CCNA Exploration: Accessing the WAN

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student was able to proficiently:

- Describe the impact of Voice Over IP and Video Over IP applications on a network

- Describe the components required for network and Internet communications

- Implement basic switch security measures such as port security, trunk access, and management VLANs

- Configure, verify, and troubleshoot DHCP and DNS operations on a router

- Describe the functions of common security appliances and applications

- Describe, configure, apply, monitor, and troubleshoot Access Control Lists based on network requirements

- Explain, configure, verify, and troubleshoot Network Address Translation (NAT) for given network requirements

- Configure and verify basic WAN serial connections including serial, Point-to-Point and Frame Relay

- Describe the importance, benefits, role, impact, and components of VPN technology

- Describe recommended security practices to secure network devices

Theophilus Musyoka

Student

African Advanced Level Telecommunications Institute
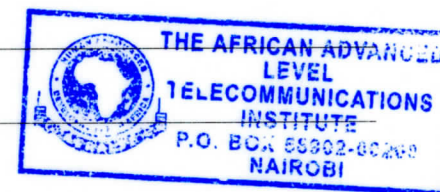
Academy Name

Kenya

Location

Nelson Kamau

Instructor

Jul 24, 2013

Date

Instructor Signature

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CCNA Exploration: LAN Switching and Wireless

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student was able to proficiently:

- Explain basic switching concepts and the operation and configuration of Cisco switches

- Describe enhanced switching technologies such as VLANs, VLAN Trunking Protocol (VTP), Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Protocol (PVSTP), and 802.1q

- Identify and describe the purpose of the components in a small wireless network, such as Service Set Identification (SSID), Basic Service Set (BSS), and Extended Service Set (ESS)

- Configure, verify, and troubleshoot VLANs, trunking on Cisco® switches, interVLAN routing, VTP, and RSTP

- Identify, prescribe, and resolve common switched network media issues, configuration issues, auto negotiation, and switch hardware failures

Theophilus Musyoka

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CCNA Exploration: Routing Protocols and Concepts

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student was able to proficiently:

- Describe the purpose, nature and operations of a router and routing tables
- Describe, configure and certify router interfaces
- Explain the purpose and procedure for configuring static routes
- Identify the characteristics of distance vector routing protocols
- Describe the network discovery process of distance vector routing protocols using Routing Information Protocol (RIP)
- Describe the functions, characteristics, and operations of the RIPv1 protocol
- Compare and contrast classful and classless IP addressing

- Describe classful and classless routing behaviors in routed networks
- Design and implement a classless IP addressing scheme for a given network
- Demonstrate comprehensive RIPv1 configuration skills
- Describe the main features and operations of the Enhanced Interior Gateway Routing Protocol (EIGRP)
- Describe the basic features and concepts of link-state routing protocols
- Describe the purpose, nature and operations of the Open Shortest Path First (OSPF) protocol

Theophilus Musyoka

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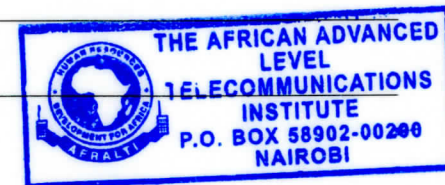
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CCNA Exploration: Network Fundamentals

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student was able to proficiently:

- Explain how communication works in data networks and the Internet

- Recognize the devices and services that are used to support communications across an Internetwork

- Explain the role of protocols in data networks

- Describe the importance of addressing and naming schemes at various layers of data networks

- Describe the protocols and services provided by the application layer in the OSI model and describe how this layer operates in sample networks

- Analyze the operations and features of the transport layer protocols and services

- Analyze the operations and features of the network layer protocols and services and explain the fundamental concepts of routing

- Design, calculate, and apply subnet masks

- Describe the operation of protocols at the OSI data link layer

- Explain the role of physical layer protocols and services

- Build a simple Ethernet network using routers and switches

- Use Cisco® CLI commands to perform basic router and switch configuration and verification

Musyoka Theophilus

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