GETTING TO KNOW THE CISCO-IOS INTERFACE

OBJECTIVES

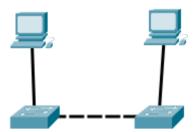
The aim of the work is to familiarize yourself with the Cisco user interface (IOS) and the basic configuration

 $of \ the \ switch \ using \ the \ Packet \ Tracer \ program.$

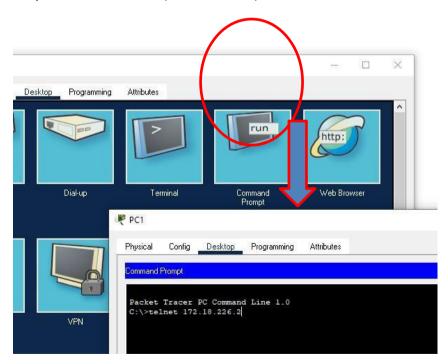
- 1. In Packet Tracer, choose the Cisco 2960 switch, select the CLI tab, and learn how the user interface works.
- 2. Familiarize yourself with the switch interface by figuring out the meaning of the following commands. (Note that you can always type a question mark, e.g. show?, after a command, so that the command is not executed, but you can see what kind of additional commands can be entered.)
 - Find out how to navigate the different command modes of the router (user, priviledge, global configuration and specific configuration)
 - Try shortening commands e.g. ena instead of enable, etc.
 - Try completing commands with the tab key
- 3. Make sure you're in priviledge mode (use enable to access priviledge mode) and find out what the following commands mean.
 - show running-config
 - show startup-config
 - show version
 - show flash
 - show ip interface brief
- 4. Define a suitable "host name" for your switch
- 5. Define console password and privilege-mode password. Test that they work as intended.
- 6. Save your settings to the "permanent memory" of the switch. Use *copy running-config startup-config* commands. Also command *write* could be use. How to find out if a configuration is saved?



7. Build the network as shown in the picture below.



- 8. Assign the computer an IP address of 172.18.226.0/24 from the network. (/24 means a mask where the first 24 bits are set to one. The mask is therefore 255.255.255.0)
- 9. Test your computer-to-computer connection by pinging or using the envelope tool
- 10. Assign each switch its own IP address from that previously used network. As you saw earlier, the switch forwards computer-to-computer traffic even if it doesn't have an IP address. The importance of the IP address on the switch is only related to network management.
- 11. Test the operation by pinging from computer to switches and from switches to switches, etc.
- 12. Enable telnet management of switches by specifying telnet passwords.
- 13. To ensure that telnet management works from computer to switch, open a telnet connection from the computer to the switch (shown below).



- 14. Save your configuration to the startup-configuration file.
- 15. Find out how to save configuration file data to a PC. At the last return your configuration file to the Learn.