

Crossing the Digital Divide (v152)

“Speed”

by Joseph Feigon
for the Observer

Top Gun: “I feel the need for speed”. Average iPhone user: “What do you mean you don’t have unlimited, 10G fiber optics to every square inch of your ranch?”

I last wrote about the 30th birthday of the World Wide Wide. We still waited nearly five years for a graphical web browser (Mosaic), and greedily gobbled up hours of modem time (dial-up) for a glimpse of the Andes, Budapest at Christmas, or a London afternoon without fog.

Fast forward into the 21st Century, there are more smart phones in use than there were computers back in the Netscape days. Mobile devices were initially for voice communications, now, that small device has more power than the PC your (or someone you know) has in 1987.

Speed, as it relates to the Internet, is an enabler. Speed is mostly about volume – the more activity and users, the larger the Internet connection need be. When we talk about users, we’re mincing words – a user is a device to the Internet, a device can be an iPhone, laptop, Roku Box, Chromecast, your weather station, or security camera. The more devices in need of Internet access translate to the need for “speed”.

Ah, but what if you live off-grid, have a metered Internet connection, how to you limit what is, by design, something that all those devices will grab as much as they can.

Let’s talk briefly about watching shows/movies on Netflix, whether you use an iPad or a 99” JumboTron.

SD – Standard Definition video requires an Internet connection of at least 3MB/s

HD – High Definition video requires an Internet connection of at least 5MB/s

UHD – Ultra High Definition video needs at least 25MB/s

4K – Ultra 4K video (depending on source) demands 15-25MB/s +

UHD, for the most part, is the holy grail in rural communities. HD is a luxury, SD is still a treat.

Settings in Netflix (the Gear Icon) should be set to Low or Medium for almost all of us.

Data Use: Netflix users will see the meter spinning at roughly 1GB of data per hour for EACH stream in SD. Remember the device comment above?

HD will burn roughly 3GB/hour of streaming.

Hope this helps.

Control the things you can and keep the surprises to a minimum.