

## Cisco CCNA (200-301)

### Configuring Static Routing for IPv4

Learning Objective: Configure Static Routing for IPv4.

Description: A router can learn routes in a few different ways. You will learn how to configure them administratively. Also, you will learn why to choose static routing and when not to as well.

**Q: Are there different contexts for using static routing, if so, what are they?**

- network routing
  - Only if routes are not likely to change or only one path out.
- default routing
  - this provides a route in the routing table for all other routes not in the routing table
  - Rids the table of Gateway of last resort not set
- host routing
  - Sets a route that points directly to a host rather than a network.
- floating static routing
  - Sets a static route to only appear in the table if the dynamic route disappears.

**Q: Can you show us how to configure them?**

- network routing
  - e.g., `ip route 22.22.22.0 255.255.255.0 192.168.16.2`
- default routing
  - e.g., `ip route 0.0.0.0 0.0.0.0 192.168.16.1`
- host routing
  - e.g., `ip route 22.22.22.2 255.255.255.255 172.16.12.2`
- floating static routing
  - e.g., `ip route 22.22.22.0 255.255.255.0 172.16.12.2 <administrative distance higher than protoocl's AD>`

### Endnotes, External, and etc.,

#### 3.3 Configure and verify IPv4 static routing

- 3.3.a Default route
- 3.3.b Network route
- 3.3.c Host route
- 3.3.d Floating static

Exam 200-301 Objectives