

Welcome

Thank you for choosing Fusion Broadband and our broadband bonding solution.

This *Getting Started Guide* has been provided to assist you in understanding how your new Fusion Bonded Hybrid service works, as well as providing installation assistance and other important information.

This guide will cover:

- Contacting Fusion Broadband
- Getting Help
- Installation of your Fusion Bonded Hybrid service (using the Fusion nanoBonder)
- Troubleshooting your installation
- Lodging a Support Ticket
- The Fusion Bonding Admin Portal

Please read this *Getting Started Guide* in its entirety as it contains valuable information about your Fusion Bonding Service and will assist you with any issues you may have regarding your broadband bonding service.

Contacting Fusion Broadband - not always the first step!

We welcome any feedback you may have about your Fusion Bonding Service and can be contacted at any time should there be a need for our assistance.

However, we encourage you to utilise this *Getting Started Guide* as well as the other available online help resources prior to contacting Fusion Broadband. Whilst we will be happy to assist in the event of a bonding issue, the vast majority of any issues you come across in your office are generally remedied by simply reviewing your connections (broadband services), your staff's current Internet usage or something very simple that is not bonding related.

This guide will point you in the right direction for the first port of call when assessing any connectivity issue.

If you are unable to diagnose or remedy a fault, please **Lodge a Support Ticket** through the Bonding Administration Portal (see page 4) for a fast response or call our Support Staff on **1300 553 526**.

Getting Help - Take These Steps

The Fusion Bonding service is very robust and generally needs no intervention. Once it is installed and 'fine tuned' by Fusion Support Staff it will happily bond your broadband services as required. In saying that however, problems do arise - the Internet sometimes breaks!

Take these steps to ascertain the best course of action in the event of a fault/connection/speed issue.

1. Access the Bonding Admin Portal (see page 4)

Check your connections through the Bonding Administration Portal first. Do things like:

- Ensure that you have all Green Lights for each of your broadband connections. If not, maybe a modem is unplugged or your ISP has an issue.
- Check your Bandwidth Charts. Perhaps there is a massive download occurring in the office that is filling your bandwidth. Perhaps a staff member is backing up their Smartphone to the Cloud and using all your bandwidth?

2. Check your Router/Power

If you have lost connectivity, maybe the router has failed. Maybe the Router/nanoBonder has lost Power. Check that you have power to the modem and the USB 3/4G dongle is connected properly.

3. Contact your IT Service Provider

If you have a company that you pay to monitor your IT equipment, call them. They will have access to your Bonded Hybrid through the Portal also. They can diagnose any connectivity issues for you.

4. Contact Fusion Broadband

If all else fails, Lodge a Support Ticket or call our Support line on 1300 553 526. In the unlikely even that there is an issue with the Bonder, we will do our best to have you back online as soon as possible.

Getting Started Guide

Bonded Hybrid Installation

1 Unpack your nanoBonder

Inside the shipping box you should have:

- The bonding hardware device (nanoBonder)
- A Power Adapter
- An Ethernet cable
- USB right-angle adapter
- A Service ID Form (also available in the Admin Portal)
- New TP-Link Modem (if ordered)



If you are missing any contents, please contact us by lodging a Support Ticket (see Page 3) and we will ship them as soon as possible. If you have all the required pieces, installation should take no more than 30 minutes. The instructions below describe what you need to do and in the correct order.

2 Install the nanoBonder

The Fusion Hybrid service uses the nanoBonder hardware. It is a desk-mount unit.

Locate the nanoBonder in a well ventilated area. If mounting inside a LAN rack, be sure there is clear space around the device. Keep in mind that the system needs to be physically near your router as well as your ADSL connection. The 3/4G service needs a good signal too.

