



CCNA Routing and Switching: Introduction to Networks

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

- Understand and describe the devices and services used to support communications in data networks and the Internet
- Understand and describe the role of protocol layers in data networks
- Understand and describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments
- Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks
- Explain fundamental Ethernet concepts such as media, services, and operations
- Build a simple Ethernet network using routers and switches
- Use Cisco command-line interface (CLI) commands to perform basic router and switch configurations
- Utilize common network utilities to verify small network operations and analyze data traffic

RAJIB DEY

Student

American International University-Bangladesh

Academy Name

Bangladesh

Location

Instructor

Mar 23, 2015

Date

Instructor Signature



Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706

Direct: 408 526 4000
FAX: 408 526 4100
www.cisco.com

Feb 20, 2015

Dear RAJIB DEY

Congratulations on completing the Cisco® **CCNA Routing and Switching: Introduction to Networks** course as part of the Cisco Networking Academy® program. This hands-on, lab-oriented course has prepared you for exciting career opportunities in the technology industry.

By completing this course you have earned a Certificate of Completion for **CCNA Routing and Switching: Introduction to Networks**, and acquired competencies that include the following:

- Understand and describe the devices and services used to support communications in data networks and the Internet
- Understand and describe the role of protocol layers in data networks
- Understand and describe the importance of addressing and naming schemes at various layers of data networks in IPv4 and IPv6 environments
- Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks
- Explain fundamental Ethernet concepts such as media, services, and operations
- Build a simple Ethernet network using routers and switches
- Use Cisco command-line interface (CLI) commands to perform basic router and switch configurations
- Utilize common network utilities to verify small network operations and analyze data traffic

Technological literacy is more important today than ever before, and Cisco is proud to provide you with the knowledge and skills necessary to build and maintain computer networks.

Please accept my best wishes for your continued success.

Sincerely,

A handwritten signature in cursive script that reads "Chuck Robbins".

Chuck Robbins
Chief Executive Officer
Cisco Systems, Inc.



CCNA Routing and Switching: Routing and Switching Essentials

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

- Understand and describe basic switching concepts and the operation of Cisco switches
- Understand and describe enhanced switching technologies
- Understand and describe dynamic routing protocols, distance vector routing protocols, and link-state routing protocols
- Configure and troubleshoot basic operations in a small switched and routed network
- Configure and troubleshoot VLANs and inter-VLAN routing
- Understand and describe the purpose and types of access control lists (ACLs)
- Configure, monitor, and troubleshoot ACLs for IPv4 and IPv6
- Understand and describe the operations and benefits of Dynamic Host Configuration Protocol (DHCP) and Domain Name System (DNS) for IPv4 and IPv6
- Understand and describe the operations and benefits of Network Address Translation (NAT)
- Configure and troubleshoot NAT operations

RAJIB DEY

Student

American International University-Bangladesh

Academy Name

Bangladesh

Location

Instructor

Jun 5, 2015

Date

Instructor Signature



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May 15, 2015

Dear RAJIB DEY

Congratulations on completing the Cisco® **CCNA Routing and Switching: Routing and Switching Essentials** course as part of the Cisco Networking Academy® program. This hands-on, lab-oriented course has prepared you for exciting career opportunities in the technology industry.

By completing this course you have earned a Certificate of Completion for **CCNA Routing and Switching: Routing and Switching Essentials**, and acquired competencies that include the following:

- Understand and describe basic switching concepts and the operation of Cisco switches
- Understand and describe enhanced switching technologies
- Understand and describe dynamic routing protocols, distance vector routing protocols, and link-state routing protocols
- Configure and troubleshoot basic operations in a small switched and routed network
- Configure and troubleshoot VLANs and inter-VLAN routing
- Understand and describe the purpose and types of access control lists (ACLs)
- Configure, monitor, and troubleshoot ACLs for IPv4 and IPv6
- Understand and describe the operations and benefits of Dynamic Host Configuration Protocol (DHCP) and Domain Name System (DNS) for IPv4 and IPv6
- Understand, describe, configure and troubleshoot the operations of Network Address Translation (NAT)

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A handwritten signature in cursive script that reads "Chuck Robbins".

