Building Core Networks with OSPF, IS-IS, BGP and MPLS Bootcamp (BCN)

Building Core Networks with OSPF, IS-IS, BGP, and MPLS Bootcamp (BCN) is a hands-on course that provides you with the required knowledge and skills to design, deploy, operate, and maintain an Internet service provider (ISP) backbone network. Hands-on labs reinforce the lecture materials to make sure that you have the working skills to affect the networks you support.

Target Audience:

This course is intended for network professionals, including designers, implementers, and support staff involved with design and deployment of large-scale networks for large enterprises or high-end ISP networks that use technologies such as Intermediate System-to-Intermediate System (IS-IS), Open Shortest Path First (OSPF), Border Gateway Protocol (BGP), or Multiprotocol Label Switching (MPLS).

Prerequisite:

No official prerequisite however understanding of Routing Concepts and hands-on experience with Cisco IOS is required. Cisco CCENT certification or Interconnecting Cisco Networking Devices Part 1 (ICND1) training, or equivalent course or work experience.

Course Outline

Module 1: Building Core Networks

Module 2: Implementing Link-State Protocols (IS-IS & OSPF)

Module 3: Border Gateway Protocol

Module 4: Implement & Troubleshoot MPLS

Lab Outline

Lab 1: Configure and Verify OSPF in the Core Network

Lab 2: Configure and Verify IS-IS in the Core Network

Lab 3: Configure and Verify Basic IBGP

Lab 4: Configure and Verify EBGP

Lab 5: Scale BGP with BGP Peer Templates and Route-Reflectors

Lab 6: Configure BGP Route Filtering

Lab 7: Configure Multihoming Policy

Lab 8: Configure and Verify MPLS

Lab 9: Configure Intranet MPLS VPNs

Lab 10: Configure Extranet MPLS VPNs