3 Set up your Modem

Set up the ADSL modem. The modem has three connections* on the back:

- One for your ADSL (telephone) line - shown in grey here (plug this in now **A**)
- One for an Ethernet cable
- One for the power cable



IMPORTANT: If you have supplied your own modem, please be sure that they have been configured into Full Bridge Mode. The modem supplied by Fusion Broadband come pre-configured in Full Bridge Mode with Ethernet cables; there is no need to make any changes with these modems. *Other modem brands may have more ports.

4 Connect the modem and nanoBonder together

Plug an Ethernet cable into the modem **B** and the other end into the nanoBonder **C** starting with WAN 1 according to the Fusion *Service ID Form* we issued with your nanoBonder. A copy of the *Service ID Form* is available in your Admin Portal.

IMPORTANT: The modem needs to be plugged into the correct port as shown on the *Service ID Form*. If you don't require a modem, plug the Ethernet cable from the hardware supplied by your Internet Service Provider.

5 Connect your USB 3/4G dongle

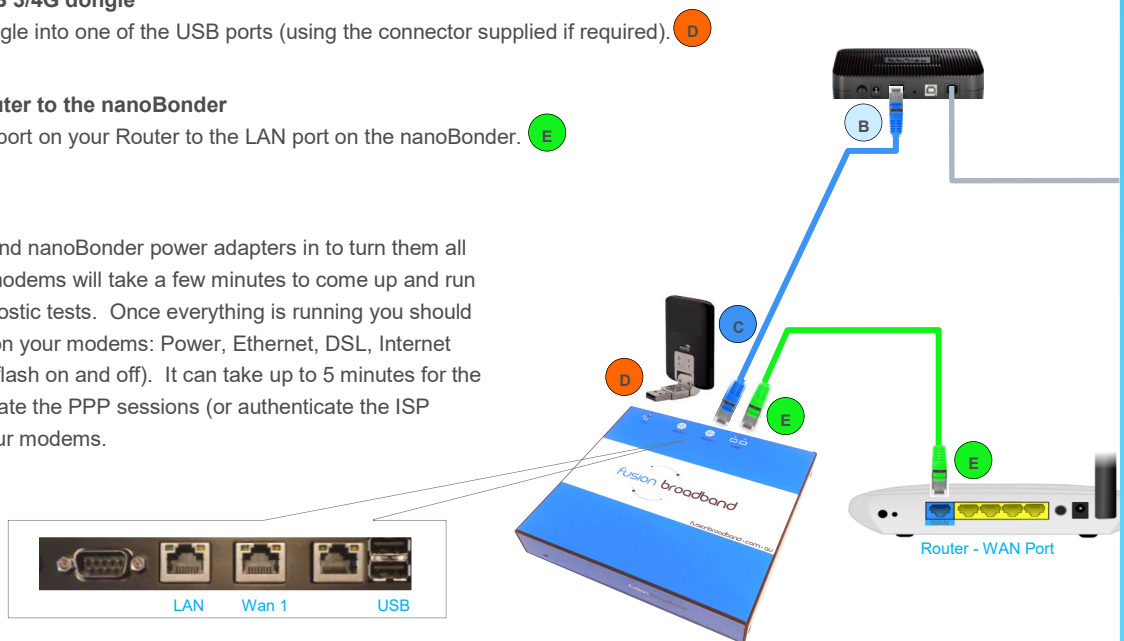
Plug your USB dongle into one of the USB ports (using the connector supplied if required). **D**

6 Connect your Router to the nanoBonder

Connect the WAN port on your Router to the LAN port on the nanoBonder. **E**

7 Power Up!

Plug the Modem and nanoBonder power adapters in to turn them all on. Typically the modems will take a few minutes to come up and run through their diagnostic tests. Once everything is running you should see several lights on your modems: Power, Ethernet, DSL, Internet (which will usually flash on and off). It can take up to 5 minutes for the nanoBonder to initiate the PPP sessions (or authenticate the ISP details) through your modems.



