

## NETWORK FUNDAMENTALS OUTLINE

### PHASE 1

- Introduction to Networking
  - The TCP/IP Network Model and OSI Reference Model
- IPv4 Addressing and Subnetting/Summarization
- Static Routing
- General Switching
  - VLAN (Virtual Local Area Network)
  - Trunk/Access Interfaces
- Layer 2 & 3 dataflows

### PHASE 2

- Spanning-Tree
- Dynamic routing protocols
  - EIGRP (Enhanced Interior Gateway Routing Protocol)
  - OSPF (Open Shortest Path First)
- Troubleshooting
- Checkpoint Quiz

### PHASE 3

- Internet Protocols
  - BGP (Border Gateway Protocol)
  - NAT (Network Address Translation)
- Redundancy Protocols
  - Port-Channel LACP
  - HSRP (Hot-Standby Routing Protocol)
- Network Services
  - DHCP (Dynamic Host Control Protocol)
- Cloud Technologies
  - AWS (Amazon Web Services)

### PHASE 4

- Filtering
  - ACLs (Access Control Lists)
  - Prefix Lists/Route Maps
- Tunneling Protocols
  - IPsec
- Final Quiz and Lab