NSIN

Nokia Scalable IP Networks

Course Objectives

After completing the course, students should be able to:

- Describe the use of the Nokia 7750 Service Router (SR) and Nokia 7450 Ethernet Service Switch (ESS) in the Internet
- Be able to execute basic commands with the command line interface of the Nokia 7750 Service Router
- Describe the purpose and operation of common Layer 2 technologies
- Describe the IP forwarding process
- Analyze an IP address with subnet mask and calculate subnet boundaries
- Develop an IP address plan using IP subnetting and address summarization
- Explain the difference between static routes and dynamic routing protocols
- Configure static routes and dynamic routing in a single area OSPF network
- Explain the purpose and basic features of BGP
- Explain the basic operation of the Transmission Control Protocol (TCP)
- Describe the purpose of MPLS and how it can be used to create tunnels across an IP network
- Describe the MPLS-based VPN services supported on the Nokia 7750 Service Router: VPWS, VPLS and VPRN

Course Modules

- Module 0 - Introduction to Scalable IP Networks
- Module 1 - Internet and TCP/IP Overview
- Module 2 - Introduction to 7750 Service Router, 7450 Ethernet Services Switch and Command Line Interface
- Module 3 - Data Link Overview
- Module 4 - IP Layer
- Module 5 - IP Routing
- Module 6 - Transport Layer
- Module 7 - Services Overview