8 Configure your Router

Use the *Service ID Form* to enter these details into your router. You will need to configure the WAN port to make a Static Connection to the nanoBonder by inputting the WAN IP address, Netmask and Gateway as well as DNS details. If you have PCs connected to your router, you may have to change the DNS settings on each PC if it is not set to automatically get it from your router.

Router Settings

The *Service ID Form* included in the shipping box will details all the necessary steps when configuring your router but here are a few other options you should to configure (if required):

- Primary DNS Server: 8.8.8.8
- Secondary DNS Server: 8.8.4.4
- SMTP Relay: au.smtp.fusionbroadband.com.au **or** smtp.fusionbroadband.com.au

3/4G Carrier Settings

Be sure that your carrier sends you data level alert messages. We never throttle the speed of your service so having alerts set will allow you to take appropriate action should you exceed your mobile data allowance.

If your 3/4G data allowance is exceeded, you can access the Bonding Administration Portal and flick the 3/4G service over to Failover mode. This will prevent data being pushed up through the 3/4G service and your connection will now solely be using your ADSL service (you will obviously notice a reduction in uplink speed).

ADSL Line Failure Alert - Important

Be sure to set an ADSL line failure alarm/alert through the Bonding Admin Portal. In the event your ADSL line fails, the 4G service downlink speed will automatically increase to retain Internet connectivity. This will cause your 4G service to potentially use a significant amount of download data. Fusion Broadband will not be responsible for any data costs associated with your 4G service.

Check Connectivity

The simplest way to test your connection is to ensure your computers connected to your LAN have Internet connectivity. If not, please refer to Installation Troubleshooting below.

Alternatively, you can login to the Fusion Bonding Administration Portal using the account details provided to you when the nanoBonder was ordered. There is further information in this Getting Started Guide about the Admin Portal on page 4.

If you have connected the nanoBonder correctly and have connectivity, contact Fusion Broadband to advise that your nanoBonder is up and running. Fusion will run some tests to ensure your nanoBonder is operating efficiently. This will most likely be done out of hours so as not to interrupt your Internet connection.

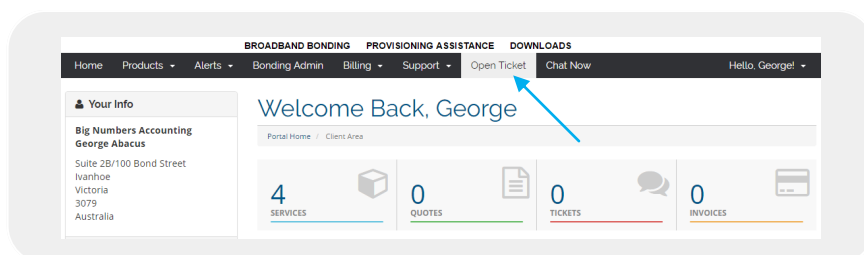
Installation Troubleshooting

- The most common problem is that your modem is not in the correct port on the nanoBonder – double check this using the *Service ID Form* as your guide. The *Service ID Form* is also available in the Bonding Administration Portal (see page 4)
- Another common problem is that the modem is not in Full Bridge Mode. If you have used your own modem, please read the manual to ensure the modem is correctly configured in Full Bridge Mode.
- Check the lights on your modem.
On a successful connection you will see (*Power* – power is getting to the modem, *Ethernet* – your modem is connected to the nanoBonder, *DSL* – your modem has detected a DSL signal, *Internet* – this will be flashing if the nanoBonder has successfully established a connection to the ADSL line).
- Check the operation of your ADSL line. This can be done easily by configuring your modem to connect independently to the ADSL line (the same way you would if you did not have a nanoBonder). Plug a PC directly into the modem and verify that you have internet connectivity. Once you have this change the settings to take the modem back to 'Full Bridge Mode'.
- If you see that the modems has flashing Internet lights and that the Ethernet WAN port lights on the nanoBonder are flashing, this means that the nanoBonder is connected. The next step would be to verify the settings on your router. Check your WAN IP address is correct as well as the DNS server IP addresses as advised on the *Service ID Form*.
- To verify that you have full connectivity, directly connect a laptop to the Bonding system using your specific WAN details (be sure to set a static IP address and the correct DNS IP addresses). Once you have verified this check the configuration details on your router.

