

INTERNETWORKING II

Chapters 7-8 Study Guide

Where does the router search for the IOS software if there are no boot commands in NVRAM?

Flash

What do the different configuration register modes tell the router where to boot from (e.g., 0x-0, 0x-1, 0x-2, etc.) . The 4-bit boot field

0x0 = ROM monitor	> prompt
0x1 = ROM (rxboot)	Router(boot)> prompt
0x2 – 0xF = NVRAM	default mode where config file is found in NVRAM

The command **config-register** does what?

Can be used to change where the router will look for the configuration file by changing the 4-bit boot field.

What command is used to check the boot field setting?

router# show version

What command provides "information about the system image file"?

show version; there is a lot more information displayed when you issue this command, also. It shows where the IOS was booted from, what the name of the IOS file is, the last time the system was booted, how it was booted, and other system information.

Which command is used to tell the router to boot from:

- FLASH

router(config)# boot system flash [filename]
(if no filename is specified, the router uses the first file found in flash memory)

- Network Server

router(config)# boot system tftp [filename] [ip address of tftp server]

- ROM

router(config)# boot system rom
router(config)# boot system flash bootflash: ver 12.0

Which step needs to be performed before copying software between the TFTP host and flash?

make sure there is enough room in flash for the new IOS image. Also, make sure the TFTP server is on the same network as the router interface.

What command is used to check the amount of system memory available?

router# show flash

Be able to read the different parts of the CISCO IOS naming convention.

Example: flash:c2500-d-1.120-9.bin
flash – where the image was booted from
c2500 – the router platform the IOS is designed for
d – special capabilities and feature sets
1. – relocatable, not compressed
120-9 – version (12.0 [9])
bin – filename extension

Router#show flash shows what?

shows how many bytes of flash memory is used and how much memory is free

Router#copy flash tftp does what?

copies the IOS image stored in flash to a TFTP server on the network

What command is used to copy an IOS image from a network server?

router# copy tftp flash

NOTE: There can actually be a little more to it than this, depending on what model of router you're using.

Which configuration register value is used on a Cisco 2500 series router during password recovery?

0x2142 (the normal value is 0x2102)

What command is used to configure a routing protocol?

router(config)# router [protocol]

What commands are used to configure an Ethernet port?

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router(config)# int e[number]  
router(config-if)# ip address [ip address of port] [subnet mask of port]  
router(config)# no shutdown
```

NOTE: The test doesn't have the complete answer, so pick the closest one to the above commands.

Which command is used to discover the configuration register setting?

show version