

COURSE OUTLINE: ECS – SLX and EFA Configuration and Implementation



ASSOCIATED CERTIFICATIONS

ECS - Data Center - SLX



COURSE DURATION

5 Days



DELIVERY METHOD

- Traditional Instructor-Led
- Virtual Instructor-Led

COURSE OVERVIEW

This course provides an in-depth study of the Extreme SLX and EFA and how they are utilized in an enterprise and datacenter networks. The course covers core competencies of configuration, operations, troubleshooting and maintenance of Extreme SLX and EFA. The course includes lab exercises on data center fabric provisioning using EFA and configuration using SLX CLI along with respective troubleshooting.

WHO SHOULD ATTEND

This course is designed for network administrators, system administrators, network architects, systems engineers, and technical support engineers who are involved with advanced installation, configuration, maintenance, and basic troubleshooting of SLX products..

PREREQUISITE

Before taking this course, students should have:

- A working knowledge of Networking protocols and implementation

COURSE OBJECTIVES

Upon successful completion of this course, the student should be able to:

- Understand Extreme's SLX Products portfolio.
- Understand SLX Architecture and Licensing.
- Configure and implement management protocols on SLX devices
- Configure and implement monitoring and reporting features on SLX Products
- Perform hardware troubleshooting and support functions on SLX devices
- Perform firmware upgrades on SLX devices
- Configure, deploy and maintain Link Aggregation Groups (LAGS)
- Configure, and maintain Multi-Chassis Trunking (MCT)
- Configure and monitor BGP.
- Implement, Configure, Monitor VxLAN Tunnels, BGP EVPN's
- Deploy, Configure and Manage TPVM on SLX devices.
- Deploy Extreme Fabric Automation (EFA)
- Understand Extreme Fabric Provisioning using EFA
- Provisioning Tenants and End Point Groups (EPGs).
- Implementing Insight Interface for Analytics on SLX devices.

AGENDA

Course Introduction

Architecture and Licensing

- SLX OS Product Portfolio
- Licensing
- SLX Architecture

EFA Features and Deployment

- EFA Overview
- EFA Architecture
- EFA Deployment

SLX and EFA Access

- Accessing SLX Devices
- Management Services
- CLI Overview
- Accessing TPVM from SLX device
- Accessing and configuring EFA on TPVM

Firmware Upgrades

- Firmware Upgrade considerations
- CLI commands

Initial System Configuration

- Host Name Configuration
- Management Configuration
- SNMP Configurations
- NTP
- User Accounts
- Loopback Interface
- Saving the Configuration

L2 Redundancy

- VLAN configuration
- Link Aggregation
- LACP Configuration
- LLDP Configuration
- Spanning tree protocols

Border Gateway Protocol

- BGP Overview
- BGP Attributes
- IBGP vs EBGP
- Configuring BGP
- Monitoring and troubleshooting BGP

Advanced BGP

- BGP Scalability
- Route Redistribution
- Route Reflectors
- BGP Confederations

IP Fabrics

- IP Fabric Overview
- Data Center Fabrics
- IP Fabrics Topology
- ECMP and Sticky ECMP

BGP EVPN and Anycast Gateway

- BGP EVPN Overview
- BGP EVPN functionalities
- Monitoring BGP EVPN
- Anycast Gateway
- BGP EVPN Configuration
- Anycast Gateway Configuration

Troubleshooting

- Firmware
- Licenses
- CPU Utilization

BGP and BGP EVPN Troubleshooting

- Reviewing the configuration
- Troubleshoot BGP Neighbor Establishment issues
- Reviewing useful show commands
- Reviewing the BGP EVPN configuration

Multi Chassis Trunking

- MCT Overview
- MCT terminology
- Operation of MCT
- Configuring MCT

EFA Fabric Service Provisioning

- Fabric service overview
- Clos Overview
- Multicast fabric provisioning
- Tenants and End Point Groups

EFA Device and Event Management

- EFA device management Overview
- Switch Health Management
- Return Material Authorization

EFA Logging

- Audit trail Logging
- RASlog services
- Notification Service

Troubleshooting and Analytics

- Wireshark
- Traffic monitoring
- Perfsonar
- Data streaming