

## CCNA 3 SWITCHING BASICS AND INTER- MEDIATE ROUTING



### CERTIFICATE OF COURSE COMPLETION

Jean-Michel Halloy

Date : April 14, 2005

Instructor : Semal, Fabian

Location : Evere

Academy Name : I.E.P.S.C.F.Evere

**During the CCNA 3 Course administered by the undersigned instructor, the student was able to proficiently:**

- Compute and use Variable Length Subnet Masking (VLSM) techniques to design and implement effective and efficient IP addressing
- Configure and use the RIP v2 distance vector routing protocol
- Describe the concepts and techniques of link-state routing, and compare and contrast with distance vector routing
- Configure and use the Open Shortest Path First (OSPF) link-state routing protocol in a single area mode of operation
- Configure and use the Extended IGRP (EIGRP) routing protocol
- Demonstrate an ability to troubleshoot routing protocol problems, specifically using and interpreting the show and debug commands
- Describe the operation and technology of the IEEE 802.3 “Ethernet” variants
- Describe and compare the concepts and techniques used within Ethernet switched LANs
- Describe and compare the concepts and techniques used by Ethernet LAN switches
- Design a simple LAN using tiered techniques
- Describe the three tier process as used by Cisco for internetwork design purposes
- Configure and administer a Cisco Catalyst LAN switch
- Compare and contrast various forms of redundancy built into networks, and explain the associated advantages and disadvantages
- Describe the operation of the spanning tree algorithm, and describe the methods by which it is implemented and used in a switched network
- Describe and compare the concepts, advantages and disadvantages of virtual LANs
- Configure and administer inter-switch VLANs on Cisco switches
- Solve a simple VLAN problem
- Configure and administer VTP on Cisco switches
- Configure and administer routing between VLANs on Cisco switches

Instructor's Signature

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April 14, 2005

Dear Jean-Michel Halloy

Congratulations! You have successfully completed CCNA 3 Switching Basics and Intermediate Routing of the Cisco Networking Academy Program.

During the course, you have developed a solid foundation in the basics of networking, demonstrating knowledge of important concepts and skills, including the OSI model, Ethernet networks running TCP/IP, IP addressing, and structured cabling skills.

Information technology skills are in high demand given the explosive growth of the Internet as a practical business tool. Technological literacy is more important today than ever before, and Cisco is proud to provide you with the knowledge and skills to design, build, and maintain computer networks.

Wishing you continued success in CCNA 4!

Sincerely,

A handwritten signature in black ink that reads "John Chambers". The signature is written in a cursive, flowing style.

John Chambers  
President and CEO  
Cisco Systems, Inc.