

4520 - Class #16 - Jan 29, 2019

Quiz #4 - results

Report #2

questions?

Homework

Quiz #4

4-pointers

Define 6/8 — 36 min

1. 1080p
2. DDoS
3. digital compression
4. IEEE 802.11
5. IPv6
6. managed IP
7. Tbps
8. VDSL2

Quiz means

#4 = 69.5%

#3 = 66%

#2 = 73%

#1 = 63%

Broken record...

Q# then term inc initialisms
tech X helps, deals with, aims to
efficient, faster, extremely fast

This...

when, where

system

pagination, paper

don't cram

numbers, examples

Managed IP

Our basic guideline: context

Cisco: pp. 13, 15, 23, 30, 31, 32, 33, 34, 36, 37

Business managed IP traffic: All business traffic that is transported over IP but remains within the corporate WAN

Step 6: Traffic migration assessment.
The next step is to reconcile the Internet, managed IP, and mobile segments of the forecast.

DMA vs STBs

Cisco definitions

Consumer: Includes fixed IP traffic generated by households, university populations, and Internet cafés

Business: Includes fixed IP WAN or Internet traffic generated by businesses and governments

Mobile: Includes mobile data and Internet traffic generated by handsets, notebook cards, and mobile broadband gateways

Internet: Denotes all IP traffic that crosses an Internet backbone

Managed IP: Includes corporate IP WAN traffic and IP transport of TV and VoD

Tbps = terabytes per sec = 1000 GB

terra

fiberoptic

“But 1H 2018 told a different tale, the peak DDoS attack size was a dramatic 1.7 Tbps, a 179% increase from 1H 2017.”

1080p

p = precise, pixel

missing: interlaced

has aspect ratio of 16:9 Mpx

progressive resolution

ATSC vs NTSC

DDoS

“systems targeted”

reasons for hacking

key defining characteristic:

mechanism for disrupting service

excessive demand for BW

Digital compression

point is to save storage space
used to transmit files faster
reduces bits in a digital signal
what's a JPEG?

IEEE 802.11

spell out

Internet Electrics & Electronics Engineers

Federal Commission for Communications

802 vs 802.11

IEEE is connected with copper wires

1-2 Mbps in the 2.4 GHz band using FHSS...

in the 2 MHz band

the latest Wi-Fi standard

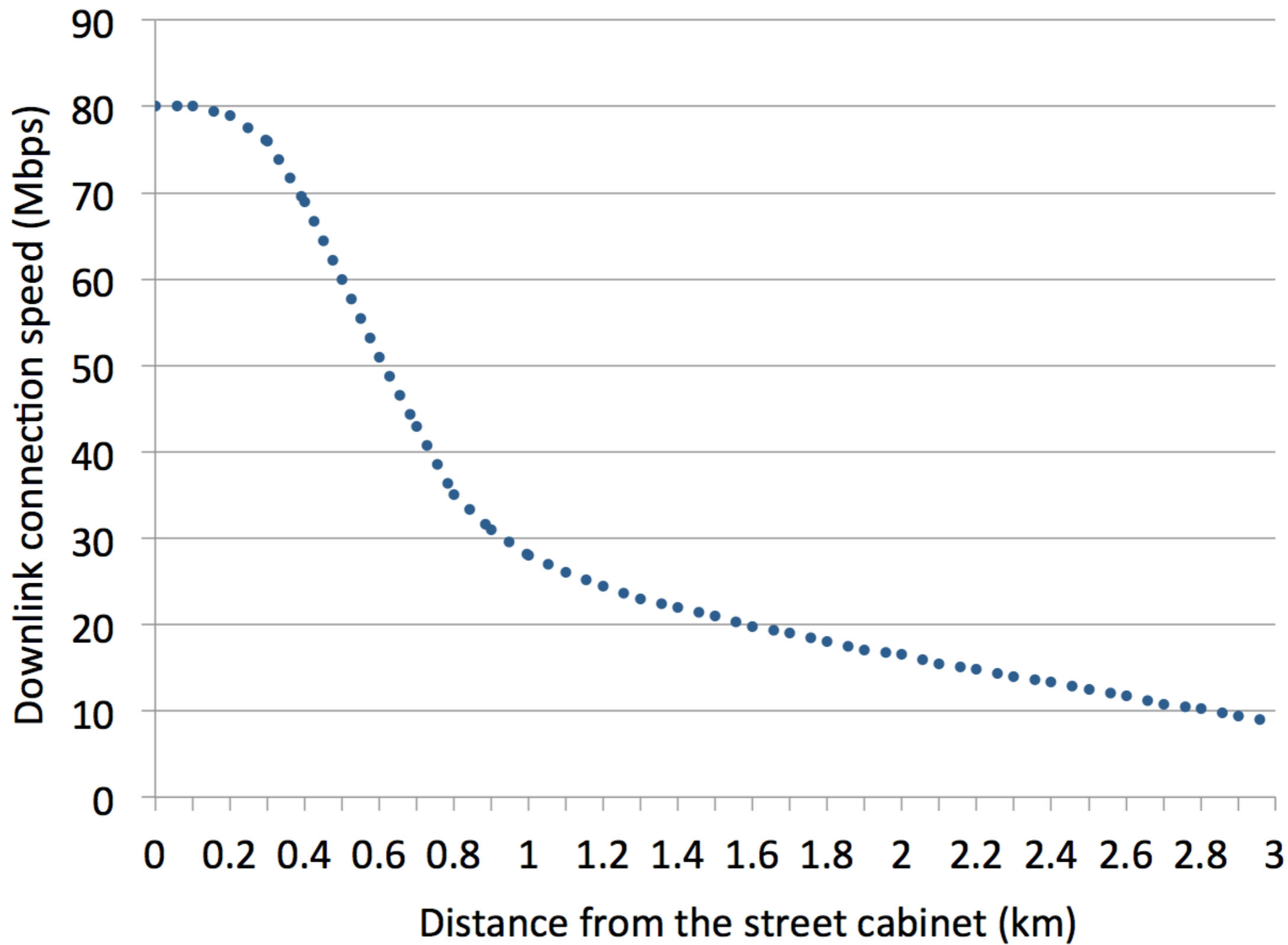
letter suffixes

VDSL2

“The amazing thing is that the VDSL2 access is available over the same wires as plain old telephone service and lower speed DSL.”

vs G.fast

Runs on 30 MHz frequency using 7 bands...



IPv6

is not an address space

does not use 128 bits (or 126)

addresses are 128 bits = 16 octets (not 8)

address space \neq internet “space”

operates at 64 bits

used to monitor the internet

Homework for Tue Feb 5

1. Reading: boyd
hand-in notes
2. Report proposal