CompTIA A+ Video Series with Mike Meyers

COMPTIA A+ CORE 1 (220-1001) EXAM CHAPTER 19: LOCAL AREA NETWORKING

OBJECTIVE MAPPING*

EPISODE: INTRODUCTION TO TCP/IP

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.6 Explain common network configuration concepts

EPISODE: NETWORK IDS AND SUBNET MASKS

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.6 Explain common network configuration concepts
- IP addressing
  - o Static
- Subnet mask

CORE 2 EXAM OBJECTIVES**

DOMAIN 1.0 - OPERATING SYSTEMS

1.6 Given a scenario, use Microsoft Windows Control Panel utilities

- Network and Sharing Center

EPISODE: SPECIAL IP ADDRESSES

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.1 Compare and contrast TCP and UDP ports, protocols, and their purposes

- Ports and protocols
  - o 67/68 – DHCP

2.6 Explain common network configuration concepts

- IP addressing
  - o APIPA

EPISODE: NAT

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.3 Compare and contrast wireless security protocols and authentication methods
- Sub-objectives

EPISODE: DYNAMIC IP ADDRESSING

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.6 Explain common network configuration concepts
- IP addressing
  - Dynamic
  - APIPA

CORE 2 EXAM OBJECTIVES**

DOMAIN 1.0 - OPERATING SYSTEMS

1.4 Given a scenario, use appropriate Microsoft command line tools
- ipconfig

EPISODE: IPV6

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.6 Explain common network configuration concepts
- IPv4 vs. IPv6

EPISODE: PORT NUMBERS

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.1 Compare and contrast TCP and UDP ports, protocols, and their purposes
- Ports and protocols
  - 443 – HTTPS

EPISODE: TCP, UDP, AND ICMP

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.1 Compare and contrast TCP and UDP ports, protocols, and their purposes

- TCP vs. UDP

EPISODE: UNDERSTANDING DNS

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.6 Explain common network configuration concepts
- DNS

EPISODE: WORKING WITH DNS

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.1 Compare and contrast TCP and UDP ports, protocols, and their purposes

- Ports and protocols
    - o 53 – DNS

2.6 Explain common network configuration concepts

- DNS

CORE 1 EXAM OBJECTIVES**

DOMAIN 2.0 - NETWORKING

2.1 Compare and contrast TCP and UDP ports, protocols, and their purposes

- Ports and protocols
    - o 53 – DNS
    - o 137-139 – NetBIOS/NetBT

CORE 2 EXAM OBJECTIVES

DOMAIN 1.0 - OPERATING SYSTEMS

1.3 Summarize general OS installation considerations and upgrade methods

- Workgroup vs. Domain setup

1.8 Given a scenario, configure Microsoft Windows networking on a client/desktop

- HomeGroup vs. Workgroup
- Domain setup

DOMAIN 2.0 - SECURITY

2.2 Explain logical security concepts

- Active Directory

CORE 1 EXAM OBJECTIVES

DOMAIN 2.0 - NETWORKING

2.2 Compare and contrast common networking hardware devices

- Routers

2.3 Given a scenario, install and configure a basic wired/wireless SOHO network

- Router/switch functionality

DOMAIN 3.0 - HARDWARE

3.2 Identify common connector types

- RS-232
- DB-9

CORE 2 EXAM OBJECTIVES**

DOMAIN 2.0 - SECURITY

2.10 Given a scenario, configure security on SOHO wireless and wired networks

- Change default usernames and passwords

EPISODE: BASIC ROUTER CONFIGURATION

DOMAIN 2.0 - NETWORKING

2.6 Explain common network configuration concepts
- DHCP
  - Reservations

EPISODE: ADVANCED ROUTER CONFIGURATION

DOMAIN 2.0 - NETWORKING

2.1 Compare and contrast TCP and UDP ports, protocols, and their purposes

- Ports and protocols
  - 161/162 – SNMP

2.3 Compare and contrast wireless security protocols and authentication methods
- Firewall settings
  - UPnP
- QoS
- Wireless settings
  - QoS

EPISODE: VLANS

DOMAIN 2.0 - NETWORKING

2.2 Compare and contrast common networking hardware devices

- Switches
  - Unmanaged
  - Managed

2.6 Explain common network configuration concepts
- VLAN

EPISODE: NETWORK TROUBLESHOOTING

DOMAIN 5.0 - HARDWARE AND NETWORK TROUBLESHOOTING

5.7 Given a scenario, troubleshoot common wired and wireless network problems
- Common symptoms
  - Limited connectivity
  - Unavailable resources
    - Internet
    - Local resources
      - Shares
      - Printers
      - Email
  - No connectivity
  - APIPA/link local address
  - Intermittent connectivity
  - IP conflict

     o Slow transfer speeds

DOMAIN 3.0 - SOFTWARE TROUBLESHOOTING

3.1 Given a scenario, troubleshoot Microsoft Windows OS problems
- Limited connectivity

*This document can be used to determine what CompTIA A+ exam objectives are in each episode, as well as map where those objectives are in the official "CompTIA A+ 220-1001 Exam Objectives (2.0)" PDF resource that accompanies this course.

**Why am I seeing different Core exams than what I'm studying? In some cases, you may be watching a video series that focuses on the Core 1 exam, however some of the episodes contain Core 2 exam objectives, or vice versa. There are 2 reasons for this: 1) The other Core exam topic is covered to give you a better, fuller understanding of the surrounding topics, and 2) Some episodes contain information from both Core exams because the topics coincide with each other and are more easily taught in 1 episode than breaking them out into separate episodes.