UEEN3113 / 3413 Server Configuration and Management

Lab Test 1
Total: 50 marks

Perform the following steps before power on the virtual machine.

i. Add an additional 5GB hard disks to the virtual machine.
ii. Change the "Network Connection" of the network adapter from **NAT** to **Host-only**.
iii. Save the settings and create a duplicate copy of the virtual machine to Desktop.

For each task, insert a screenshot that shows the commands executed / content of a file which has been modified.
Make sure your name is visible in the screenshot. Each screenshot contribute 1 mark.
It is recommended to use nano to edit configuration file.

Instruction:
[Start the virtual machine and complete the following tasks.]

1. Create a new user with the following information.
   - Username : **your_full_name**
   - Default password: scam605
   - Home directory : /home/your_full_name

   Command: (2 marks)

   Screenshot:

2. Allow the newly created user to perform sudo.

   Command: (2 marks)

   Screenshot:

[Log out from current session and login with your_full_name, your name should appear in the prompt.]

3. Configure the network interface to use static IP, in the network 192.168.40.101.

   File to be edited: (1 mark)

   Command to check / show the network interface available: (1 mark)

   Screenshot:

   Modify the file to apply static IP and insert the screenshot of the file content with the static IP configuration: (5 marks)

Commands to make the new configuration of network interface takes effect: (4 marks)

Screenshot:

[Repeat tasks 1 – 3 in the second server. Assign static IP address 192.168.40.102 to the second server.]

4. Change the host name of second server to **server2**.
   Command: (2 marks)

   Screenshot:

5. Check if both servers can communicate with each other.

   Command: (2 marks)

   Screenshot:

6. Check the status of ssh service.

   Command: (1 mark)

   Screenshot:

7. Check the port that ssh is listening to.

   Command: (1 mark)

   Screenshot:

8. Generate a pair of public / private keys in server2. You may leave the passphrase empty.

   Command: (1 mark)

   Screenshot:

9. Copy the public key to server1.

   Command: (2 marks)

   Screenshot:

10. Configure ssh to listen to port 10022.

Command: (2 marks)

Screenshot:

11. Make the new configuration takes effect and check if ssh is listening to new port number.

Command: (2 marks)

Screenshot:

12. Configure the additional hard disk as a physical volume.

Command: (1 mark)

Screnshot:

13. Create a volume group named **vg-db** on the physical volume.

Command: (1 mark)

Screenshot:

14. Create a logical volume named **dbvol** for vg-db group, assigned all free space to the logical volume.

Command: (1 mark)

Screenshot:

15. Find the full name of the logical volume.

Command: (1 mark)

Screenshot:

16. Format the logical volume as ext4 file system.

Command: (1 mark)

Screenhot: