CBT Nuggets - Cisco 642-901: CCNP BSCI

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. The Building Scalable Cisco Internetworks (BSCI) series, at its core, is all about routing. You"ll immerse yourself in the routing knowledge you need to work on enterprise-class networks. Plus you"ll learn what it takes to pass the CCNP-BSCI exam. **What You'll Learn** Video 1: Today's Routed World|23:42 Welcome to the BSCI video series! This opening video discusses the course objectives and their relation to the Cisco CCNP certification exam. You'll also see recent changes to the Cisco certification process that make real world training (which is the goal of CBT Nuggets) the best possible way to prepare. Video 2: EIGRP: The Concepts|35:36 sco designed EIGRP to be one of the most feature-packed and yet easy to configure routing protocols on the planet. However, terminology is the name of the game in this protocol. For example, did you know that a route considered a "successor" would actually be a primary route? Did you know that Active routes are bad? This video logically walk though the concepts and terms of EIGRP before any syntax is entered. Video 3: EIGRP: Implementation and Verification|32:50 Action! With the foundation concepts in place, Jeremy journeys with you through a complete configuration of EIGRP, including the base configuration and default route advertisement. Throughout the video, Jeremy discusses the core verification commands you can use to troubleshoot EIGRP in a production network. Video 4: EIGRP: Summarization, Authentication, and Other Advanced Options|41:54 Cisco designed EIGRP implementations to be easy. However, even the "simple protocol" has advanced features which take a little more configuration. This video walks through the implementation of manual and automatic route summarization, unequal-cost load balancing, and authentication using key chains. Video 5: EIGRP: Best Practices and Design Options|25:20 EIGRP's simplicity is one of its best features as well as one of its biggest drawbacks. Many administrators see EIGRP as a blanket routing protocol - just throw it at any situation with minimal configuration and it will work. While this may be true, it won't work well. Query messages can eat your network alive causing slow convergence at best and complete outages at worst. This video walks through the design options and best practices when setting up an EIGRP-based network. Video 6: OSPF: The Concepts (Part 1)|42:35 Welcome to OSPF, the most popular routing protocol in the world, but also one of the most complex interior gateway protocols one can deploy. Before a single line of syntax is typed, many concepts must be discussed. This video covers the benefits of link-state routing protocols, OSPF area terminology and concepts, and the forming of OSPF neighbor relationships. Video 7: OSPF: The Concepts (Part 2)|23:53 We'd pack all the OSPF concepts in a single video if we could! There's just too much to talk about. This video picks up where the last one leaves off and discusses the OSPF cost (metric), the concepts behind the Designated Router (DR) and Backup Designated Router (BDR), and the flurry of OSPF packet types you will encounter on your network. Video 8: OSPF: Implementation and Verification|37:32 Enough with the concepts, it's time to move into the hands-on configuration. This video walks through the base configuration of OSPF in a single area and covers many of the basic implementation and verification commands. Video 9: OSPF: Understanding Network Types|46:53 OSPF can run across nearly any type of network: point-to-point, broadcast-based, and even the dreaded non-broadcast, multi-access (NBMA) clouds. The focus of this video is primarily on these cloud architectures. Cisco has equipped OSPF with five different modes it can use to operate in NBMA environments. Jeremy walks through each one of these with a thorough explanation and configuration. Video 10: OSPF: Router LSAs and Summarization Options|32:17 It's now time to expand OSPF to multi-area environments. This video walks through the configuration of the OSPF Area Border Router (ABR) and Autonomous System Boundary Router (ASBR), as well as the implementation of OSPF summarization options. The video wraps up by discussing the different Link State Advertisements (LSAs) supported by OSPF. Video 11: OSPF: Special Area Types and Options |33:26 Understanding the OSPF area types is definitely one of Jeremy's favorite OSPF topics! Just the names of the area types alone speak volumes: stub areas, totally stubby areas, not-so-stubby areas? It's not often you get to deal with technical terms that sound like this. Each one of these area types offer their own, unique features. Find out all about them (along with your standard dose of configuration) in this video! Video 12: OSPF: Authentication and Other Miscellaneous Options|27:49 It's finally time to wrap up the OSPF protocol. This video covers all the "miscellaneous features and options" that didn't quite fit anywhere else. These options include default route advertisements, limiting LSA messages, external route types, and authentication. Video 13: IS-IS: The Concepts (Part 1)|33:22 If there's one thing you can guarantee from the IS-IS routing protocol, it's that you've never seen anything like this! Since IS-IS was originally designed for the OSI protocol rather than TCP/IP, many concepts are very strange. This video explains many of the advantages and disadvantages of IS-IS and works through a detailed comparison of IS-IS and OSPF. Video 14:

