MEF-SDCP: SD-WAN Certified Professional (B)

Duration: 4 Days

Prerequisites:

The following prerequisites are recommended:

- Basic understanding of L2 switching and L3 routing and commonly implemented protocols (BGP, UDP, OSPF, etc.)
- Basic understanding of security concepts.
- Experience in the deployment, design, maintenance, and troubleshooting of networks in a traditional WAN environment including, but not limited to: MPLS, Ethernet, and mobile technologies.
- Two years of general networking experience.

Course Description:

MEF-SDCP is a professional level, specialization certification within the MEF Professional Certification Framework and provides an overview of SD-WAN.

This class reviews requirements for an application-aware, over-the-top WAN connectivity service that uses policies to determine how application flows are directed over multiple underlay networks irrespective of the underlay technologies or service providers who deliver them.

Course Objectives:

Upon completion of this course, you will have knowledge and skills to:

- Assess, plan and design scenarios of size and scale, implementations, applications, strategy and business requirements
- Implementation of MEF 70 related to business requirements, application flow, policy, underlay services, characteristics and migrations strategy
- Lifecycle Service Orchestration (LSO): service impacting issues, diagnostics, performance metrics and troubleshooting
- Components and features: fundamentals and characteristics of SD-WAN solutions, service components and service attributes.
- Transport-independence of the Underlay Network
- Service assurance of SD-WAN connections
- High Availability of SD-WAN Services
- Applying Policy-based Packet Forwarding for SD-WAN

Target Audience:

The target audience for this class is networking engineers, service provider architect and engineers, and premise technology engineers looking to expand their understanding of SD-WAN and MEF certification.

Course Outlines:

1: Overview of Basic Networking
- Network Definitions
- Network Robustness
- Network Failures and Performance Issues
- Traffic Addresses

2: Assessing, Planning, and Designing
- Characteristics and Benefits of an SD-WAN Service
- SD-WAN Components
- Virtual Topology
- Zone
- Internet Breakout
- Introduction to Application Flow Specification Groups and Policies
- Matching Traffic to Application Flows
- Legacy Migration to SD-WAN

3: Attributes and Policy Criteria
- SWVC Service Attributes
- Policies

4: Underlay Connectivity Services
- Types of Underlay Connectivity Services
- Characteristics of Underlay Connectivity Services
- Underlay Connectivity Service Attributes
- Public versus Private
- Traffic Requirements and Allocation of Bandwidth across Multiple Underlay Connectivity Services

5: SD-WAN LSO Components
- Using an SD-WAN Gateway to Interconnect an SD-WAN Service to an External Service
- Defining the SD-WAN Controller and SD-WAN Orchestrator

6: SD-WAN Security
- Security
- Firewall Usage with SD-WAN
- Security Protocols
- Encryption
- Security Functions
- Service Readiness Testing for SD-WAN Services
- SD-WAN Performance Monitoring