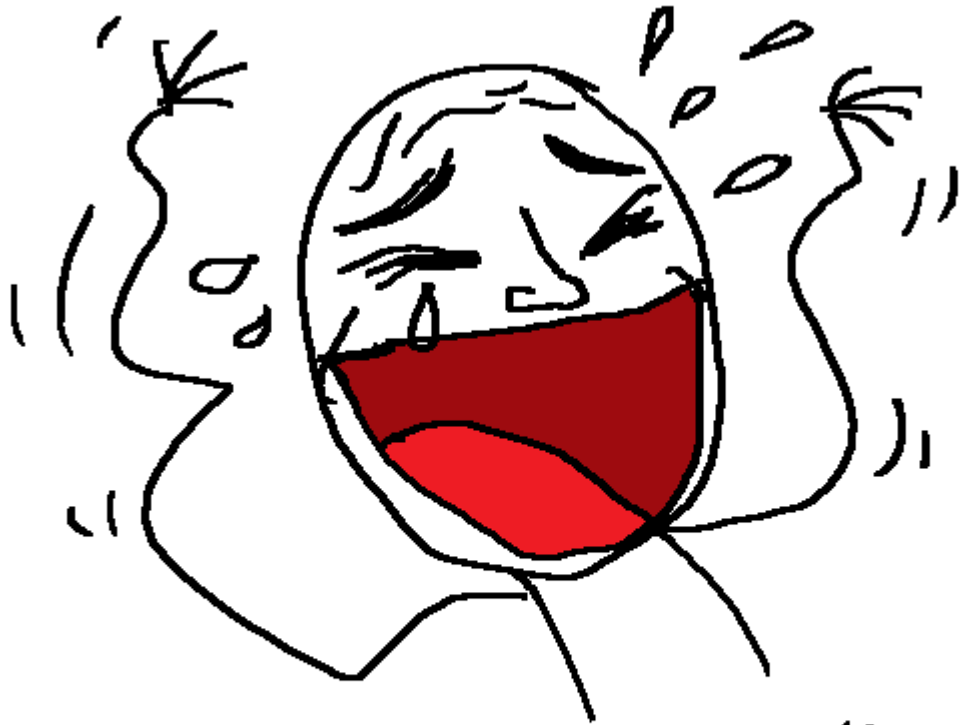


What To Expect When You're Expecting Fibre

It's been a long time coming, but you've done it. Perhaps you've watched as the construction crews dug trenches next to roads near you, forcing endless orange pipes into the ground. Perhaps you've held a flyer in trembling hands, or beheld an email, announcing the most momentous news of the last 5 billion years or so – fibre is here. All this has been done, and you've finally ordered your fibre connection from your ISP of choice (which is, of course, [Bigpipe](#)). All that stands between you and the holy grail of ultra-fast fibre broadband is... what?



