

## R&S Quick Notes ? Switching

With the insane amount of theory to go through before the big day comes, it is only normal for a couple of items to get lost in the masses. On top of that, regardless of the material you used to study, you are bound to come across a couple small things that you have not seen before. Apart from my 400 pages of summarized notes, I made short notes on the fly while labbing of anything I have not seen before or any beeg gothas to look out for.

Hope these help some of you!

### Switching Notes

If different VTP domain names between 2 switches, you cant use DTP. Must use manual trunking.

- When configuring 802.1x, DO NOT forget to add ?aaa authentication login default none?, else you might lock the router and forfeit any points related to that switch.
- Always confirm your MD5 to be same when configuring VTP PASSWORDS, with ?sh vtp status?
- To enable WCCP on a 3550, you have to change the SDM template to 'extended-match'
- STP Timers question-1: Change the STP timers when a port initially comes up to 44 sec. Answer: Blocking is always 20 sec,  $(44-20 = 24/2)$  each listening and learning timers should be configured at 12 sec.
- STP Timers question-2: Change the STP timers, that in the event of convergence, delay should be no more than 20 sec. Answer:  $(20/2)$  each listening and learning timers should be configured at 10 sec.
- MAC-ACL's will only match NON-IP traffic. 3560 sees IPv6 traffic as IP-traffic, but 3550 sees IPv6 traffic as NON-IP-traffic, so a 3550 can use a MAC-ACL for IPv6 traffic.
- Ethertypes used with MAC-ACL's not on DOC-CD/CMD-Help :

- 0x0806 : IP ARP
- 0x0800 : IPv4
- 0x86DD : IPv6
- 0x4242 : CST (Common Spanning Tree)
- 0xAAAA : All Cisco proprietary (VTP, STP, CDP, DTP, UDLD, PAgP)
- 0xFFFF : all NON-IP

- VLAN-ACL's: ONLY a ACL-Permit performs the ?forward?/?drop? function in the access-map. A ACL-deny will be ignored. So to deny traffic with VLAN ACL's, permit the traffic and use a ?drop? action in the access-map.
- Storm-Control: Multicast amount must be equal or greater that the broadcast amount.
- Uplinkfast used when a direct link failure is detected.
- Backbonefast ? used to determine indirect link failure.
- Root Bridge Election: 1-Lowest Bridge-ID (Priority  $[32768 + \text{Sys-Id-Ext} [= \text{vlan}]]$  & 2-Lowest MAC
- Root Port Election: 1-Lowest cost to Root, 2-Lowest upstream Bridge-ID, 3-Lowest Port-ID (Port Priority + Port Number)
- Influencing local Root Port election ? change the Port Cost.
- Influencing the Root Port of directly connected downstream switch ? change the Port Priority.

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