



Welcome

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

This *Getting Started Guide* has been provided to assist you to understand how your new Fusion Mini Bonder 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 Mini Bonder service
- 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 Administration 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 Graphs. Perhaps there is a massive download/upload occurring in the office that is filling your bandwidth. Perhaps a staff member is backing up their smartphone to the Cloud, streaming music or downloading photos from *Dropbox* and using all your bandwidth?

2. Check your Router/Power

If you have lost connectivity, maybe the router has failed. Maybe the router/Mini Bonder has lost power. Check that you have power to the modems also and the DSL light is on.

3. Contact your IT Service Provider

If you have a company that you pay to monitor your IT equipment and services, call them. They will have access to your Mini Bonder through the Fusion 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 event that there is an issue with the Mini Bonder, we will do our best to have you back online as soon as possible.

Getting Started Guide

Mini Bonder Installation

1 Unpack your Mini Bonder

Inside the shipping box you should have:

- The bonding hardware device (Mini Bonder)
- A Power Adapter
- An Ethernet cable
- A Service ID Form (also available in the Admin Portal)
- New TP-Link Modems (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 Mini Bonder

The Mini Bonder hardware is a desk-mount unit.

Locate the Mini Bonder in a well ventilated area. If mounting it 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/broadband connections.

3 Set up your Modems

Set up each of the broadband modems. These have three connections* on the back:

- One for your ADSL (telephone) line Plug this in now. **A**
- One for an Ethernet cable **B**
- One for the power cable/adaptor **P**



Note: If you are not bonding an ADSL service, a modem may not be required.

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

4 Connect the modems and Mini Bonder together

Plug an Ethernet cable into the modem **B** and the other end into the Mini Bonder **C** starting with WAN1 according to the Fusion *Service ID Form* we issued with your Mini Bonder. A copy of the *Service ID Form* is available in your Admin Portal.

IMPORTANT: Each modem needs to be plugged into the correct port as shown on the *Service ID Form*. Continue to connect all the modems as required (WAN2 and WAN3).

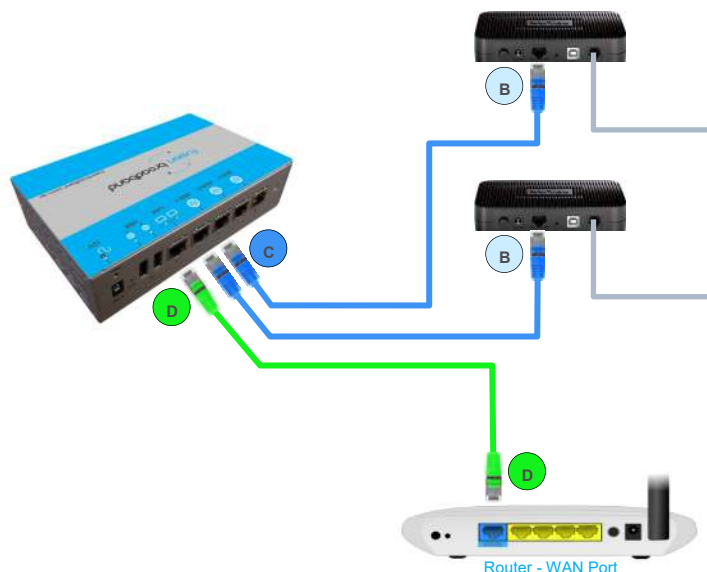
Again, if you don't require modems, plug the Ethernet cable from the hardware supplied by your Internet Service Provider.

5 Connect your Router to the Mini Bonder

Connect the WAN port on your Router to the LAN port on the Mini Bonder. **D**

6 Power Up!

Plug the Modems and Mini Bonder 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 and Internet (which will usually flash on and off). It can take up to 5 minutes for the Mini Bonder to initiate the PPP sessions (or authenticate the ISP username/password details) through your modems.



7 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 Mini Bonder 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

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 Mini Bonder was ordered. There is further information in this Getting Started Guide about the Admin Portal on page 4.

