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# Welcome to Todd Lammle's CCNA Bootcamp

**Todd Lammle Cisco® Authorized CCNA Bootcamps are now available, delivered by CCSI instructor, and popular Sybex author Todd Lammle.**

Todd Lammle CCNA Training Boot Camp is a high-energy instructor-led course, and includes a brand-new lab topology to assist you with Cisco's intensive simulation exam. Our repetitive hands-on labs and individual student pods with Cisco's high-end routers and catalyst switches create a perfect learning environment to gain the maximum amount of knowledge in a short period of time.

Todd Lammle's 5-day CCNA Training Boot Camp will provide you with everything you need to be successful in a professional Cisco routing and switching environment, and the knowledge needed to pass the new Cisco CCNA certification exam. We guarantee it.

**This 5-day course was developed by industry expert and bestselling author Todd Lammle. [View Schedule](#) to see when Todd will be teaching our next class!**

**GlobalNet's CCNA course offers high levels of classroom participation, interaction and collaboration, utilizing:**

- One-on-one Mentoring from Todd Lammle weeks before class for each student
- Pre-study time with Todd Lammle weeks before class
- Personalized study plan created by Todd Lammle for each student
- 5-night stay in Luxury hotel
- Hot chef prepared breakfast and lunch
- Onsite testing with exam voucher included!
- 24 hour instructor availability
- Guaranteed Todd Lammle Instructor
- Todd Lammle CCENT Study Guide
- Todd Lammle Online CCENT Course Modules
- Todd Lammle Online Video Modules
- Todd Lammle's New Book *CCNA: Cisco Certified Network Associate Study Guide (Exam 640-802), 7th Edition*
- Todd Lammle Custom *Cisco Authorized courseware*

- Real world labs, on real equipment, written by a real world fortune 500 employee and consultant for 30 years!
- 4 Routers Per Student Pod - No sharing of equipment!
- 2 Switches, including Cisco's Catalyst Switch, Per Student Pod
- 200 Electronic Flash Cards
- Over 500 Practice Questions on CD
- Written Labs with over 400 questions for use during and after class
- More than 35 Hands-On labs written by Todd Lammle utilizing the latest Cisco Routers and Switches - repetition of labs is key to success in class!
- Practice questions, study software, router simulator, and more!

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## What is covered in the class?

The following is covered in the CCNA course. Chapters from the latest Sybex CCNA 7th edition study guide are used for learning the foundation we use in class.

Chapters 1-4 are mandatory pre-study chapters and are provided to each student with the course tuition.

Students will study weeks before class via online training, online videos, and written and hands-on labs. The CCENT 4-day course is a recommended path for someone with little or no Cisco experience before attending the CCNA bootcamp.

## Chapter 1: Internetworking

- Introduction to Internetworking
- OSI Reference Model
- OSI Overview
- Application
- Presentation
- Session
- Transport
- Network
- Data Link
- Physical

## **Chapter 2: Ethernet**

- Encapsulation
- Half and full duplex
- Collision detection
- LAN Technologies
- Ethernet standards
- FastEthernet standards
- Gigabit standards

## **Chapter 3: Introduction to the Internet Protocol**

- DOD Stack
- Protocols
- Ports
- Host-to-host layer Protocols
- Internet Layer protocols

## **Chapter 4: IP Addressing and Subnetting**

- IP Addressing
- Subnetting masks
- Subnetting
- Verifying subnetting
- Written Lab: Subnetting

## **Chapter 5: VLSM and Summarization**

- What is VLSM?
- Implementing VLSM
- Written Lab: VLSM
- What is Summarization?
- Implementing Summarization
- Written lab: Summarization

## **Chapter 6: Introduction to the Cisco IOS**

- Operation of Cisco IOS
- Startup of a Cisco Router
- Software Exec

- Keyboard Help
- Router Identification
- Setting the Passwords
- Setting Banners
- Saving Configurations
- Router Interfaces
- Descriptions
- Encrypting passwords
- Verifying your Configuration

## **Chapter 7: Managing A Cisco Internetwork**

- Managing IOS and Configuration Images
- Router Boot Sequence
- Backing up the Cisco IOS
- Restoring the Cisco IOS
- Backing up the Cisco Configuration
- Restoring the Cisco Configuration
- Cisco Discovery Protocol
- Creating a host table to resolve names
- Using DNS to resolve names
- Telnet
- Ping
- Troubleshooting steps

## **Chapter 8: IP Routing**

- Basic IP Routing
- Static Routing
- Default Routing
- Dynamic Routing
- RIP
- RIPv2
- Verifying routing

## **Chapter 9: Advanced Routing Protocols**

- EIGRP
- OSPF
- Verifying routing
- Troubleshooting EIGRP and OSPF

- Advanced OSPF configurations

## **Chapter 10: Layer-2 Switching Technologies**

- Layer 2 Switching
- Address Learning
- Forward/Filter Decision
- Half and Full Duplex Ethernet
- Bridging Compared to LAN Switching
- LAN Switch Types
- Spanning Tree

