

## Nokia Services Architecture

### Course Objectives

After completing the course, students should be able to:

- Demonstrate a basic overall understanding of Nokia services
- Differentiate between service access point (SAP) and network ports
- Provide an explanation for a service delivery point (SDP) and differentiate between mesh and spoke SDPs
- Differentiate between transport tunnels and service tunnels
- Correctly analyze the implications of maximum transmission unit (MTU) size
- Use the correct operations, administration and maintenance (OAM) tools to analyze a configured system
- Correctly define the terms related to VPWS services such as Epipe, Apipe, Fpipe, and Lpipe
- Correctly configure an Epipe service
- Manage Epipe services given an existing infrastructure including modifying, deleting, disabling, re-enabling, and creating these services
- Explain the issues related to VPWS interworking
- Describe the purpose and operation of a VPLS service
- Explain the different types of SAP encapsulations and describe their behaviour
- Correctly configure a VPLS service
- Define and configure an Internet enhanced service (IES)
- Configure an IES spoke termination to a VPLS service
- Identify reasons to use mirror services and differentiate between local and distributed mirror services
- Configure and verify the operation of a remote mirror service
- Identify the protocols and technologies required to implement VPRN service
- Explain the interaction between the control and data plane of a VPRN service
- Configure, verify, and troubleshoot an IPv4 and IPv6 VPRN Service

## Course Modules

- Module 1 - Services Overview and Implementation
- Module 2 - Virtual Private Wire Service
- Module 3 - Virtual Private LAN Service
- Module 4 - Operations, Administration, and Maintenance
- Module 5 - Internet Enhanced Service
- Module 6 - Service Mirroring
- Module 7 - Virtual Private Routed Network Service