

Train Signal - Cisco CCENT 640-822 (2010)

Over 15 hours of expert instruction with real world examples of Cisco Networking help you deploy and manage your first Cisco Network. Mastering Networking Fundamentals has never been more fun: OSI model, IP addressing, routing and switching, security, wireless, WAN, IOS devices, configuring RIPv2, implementing NAT and DHCP and much more! Acquiring your CCNA certification can be challenging. Cisco recognizes this and has responded with a 2-step solution. By essentially splitting the CCNA into 2 exams (CCENT & ICND2), you can give your brain a break and achieve your goals at your own pace. This course focuses on complete coverage of the CCENT exam. **In this File:** Video 1 **Introduction to Networking and the Networking Models** To familiarize you with the CCNA and CCENT, explain what you can expect from the course, and cover exam preparation information. I also 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 Video 2 **Ethernet Standards and Cable Types** The CCENT 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 Video 3 **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 Video 4 **Common Router and Switch Commands** 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 Video 5 **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 Video 6 **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 Video 7 **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 Video 8 **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 Video 9 **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/CCENT. "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 Mastering Binary Math PDF Workbook Same benefit as the Binary Math Video, but this gives you the chance to try binary math on your own so you can master it and practice for the exam. Video 10 **Static Routing and RIP - Part 1** 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! Video 11 **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 Video 12 **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 Video 13 **Introduction to Network Security** You will learn about network attackers and intruders, how they get in, and how to keep your network save 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 Download [This hidden password content is only available for our **VIP member. Become VIP Member NOW**