## **Chapter 11: Virtual LANs/VTP and STP**

- VLAN Concepts
- ISL and 802.1q
- InterVLAN routing
- VTP
- VLAN configuration
- VLAN management and verification
- STP and RSTP
- Hands-on Lab: VLANs/VTP and STP
- Written Lab: Switching

## **Chapter 12: Access-Lists**

- Standard ACL's
- Controlling VTY Access
- Wildcards
- Extended ACL's
- Named Access-lists
- Access-list configuration
- Verifying and Monitoring Access lists
- Troubleshooting ACL's

## **Chapter 13: Network Address Translation (NAT)**

- Introduction to NAT
- Static NAT
- Dynamic NAT
- NAT Overload (PAT)

- Configuring NAT and PAT
- Verifying NAT and PAT
- Hands-on lab: NAT
- Written lab: NAT

## **Chapter 14: Wireless Technologies**

- Introduction to Wireless
- Wireless standards
- Encoding and modulation techniques
- Implementing WLAN's
- WLAN security
- Written lab: Wireless

## **Chapter 15: IPv6**

- Introduction to IPv6
- Why IPv6
- IPv6 Addressing
- IPv6 routing protocols
- Written lab: IPv6

## **Chapter 16: Cisco Wide Area Network Support**

- WAN Overview
- WAN Connection Types
- WAN Terms
- Serial Standards
- WAN Protocols
- HDLC
- PPP
- LCP/NCP
- PPP Authentication
- PAP
- CHAP
- Configuring PPP
- Verifying PPP Configuration
- Frame Relay
- Frame Relay Terminology
- Frame Relay Signaling
- Inverse ARP and LMI

- Configuring Frame Relay
- Static mappings
- Verifying Frame Relay
- Subinterfaces
- Configuring Subinterfaces
- Hands-on Labs : PPP and Frame-relay
- Written Lab: WANs

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## Hands-on Labs Included in this course

The Todd Lammle Learnit! CCNA bootcamp will provide the following hands-on lab to each individual student: This does not include the list of numerous written labs (over 600) provided to each student!

Note: The course outline does not follow the CCNA Study Guide 7th edition, but has its own flow, one that is designed to build a solid foundation in a classroom environment.

### Chapter 1 Labs (Sybex CCNA Book Chapter 6 & 10)

- Lab 1: Logging into a Cisco Router
- Lab 2: Overview of Router Modes
- Lab 3: Editing and Help Features
- Lab 4: Gathering Basic Router Information
- Lab 5: Setting the Passwords
- Lab 6: Encrypting your Passwords
- Lab 7: Setting Router Banners
- Lab 8: Configuring Router Interfaces
- Lab 9: Bringing up An Interface
- Lab 10: Configuring an IP Address on an Interface
- Lab 11: Serial Interface Commands
- Lab 12: Setting The Router hostnames
- Lab 13: Setting interface descriptions
- Lab 14: Saving Your Configurations
- Lab 15: Verifying Your Configurations
- Lab 16: Connecting to the switch and setting the passwords
- Lab 17: Setting the hostname
- Lab 18: Configuring the IP address information
- Lab 19: Configuring Switch Interfaces
- Lab 20: Configuring Interface Descriptions
- Lab 21: Viewing Descriptions
- Lab 22: Configuring the port duplex

Lab 23: Verifying IP Connectivity  
Lab 24: Erasing the Switch Configuration

## **Chapter 2 Labs (Sybex CCNA Book Chapter 7)**

Lab 1: Password Recovery Techniques  
Lab 2: Backing up a Cisco IOS to a TFTP server  
Lab 3: Upgrading or restoring a Cisco IOS from a TFTP server  
Lab 4: Backing up a Cisco router configuration using a TFTP server  
Lab 5: Restoring a Cisco router configuration from a TFTP server  
Lab 6: Using the Cisco Discovery Protocol to gather information about neighbor devices  
Lab 7: Using Telnet  
Lab 8: Create a hosts table on a router and resolve host names to IP addresses

## **Chapter 3 Labs (Sybex CCNA Book Chapter 8 & 9)**

Lab 1: Configuring the Routers  
Lab 2: Verifying the Configurations  
Lab 3: Configuring Static Routing  
Lab 4: Verifying Static Routing  
Lab 5: Configuring and Verifying The Hosts  
Lab 6: Configuring Default Routing  
Lab 7: Verifying Default Routing  
Lab 8: Configuring RIPv2 Routing  
Lab 9: Verifying RIPv2 Routing  
Lab 10: Configuring EIGRP Routing  
Lab 11: Verifying EIGRP Routing  
Lab 12: Configuring OSPF Routing  
Lab 13: Verifying OSPF Routing

