

# Delivery Type: Classroom Duration: 5 days

#### **Overview**

The Configuring BGP on Cisco Routers (BGP) v3.1 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 Multi-protocol 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.

#### **Target Audience**

This course is intended for technical engineers and delegates seeking professional level certification including Cisco Certified Internetwork Professional (CCIP) or Cisco Certified Internetwork Expert (CCIE).

## **Pre-Requisites**

The knowledge and skills that a learner must have before attending this course are as follows:

- ✓ Delegates are required to hold a valid CCNA before attending this course.
- ✓ Attendance of the BSCI is also strongly recomended to anyone wishing to attend this course.

## **Objectives**

At the end of the course delegates will be able to;-

- ✓ Given a network scenario with multiple domains, configure, monitor and troubleshoot basic BGP to enable inter domain 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 processGiven 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 optimise the scalability of the BGP routing protocol

## Certification

This course will prepare delegates for the following exam;

- ✓ 642-661 BGP Configuring BGP on Cisco Routers
- ✓ BGP is part of the Cisco Certified Internetwork Professional Qualification

#### Follow on Courses

- ✓ QOS Implementing Cisco Quality of Service
- ✓ MPLS Implementing Cisco MPLS

