

## TrainSignal: Cisco CCNA 640-802 DVD

Once upon a time, I was in your shoes. Yes, I know how difficult it is to get started with Cisco studies. But stick to it and I promise, the challenges will pay off handsomely. The CCNA is Cisco's entry level certification exam, but it is not easy. And since the CCNA covers a wide array of topics, I have designed this course to help you tackle those diverse challenges. The key to exam and job success is in the details. And most of those details are hard won from real world experience. Everything I am going to teach you, I wish someone would have taught me when I first started studying for my CCNA. At least you can benefit from my hard won experience and hopefully not repeat the same mistakes. As with all Train Signal courses, I break down the theory and "real world" application of Cisco Networking. This exciting course contains nearly 29 hours of video instruction where I break down networking theory as you work hands on with real Cisco routers & switches... and build your own working network! **&#160;Cisco CCNA Training - Course Outline**

Lesson 1 - Introduction to CCENT \* Video Topics \* Your Instructor \* Exam Prep Tips

Lesson 2 - Introduction to Networking and the Networking Models Cover the theory needed for the exam, to accelerate Cisco networking career and for troubleshooting experience. \* What is A Network? \* The OSI Model \* The Data Transmission Process \* The TCP/IP Model \* Why Use Networking Models? \* TCP And UDP - Part 1 \* TCP And UDP - Part 2 \* Ports \* Sockets \* Port Numbers

Lesson 3 - Ethernet Standards and Cable Types The CCNA Exam will hammer you with questions about Ethernet... so this course breaks down everything you need to know about cable types. This is also crucial for setting up and running a network in the real world. \* The Need For And Operation of CSMA/CD \* Ethernet Types And Standards \* Pins And Transmissions \* Crosstalk \* Cable Types \* Ethernet Addressing \* Intro to WAN Cabling and a Cable Type Review

Lesson 4 - Switching I Explain How (and WHY) Switches Work... in theory, for real world application and for the exam. \* Repeaters, Hubs and Bridges \* Building the MAC Table \* "Flood, Filter or Forward?" \* Frame Processing Methods \* Virtual LANs \* Cisco Three-Layer Switching Model \* Introduction to STP \* Basic Switch Security \* Port Security Defaults, Options and Configurations

Lesson 5 - Common Router and Switch Commands Typical Switch (and Router) Commands are Broken Down. This information is necessary both on exam day and also when working in the real world as a network admin, as these commands are used daily. \* Physical Connections and Passwords \* Telnet and SSH \* User, Enable and Privilege Modes \* Enable Password vs. Enable Secret \* "privilege level 15" \* Physical Side of Cisco Switches \* Assigning an IP Address and Default Gateway To The Switch \* Speed, Duplex, and "Interface Range" \* Banners, "logging synch", and "exec-timeout" \* Keystroke Shortcuts and Manipulating History

Lesson 6 - IP Addressing and the Routing Process This section covers must know (and memorize) fundamentals, which are needed for the exam and necessary for future videos: binary math, subnetting, and working with network and port address translations. \* IP Addressing and Binary Conversions \* IP Address Classes \* Private IP Address Ranges \* Intro to the Routing Process \* Keeping Subnets On One "Side" of the Router

Lesson 7 - ARP, DNS and DHCP This section will teach you these fundamental protocols which are necessary for use within any network. \* One Destination, Two Destination Addresses \* DNS and DHCP Process \* The ARP Process \* Routers, Broadcasts, and Proxy ARP \* Configuring DHCP on a Cisco Router With SDM

Lesson 8 - Memory Components and Config Files This video introduces the student to basic password and security configurations, as well as assigning privilege levels; so, it's really the foundation for their knowledge of router security as well as the basic password recovery process. \* ROM, RAM, NVRAM, And Flash \* The Boot Process \* Setup Mode \* Startup And Running Configuration Files \* The COPY Command \* IOS Upgrading \* The Configuration Register

Lesson 9 - Intro to Wireless Networks (WLANs) Learn the standards of wireless, which relates to all wireless, not just Cisco. This is the fastest evolving and growing field. It's also necessary to memorize this information for the exam. \* Wireless Network Types \* Standards and Ranges \* Spread Spectrum \* Antenna Types \* CA vs. CD \* SSIDs and MAC Address Authentication \* WEP, WPA, and WPA2

Lesson 10 - Binary Math and Subnetting Fundamentals for the exam. Also, essential for IP addressing and IP address conservation. #1 topic that causes otherwise well prepared students to fail CCNA. \* "The Secret" (Of Binary Success, That Is) \* Decimal > Binary, Binary > Decimal \* Subnetting Basics \* Calculating Number of Valid Subnets \* Prefix Notification \* Calculating Number of Valid Hosts \* Calculating Number of Valid IP Addresses in a Given Subnet \* Calculating the Subnet Number of a Given IP Address \* Meeting Stated Design Requirements

Lesson 11 - Static Routing and RIP More fundamentals for the exam, and you will see the work done over a Cisco router. You will learn how to manually set up routing. This video will pave the way for future exam and real world success. \* Static Routing Theory and Labs \* RIP Routing Theory and Labs \* "show ip protocols", "show ip route rip", "debug ip rip", And More!

