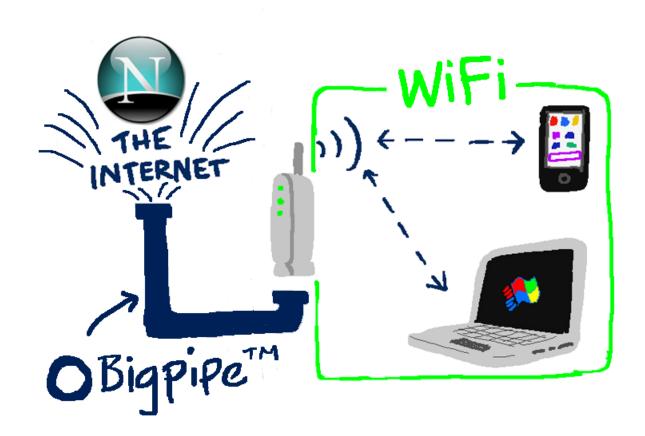
The Bigpipe Big Guide to WiFi

One of the things we hear often from our customers is that their WiFi is not working. We get a lot of messages like this:

Palmerston North here, my hard wired stuff like PlayStation work but lap tops and Mobiles don't even pick up our router anymore.

It's understandable why people get confused. To many, WiFi is the internet. It's the technology that your phone, iPad, and lots of other devices use to get online. But, often, "WiFi" isn't the same as "My internet connection." In the example above, the problem almost certainly has to do with the WiFi, and the Bigpipe connection is fine. It's always tough when we get one of these messages because it's difficult to explain that we can't usually affect how well your WiFi works. We just supply the connection. Put more simply:

WiFi is not the internet.



Think of Bigpipe as a water company — one with really big pipes, naturally. We deliver the water to your property and take care of the water meter. Nice and easy. WiFi is like your internal plumbing and other things that allow you to get at the water — taps, faucets, showers, and so on. And laptops and iPads and smartphones are like cups and kettles — things that allow you to get at the water and use it.

The main difference between us and the water company is that if there's something wrong with your WiFi, we'll do what we can to help you fix it — but we can only do so much. Fortunately, we know a bunch of tips and tricks that you can use to get your WiFi as good as it can be.

What if I've got a Bigpipe modem?

If you've got a Bigpipe modem, it's a bit different to bringing your own modem to our service. As you've purchased it from us, you're entitled to a refund or exchange if it turns out to be faulty because of a manufacturing defect, and this includes faulty WiFi. We're also able to get a bit more indepth with troubleshooting. Not to mention that it should "just work" right out of the box — the Bigpipe modem comes pre-configured for our service, no matter what sort of connection you have. However, we almost always find that, no matter what sort of modem you've got, a problem with the WiFi comes from one of the causes outlined below — and the fix should work too \sqcap

How do I know if the problem is with Bigpipe or my WiFi?

The easiest way for you — and us — to tell whether a problem is related to your WiFi or to your Bigpipe connection is to test using a wired connection. If the WiFi doesn't work, it could be any number of problems. If a wired connection doesn't work, chances are the problem is on Bigpipe's end — and it's much easier for us to diagnose and fix it.

How to get your WiFi working well

Everything in its right place.

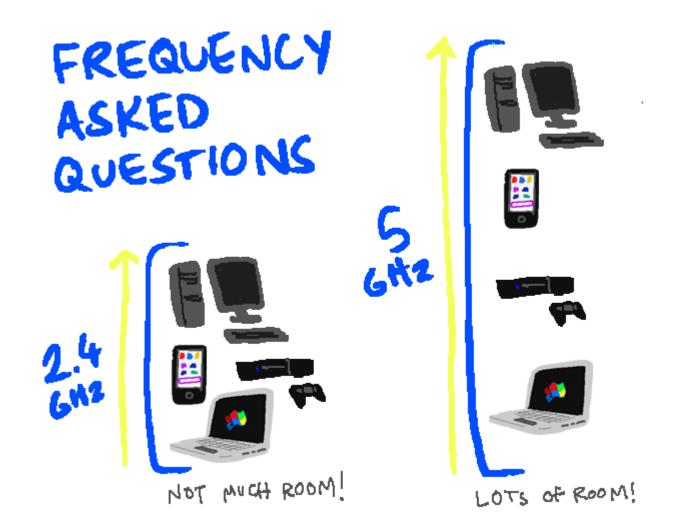


This is what WiFi looks like to Superman. Poor Superman.

WiFi works using radio waves. Anything that emits or gets in the way of radio waves — for example, TVs, microwaves, other routers, cordless phones, walls — can interfere with your WiFi connection. For best results, place your router carefully. Make sure there are as few walls as possible between your devices and your router. Don't put your router with other electronics like your TV. Give it its own special, privileged spot high on a shelf, like you would a valuable painting, or a cat.

And, if you can, try and place it somewhere in your house that is closer to where you like to use the internet. Either in the middle of your house, or, if you like doing a lot of streaming to a big screen (and let's face it, who doesn't?) then place it in a good spot with line of sight to your streaming device.

