Dslextreme Fiber Via AT&T

Forward:

- + This topic will start by describing my transition from slow ASDL to Gigabit Fiber. Happy to discuss a orders of magnitude change or even boast a bit..
- + I like to think I can also cover expectations, the reality of high speed downloads on the internet, and a bit on getting everything going the way you want to. Applies to other internet choices also
- + Turn over the myth that only cable will get you the internet
- + Finally try to get past the request I get to give the one simple path to perfection to the beginners group. The one piece of hardware and software to solve all issues. School choice for kids or grandkids, which vehicle to buy, health plans etc, it all depends on individual needs, so no simple one plan fits all!

Introduction; aka the problem to be solved:

- + Was on slow DSL. Could get email, youtube video at reduced video quality, and large downloads just took time.
- + Was frustrated with the slow speed, but put up with it.
- + Love motorcycle racing. Beinsports covered the three major race series. Directv dropped them. Probably not coming back; 1.5 months +.
 - + Dish has it, but long term contract, and no spectrum LA lakers channel
 - + Spectrum cable has me blacklisted.. Not sure left on bad terms with there predecessor or even previous predecessor 22+ years ago. Who knows... Don't see much customer satisfaction anyway

Introduction; aka the problem to be solved (cont'd):

- + Cheapest and best solution was to go with Slings
 International Worldsports package at \$10 month with the \$5
 cloud DVR addition. (lots of live European races start a 1:55
 AM, can't think of a worse time to try and stay awake!
- + But this internet streaming package requires 5+ Mbps preferably 25 Mbps.
- + Luckily there was a major announcement at the beginning of September. Dslextreme was now able to resell ATT fiber!
 - + More Later slides.

Telephone Internet a bit of history:

- + Some of you may remember the Pre-internet days with BBS (SBAMUG and HughsBBS, etc) Prodigy, AOL and the like.
- + The only choice was 1200 or 2400 bps modems. Used the analog voice telco lines.
 - + There was 300 bps modems before that, but that's before my time.
- + Eventually we worked our way up to 9600 then 56K modems. Great for the BBS and online services, but not really up to the new internet bandwidth requirements.

My History

- + Went with Flashnet then they got bought out.
- + Then with Mr. Internet
- + Finally went to DSLextreme.com

DSL:

- + DSL uses the phone lines (POTS)
- + Specifically ADSL and ADSL2
 - + Unlike dialup which made a telephone call to a number and used voice frequencies ADSL use frequencies above the voice frequencies. A device in the telco office processed the data
 - + The data use was independent of any voice telephone data.
 - + The upload rate was much less than the download rate on purpose.
 - → Data rate depended on distance to the telco office and line quality. 6 10 Mbps at short distances ~4000 ft
 - + I was in excess of 10000 ft thus my speed was slower.

VDSL:

- + The ADSL speeds were not competitive with cable offerings
- + Technology improvements allowed the telcos to extend the frequencies even higher
- + In addition AT&T set up neighborhood devices called VWADS. (have a electric power meter on the side). Used fiber to connect.
- + As long as your POTs telephone lines were within 1000 ft or so you could get up to 37.5-40 Mbps. They also allowed two pairs of lines to double the speed.
- + Up to 2500 -3000 ft connection is still possible. I was briefly offered 45 Mbps presumably with two line pairs.

Issues, a change in plans, and Fiber

- + AT&T has stopped maintaining its POTS (copper) lines in many parts of the country.
- + While with many customers no longer having POTs service, spare lines are available. Not really a good long term solution. AT&T is not rolling out any new ADSL.
- + Frontier (was Verizon) was an initial fiber to the home provider. Sort of stopped, but is rolling fiber to new construction again. Perhaps to older new areas too.
- + Seems like AT&T changed plans and is now providing fiber direct to the home in many areas.

AT&T and Dslextreme

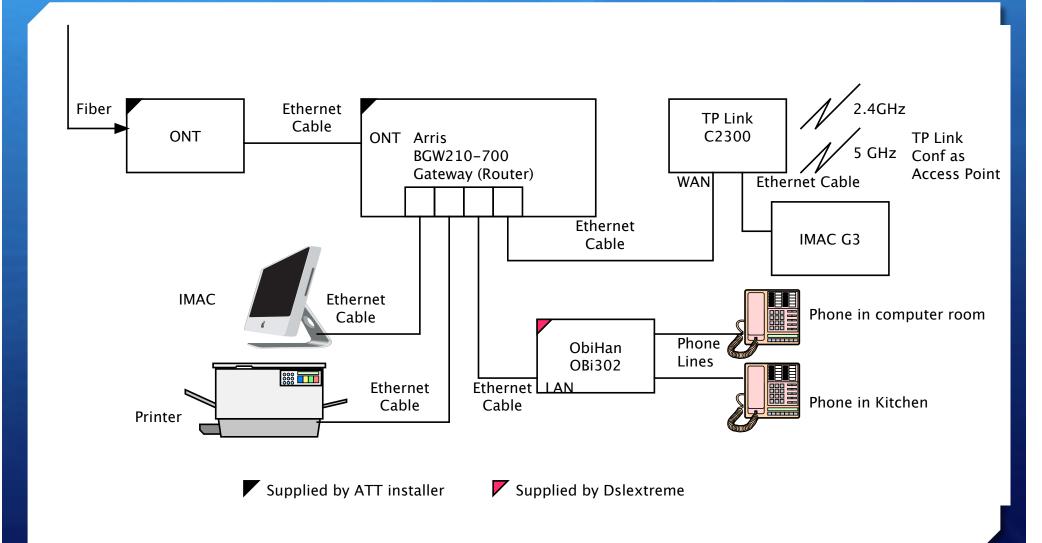
- + Dslextreme along with many others independent companies could offer ADSL because of government regulations
- + The VSDL was not part of the regulations, but Dslextreme was able to enter an agreement with AT&T to resell.

