

## VPRN

Essentials: (1) MP-BGP on PE's; (2) VRPN service; (3) Proto for PE-CE routing

### Agenda

- Notice: SBA: 2.5 hrs, **Sat Apr 13<sup>th</sup>**; times/sections posted on BB
  - new list of lab work; study guide & preview posted on course site
- In The News: The World at Large, and Canada in particular
- Review of VRPN basics:
  - **new** families: VPN-IPv4, VPN-IPv6 = RD + IP prefix
  - Route Distinguisher: 64 bits = **[1]** type (0) **[2]** ASN **[3]** assigned number *pre*-pended onto IP prefix
  - Route Target: identifies *to whom* the VPN-IpvX prefix is of interest
  - Both appear in MP-BGP updates; RT is a separate attribute field
- Continue VPRN basics – SA Mod 5, slides 54 onwards
  - (1) MP-BGP on PE's; (2) VRPN service; (3) Protocol for PE-CE routing

### References / Lab Prep

There's a few key slides in SA Mod 5 that show exactly how to configure a VPRN:

- MP-BGP on PE's: slide 60
- VPRN service on PE: slide 67, 69
- PE-CE peering: slide 73 (protocol), 72 & 74 (export policies)
- Overall for VPRN + PE --> CE peering: slide 78

### In The News: The World at Large, and Canada in Particular

*"Canada is, on average, experiencing warming at twice the rate of the rest of the world, with Northern Canada heating up at almost three times the global average, according to a new government report. ...*

*In Northern Canada, the annual average temperature has increased by 2.3 C."*

<https://www.cbc.ca/news/technology/canada-warming-at-twice-the-global-rate-leaked-report-finds-1.5079765>

<https://changingclimate.ca/CCCR2019/>

- What impact is this likely to have on you, during your lifetime?
- What impact is this likely to have on your children and grandchildren?
- What connections exist, if any, with networking?