

CBT Nuggets - Cisco 642-812: CCNP BCMSN

Cisco is developing new CCNP exams. However, the training in this package remains valid through July 31, 2010. Naturally, our Nugget Streaming Subscribers will gain immediate access to the new CBT Nuggets CCNP training as they're developed. But even if you're a **not** a subscriber, you'll stay current on CCNP certification training by purchasing the full CCNP package. For up to 12 months the full CCNP package holds **trade-in** credit towards a full-year Nugget Streaming Subscription. In this training, Jeremy Cioara shows you how to build and manage converged Cisco multilayer switched networks, covering concepts and technologies like VLANs, Inter-VLAN routing, Spanning Tree concepts, High Availability, Wireless Client Access, Access Layer Voice concepts, and minimizing service Loss and Data Theft in a Campus Network.

Video 1: The Switches Domain: Core Concepts and Design **26:32** Welcome to the BCMSN video series! This introductory video lays the foundation design of campus LAN environments and discusses the operating systems available for the Catalyst switch platform.

Video 2: VLANs: Configuration and Verification **13:16** Virtual LANs (VLANs) are a concept that took the network world by storm. It's virtually impossible to find any business network not employing VLANs somewhere in their network architecture. This video explains the concept of VLANs along with the base configuration.

Video 3: VLANs: In-Depth Trunking **35:57** The VLAN fun continues as Jeremy walks through the concepts and configuration of ISL and 802.1Q trunking methods. This video also discusses the purpose behind the 802.1Q native VLAN, which is key in understanding modern Cisco VoIP devices.

Video 4: VLANs: VLAN Trunking Protocol **33:20** The final of the VLAN videos focuses on the VLAN Trunking Protocol (VTP). This protocol can save you a ton of time or destroy your network in less than a second! Be sure to check out this video before using VTP in your network.

Video 5: STP: Foundation Per-VLAN Spanning Tree Concepts, Part 1 **23:47** The concept behind Spanning-Tree Protocol (STP) is simple: stop loops in a redundant switched network. However, networks have become increasingly complex, which makes STP more difficult to understand. This is Part 1 of learning the essentials of the 802.1d implementation of STP.

Video 6: STP: Foundation Per-VLAN Spanning Tree Concepts, Part 2 **34:20** The concept behind Spanning-Tree Protocol (STP) is simple: stop loops in a redundant switched network. However, networks have become increasingly complex, which makes STP more difficult to understand. This is Part 2 of learning the essentials of the 802.1d implementation of STP.

Video 7: STP: Rapid Spanning Tree Concepts and Configuration **24:10** STP is a functional and widely deployed protocol in switch environments, but has proven far too slow for networks demanding constant uptime. Cisco originally deployed proprietary plug-ins (such as Uplinkfast and Backbonefast) to try and speed things along, but finally the industry has caught up. This video welcomes the new Rapid Spanning Tree Protocol (RSTP) into Cisco network equipment and puts the new standard to the test with a timed network failover.

Video 8: EtherChannel: Aggregating Redundant Links **24:02** STP may do a great job at blocking the redundant links, but isn't there a better way? You bet there is! Say hello to EtherChannel, the protocol allowing you to use the extra bandwidth provided by the redundant links without causing loops in your network.

Video 9: L3 Switching: InterVLAN Routing Extraordinaire **28:31** Whenever VLANs are introduced to help segment a network, routers must also step onto the scene to move data between those VLANs. This video walks through multiple methods (including Layer 3 switching) to move data between VLANs in a campus environment.

Video 10: L3 Switching: Understanding CEF Optimization **16:54** If you look at the documentation for any modern Cisco switch, you will see the tag line, "This switch supports Cisco Express Forwarding (CEF)." What is CEF? How does it make my switch faster? Can I configure CEF? What is the meaning of life? Find all these answers (except perhaps the last question) in this video.

Video 11: Redundancy in the Campus: HSRP, VRRP, and GLBP Part 1 **43:37** Part 1: It won't take you long to realize that Hot Standby Router Protocol (HSRP), Virtual Router Redundancy Protocol (VRRP), and Gateway Load Balancing Protocol (GLBP) are some of Jeremy's favorite topics to talk about. These protocols bring redundant connections to the campus network. Watch as Jeremy explains and configures the protocols in a live network environment.

Video 12: Redundancy in the Campus: HSRP, VRRP, and GLBP Part 2 **23:37** Part 2: It won't take you long to realize that Hot Standby Router Protocol (HSRP), Virtual Router Redundancy Protocol (VRRP), and Gateway Load Balancing Protocol (GLBP) are some of Jeremy's favorite topics to talk about. These protocols bring redundant connections to the campus network. Watch as Jeremy explains and configures the protocols in a live network environment.

Video 13: Wireless LAN: Foundation Concepts and Design Part 1 **26:25** 802.11 wireless is one of the newest topics to make its way on to the Cisco BCMSN exam. It's no surprise to see the addition when you take into consideration the speed at which 802.11 wireless equipment is being installed in corporate networks. This video introduces key pieces of wireless networks and talks through the proper way to design a wireless network for your organization.

Video 14: Wireless LAN: Foundation Concepts and Design Part 2 **22:56** The wireless concepts get deeper as Jeremy discusses the purpose behind 802.11 wireless roaming and using VLANs in wireless networks.

Video 15: Wireless LAN: Frequencies and 802.11 Standards **34:40** Wireless networking without security is like walking around with all your personal identification and credit cards taped to the outside of your

clothing for all to see. This video discusses the wireless security standards along with 802.11 channels and frequencies. **Video 16: Wireless LAN: Understanding the Hardware****|30:21** It is absolutely necessary that you understand what router to purchase to fill a customer's requirements. Likewise, purchasing the right Cisco wireless hardware can make or break the network environment. This video discusses the different wireless hardware you can use in your network. **Video 17: Wireless LAN: Configuration and Verification****|17:28** Last, but not least, is the configuration of a Cisco wireless access point. While this concept is not on the BCMSN exam, Jeremy goes above and beyond to show you the basics of getting a wireless access point set up in your network. **Video 18: Campus VoIP: Overview, Considerations, and AutoQoS****|44:47** Voice over IP (VoIP) has gained sizable momentum in the industry, converting one enterprise network after another. The sad thing is that most organizations don't even realize WHY they are moving to VoIP. This video discusses the benefits of using VoIP, the migration phases to move a network to VoIP, and the technical network requirements to support VoIP. **Video 19: Campus Security: Basic Port Security and 802.1x****|32:34** It's time to move into the final campus LAN topic: security. Quite often, Layer 2 security gets overlooked for the "more important" matters such as an Internet firewall. However, if the layer 2 fabric of your network is compromised, Internet firewalls won't make a bit of difference. Check out this video to find out why. **Video 20: Campus Security: VLAN and Spoofing Attacks****|31:14** The campus security continues on as Jeremy discusses methods to prevent VLAN hopping attacks, rogue DHCP servers, and spoofing. **Video 21: Campus Security: STP Attacks and Other Security Considerations****|15:08** Jeremy wraps up the security portion and the entire series by discussing attacks for the Spanning Tree Protocol. This is followed up with a discussion of the Cisco recommended best practices for security on a network switch. Download **[This hidden password content is only available for our VIP member. Become VIP Member NOW**