Change the frequency



Back in ye olden days, about five years ago, every WiFi enabled device used the 2.4 gigahertz frequency. Now, in our shiny new modern era, most WiFi devices can make use of 5 gigahertz frequencies — and so they should. 5 GHz is almost always better.

Giga-what?

When it comes to modem frequencies, you'll see the term "gigahertz", or GHz, a lot. Don't let the jargon hertz your brain — all this means in practical terms is that 5 gigahertz tends to be better with modern devices.

If your modem or devices support 5 GHz, use it whenever possible. While 5 GHz comes with a few caveats — some older devices don't do as well on 5 GHz WiFi — it tends to be faster, and having more bandwidth means there's more room for more devices to connect at once.

Most modern modem/routers output 2.4 and 5 GHz frequencies simultaneously, by default. You can set the different frequencies to have the same login details, and then all you need to do is make sure to connect your iPad, laptop or phone to the 5 GHz network instead of the 2.4. Easy!

Make sure your network is secure

If you haven't set up a wireless password for your WiFi network, do it. DO IT NOW.

×

If you don't have one, get a WiFi password now! Make your dreams come true!

Why? Because if you have an open wireless network, everyone can use it. And if you have an open network, we can guarantee that everyone is using it, right now. Your weird neighbours are using it to access websites with names that rhyme with "Horn Pub". German tourists in the van down across the road are using it to have long Skype conversations in German with their German friends and German family and German Shepherds. Hackers are using it to hack into the mainframes and turn your computer into a mindless zombie slave. Of course, if you've got Bigpipe, you don't have to worry about data caps, (and if you don't have Bigpipe, you should get it here!) but if there are a bunch of strangers using your WiFi, it can make still your connection really slow. Set up a username and password for your WiFi network. Make it a good one. Or your connection will be terrible.

Change the channel (advanced)



If you've been having WiFi trouble and you're a bit more tech-comfortable than the average bear, it's a really good idea to look at changing the channel on the router. Within each frequency band (2.4 and 5 GHz) there are a number of channels that the router uses to communicate with different devices on the network. If too many devices are using the same channel, you'll get interference. How to fix it? Simply log in to your router and change the channel.

Of course, this isn't necessarily simple, but it can definitely be worth having a go at figuring it out. The best way is probably to Google "change router channel [+ your router model name / number]". There's a good how-to guide here.

Get a better modem/router



Bigpipe is a BYO modem service, and most modems will work fine — but let's face it, if your modem is more than 3 years old, it's probably getting a bit crusty. So why not get a new one? You can get some great modems here. We've also started offering the Bigpipe Modem, which you can buy from us for \$199 — or get it half-price at \$99 if you're a new customer, or you're changing Bigpipe plans. To extend our analogy from

before, it's like if your water company threw in a kick-ass kettle that made 500 cups of tea a minute. And if something ever does go wrong with your WiFi, it's a lot easier for us to help you fix it.

Whenever possible, don't use WiFi



We get it — WiFi is convenient. But it's also a huge pain. Because it's just radio waves, it's vulnerable to interference from everything from other WiFi users to solar flares. Whenever you have a device that can accept a wired (Ethernet) connection from your route — PCs, game consoles, many laptops — use it. It's nearly always faster and more reliable than WiFi.

The End...?

If you're having trouble with your WiFi in the future, try

these tips first. We've also got a bunch of other ways to optimise your connection at our <u>Bigpipe Big Guide to Improving Your Broadband</u> If you've got any tried and true tips and tricks for getting WiFi working (microwaving your router or deleting System 32 don't count) feel free to leave them in the comments!

Lurking gremlins squashed: Bigpipe Outage Resolution Update 9 June 2016.

After yesterday's outage was resolved, a small number of Bigpipe customers were still not able to connect to the internet.

After investigation this issue was fixed at approximately 11 PM last night, 8 June 2016. All Bigpipe customers should now be able to connect to our network without difficulty. If you are still experiencing problems (and you have recently restarted your modem / router / ONT) it is unlikely to be related to the outage, and we ask you to please contact our care team via our support centre for troubleshooting.

The was that a relatively small number of customer devices were mistakenly identified as making multiple connection attempts at the same time, and were subsequently denied network access. We have now accounted for this problem and have a working solution in place. We are still investigating the exact reason the problem occurred, and we are working with Chorus, Enable, and Ultrafast Fibre to determine the root cause.

Bigpipe Scheduled Maintenance 9 June 2016

At around 3:30 AM on 9 June, 2016, we will be performing scheduled maintenance on elements of the Bigpipe network, as part of work to make Bigpipe more reliable, faster, and support more access protocols. More technical details are available at this link.

This instance of scheduled maintenance will be isolated to customers in Hamilton and Palmerston North. Customers can expect their connections to go offline for 5 — 30 minutes maximum, between 3:30 and 5:30 AM. More scheduled maintenance will be coming up for other areas of New Zealand — we will let you know when it's due in your area.

