

STP, RSTP, MSTP

Essentials: STP, RSTP, Timers, TCN & TC

Agenda

- Take up answers to Midterm #1
- Review & questions on Ch 3 material to date
- Continue Ch 3 – STP slide deck

Assignments and Lab prep

- Next Cisco online quiz: Ch 3 at beginning of lab on Wed Feb 15.
- Do Ch1Quiz on BB by **Sun Feb 12 @ 11:59pm**
- Lab 5 **post-lab** is due **before** the beginning your lab period this week.
- Lab 6 **pre-lab**, based on pdf lab manual Labs 4-1 and 4-3, due **before** the start of your lab this week.
- Cisco Lab 4-1 done **in lab** this week. Start on Lab 4-3. Do both labs ahead of time in PT (all of 4-1, all but two items from 4-3)
Note: **post-lab** may require results saved from in-lab work (ie. copy & paste of actual outputs).

STP: Three Decisions

1. Which switch is the **root bridge**?

Bridge ID (= switch priority [1 st]+ MAC address [2 nd , tie breaker])	Lowest wins
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2. Which is the **Root port**?

Accumulated Cost to Root bridge (= received + cost of last link)	Lowest wins
Bridge ID (of sender; = switch priority [1 st]+ MAC address [2 nd])	Lowest wins
Port ID (of sender; = port priority [1 st] + port number [2 nd])	Lowest wins
Port ID (of local switch; = port priority + port number [tie breaker])	Lowest wins

3. Which is the **Designated port** (for a segment)?

Bridge ID (of sender; = priority [1 st]+ MAC address [2 nd])	Lowest wins
Port ID (of all segment; = port priority + port number [tie breaker])	Lowest wins

RSTP (MSTP) adds:

Backup port(s): other ports on same segment & same switch with higher Port ID

Alternate port(s): other ports on same segment but **not** on designated switch