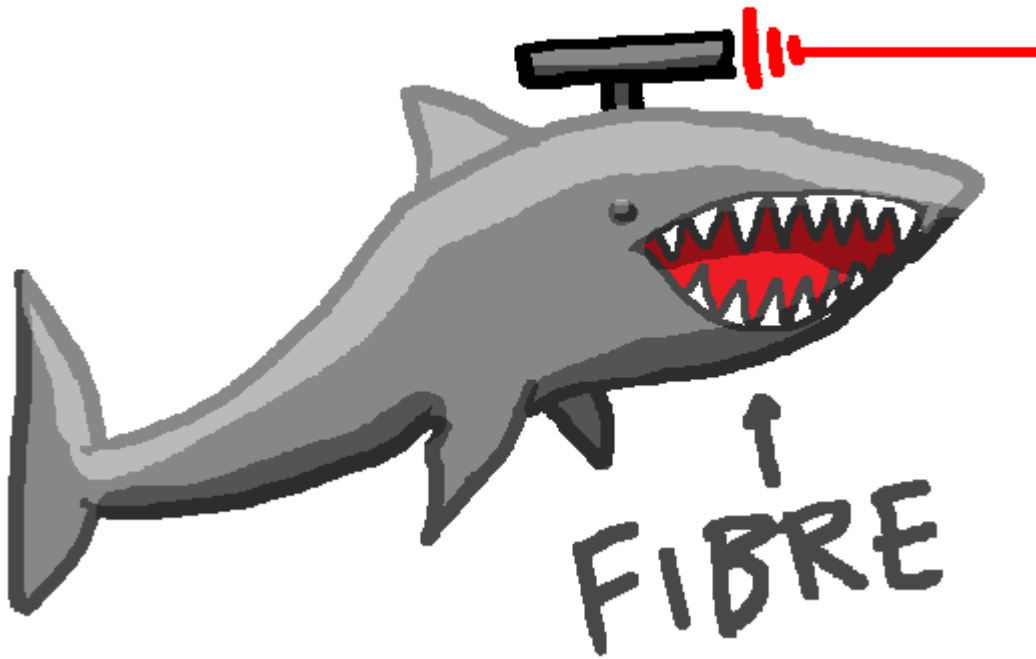
YOU, AFTER HEARING
YOU CAN GET FIBRE

Quite a lot, as it turns out.

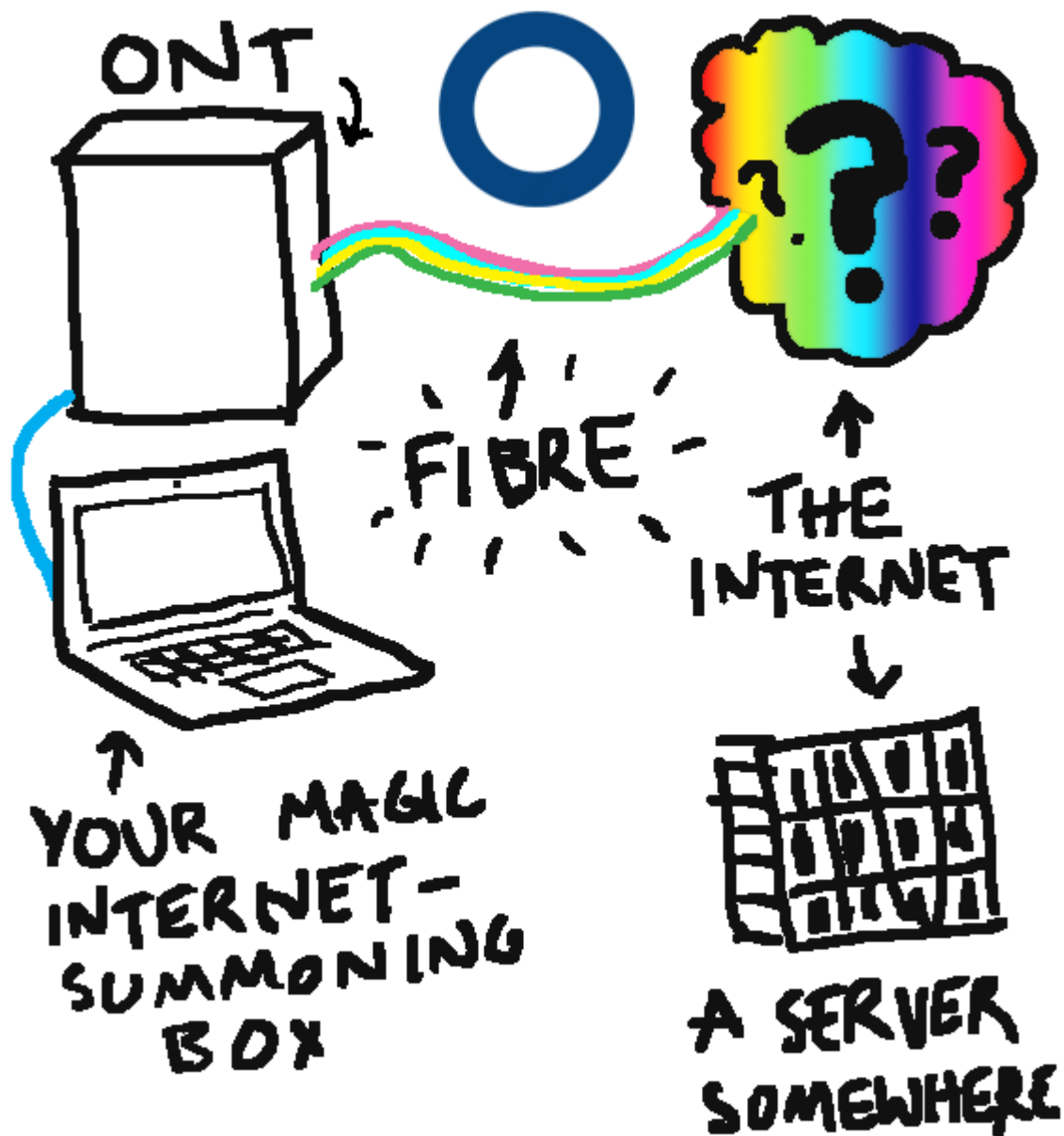
But first, in case you didn't know:

What is fibre?