 Dslextreme calls it Truestream.
- + AT&T starting touting 100 Mbps service with Fiber a few months ago.
- + As of September 1 of this year, Dslextreme started offering ATT fiber. No rate caps on 100 Mbps unlike AT&T

Before we continue, one other Alternative

- + Satellite Internet
- + If you have nothing better to choose from!
 - + Low Data rates 12 Mbps or so
 - + Expensive
 - + Low usage caps
- + Rural areas, or perhaps a few of you have remote vacation homes or rural cabins away from other choices.

My Setup



Installation

- + ATT installer came out
- + Installed Fiber cable from Utility Poles
- + Installed ONT (Optical Network Transceiver) converts optical to Gigabit Ethernet.
- + Installed Gateway Arriss BGW210-700 gateway. Needs to be there. Via Mac Address and Certificates authenticates you on the Fiber network.
 - + Has 4 wired Ethernet and 2.4 and 5 GHz wireless.
- + All have separate external power supplies

My Router

- + I did have my own router before, a 2.4 GHz obsolete router
- + Bought a new TP Link router based on reviews
- + Internet said supplied Arriss router was okay but not great. Can't really get the Arriss into a true bridge mode, but IP passthrough will be the equivalent. This did work
- + However after the installation my VOIP setup I requested was slated to ship. An inquiry to support resulted in a response I did not like, VOIP will not work with IP passthru!
- + So I configured the TP Link router to be an access point.

My Router (cont'd)

- + As it turns out the TP link can provide a stronger signal in my living room and more importantly sustain faster speeds than the ARRISS.
- + I probably can configure the TP link to work with the VOIP but I have to dig deeper.

VOIP

- + Part of the offer from Dslextreme was that for \$10.00 more a month I could get Broadvoice's Phonepower VOIP and transfer my number. Justify more payment to Dslextreme by reducing my phone bill!
- + Why did I still have a landline? Easy if I got rid of my landline, I got rid of my ADSL! No "dry" ADSL was possible!
- + The Obihan Obi302 plugs into the Arriss. One local phone in my computer room is connected.
- + The kitchen phone is also connected. I pulled the wires from my old demarcation box and spliced them with proper connectors. No crawling under the house! (not recommended by Phonepower ... but)

VOIP (cont'd)

- + You get voice mail with the service. Dial *21 + pin number
- Dial your own number Hit * + pin number to retrive messages remotely
- + You do not get the full internet account connectivity that full up Phonepower users get. You are paying less than they are however.
- + Did say they had setup E911 to send my home address to the dispatcher.

Fiber Speeds

AT&T Internet Speed Test





AT&T's Speed Test resource the speed between your computer and the Internet, it does not resource the speed between the Network Interface Device at your location and the AT&T network. Unsatisfactory less results do not necessarily indicate a problem with your AT&T service as factors outside of AT&T's control affect your appeal. Review our online self-help to learn more about these factors and what you can do to improve performance.

Testing your speed now

Speed test in progress. Please wait.

Speed:

- So everything happens immediately!
- + Not quite!:
 - + Probably exceed servers speeds on most webpages and download sites.
 - + Sometime surprised used to see downloading page, install page comes up, or say Podfeet podcasts are now just there.
 - + Websites with lots of third party ads still take some time. Lots of links to remote advertisers.
 - + Office updates are large 1GB+. Well last update was quicker but not super fast. Got a second update that was slow. Lots of similar complaint online so I was not alone.
 - + Office 2019 downloaded to my Macbook Air wirelessly. Got 25 MBps which is more than 200 + Mbps (8 bit/byte + overhead)
 - + Sling TV is buffer free and no download pixilation.
 - + But Beinconnect 6 was buffering likely their problem
 - + Was able to stream youtube in HD while watching SlingTV.. No issues noted!
 - + See what happens when Mojave 10.14.1 comes out. Probably 6.5 GB ish download Apples servers fast (except the first day)

Speed (cont'd):

- + Was not getting good speeds at all on my iPad2 ~ 35 Mbps
 - + But nobody else gets them either! Limits on device
 - + Oct 30 iPad pro announcement will solve speed issue!
- + Wireless speeds will not equal that of wired Gigabit ethernet cable
 - + The 5 GHz band is faster than 2.4 GHz but 5 GHz wireless does not travel as far.
 - + I can get 250- 325 ish in my living room, 500 or slightly faster in the same room as my TP link.

UPS:

- + When Verizon first started rolling out Fiber they would install a large box outdoors. Inside were backup batteries. I guess the need to replace batteries several years down the road created so many logistical issues they abandoned it.
- + No backup batteries. I offered to plug the various devices into my UPS when the AT&T install tech was here. He did not want to do it. (Liability?) Went and plugged devices in (ONT, Arriss, TP link, and Obihan) anyway.
- + Probably order replacement batteries for my UPS so I can get some run time if needed.