LAB SESSIO WEEK 7 – TUTORIAL NOTES

GENERAL INFORMATION

Your Mid-Sem Skills Assessment is next week

- We will complete a sample assessment today
- We will also run a live demonstration today
- Mid-Sem Skills discussion board available → tips, examples, common mistakes posted here
- The Convenor will run a Mid-Sem Skills Q&A session on Thursday at 2:00 PM.
- You are encouraged to complete all available sample assessments.
- The Networking Help Desk runs Thursday this week and Tuesday next week

VLSM Test 1 opened. It will close Sunday 11:59 PM.

- Marks will be posted within the next week.
- One-to-one feedback provided during our next session (after assessment)

Group Lab Activity 1 feedback available in Canvas

Group Lab Activity 2 due by the end of this lab session → Marks/feedback available before the mid-sem skills.

REVISION

Have a clear troubleshooting approach. One was suggested last week.

Show commands are important

Knowing how to read the show outputs even more important

- Must be able to predict what the output should look like
- Can't predict the correct output → can't tell if what you're looking at is correct or not.

For each configuration item in your lab journal → have the show command(s) to validate.

Lab SU-6a errors will be provided one to one to whoever requests it.

MID-SEM SKILLS OVERALL REVISION

1. Global tasks

    Hostname

    Banner motd

    Line console and line vty configuration

    Passwords → enable, console and line vty

    Username/password entries → when using login local on console or line vty

    Enable SSH (first have to set hostname, domain name and generate rsa keys, configure line vty).

    Logging synchronous

    Disable ip domain name lookup

2. 802.1q tasks

    Create and name VLANs

    Configure VLAN membership → access ports

    Configure 802.1q trunks → remember if from switch to router, switch must be explicitly on

    Configure router sub-interfaces to send/receive dot1q tagged frames

3. Layer 3 and inter-VLAN routing tasks

    Configure interface VLAN on a switch with the management IP

    Configure default gateway for a switch

    Configure router interfaces, sub-interfaces and loopback interfaces with their respective IPs

    Configure IPv4 settings on a PC (including the default gateway)

4. Show commands:

   sh run

   sh startup-config

   sh ip int brief

   sh interface <if_id>

   sh vlan brief

   sh vlan id <vland_id>

   sh int trunk

   sh ip route

   ping tests

5. Switchport port-security tasks

   Enable port-security on a port

   Change violation action

   Change max. MAC address allowed

   Allow specific MAC addresses and/or set up sticky mode

   Check >> sh port-security interface <if_id>

- Configuring multiple interfaces VLAN in a switch
- NOT configuring the default gateway IP on a switch ← never explicitly instructed
- Attempting to configure a network or a broadcast address on a router interface
  - Read the instructions and the addressing table properly.
  - Have subnetting tables in your journal to minimise IP calculation errors.
- NOT configuring trunking on the switchport connected to the router ← this is never explicitly instructed
- NOT configuring ALL VLANs on the switch connected to the router ← might not be explicitly instructed
- NOT enabling the router interface connected to the switch (remember is disabled by default) ← this is never explicitly instructed
- NOT configuring trunking between the switches ← might not be explicitly instructed
- NOT configuring the right IP settings on the testing PC
  - Test PC is not marked. Is there for you to run connectivity tests.
  - PC settings might not be specified at all ← should know what to use knowing where the PC is connected to