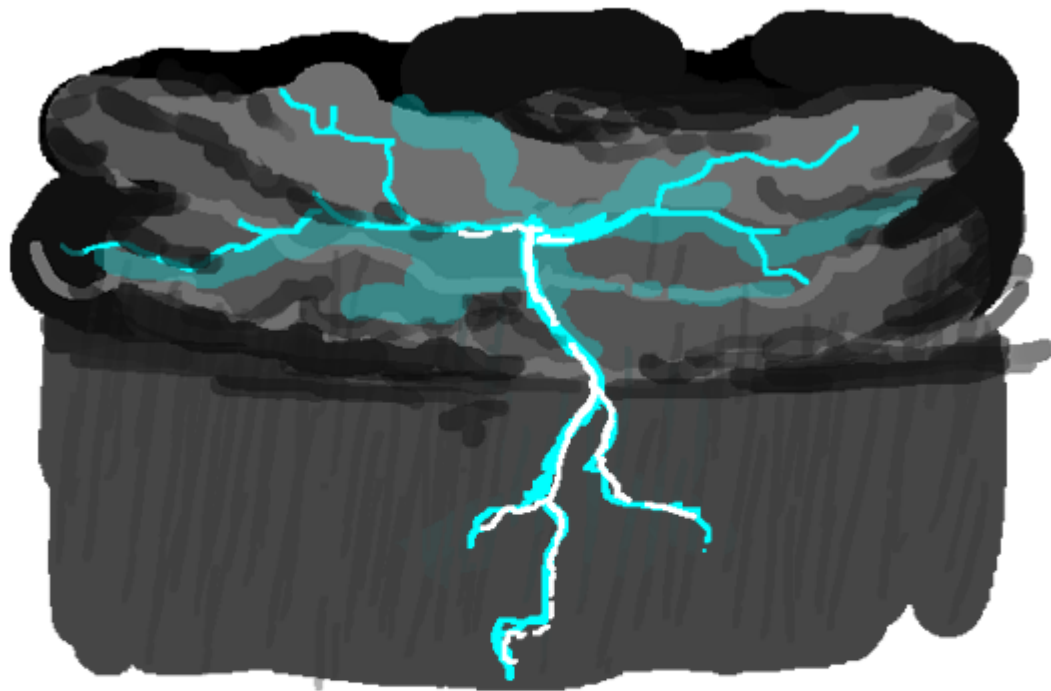
Fibre is broadband that runs over fibre-optic cables. This is done in much the same way as sharks in Austin Powers: The Spy That Shagged Me: with *fricken lasers*, as opposed to lesser broadband technologies like ADSL and VDSL, which work over copper wires.



Fibre is quicker than copper because copper is limited to the speed that electricity flows, whereas fibre carries data at the speed of light. Literally. It works like this: let's say you want to visit a website. We'll say it's YouTube. You type in youtube.com in your browser, your computer has a chat to your router, which talks to the modem (this is a slightly shorter conversation if your modem and router are the same box) which has a yarn to a box on the wall, called an optical network terminal, or ONT. The ONT takes your request, turns it into fricken lasers, and zips via your ISP's fibre network which connects to the Southern Cross trans-Pacific cable which connects to another network in the US which connects to the server farm, which starts streaming the requested data back to you. (This, of course, is dramatically oversimplified, and strictly speaking it's also wrong, but the gist is right.)



All this happens quite quickly. Exactly how quickly is a bit too fast to actually comprehend. I just checked, using a process called “pinging”, and it took my computer 1.8 milliseconds to have 56 bytes worth of data-chat with YouTube. To put this into perspective, a full lightning strike takes around 50 milliseconds.



