



## Arista Configuration Essentials Training

### ACE 2.1

### Course Description

This 3-day, instructor-led, hands-on course covers an overview of Arista hardware and software (Extensible Operating System EOS), and the theory, operation and configuration of Arista differentiated features such as VM Tracer, Latency Analyzer (LANZ), Multi-Chassis Lag (MLAG) and Advanced Event Management (AEM). This course is designed to provide the student with a significant amount of meaningful hands-on lab time to support topics covered in class. Candidates for this course should have a working knowledge of L2 and L3 protocols. Experience with Linux, Bash and Python is a plus.

### Who Should Attend?

Network engineers, network operators and network administrators who are interested in understanding, configuring and testing Arista's differentiating features.

### Prerequisites

Candidates should be comfortable with configuring a network device through the CLI and should have a working knowledge of L2 and L3 protocols. Experience with Linux Bash and Python is a plus.

### Course Outline

#### Module 1: Arista Hardware Overview

- Data Center Cloud Architecture
- Arista Fixed Form Factor Switch Overview
- Arista Modular Chassis Switch Overview
- MXP Ports and Breakout Technology
- MXP Port Configuration

#### Module 2: EOS Overview

- Design Principles of EOS
- SysDB Overview
- Benefits of EOS
- Interacting with EOS
- Introduction to EAPI
- EOS Naming Convention
- EOS Lifecycle

#### Module 3: Switch Configuration Basics

- Switch Access & CLI Introduction
- Basic Configurations
- Logging
- Interface Configuration
- VLAN and Trunk Configuration
- Portchannel & LACP Configuration
- LACP Fallback
- Basic Spanning Tree Protocol Configuration

- Linux Shell Access
- Management VRF

#### Module 4: Switch Maintenance

- About Overview
- EOS Upgrade Procedures
- Modular Redundant Supervisor Upgrade Procedures
- Password Recovery Procedures
- Recovery Procedures

#### Module 5: Zero Touch Provisioning (ZTP)

- ZTP Modes
- Operation
- Requirements
- Config Files vs. Scripts
- ZTP Examples

#### Module 6: Multi-Switch CLI

- Feature Overview
- Use Cases
- Requirements
- AAA Integration
- Configuration and Operation

#### Module 7: Multi-Chassis LAG (MLAG)

- Definition and Purpose
- Operation- Peerlink, Election, L2 Protocols
- Stateful Switchover (SSO)
- In-Service Software Upgrade (ISSU)
- Configuration and Verification
- MLAG and Virtual ARP (VARP)

#### Module 8: Virtual Extensible LAN (VXLAN)

##### Overview

- Definition and Purpose
- Terminology
- Encapsulation
- Operation
- Head-End Replication Configuration
- Verifying VXLAN Operation

#### Module 9: Monitoring Topics

- Simple Network Management Protocol (SNMP)
- SFLOW
- TCPDUMP Overview
- TRACE Overview
- Port Mirroring Configuration
- Advanced Event Management (AEM) Overview
- CLI Scheduler

- Event Monitor
- Event Manager
- Latency Analyzer (LANZ)
- Digital Optical Monitoring (DOM)

#### Module 10: VM Tracer Overview

- Data Center Virtualization Challenges
- Supported Functions
- Operation
- Viewing VM Tracer Information
- VM Adaptive Segmentation
- Configuration

#### Module 11: DANZ Overview

- Agile Ports
- Advanced Mirroring
- Mirror to EOS
- Using ACLs to Filter Mirror Sessions
- Packet Truncation
- Time Stamping
- Tap Aggregation Mode

#### Module 12: EAPI Overview

- Understanding EAPI
- EAPI vs. Screen Scraping
- Configuration and Verification
- Using Python with EAPI

### Hands-on Labs

- Lab 1: CLI & BASH
- Lab 2: About
- Lab 3: Upgrade EOS
- Lab 4: EOS Architecture
- Lab 5: Zero Touch Provisioning (ZTP)
- Lab 6: Multi-Switch CLI
- Lab 7: Multi-Chassis LAG (MLAG)
- Lab 8: BGP Equal Cost Multi-Pathing (ECMP)
- Lab 9: Virtual Extensible LAN (VXLAN) Bridging
- Lab 10: Advanced Event Manager
- Lab 11: Latency Analyzer (LANZ)
- Lab 12: VM Tracer
- Lab 13: Advanced Mirroring
- Lab 14: Tap Aggregation
- Lab 15: Extensible API (eAPI)

## Logistics

- EOS Version: 4.13.1F
- Length of Class: 3 days
- Formats Delivered: In-person and virtual
- Select Date and Cost: a full schedule and pricing information is available at <http://www.arista.com/en/support/hands-on-training>
- Product Number: TRAIN-1
- Product Description: 3-Days Basic Configuration Essentials Class
- Registration online: <http://www.arista.com/en/support/hands-on-training>, or email [training@arista.com](mailto:training@arista.com)

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