Chuck Robbins
Chief Executive Officer
Cisco Systems, Inc.



CCNA Routing and Switching: Scaling Networks

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

- Understand, configure, and troubleshoot enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel
- Understand, configure, and troubleshoot first hop redundancy protocols (HSRP) in a switched network
- Understand, configure, and troubleshoot wireless routers and wireless clients
- Configure and troubleshoot routers in a complex routed IPv4 or IPv6 network using single-area OSPF, multiarea OSPF, and Enhanced Interior Gateway Routing Protocol (EIGRP)
- Manage Cisco IOS® Software licensing and configuration files

RAJIB DEY

Student

American International University-Bangladesh

Academy Name

Bangladesh

Location

Instructor

Jun 17, 2015

Date

Instructor Signature



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170 West Tasman Drive
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Jun 12, 2015

Dear RAJIB DEY

Congratulations on completing the Cisco® **CCNA Routing and Switching: Scaling Networks** course as part of the Cisco Networking Academy® program. This hands-on, lab-oriented course has prepared you for exciting career opportunities in the technology industry.

By completing this course you have earned a Certificate of Completion for **CCNA Routing and Switching: Scaling Networks**, and acquired competencies that include the following:

- Understand, configure, and troubleshoot enhanced switching technologies such as VLANs, Rapid Spanning Tree Protocol (RSTP), Per VLAN Spanning Tree Plus Protocol (PVST+), and EtherChannel
- Understand, configure, and troubleshoot first hop redundancy protocols (HSRP) in a switched network
- Understand, configure, and troubleshoot wireless routers and wireless clients
- Configure and troubleshoot routers in a complex routed IPv4 and IPv6 network using single-area OSPF, multiarea OSPF, and Enhanced Interior Gateway Routing Protocols (EIGRP)
- Manage Cisco IOS® Software licensing and configuration files

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Chuck Robbins
Chief Executive Officer
Cisco Systems, Inc.



CCNA Routing and Switching: Connecting Networks

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

- Understand and describe different WAN technologies and their benefits
- Understand and describe the operations and benefits of virtual private networks (VPNs) and tunneling
- Understand, configure, and troubleshoot serial connections
- Understand, configure, and troubleshoot broadband connections
- Understand, configure, and troubleshoot tunneling operations
- Understand, configure, and troubleshoot Network Address Translation (NAT) operations
- Monitor and troubleshoot network operations using syslog, SNMP, and NetFlow
- Understand and describe network architectures

RAJIB DEY

Student

American International University-Bangladesh

Academy Name

Bangladesh

Location

Instructor

Jul 6, 2015

Date

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Jun 26, 2015

Dear RAJIB DEY

Congratulations on completing the Cisco® **CCNA Routing and Switching: Connecting Networks** course as part of the Cisco Networking Academy® program. This hands-on, lab-oriented course has prepared you for exciting career opportunities in the technology industry.

By completing this course you have earned a Certificate of Completion for CCNA Routing and Switching: Connecting Networks, and acquired competencies that include the following:

- Understand and describe different WAN technologies and their benefits
- Understand and describe the operations and benefits of virtual private networks (VPNs) and tunneling
- Understand, configure, and troubleshoot serial connections
- Understand, configure, and troubleshoot broadband connections
- Understand, configure, and troubleshoot tunneling operations
- Understand, configure, and troubleshoot Network Address Translation (NAT) operations
- Monitor and troubleshoot network operations using syslog, SNMP, and NetFlow
- Understand and describe network architecture

Technological literacy is more important today than ever before, and Cisco is proud to provide you with the knowledge and skills necessary to build and maintain computer networks.

Please accept my best wishes for your continued success.

Sincerely,

A handwritten signature in cursive script that reads "Chuck Robbins".

Chuck Robbins
Chief Executive Officer
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