

INTERNETWORKING II

Chapter 12-13 Study Guide

When is the setup mode used on a router?

To initially configure a router or to create a configuration file if there is none stored in NVRAM.

When no other routers are know, what type of route is used?

Default route; this is manually configured by the system administrator to tell the router where to send packets if the network they are destined for is not known to the router.

Which routes are automatically determined by the router?

dynamic routes

What is administrative distance?

it is the rating of the trustworthiness of a route. The higher the number the lower the trustworthiness. RIP's default administrative distance is 120.

What is the syntax to configure a static route?

ip route [network number] [subnet mask] [port IP] [administrative distance]

EXAMPLE:

Router(config)# ip route 192.5.5.0 255.255.255.0 201.100.11.1 120

What is the purpose of the **ip default-network** command?

it sets up the default route

EXAMPLE:

ip default-network [network]

ip default-network 201.100.11.0

What is an autonomous system (AS)?

It is a number assigned by the Network Information Center to an enterprise that groups all of its routers under a common administration.

Why are exterior routing protocols used?

To communicate between autonomous systems (e.g., the Internet)

What is the default broadcast for RIP updates?

every 30 seconds (default)

Which metric is used in RIP?

hop count; maximum of 15

Which command would identify destination network addresses and next hop pairs?

show ip route (this command shows the routing table)

What variables are used by IGRP?

bandwidth, delay, load, reliability

How often are IGRP routing updates broadcasted?

every 90 seconds (default)

Why do you use the **network** subcommand after using the router IGRP command?

to specify any directly connected networks to include in the routing information

What does the **debug** command do?

Displays router activity in real time. Use caution when using any of the debug commands because they are processor intensive and can decrease network performance, sometimes to the point of crashing the router. Be sure to turn off the debug command when you are finished with it.