

MEF Network Foundations

Duration: 2 Days

Prerequisites:

A basic knowledge of Computer Networking is assumed. Also, some familiarity with various conceptual models of networking

(OSI, Internet, etc.) and technologies is helpful.

Course Description:

This course has vendor-neutral conceptual knowledge of all aspects of digital transformation. These include SDN & virtualization, Layer 2 & 3 connectivity services, Carrier Ethernet, SD-WAN, Lifecycle Services Orchestration (LSO and its API's), Network as a Service (NaaS) and the standards, plus open-source ecosystem. We also look at use cases in these practice areas, collectively referred to as the Network as a Service vision from MEF.

Course Objectives:

- Understand digital transformation occurring within the industry
- Discover the building blocks of Software Defined Networking (SDN)
- Examine the fundamentals of Telco Cloud & Network Virtualization
- Investigate SD-WAN concept and use cases
- Understand Lifecycle Services Orchestration (LSO) and accompanying orchestration / automation tools
- Explore the connected ecosystem of standards bodies (SDOs) and opensource projects
- Recap Layer 2 & Layer 3 connectivity including MEF Carrier Ethernet
- Gain understanding of the MEF3.0 NaaS vision

Target Audience:

he major focus of this certification is the IT professional currently working in network operations e.g., server, network, storage and administrators who is seeking greater responsibility in their current job or seeking to validate new skills to gain a better job or is interested in modern network technologies.

Additionally, the marketing, support, product management, and entry-level technical training needs of companies that make or utilize these technologies would also benefit from this workshop.

Some specific roles are listed below:

- Manager/Director for Network/IT Group
- Network Technician (Entry Level)
- IT Analyst (Entry Level)
- System Administrator (Entry Level)
- Consultant/Professional Services Engineer
- Sales Representatives
- IT Project Manager (assumes knowledge, skills, abilities in a project management domain)
- IT Project Manager (assumes knowledge, skills, abilities in a program management domain)
- Help Desk/NOC Engineer

Course Outlines:

Understand Telco Cloud & Network Virtualization Concepts

- Key definitions of virtualization today
- Key Characteristics of an NFV Solution
- The Major Benefits of an NFV Solution
- The Major Challenges Presented in Moving to an NFV Solution
- Comparison between the Different Characteristics of an NFV Solution to those of its Network Predecessor
- How Various NFV Technologies Relate to Each Other
- An Example Scenario: How NFV Would Be Applied to Leverage Its Benefits

Understand LSO Orchestration Concepts

- Key characteristics of an automation and an orchestrated solution
- Major benefits of an orchestrated solution
- Major challenges presented in moving to an orchestrated solution
- Key definitions of LSO
- LSO APIs and their usage
- How various LSO technologies relate to each other
- An example scenario: How LSO would be implemented to leverage its benefits

Understand Carrier Ethernet Concepts

- Major building blocks of carrier-based connectivity services
- The roles of the organizations and actors involved in buying and selling carrierbased connectivity services
- MEF Carrier Ethernet Services
- Retail Services
- Wholesale Services
- Bandwidth Profile
- Class of Service
- Major benefits of a carrier-based connectivity services solution
- Major challenges presented in deploying a carrier-based connectivity solution
- Comparison between the different characteristics of a carrier-based connectivity solution to those of its predecessor
- An example scenario: How a carrier-based connectivity solution would be implemented to leverage its benefits

Understand the Network as a Service (NaaS) vision

- Kev characteristics of NaaS
- The predecessors to NaaS
- Major benefits promised by a software-driven connectivity and functional service Major challenges in deploying a software-driven connectivity and functional service
- An example scenario: How combinations of SDN, NFV, and LSO are leveraged to
- form a Software-driven connectivity and functional solutions

Software Defined Networking (SDN) Concepts

- Key characteristics of an SDN solution
- Major benefits of an SDN solution
- Different definitions of SDN today
- Comparison of the major benefits of an SDN solution to those of its network predecessor
- Major challenges in moving to an SDN network
- How various SDN technologies relate to each other
- Example scenario: How SDN would be implemented to leverage its benefits