PREPFORCE

SD-ACCESS DEEP DIVE WORKSHOP

5 DAYS

OBJECTIVES

At the end of this course, you will be able to make the best design decision regarding the deployment of SD-A in your network. By knowing all the options and features, you will be able to use the SD-A solution at its best.

You will be able to profit from all the advantages of SD-A in the provisioning and the operation of your network thanks to automation and programing.

How you'll benefit: This course will be focused on hands-on. All the advanced features will be implemented into our labs.

DETAILED COURSE OUTLINE

| Day 1 |

Deep Dive Connecting the Fabric to External Networks

- Border Layer 3 Hand off with VRF-Lite
- Border Resiliency (HA)
- Shared Services with Border
- WAN Connectivity with Border
- Multiple Fabric Domains Connectivity with Border
- Service Chaining with Border
- Data Center Connectivity with Border
- Internet Connectivity with Border

Lab:

- $\boldsymbol{\cdot}$ Configuration of a VXLAN handoff to MPLS
- Configuration of transit network between 2 Fabrics

| Day 2 |

Deep Dive Migration and Integrate with Existing Network

- SD-Access Migration: Using new Subnets, New Switches
- User Onboarding
- External Route Exchange
- Retain Existing Subnets
- Migrating Routed Access
- Deep Dive Integrate Wireless in SD-Access

Lab:

• Migration from a classical network to a SD-A fabric.

| Day 3 |

Deep Dive Integration with Data Center Architectures

Deep Dive Extending Secure Segmentation and Policy into the IoT Space

- SD-Access Integration with DC
- ACI Integration
- Non ACI Integration
- Cloud Integration
- SD-Access use cases for IOT Networks
- IoT Deployments across Multiple Sites
- SD-Access Extended Node Functionality for IoT

Lab:

• Configuration of a interconnect between an ACI Fabric and a SD-A Fabric

PREPFORCE

| Day 4 |

Deep Dive SD-Access Wireless Integration

Deep Dive Policy Driven Manageability

Deep Dive Secure Segmentation

- Secure Segmentation Case Study
- Access Policy: Authentication and Authorization
- Access Control Policy
- Application Policy
- Extending Policy across domains: From Access to Data Center
- SD-Access Wireless Guest Design
- SD-Access Wireless Over the Top (OTT)
- SD-Access Wireless in Distributed Campus
- High Availability in SD Access Wireless

Lab:

• Configuration of a seamless interconnect between an ACI tenant and a SD-A VN with end-to end Security mapping.

| Day 5 |

Deep Dive SD-Access Assurance and Analytics

Deep Dive SD-Access programmability and API advanced

- Advanced python
- ISE APIs
- DNA-Center APIs
- Configuration of IOS-XE with NETCONF
- Working with flask for websites

Lab/Project:

• Programming the SD-A using the REST APIs

• Configuration of a business controller to provision a new service with a simplified GUI