

# Advanced Routing & Switching for Field Engineers v2

ARSFE



**Delivery Type:** Classroom

**Duration:** 3 days

## Overview

The Advanced Routing and Switching for System Engineers (ARSFE) 2.0 course helps learners to configure and monitor advanced routing and switching services in Cisco devices. The course starts with an overview of advanced technologies such as security, bandwidth and application optimization and quality of service (QoS) as implemented in Cisco devices. The main families of Cisco routers and switches are described with respect to their hardware and software characteristics. The course then focuses on some advanced aspects of network management, including secure management access (Secure Shell [SSH]) and network monitoring with Syslog, Network Time Protocol (NTP), and Netflow services. High availability on Layer 2 (EtherChannel and Rapid Spanning Tree [RSTP]) and on Layer 3 (Hot Standby Router Protocol [HSRP], Virtual Router Redundancy Protocol [VRRP], and Gateway Load Balancing Protocol [GLBP]) is presented through configuration examples, followed by description of hardware and software redundancy on high-end modular switches.

The course concludes with extensive explanation of Multiprotocol Label Switching (MPLS) Virtual Private Networks (VPNs), with special attention to troubleshooting aspects of this technology.

## Target Audience

The primary audience for this course are Cisco Premier Channel Partner Field Engineers, and Cisco Customer Network Engineers.

## Pre-Requisites

The Knowledge and skills required to sit this course are as follows;

Delegates must hold a valid CCNP or Comparable experience to sit on this course. Delegates who do not meet this level of knowledge may be asked to leave the course if they hold it up.

## Objectives

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

- ✓ Define advanced capabilities of Cisco routers and switches, and list the hardware platforms that implement the advanced technologies

- ✓ Securely manage Cisco network devices and monitor the network using Syslog, NTP, and NetFlow services
- ✓ Configure Layer 2 and Layer 3 high availability on Cisco routers and switches, including hardware and software redundancy on modular switches
- ✓ Configure and troubleshoot MPLS VPNs

## Certification

Recommend as preparation for exam(s):

- ✓ 642-066 ARSFE
- ✓ This is required for the Cisco Routing and Switching Field Engineer or specialisation for Cisco Partners requiring the Advanced Routing and Switching Channel Partner Accreditation.

## Follow on Courses

The following courses are recommended for further study:

- ✓ WAAS- Required for the Cisco Routing+Switching Field Engineer Specialisation