Lodging a Support Ticket

Before lodging a support ticket, please review the Troubleshooting steps above. Nine times out of ten a connectivity problem is due to an ISP's broadband service being unavailable or a modem failing - something that is out of our control!

If you are still having connectivity problems, please lodge a Support Ticket by logging on to the Bonding Administration Portal and choosing **Open Ticket** from the main menu.



Click the **Open Ticket** button and after choosing the department to submit your support request to, complete the details of your problem and click **Submit**.

If you cannot connect at all in order to submit a ticket, please call us on **1300 553 526** and choose the Support option.

The Fusion Bonding Administration Portal

The Portal should be the first port of call for any issues regarding your Fusion Broadband account or bonding service. You have access to Fusion's online portal that will allow you to monitor the status of your Bonder as well as many other options including:

- Upgrading your service
- Checking the status of your broadband services
- Creating alerts to advise of connection losses
- Reviewing and paying invoices
- Lodging Support Tickets
- Ordering new services
- Creating sub-accounts
- Much more

The Bonding Administration Portal is accessed by clicking on the **Login** menu item on the Fusion Broadband website. You will then be asked for your **Email Address** and **Password**. The email address would be the same as the one your Fusion account was created with. You can request a password reset if required. Once logged in, you will see the following screen and the available menu options.

Current Bonds (this customer has three)

Description	Services	Traffic	Details
Big Numbers_Ivanhoe	●●●●	↓538.33 Kbps ↑89.75 Kbps	⊕
Big Numbers_Home Office	●●○●	↓14.07 Kbps ↑17.63 Kbps	⊕
Big Numbers_Head Office	●●●●	↓2.48 Mbps ↑206.36 Kbps	⊕

Leg Status Legend
 ● Up ● Down * Testing ● Idle ○ Offline ■ Failover, Up ■ Failover, Down

Fusion Broadband Bonding - Big Numbers

Status

Customer: Big Numbers_Head Office
 Description: Ivanhoe_Vic
 Profile: FB8I5-IbXg6-BSCJI-7sIM1
 Speed / Traffic: ↓5.48 Mbps ↑178.27 Kbps
 QoS Profile: On Off Default
 Compression: On Off
 TCP Acceleration: On Off
 Tunnel Authentication: -
 Control: [Restart Bond](#)

PPPoE Legs

Status	Link Mode	Current Rate	Failover	Interface	IP Address	PPP Username	PPP Password
●	Active	↓ 1.44 Mbps ↑ 20.19 Kbps	Off	Port 2	123.123.123.123	PPPUsername1	PPPPassword1
●	Active	↓ 1.5 Mbps ↑ 15.85 Kbps	Off	Port 4	123.123.123.124	PPPUsername2	PPPPassword2
●	Active	↓ 1.44 Mbps ↑ 22.43 Kbps	Off	Port 3	123.123.123.125	PPPUsername3	PPPPassword3

Static Legs

Status	Link Mode	Current Rate	Failover	Interface	IP
●	Active	↓ 1.15 Mbps ↑ 170.2 Kbps	Off	Port 6	168.214.10.4

Router IPs

IP	Netmask	Interface
103.1.x.x	255.255.255.252	Port 1 - LAN

Annotations:

- Current Leg Status
- Current speed of traffic
- Click [+]
- Switches for QoS, Compression and TCP Acceleration
- Restart Bond Button
- Click to set alarms and view statistics on the Leg
- Click to change status of leg to Idle or to set as Failover
- Your IP Address
- Individual PPPoE Information
- This bonder has an SHDSL connection bonded also (set as a static connection)