IS-IS: The Concepts (Part 2)|34:41 IS-IS may seem like the best routing protocol for your network...until you realize that you need to learn OSI addressing to make it work! This video walks through the concepts of assigning an OSI address to your router to build the foundation network IS-IS uses for communication. You'll also see the packets exchanged by IS-IS routers to converge the network routing tables. Video 15: IS-IS: Basic Implementation and Verification|34:53 IS-IS may be tough conceptually, but you'll really enjoy the configuration. It doesn't take long to find out that next to EIGRP, this is the easiest link-state protocols to set up. The sole focus of this video is IS-IS configuration. Video 16: Advanced Routing: Route Redistribution|35:06 Some network environments decide to run multiple routing protocols. Why would they do this? There's a variety of reasons, discussed in this video. Regardless of the reason, it will usually result in some form of route redistribution, which Jeremy calls the "necessary evil of routing politics." This video walks through the concepts and configuration of route redistribution. Video 17: Advanced Routing: Manipulating Route Updates|47:45 Route redistribution always has the potential for routing loops. At this point, you will need to step into the advanced world of route filtering. Join Jeremy as he configures a variety of route filter methods on live Cisco equipment. Get your brain ready for this one - it's not for the faint of heart! Video 18: BGP: Foundation Concepts|23:57 Take a step into the largest routing protocol in the world: the Border Gateway Protocol (BGP). This video walks through the foundation concepts of BGP: what it is, where you would use it, and facts to consider before deploying it. Video 19: BGP: Implementation and Tuning (Part 1)|33:43 Let the BGP configuration begin! Because BGP is so complex, we had to divide this configuration topic into three separate videos. This initial video walks through the difference between IBGP and EBGP, the setup of BGP neighbor relationships, and implementing minor tuning of BGP through the use of the "update-source" and "ebgp-multihop" commands. Video 20: BGP: Implementation and Tuning (Part 2)|33:31 The BGP configuration fun continues as Jeremy walks through the process of advertising networks into BGP and disabling BGP auto-summary (you REALLY don't want this feature). In addition, special time is given to the BGP next-hop behavior and BGP synchronization, which can traditionally be very confusing topics. Video 21: BGP: Implementation and Tuning (Part 3)|25:00 This final BGP implementation video takes a step back and looks into the architecture of the BGP neighbor process. Using show and debug commands, Jeremy explores the packets used to form BGP neighbors along with BGP neighbor relationship troubleshooting. In addition, you'll learn how to make your BGP configuration more efficient through the use of BGP peer-groups. Video 22: BGP: Tuning Attributes (Part 1)|29:37 Now that the foundation BGP configuration has been deployed, you'll need to begin your custom modifications to help BGP find the best path through the Internet. Without proper modification of BGP attributes, the protocol behaves like an advanced version of RIP (which you DON'T want!). Join Jeremy as he discusses the concepts around these BGP attributes and how you can modify them effectively. Video 23: BGP: Tuning Attributes (Part 2)|49:39 More BGP attribute fun! Because the BGP metric is so complex, we needed to split the attribute discussion into two videos. In this video, Jeremy continues through the live demonstration of BGP attribute modification. Video 24: Multicast: Concepts and Configuration|45:43 IP multicast is one of "those" topics: you hear about it plenty, but it's always in passing. It doesn't seem like anyone is really supporting IP multicasting...or are they? Regardless, if you deploy multicast on a Cisco network that has not been specifically configured to support it, it just plain won't work. This video discusses the proper planning and understanding of multicast protocols and concepts, along with a brief configuration to get your network ready to support it. Video 25: IPv6: Understanding Basic Concepts and Addressing |42:17 Everything you thought you knew about TCP/IP is changing! Welcome to the world of IPv6 (also known as IPng - next generation). This video gives you the reasons to use IPv6 and a in-depth discussion of the new IPv6 addressing. We can guarantee after you watch this video, you will think, "That is one of the best introductions to TCP/IPv6 I've ever heard!" Video 26: IPv6:Configuring, Routing, and Interoperating|31:01 It's just as easy to assign an IPv6 address to your router as it is an IPv4 address...it just takes a little more typing! In this video, you'll learn how to configure IPv6 addressing on a router along with the new version of OSPF (version 3), which is geared specifically for the new version of IP! Video 27: Advanced Routing: Implementing Router-Based DHCP Services|25:52 It's the bonus video! Learn to use Cisco devices, one of the most stable platforms in the industry, for key DHCP services on your network. This video walks through the configuration of DHCP services on an IOS-based device, but also gets into the setup of a Cisco router as a DHCP client. Finally, you'll discuss the ever-so-popular "ip helper-address" command, which is used to centralize all DHCP services in your organization. Download **[This hidden password content is only available for our VIP member. Become VIP Member NOW**