**LIGHTNING: GOOD AT
SCARING DOGS, LOOKING
COOL. BAD AT BEING A
METAPHOR FOR INTERNET.**

Speed isn't everything – you can get low pings on copper connections as well – but the real trick of fibre is in the sheer amount of data it can carry at these high speeds. To put it another way, if we say the internet is made of pipes of varying capacity, fibre is a really *big pipe*.



See what we did there?

Now that we've explained how our brand name is actually a pun, it's back to the fibre install process.

If you're the first person at your residence to have ordered fibre broadband, there's plenty to do before you can get connected. When you first contact your ISP – which, we're just going to assume, is [us](#) – to get fibre, we get in touch with your LFC and tell them you need fibre. Then your LFC does what they do best: they dig a hole.



Everything You Never Wanted To Know About LFCs But Were Afraid To Ask

"But what *is* an LFC?" you are probably shouting loudly at the sky right now. We're glad you asked. There are several LFCs, or Local Fibre Companies, in New Zealand, and their job is building and maintaining fibre lines. First, there's Chorus – which, confusingly, is not actually an LFC, but we're going to treat it like one for the purposes of this article. Chorus is half of what was Old Telecom, which used to be a government-owned infrastructure company. Old Telecom got sold and had an

awful lot of fun being a monopoly for a decade or two before being broken up by the government into two bits: Telecom and Chorus. Chorus kept running the lines and Telecom became a retailer of phone and internet services. After a while, Telecom decided to stop confusing everyone who thought they still ran everything and changed their name to Spark, which confused everyone even more until everyone just kind of got used to it. Chorus still runs the lines, plus they got given the lion's share of the fibre installation contract by the government, and every internet service provider in the country has to use them for nearly all of their internet service provisioning stuff.

The LFCs Bigpipe works with are Enable (who look after Christchurch and bits of Canterbury) and Ultrafast Fibre (who are fibre-ing Hamilton and a few nearby Waikato towns).

What happens after we talk to your LFC

Unlike the decades-old copper network that ADSL and VDSL run on, fibre is brand new. And because New Zealand's ultra-fast broadband build utilises fibre to the premises (or FTTP) it means, essentially, that a man in a van is going to come and dig up your front lawn, or perhaps your driveway, and put some laser tubes under it.

If you're a renter, this is the first hurdle – your LFC needs to get permission from the landlord to come and dig your driveway. Usually this isn't a major problem, although it can take a while. Most landlords like the idea of having fibre available, though; it's a great way to make more rent.

(Unless you have a lawn or a driveway that can't be dug. That's a whole different problem.)

This is far from the last hurdle. Do you live in a mixed dwelling – like a duplex, or an apartment? If you do, your LFC legally must get permission from every party with an

interest in the dwelling, and this can take a while.

Once all the permissions have been signed, your LFC has to do their digging, and as this requires an actual person to show up with a spade, and thanks to everyone (understandably) wanting fibre all at once, there is a bit of a shortage of spade people at the moment. So this bit might take a while.

After this, your LFC must show up again at your property (which they also need permission to do, because of a lingering societal reticence towards strange people showing up uninvited in your house and drilling holes) and install the ONT, which takes the form of a white box that sits on your wall. This, perhaps unsurprisingly, might take a while.



You may have noticed all the times that we said "this might take a while". These can add up. Getting fibre can be a long,

and occasionally frustrating, process. The good news is: a.) we do our absolute best to smooth out the bumps in the road b.) you can get excellent broadband with Bigpipe's ADSL or VDSL offerings while you wait and c.) If you'd like to ask us anything about getting fibre, we're just an email away – and there's no need to listen to 40 minutes of music to be told "Er, we'll need to ask your LFC. Please call back and wait on hold tomorrow."



But good things take time. Eventually, the ONT is connected to the laser tubes in your lawn, which connect to the internet, your LFC tells us that the ONT is connected, we flip the appropriate switches, and you are connected to much-faster-than-lightning fibre broadband!



YOU, AFTER
GETTING FIBRE

TL;DR: Fibre can take a while, but it is definitely worth waiting for. Fibre broadband isn't just fast – it's also very reliable. Once you've got it, you'll wonder what you ever did without it. [So why not order your fibre today?](#)