloads will go faster than uploads, to optimise most people's web usage.

## BANDWIDTH

Bandwidth is just data capacity. Broadband services can carry huge amounts of data. Low bandwidth or 'narrowband' services, like dial-up, carry far less. Bandwidth is usually expressed in terms of data flow – 256 kbps or 512 kbps, for example – because it translates into speed when you're browsing the internet.

## BITS PER SECOND

Most internet service providers, including Telstra, rate broadband plan speeds in kilobits per second (eg 256/126 kbps). However, most software, including Internet Explorer and Windows, displays download speeds in kilobytes per second (kBps). One byte equals eight bits, so typical plan speeds 'translate' as:

PLAN SPEED KIL OBITS (kbps)	KILOBYTES PER SECOND (kBps)
1500	187
8000	1000
20000	2500

## BYTES

Bytes are a common unit of computer data measurement, although the base unit is actually a 'bit'. Each 'bit' (short for 'binary digit') is literally a '1' or a '0' in the binary code that makes computing possible. And there are eight bits in a byte. A kilobyte is generally taken to be 1,000 bytes and a megabyte is generally taken to be a million bytes. Because of the binary code, all computing is based on the 'two times table' – so they are actually 1,024 and 1,048,576 respectively.

## BROADBAND

'Broadband' is an umbrella term for high bandwidth internet services (please see the 'bandwidth' definition on page 29). Telstra Business Broadband services include ADSL and BDSL.

## DOWNLOAD

Downloads are data that you pull 'down' from the internet into your computer. That data could be anything from a web page or an email , to a streaming video file.

## ETHERNET

Ethernet is a very common Local Area Network (LAN) technology. In other words, it's a way of connecting computers and computer equipment. 'Wired' ethernet connections usually use RJ45-type connectors.

## FAQS

Frequently Asked Questions (FAQs) are literally just that, and are usually the heart of any internet or computer information directory. You'll find some very useful FAQs in this guide. There are further FAQs located at [telstra.com/business](http://telstra.com/business) in the 'Help' section.

## FILTER

ADSL filters (or filter/splitters) are designed to stop the high-frequency ADSL signals and low-frequency telephony signals interfering with each other (please see the ADSL definition above). Every telephone device that shares a phone line with an ADSL router must be connected via a filter, effectively isolating the router.

## FIREWALL

A firewall is an application that places a virtual security fence around your computer. As long as it's kept up to date and active, a firewall can stop hackers from accessing your computer, stop trojans from sending data out of your computer, and provide you with a report on any such activity.

## ROUTER

The term 'router' is used to describe the device which connects your local business network with your Telstra Business Broadband service (including the internet, Business Mail and any Telstra Business Broadband Extras that you may have subscribed to). You can think of your router as being just like an ADSL modem but with some additional features built in (eg IP routing, multi port Ethernet switch and Wi-Fi access).

## SPLITTER

A splitter is a special filter that separates your internet signal from your phone (ADSL) or pay-TV (cable) signals. A central splitter is an even more advanced filter, which is required when you have several outlets on the same line as your Telstra Business Broadband service.

## SSID (OR NETWORK NAME)

The SSID (Service Set Identifier) defines the 'name' of the local Wi-Fi network provided by your router.

## USB

USB stands for 'universal serial bus' and is a system that lets you plug a huge range of devices (hence the term 'universal') into the one plug (hence the 'serial bus' part of the term) on your computer. USB connectors are usually flat, although there is a square model available as well.



## VOIP

VoIP stands for Voice over Internet Protocol (or IP). VoIP telephones send your telephone calls over the internet in digital format. Telstra does not provide this feature as part of the router.

## WI-FI

Wi-Fi is short for Wireless Fidelity. And Wi-Fi is the technology that allows you to connect to your Telstra Business Broadband router without wires.

## DECT

Digital Enhanced Cordless Telephone.

## ECO

Economy LED Light. This feature ensures that the router only uses a limited amount of energy to power its components and respond to user activity.

## WPS

Wi-Fi Protected Setup that allows for users to add wireless clients to your network. Note this is disabled by default.

## WPA

Wi-Fi Protected Access

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