Lesson 12 - Wide Area Networks (WANs) Learn to link routers with other routers for communication. \* Physical Side of WANs \* Directly Connecting Cisco Routers Via Serial Interfaces \* HDLC and PPP \* Intro to Frame Relay \* RFC 1918 Addresses, NAT and PAT \* Intro to ATM \* Modems and DSL Variations

Lesson 13 - Troubleshooting 95% of work in the real world is troubleshooting, so it's

necessary for real world success. \* Where to Begin \* Cisco Discovery Protocol (CDP) \* L1 and L2 Troubleshooting \* LAN Troubleshooting \* WAN Troubleshooting \* Telnet and SSH Review and Maintenance Commands \* Administrative Distance \* Extended Ping and Traceroute \* The Real Key to Troubleshooting Lesson 14 - Introduction to Network Security You will learn about network attackers and intruders, how they get in, and how to keep your network safe by keeping them out. \* Firewalls and Proxy Servers \* The Attacker's Arsenal \* Intro to PIX, ASA, IDS, and IPS \* Viruses, Worms, and Trojan Horses \* Preventing Virus Attacks \* One Final Cisco "Secret" Lesson 15 - Introduction to ICND2 \* Your Instructor \* CCNA Exam Paths Lesson 16 - Switching II \* STP \* Root Bridges, Root Ports, and Designated Ports \* STP Timers and Port States \* Portfast \* VLANs and Trunking \* Access and Trunk Port Comparison \* VTP \* "Router on a Stick" \* RSTP and PVST \* Etherchannels Lesson 17 - PTP WAN Links, HDLC, PPP, and Frame Relay This will help you when working on real production networks. All topics are shown being configured on live equipment. Frame Relay is a major topic on the exam and in the real world. \* HDLC vs. PPP \* PPP Features \* PAP and CHAP \* Frame Relay Introduction \* Frame Relay LMI Theory \* Frame Relay Configs, DLCIs, Frame Maps, and Inverse ARP \* Frame Sub-Interfaces3 \* Split Horizon \* Frame Relay LMI Show, Debug, and Lab \* FECN, BECN, DE bits \* PVC Status Meanings Lesson 18 - Static Routing and RIP This video expands on the CCENT video, covering advanced topics found on the ICND2 and in the real world. \* Static Routing Theory and Configuration \* Distance Vector Protocol Behavior - Split Horizon and Route Poisoning \* RIP Theory and Version Differences \* The Joy of "show ip protocols" \* RIP Limitations \* RIP Timers \* Floating Static Routes Lesson 19 - OSPF OSPF is an Internet protocol. In this video you will look at types of OSPF and how to configure on a live network. Experience with OSPF is necessary for the CCNA, for the real world, and to build upon for CCNP & CCIE. \* Link State Routing Protocol Concepts and Basics \* The DR and BDR \* Hello Packets \* Troubleshooting Adjacency Issues \* Hub-and-Spoke NBMA OSPF Networks \* Broadcast Networks \* The OSPF RID \* OSPF Router Types \* Advantages of OSPF \* Point-to-Point OSPF Networks \* Default-Information Originate (always?) \* OSPF Authentication Lesson 20 - EIGRP Learn the theory and practice with labs to learn this hybrid routing protocol which has increased operational efficiency from its predecessor. Learn the capabilities and attributes. \* Introduction to EIGRP \* Successors and Feasible Successors \* EIGRP vs. RIPv2 \* Basic Configuration \* Wildcard Masks \* Load Sharing (Equal and Unequal-cost) \* EIGRP, RIPv2, and Autosummarization \* Passive vs. Active Routes Lesson 21 - IP Version 6 and NAT Learn the basic theory and routing protocol. You will need to know the basics for the CCNA exam and for working with networks. IP Version 6 is everywhere and becoming more prevalent, so understanding this material is vital for future success. \* IPv6 Theory and Introduction \* Zero Compression and Leading Zero Compression \* IPv6 Reserved Addresses \* The Autoconfiguration Process \* OSPF v3 Basics \* Transition Strategies \* NAT Theory and Introduction \* Static NAT Configuration \* Dynamic NAT Configuration \* PAT Configuration Lesson 22 - VPNs and IPsec Learn key terminology & definitions for the exam. \* Definitions and Tunneling Protocols \* Data Encryption Technologies \* Key Encryption Schemes \* IPsec, AH and ESP \* A VPN in Your Web Browser Lesson 23 - ACLs and Route Summarization Download; **[This hidden password content is only available for our VIP member. Become VIP Member NOW**