Arista Cloud Engineer, Level 3

ARISTA
ACE
Cloud Journeyman
L3

SKILLS ACQUIRED

Equipping candidates with a range of skills essential for designing, managing, troubleshooting, and maintaining data center infrastructures. This includes common networking concepts such as QoS, BGP, and Multicast. Additionally, there is a focus on some of the newer data center centric technologies such as CVP, Universal Cloud Networking, MP-BGP, VXLAN and EVPN.

WHO IS IT FOR?

ACE:L3 is best suited for individuals with mid-to-senior level experience in the networking field with advanced Layer 2 and 3 technologies and configurations. Engineers and operations staff will find the skills covered in this course map to the needs of modern-day, technology-oriented corporations.

Beginner — **Expert**

LAB TIME

This course includes hands-on virtual labs built on current versions of EOS and CloudVision.

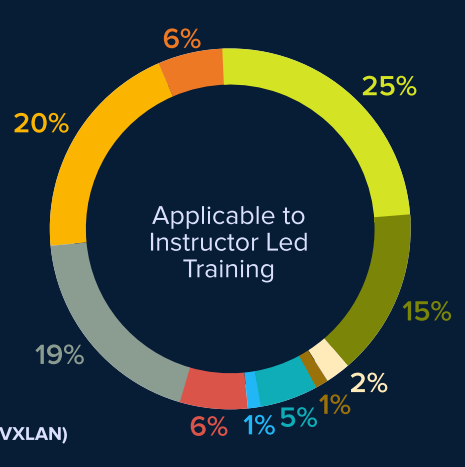
3 Weeks — **3 weeks** access to Labs

1 week Instructor Led

2 weeks Work on labs independently to refine skills

COURSE OVERVIEW

ACE:L3 is a 5-day course that is designed around Arista's data-driven Cloud network architectures. Candidates will master core technologies found in most modern corporate networks today such as MultiProtocol Border Gateway Protocol (MP-BGP), Exterior BGP (eBGP), underlay/overlay networks, Ethernet Virtual Private Networks (EVPN), and Virtual Extensible LAN protocol (VXLAN). Additional topics include security, QoS, multicast, and Campus Architectures.



- CloudVision
- Universal Cloud Networking - L3LS
- Ethernet VPN (EVPN)
- Virtualized Extensible LAN (VXLAN)
- Multicast
- Quality of Service (QoS)
- EVPN GW Super Spine & DCI
- Security
- Campus Architecture
- Labs

CloudVision

- Automation Concept Overview
- CloudVision Deployment Options
- Cluster
- Backup
- BugAlerts
- Device Communications
- Configlets
- Containers
- Task and Change Control
- Change Control Templates
- Zero Touch Provisioning (ZTP)
- Image Management
- Snapshots
- Rollback
- Labels & Tags
- CloudVision Telemetry
- Automation Implementation Overview

Ethernet VPN (EVPN)

- Underlay Design Options
- EVPN Overview
- MP-BGP Overview
- VRF & VPN
- MP-BGP Multi-Tenant Control Plane
- EVPN Control Plane
- Route Type-2 and Route Type-3 Advertisements
- L3 VPNs and Type 5 Route Advertisements
- EVPN Data Plane
- IRB
- EVPN-VXLAN Config Walkthrough of Asymmetric & Symmetric IRB
- Symmetric IRB - Indirect Routing
- IP-VRFs and Multi-Tenancy with Asymmetric & Symmetric IRB
- Route Type-4, Route Type-1 and Multi-Homing
- EVPN ESI Active/Active Multi-homing
- Failure Scenarios
- EVPN Deployments
- Troubleshooting EVPN

Multicast

- Overview and Protocols
- IGMPv2 Snooping Configuration
- MSDP Configuration
- Multicast with EVPN Control Plane
- EVPN Layer 2 Multicast
- EVPN Multicast OISM
- EVPN Multicast Underlay
- Redundancy Models
- PIM Edge Gateway

Labs

- CVP Navigation
- CVP Configlet Management
- CVP Configlet Builder
- CVP Snapshots
- Change Control
- CVP Dashboard Labs
- L2EVPN
- L3EVPN
- Multicast
- CVP Using Studios
- CVP Creating Studios

Universal Cloud Networking - L3LS

- L2LS Review and Configuration
- Traditional DC Architecture
- Leaf-Spine Architectures
- Underlay & Overlay Design Options
- L2LS link and switch failure scenarios
- L2LS v L3LS
- Layer 3 Redundancy
- OSPF Review and Configuration
- IS-IS Overview, Areas & Addressing, and Routing
- BGP Introduction, Enabling and Peer Groups
- BGPv4

Virtualized Extensible (VXLAN)

- Recommended Practices
- First Hop Redundancy Protocols (FHRP)
- VXLAN Control Plane, Routing, Broadcasts, Multicast, Head End Replication (HER), Operations, Configuration (HER)
- Troubleshooting VXLAN

Quality of Service (QoS)

- Modes and Setting
- Traffic Classes
- QoS Policies, QoS Prioritization
- Policing
- Shaping
- Explicit Congestion Notification
- Priority Flow Control

Security

- Macro Segmentation Security (MSS-FW) Overview
- Arista DANZ Monitoring Fabric (DMF) Overview
- Arista's Network Detection and Response (NDR) Overview

Campus Architecture

- Pod Designs
- Spline Designs
- Arista WiFi
- WiFi Fundamentals
- WiFi 6
- Campus WiFi Security (WIPS)
- WiFi Design, WiFi Configuration
- Cognitive WiFi

EVPN GW Super Spine & DCI

- GW L3 Model
- GW L2 Model
- L2/L3 over VXLAN Connectivity over VXLAN IP WAN

MODALITIES

Our aim is to provide high quality training that is flexible and accessible for modern needs.

Instructor-led Training

Arista Academy PRO

ADDITIONAL INFORMATION

Verification from an official Arista training partner is required to register and take an exam. Instructor-led and self-study options are available. Look for these badges prior to purchasing your training.

ARISTA TRAINING PARTNER AUTHORIZED — ARISTA TRAINING PARTNER ELITE — ARISTA TRAINING PARTNER ELITEPLUS — ARISTA Training and Certification Official Curriculum