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

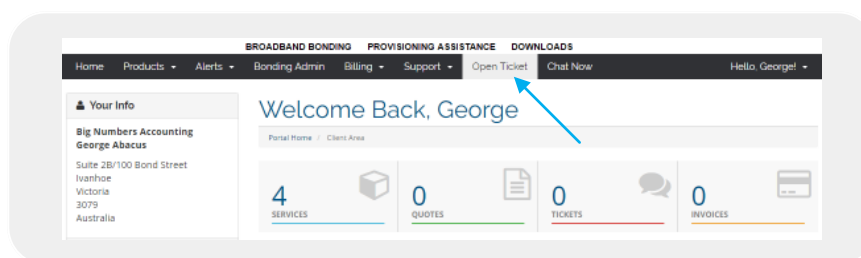
Installation Troubleshooting

- The most common problem is that your modem is not in the correct port on the Mini Bonder – 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 modems, 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 Mini Bonder, *DSL* – your modem has detected a DSL signal, *Internet* – this will be flashing if the Mini Bonder 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 Mini Bonder). 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 any of the modems have flashing Internet lights and that the Ethernet WAN port lights on the Mini Bonder are flashing, this means that the Mini Bonder 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.

Online Help Videos

If you need any assistance with your Bonding Administration Portal and your client account, please visit our online videos page:

www.fusionbroadband.com.au/videos

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.

The screenshot shows the 'Bonds' page in the Fusion Bonding Administration Portal. The page has a navigation bar at the top with links for Home, Products, Alerts, Bonding Admin, Billing, Support, and Open Ticket. The user is logged in as 'Hello, George!'. The main content area is titled 'Bonds' and shows a table of active bonds for a customer named 'Big Numbers'. The table has columns for Description, Services, Traffic, and Details. Three bonds are listed: 'Big Numbers_Ivanhoe', 'Big Numbers_Home Office', and 'Big Numbers_Head Office'. Each bond has a 'Current Leg Status' (represented by colored dots) and 'Current speed of traffic' (download and upload speeds). A 'Leg Status Legend' is provided below the table, showing symbols for Up, Down, Testing, Idle, Offline, Failover, Up, and Failover, Down. A blue arrow points to the 'Details' column, indicating that clicking the '+' icon will view the details of the bond.

Annotations on the screenshot include:

- Current Bonds (this customer has three)**: Points to the table of bonds.
- Current Leg Status**: Points to the status indicators in the Services column.
- Current speed of traffic**: Points to the traffic statistics in the Traffic column.
- Click [+] to view the details of the bond**: Points to the '+' icon in the Details column.
- Switches for QoS, Compression and TCP Acceleration**: Points to the configuration options in the 'Fusion Broadband Bonding - Big Numbers' details page.
- Restart Bond Button**: Points to the 'Restart Bond' button in the Control section.
- Click to set alarms and view statistics on the Leg**: Points to the alarm icon in the PPPoE Legs table.
- Click to change status of leg to Idle or to set as Failover**: Points to the status dropdown menu in the PPPoE Legs table.
- Individual PPPoE Information**: Points to the details of a specific PPPoE leg.
- This bondler has an SHDSL connection bonded also (set as a static connection)**: Points to the Static Legs table.
- Your IP Address**: Points to the IP address in the Router IPs table.

The 'Fusion Broadband Bonding - Big Numbers' details page shows the following information:

- Status**: Customer: Big Numbers_Head Office, Description: Ivanhoe_Vic, Profile: FB8I5-IbXg6-BSCJI-7SIM1, Speed / Traffic: 5.48 Mbps down, 178.27 Kbps up.
- QoS Profile**: On (Default)
- Compression**: On
- TCP Acceleration**: Off
- Control**: Restart Bond button

The 'PPPoE Legs' table shows the following data:

Status	Link Mode	Current Rate	Failover	Interface	IP Address	PPP Username	PPP Password
Active	Active	1.44 Mbps down, 20.19 Kbps up	Off	Port 2	123.123.123.123	PPPUUsername1	PPPPassword1
Active	Active	1.5 Mbps down, 15.85 Kbps up	Off	Port 4	123.123.123.124	PPPUUsername2	PPPPassword2
Active	Active	1.44 Mbps down, 22.43 Kbps up	Off	Port 3	123.123.123.125	PPPUUsername3	PPPPassword3

The 'Static Legs' table shows the following data:

Status	Link Mode	Current Rate	Failover	Interface	IP
Active	Active	1.15 Mbps down, 170.2 Kbps up	Off	Port 6	168.214.10.4

The 'Router IPs' table shows the following data:

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