This scheduled maintenance is a part of network expansion work. We are preparing for users around NZ to be handed over via local pops rather than terminated collectively in Auckland. This is part of preparation for implementation of IPoE and IPv6.

Bigpipe Outage Resolution 8 June 2016

Many Bigpipe customers experienced an outage between 4:30 AM and 10 AM on Wednesday, 8 June 2016. Here's what happened, and what to do if you are still experiencing connection trouble.

We had scheduled maintenance that occurred at the same time as Chorus network updates at approximately 4:30 AM this morning. Unfortunately, a bad configuration setting caused network instability and dropped connections. This was initially limited to a small number of customers but the problem grew worse, culminating around 8:30 with many Bigpipe customers experiencing loss of connection. Once the cause of the outage was known we rolled back to the previous configuration, which fixed the outage and restored service to 99 percent of Bigpipe customers by around 9:30

If you're still experiencing loss of connection, please restart your modem/router and wait for 5 minutes to reconnect. If you are on fibre, please restart your ONT first and then restart your modem/router.

If you still have no connection after taking these steps, please visit our <u>Support Centre and get in touch with our support team</u>. Please select "No connection" as the problem, and add the subject line "I still can't connect after Wednesday 8 June 2016 outage" into the More Information field. This will help us diagnose and restore your connection more quickly.

Thanks for your patience while we resolved this outage. We apologise for any inconvenience.

Cheers,

The Bigpipe People

Bigpipe People Profile: Jith DR



It's time to meet another of the mighty lords and ladies who reign supreme from Bigpipe Towers. This time it's Sarvajith DR, Bigpipe's Product Manager! Sarvajith, or "Jith", or "Dark Lord of the Jith", or "Jithu", or "The Doctor", as well as various other names by which he is affectionately known, is brilliant and is also very funny, but you might not know it from this interview — we think he might have been a bit busy that day. We've taken the liberty of expanding upon a few of his answers.

Your Name Here Sarvajith DR

Savajith Dr Who? A/S/L?

30/Male/Auckland

Tell us a bit about yourself.

I am a huge fan of start-up companies and the whole start-up ecosystem. I have founded and been part of small companies for most of my career so I feel at home working for Bigpipe. *Jith*

actually has his own food start-up, that he set up with his mum and dad — it's called <u>Tambura</u>. They make traditional Indian chick-pea snacks and cumin-infused chutney, among other things. When Jith started at Bigpipe he brought a whole lot of the stuff in to work and got us all hooked on it. Now he refuses to bring us more unless we pay him "real cash money". Goddamn it, Jith. Just give us a little taste. Just a bit to take the craving away.

What do you get up to outside of work?

I love craft beer and great street food. I also spend a fair bit of time watching Twitch streams (Kripp and anything DOTA2 related). Jith is the office Twitch addict. We can rely on him to source us only the freshest, dankest Twitch memes. Why, just today he was spamming our own work chat with Twitch stuff. Ruined! Soiled! Happy little trees!

What work do you do for Bigpipe?

I am the Product Manager. This is another way of saying that Jith comes up with ideas for Bigpipe and Bigpipe-related products and makes it so they actually get made. Our Bigpipe modems? Jith. Our spiffy new Refer A Friend tool? Also Jith.

Come on Jith! You can do better than that. What's the best thing about Bigpipe?

We are constantly changing the game with world firsts. This is a Bigpipe inside joke, ha-ha! But seriously, we are totally doing that.

Well. Guess you couldn't! Okay. What are you doing for Christmas in 2042?

Staying Alive. We think he means that he's a huge fan of the BeeGees.

What's your favourite thing that you use the Internet for?

Watching Twitch streams (Kriparian, Arteezy) We're becoming unsure if Jith actually knows that there are things on the Internet besides Twitch streams.

Favourite video game right now?

Dota 2 > LOL.

We too prefer playing DOTA to Laughing Out Loud. Speaking of which, what is your favourite dank meme?

via GIPHY

Feels bad man. What's the best thing that a customer ever said to you?

"It feels like 2016 with Bigpipe"

Fresh! Would you rather fight 100 bee-sized men, or 1 man-sized bee?

100 bee sized men.

Incorrect! A man-sized bee couldn't even move under its own weight, whereas 100 bee sized men (assuming they had standard human intelligence) would be a terrifying and insidious opponent. They'd sneak up on you with a gun or something and you'd wake up dead. Anyway, tell us a joke.

What do you call a guy with no shins? Tony

That makes absolutely no sense. Instead, we demand you tell us an amusing anecdote.

A friend of mine decided to splash sulphuric acid on my elbow at school and then proceeded to pour ammonia to equalise the effect of the acid with a base. Yeah that didn't work. I ended up with a scar which I still sport today! I just had a look at the scar and it's pretty seriously gnarly you guys.

That was horrifying, not amusing! Link us to your current favourite thing on the Internet.

Cunning! What is your spirit animal?

Anything you'd like to add?

Nah not really

That's OK, we'll add it for you.

