

OS-Lab-8: Connectivity/remote access

Command line work, have commands in journal for both command line and GUI

- configure IP

CLI: To configure a interface IP, you can type `ifconfig` to see you current IP address and then type the following: `# ifconfig eth0 (or other interface) 192.168.1.5 netmask 255.255.255.0`. This will change the IP address of `eth0` to the one you just typed. You use this command for any interface.

GUI: In the GUI, you can go to `Kmenu>applications>system settings>network connections`. Here you configure each interface.

- configure default gateway

CLI: Open the Terminal and enter: `vi /etc/sysconfig/network`, in this file you can enter the following: `GATEWAY=10.10.29.65` (or your default gateway) right below the "HOSTNAME" section.

- GUI: In the GUI, you can go to `Kmenu>applications>system settings>network connections>wired>edit`. Then chose the protocol you want, say IPv4. Then you can choose to use the automatic DHCP configuration or you can choose to set it your self.

- configure DHCP as a client

CLI: First in Terminal make sure the `NETWORKING` is set to `yes` in the `/etc/sysconfig/network` file, then in the `/etc/sysconfig/network-scripts/ifccfg-eth0` (or other interface) and make sure the file contains these lines: `DEVICE=eth0 BOOTPROTO=dhcp ONBOOT=yes`.

GUI: `Kmenu>applications>system settings>network setting>Wired(or other interface)>IPv4 Address`, here you can configure the method of using DHCP (automatic or manual) or set up manual.

- configure wireless

CLI: o configure a interface IP, you can type `ifconfig` to see you current IP address and then type the following: `# ifconfig wlan0 (or other interface) 192.168.1.5 netmask 255.255.255.0`. This will change the IP address of `wlan0` to the one you just typed. You use this command for any interface.

GUI: Go to `Kmenu>applications>system settings>network connections>wireless>` and in each of the fields input the information. I.e: BSSID, network name, network password and type of encryption.

- view IP configuration

CLI: In the CLI type: `ifconfig`, this will show all connections on all the interfaces.

GUI: You should see an applet in your task bar that shows your network configurations.

- view route information

CLI: Type: `route` and you should see all the information about your connection to the gateway.

GUI: Go to `Kmenu>applications>system settings>network connections>wired>edit`. Under IPv4 you can see the route, by selecting route in the drop down box.

- view wireless information

CLI: In terminal enter: `ifconfig` and look for the `wlan0` section.

GUI: Go to Kmenu>applications>system settings>network connections>wireless and

- view configuration files

CLI: In terminal enter: su -l to log in as root (you don't need to be root to view the file, but to edit this file you do) , then cd /etc/sysconfig and find the “network” file and open in vi or just enter: vi /etc/sysconfig/network.

GUI: You must be root to edit this, but to view it you can just open up the file manager and in the / directory, find the etc>sysconfig>network.

- allow secure access to your machine

CLI: In the terminal, type systemctl start (or enable) sshd.service.

- GUI: Go to Kmenu>Applications>Administration>Software management, then find the selection sshd (openssh server daemon) select and then click start button at the top.

Be able to perform these without the use of the text.

Turn in a copy of your journal entries.