The Need for Speed

I like high speed broadband. It is life changing. But how much do I actually use and how much is just wasted capacity? All the speeds mentioned are after contention (sharing).

Our average customer uses about 1Mb/s in the evening, but that is not the whole story. Some use 10Mb/s or more for sustained periods in the evening, some very little over the same period. Some use a lot more for very short periods of time when downloading a new game or a complete Operating System, but we have clever load sharing so no one really notices on the network. On average during the peak time between 6pm and Midnight we run about 35Mb/s over our 35 customers, during the day it is much much less. It sounds like it should be more, indeed we were expecting more. We even checked with another provider who has 230 customers on a 200Mb/s feed and they confirmed we are about where we should be.

So what uses what?

A really fast PC can process about 40Mb/s peak when browsing. But humans can't, so it is not sustained usage. Anything over 10Mb/s is near instantaneous to the user.

Streaming HD Television takes about 8Mb/s. Ultra HD about 12Mb/s

Gaming streams take about 0.1Mb/s

For general use you don't really need anything above 10Mb/s, but if you have faster it can be helpful. For example a 5GB download takes about the following times at the following speeds. For most people you might do this a few times a year.

- 0.5Mb/s   About 24 hours
- 10Mb/s   1Hour 6 Minutes
- 50Mb/s   13 Minutes
- 100Mb/s   6 ½ Minutes
- 1Gb/s   40 Seconds

You can see the time saving from 0.5Mb/s to 10Mb/s is meaningful and helpful especially as the price change from 0.5Mb/s to 100Mb/s is low. But as we don't normally sit in front of our computers watching things download the marginal benefit past 10Mb/s is just that – Marginal. If you spent an extra £600 a year on a 1Gb/s service and did five big downloads a year (the only time it makes any difference) you might end up paying £1200 an hour for faster downloads. In my opinion not great value.

Now we only have one speed on WBCB which is 100Mb/s and that is a deliberate choice so people can get the best service possible. But does anyone need or use the whole 100Mb/s? Sometimes but only for a few minutes at a time.

Andy
West Berks Community Broadband
By the Community: For the Community