

Configuring BGP on Cisco Routers (BGP)

Duration: 5 Days

Course Content

This course provides students with in-depth knowledge of BGP, the routing protocol that is one of the underlying foundations of the Internet and new-world technologies such as Multiprotocol Label Switching (MPLS). This curriculum covers the theory of BGP, configuration of BGP on Cisco IOS routers, detailed troubleshooting information and hands-on exercises that provide students with the skills needed to configure and troubleshoot BGP networks in customer environments. Different service solutions in the curriculum cover BGP network design issues and usage rules for various BGP features preparing students to design and implement efficient, optimal and trouble free BGP networks.

Course Objective

After completing this course the student should be able to:

- Given a network scenario with multiple domains, configure, monitor and troubleshoot basic BGP to enable interdomain routing
- Given a network scenario where connections to multiple ISPs must be supported, use BGP policy controls to influence the route selection process with minimal impact on BGP route processing
- Given a network scenario where multiple connections must be supported, use BGP attributes to influence the route selection process
- Given customer connectivity requirements, implement the correct BGP configuration to successfully connect the customer's network to the Internet
- Given a typical service provider network with multiple BGP connections to other autonomous systems, enable the provider network to behave as a transit autonomous system
- Given a typical service provider network, identify common BGP scaling issues and enable route reflection and confederations as possible solutions to these issues
- Given a typical BGP network, use available BGP tools and features to optimize the scalability of the BGP routing protocol

Course Outline

- BGP Overview
- Route Selection Using Policy Controls
- Route Selection Using Attributes
- Customer to Provider Connectivity with BGP
- BGP Transit Autonomous System
- Scaling Service Provider Networks
- Optimizing BGP Scalability



Western Group (Thailand),Ltd.
31/92 Rangsit-Klong 7 Rd., Lam luk ka,
Patum-tani, 12150, THAILAND
Tel: +662 909-3691, Mobile: +66(0)8-1908-1052
Fax: +662 909-3691

Prerequisites

The participant should successful completion of the following courses or equivalent field experience:

- Interconnecting Cisco Network Devices (ICND)
- Building Scalable Cisco Internetwork (BSCI)