

ACLs (Part 2)

You'll need ACLs with every vendor, every application in Networking

Agenda

- In The News: Concerned about Climate Change? You should be!!
And the president of Microsoft also thinks so!
news.slashdot.org/story/22/11/02/1446202/microsoft-president-wants-more-training-for-workers-to-fight-climate-change
- New material: Configuration of standard & extended ACLs

Assignments and Lab work

- Lab 8 post-lab: due **before** your lab session this week.
- Lab 9 pre-lab: due **before** your lab session this week.
- Lab 9: BGP (including self-directed learning)
- Readings: NetAcad Module 5: ACL Concepts; by Mon **Nov 14 @ 8am**

References

- NetAcad online course materials: Module 5
- Cisco articles on ACLs:
 - 1 <https://community.cisco.com/t5/networking-knowledge-base/access-control-lists-acl-explained/ta-p/4182349>
 - 2 <https://www.cisco.com/c/en/us/support/docs/ip/access-lists/26448-ACLsamples.html>

Notes on ACLs

- Most every other vendor just has a singular equivalent of ACLs;
AFAIK it's only Cisco that has two flavours of ACLs (standard and extended)
- It's not the first time we'll find contradictory evidence on the internet:
 - Sect 4.3.1 (slide 19) says max 4 (four) simultaneously applied ACLs per interface
 - reference item 1 above says two slightly different, contradictory things:
 - "Only two ACLs are permitted on a Cisco interface per protocol."
 - "Maximum of two ACLs can be applied to a Cisco network interface."
 - testing using NetLab confirms the max on slide 19 (1 per direction, per proto)
- Gotta love Cisco: there's at least three *different* keywords associated with ACLs:
 - **access-list** when creating & *defining* an ACL
 - **access-group** to apply an ACL *to an interface*
 - **access-class** to apply an ACL *to VTY connections*
- IPv6 only has named, extended ACLs (same structure as IPv4); different key words
(We'll also clarify one ACL command once we get to IPv6 ACLs.)