

CCNA Exploration Chapter 11 Configure and Test. Study questions.

Answers in white font.

11.1

IOS is short for:

What sort of devices use the IOS?

Where is the IOS stored, and what is the advantage of this type of storage?

On most devices the IOS is copied into RAM when the device is powered on, and run from RAM. Why is this?

What are the three methods of accessing the IOS command line interface?

When would you have to use the console port rather than Telnet?

What precautions should you take to limit access to a device via the console port?

Why is SSH preferred to Telnet for remote access to a router?

Why is SSH not used instead of Telnet all the time?

Do you need networking services configured on the router in order to gain access through the AUX port?

Why is the console port preferred to the AUX port?

What is the purpose of a configuration file?

Where is the running configuration held, and what is it for?

Where is the startup configuration held, and what is it for?

If an administrator makes a configuration change, does this change affect the running configuration or the startup configuration, and will the change be kept when the router is switched off?

What are the main IOS modes, and which do you enter first when you access the CLI?

How do you know which IOS mode you are working in?

What is the difference between user exec mode and privileged exec mode?

What is the prompt in user exec mode if the router's name is Athens?

What command would you enter in order to go to privileged exec mode?

What happens after you have given this command?

What is the prompt in privileged exec mode if the router's name is Athens?

What command would you enter in order to go to global configuration mode?

What is the prompt in global configuration mode if the router's name is Athens?

What command would you enter in order to leave global configuration mode and go back to privileged exec mode?

What command would you enter in order to leave privileged exec mode and go back to user exec mode?

You are reading a set of lab instructions and a command is shown like this:

Athens(config-if)#**ip address** *ip-address mask*

Explain the use of bold and italic in the instruction.

Here is an example of a command

ip route *prefix mask* {*address | interface*} [*distance*] [**tag** *tag*] [**permanent**]

What do the curly brackets and the | sign mean in {*address | interface*}?

What do the square brackets mean in [*distance*]?

You know that there is a show command that will show you the contents of the routing table, but you cannot remember which show command it is. What should you do?

You think that a command starts with **co** but you cannot remember how the word continues. What should you do?

You want a list of all available commands at the current prompt. What should you do?

If you type in a command and it contains an error so that the IOS cannot recognise it, how can you tell where the error is?

You start typing in a command **show int** then you press the Tab key. What happens?

The backspace key will delete the character to the left of the cursor, just as you would expect. How can you delete the character at the cursor position?

You give the **show run** command and the first screen of information is displayed. At the bottom it says -----More----- . How can you show the next screenful?

You are in interface configuration mode and you want to return to privileged exec mode. Which key combination should you use?

Which command should you give if you want to see statistics about serial interface 0/0 (and no other interfaces).

Which command will save the configuration currently in use in RAM into longer term storage in NVRAM?

11.2

Why should each router and switch have a unique hostname?

You want to give a router the name Abingdon1. You have reached the global configuration prompt. What command do you give?

You decide that you do not want the router to be called Abingdon1 after all, and you want it to go back temporarily to the default name of Router while you decide on a new name. You are at the global configuration prompt. What command do you give.

You are starting a console session with a switch or router and you are prompted to enter a password. What will display on the screen as you enter the password?

Why is the password **cisco** used for routers and switches in Networking Academy classes, but not used on production networks?

Starting from the privileged exec prompt of a router called London, how would you configure the password **cisco** on the console and 5 vty lines?

Starting from the privileged exec prompt of a router called London, how would you configure an encrypted password **class** and an unencrypted password **cisco** to restrict access to privileged exec mode?

You have configured both these passwords. Someone is starting a new console session and wants to gain access to privileged exec mode. Which password should be used?

The console and vty passwords are shown in plain text when the configuration is displayed. How can this be prevented.

Why is it a bad idea to configure a login banner “Welcome to the London router”?

Any character can be used as a delimiter when creating a message of the day banner. An administrator enters the command

Paris(config)#**banner motd c *No unauthorised access* c**

What will be displayed when someone tries to start a console session with the router?

You enter some configuration commands. When will they take effect?

You decide that you do not want the new commands after all. You have not saved the configuration since you gave the commands. How can you return to the previous configuration?

You decide that you do not want the new commands after all, but unfortunately you **have** saved the configuration since you gave the commands. How can you return to the previous configuration?

What is the purpose of the command **copy running-config tftp** and what additional information would you expect to give?

How can you remove the existing saved startup configuration from NVRAM, and why must you be careful when doing so?

If you do not wish to back up your configuration file to a TFTP server, what other method can you use?

Does a switch need an IP address? If so, how many and what is their purpose?

Does a router need an IP address? If so, how many and what is their purpose?

Which two basic commands must be given in interface configuration mode when configuring an interface?

Which additional command is needed on a DCE serial interface?

Which other command should you give when configuring an interface, though it is not necessary for the router to operate?

How would you configure an IP address on a switch?

What else does a switch need if devices from outside the network are likely to contact it?

11.3

How do you make a host ping itself, and why would you do this?

Why would you ping a host's own IP address from that host?

Which command would you give for a list showing IP addresses and whether interfaces and protocols are up or down?

An interface is not operating. You give a show command and see that the interface is administratively down. What should you do to correct the problem?

What action should bring a switch interface up?

11.4

What is a network baseline?

Why is it important to establish a network baseline?

What command could you give at a PC command prompt in order to list IP addresses and corresponding MAC addresses?

What should you do just before giving this command in order to ensure that devices are included in the list?

What command could you give at a switch prompt in order to list IP addresses and corresponding MAC addresses?