

Implementing Segment Routing on Cisco IOS XR (SEGRTE201)

Course Content:

- Segment Routing and LDP Interworking
- Introduction
- SR and LDP Interworking Data Plane
- Mapping Server Function and Configuration
- Interworking Deployment Models
- Topology Independent – Loop Free Alternate
- Introduction
- Examining Classic LFA
- Examining TI-LFA Fundamentals
- Implementing and Verifying TI-LFA for SR Traffic
- Implementing and Verifying SR TI-LFA for LDP Traffic
- TI-LFA and SR LDP Interworking
- Segment Routing Policies – Traffic Engineering (SR-TE)
- Introduction
- Exploring SR Policies
- Anycast and Binding SIDs
- Enabling and Verifying SR-TE
- Explicit path SR-TE policies
- Constrained dynamic path SR-TE policies
- Instantiating SR Policies
- Instantiating SR Policies using BGP Dynamic
- Multidomain SR Policies
- Introduction
- Configuring and Verifying a Path Computation Element (PCE)
- Configuring and Verifying BGP Link-State (LS)
- Configuring Multidomain SR Policies with a PCE
- Configuring Multidomain SR Policies with On Demand Next-Hop (ODN)
- BGP Prefix Segment and Egress Peer Engineering
- Introduction
- Examining the BGP-based data center
- Examining the BGP Prefix-SID Operation
- Configuring and Verifying the BGP Prefix SID
- Examining Egress Peer Engineering
- Examining BGP peering segments
- Configuring and verifying egress peer engineering

Lab outline

- Configuring and Verifying IGP Segment Routing
- Migrating from LDP to Segment Routing
- Configuring and Verifying TI-LFA Fast Reroute
- Configuring and Verifying SR Policies
- Configuring and Verifying Multidomain SR-TE
- Configuring and Verifying BGP Segment Routing