## **Chapter 4 Labs (Sybex CCNA Book Chapter 12)**

Lab 1: Standard IP Access-Lists  
Lab 2: Verifying Standard IP Access-lists  
Lab 3: Applying an Access-List to a VTY Line  
Lab 4: Extended IP Access-Lists  
Lab 5: Verifying Extended IP Access-lists  
Lab 6: Troubleshooting ACL's

## **Chapter 5 Labs (Sybex CCNA Book Chapter 11)**

Lab 1: Configuring VLANs  
Lab 2: Configuring Trunk Ports  
Lab 3: Configuring ISL Routing

Lab 4: Configuring VTP domain  
Lab 5: Configuring the Switches in Our Lab  
Lab 6: Managing STP  
Lab 7: Managing RSTP

## **Chapter 6 Labs (Sybex CCNA Book Chapter 13)**

Lab 1: Understanding NAT  
Lab 2: Configuring static NAT  
Lab 3: Configuring Dynamic NAT  
Lab 4: Configuring NAT Overload  
Lab 5: Verifying NAT  
Lab 6: Troubleshooting NAT

## **Chapter 7 Labs (Sybex CCNA Book Chapter 16)**

Lab 1: Configuring PPP Encapsulation  
Lab 2: Verifying PPP Encapsulation  
Lab 3: Configuring PPP Authentication with CHAP  
Lab 4: Verifying PPP with Authentication  
Lab 5: Understanding Frame Relay Configuration  
Lab 6: Configuring Frame Relay Switching  
Lab 7: Configuring Frame Relay with Subinterfaces  
Lab 8: Verifying Frame Relay

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# **CCNA Bootcamp Day-by-day schedule**

The following is a breakdown of the Todd Lammle 5-day CCNA Bootcamp by course book chapter

## **Day 1: The Cisco IOS**

The Cisco IOS Interface  
Introduction to TCP/IP and Subnetting

### **Chapter 1: The Cisco Interface (Sybex book chapter 6)**

The following hands-on labs are covered in chapter 1:  
1.1: Console login

- 1.2: Router Examination Lab
- 1.1 Configuring Administrative Functions on your routers
- 1.4: Configuring your Router interfaces
- 1.5: Configuring your Catalyst Switches
- 1.6: Configuring your backbone router and verifying your internetwork

## **Chapter 2: Advanced IOS Management (Sybex book chapter 7)**

The following hands-on labs are performed in chapter 4:

- 2.1: Copying the Cisco IOS to a TFTP Host
- 2.2: Backing up and restoring the configuration of your routers and switch
- 2.1: Using CDP to find your Neighbors
- 2.2: Telneting into Multiple routers and switches simultaneously
- 2.5: Building and maintaining a hosts table

## **Chapter 3: TCP/IP & Subnetting Review (Sybex book chapter 4 & 5)**

The following hands-on labs are performed in chapter 3:

- 3.1: IP Addressing and subnetting

## **Day 2: IP Routing**

IP Routing

### **Chapter 4: IP Routing**

The following written and hands-on labs are performed in chapter 5:

- 4.1: Static Routing and Verification
- 4.2: RIP Routing and Verification
- 4.1: EIGRP Routing and Verification
- 4.2: OSPF Single Area Configuration and Verification
- 4.4: OSPF DR and BDR elections
- 4.7: Written Lab: IP Routing

## **Day 3: Advanced TCP/IP, Access Lists and NAT**

### **Chapter 5: Advanced TCP/IP**

The following written and hands-on labs are performed in chapter:

- 5.1: Written Lab: Class B Subnetting
- 5.2: Written Lab: VLSM Design
- 5.3: Implementing VLSM and Summarization

### **Chapter 6: Access Lists**

The following hands-on labs are performed in chapter 7:

- 6.1: Configuring Standard IP Access-lists
- 6.2: Limiting VTY Access

6.1: Extended access-list configurations

## **Chapter 7: Network Address Translation**

7.1: Setting up Network Address Translation (NAT)

8.2: Dynamic NAT

9.1: Port Address Translation (PAT)

## **Day 4: Switching, VLAN's, Wireless LANs and IPv**

### **Chapter 8: Switching and VLANs**

The following labs are covered in chapter 10:

8.1: Configuring Switching with VLAN's and inter-VLAN Routing

8.2: Written Lab: Switching

### **Chapter 9: Introduction to Wireless LAN's**

The following labs are covered in chapter 10:

9.1: Written Lab: Introduction to Wireless

### **Chapter 10: Introduction to IPv6**

The following labs are covered in chapter 11:

10.1: Configuring basic IPv6

10.2: Written Lab: IPv6

## **Day 5: Wide Area Networks, Review, and Test!**

### **Chapter 11: Cisco Wide Area Network Support (WANs)**

The following written and hands-on labs are covered in chapter 12:

11.1: Configuring PPP with Authentication

11.2: Configuring Frame Relay

11.3: Verifying Frame Relay

11.4: Written Lab Frame Relay

## **Study and Final Test Preparations**