

Arista Cloud Engineer, Level 1





SKILLS ACQUIRED

This training will equip you with the skills to configure, troubleshoot, and manage fundamental network devices and protocols, apply essential Layer 2 and Layer 3 switching and routing techniques, implement foundational network security measures to protect data and ensure compliance, understand the basics of IPv6 to prepare your network for the future, and gain an introduction to network automation using CloudVision.

WHO IS IT FOR?

Expert

ACE:L1 is designed for entry-level network engineers, network administrators, network support technicians, and IT professionals who are new to networking.

Beginner





LAB TIME

Includes 16 hands-on labs, offering approximately 21 hours of practical experience.



120 hours of cloud-based lab access, available remotely for **90 days** once activated

COURSE OVERVIEW

The Arista ACE:L1 Cloud Novice course provides comprehensive foundational knowledge and skills necessary to configure, troubleshoot, and manage network devices. This course covers essential topics such as Network Engineering Fundamentals, Layer 2 Switching, Layer 3 Routing, and Advanced Networking Concepts. It is designed to prepare you to effectively implement and maintain network infrastructures in Campus and Datacenter environments.

- Layer 2 Switching **Network Engineering Fundamentals Fundamentals** Layer 3 Routing Advanced Networking
- Labs

22% 12% Lesson Breakdown (approx.) 11% 46%

Network Engineering Fundamentals

- Learn the basics of network structures, components, and OSI model applications.
- Understand different cabling types and Power over Ethernet (PoE) technology. • Explore Ethernet, MAC addresses, and Layer 2
- switching operations. • Get an overview of Arista EOS, its architecture, and
- basic CLI configuration. - Delve into IPv4 addressing, subnet masks, and
- subnetting techniques. • Gain insights into protocols like DHCP, ICMP, DNS,
- Learn the Transport Layer's role in data transmission, focusing on TCP and UDP.

Layer 2 Switching Fundamentals

- Understand LLDP for device discovery and creating network diagrams.
- Learn VLAN segmentation, trunking protocols, and inter-VLAN routing.
- Understand STP's role in preventing loops in Layer
- Explore Link Aggregation, LACP, and MLAG for increased bandwidth and redundancy.

Layer 3 Routing Fundamentals

across various network environments. • Learn about static and dynamic routing, RIP, OSPF,

• Understand the role of routers in directing data

- and route selection methods. • Understand WAN concepts and how NAT
- translates IP addresses for network communication.

Labs

Network Engineering Fundamentals Labs • Lab – Introduction to EOS CLI.

- Lab Management.
- Lab Understanding and Working with Network Protocols.
- Layer 2 Switching Fundamentals Labs

• Lab – Create a Network Diagram using LLDP.

- Lab Configure VLANs. • Lab – Configure Inter-VLAN Routing.
- Lab Spanning Tree Protocol. • Lab - LACP and MLAG.

Layer 3 Routing Fundamentals Labs • Lab – Configure L3 Addresses.

- Lab Configure Static Routing.
- Lab Configure Routing Protocols.

• Lab – Troubleshooting ACL.

- · Lab QoS. • Lab - Configure IPv6 Addressing.
- Lab Navigating CVP.

Advanced Networking Concepts

and ARP Inspection for network security. • Understand QoS for traffic management, including

• Learn to configure ACLs, AAA, DHCP Snooping,

- classification, marking, and shaping. • Explore IPv6 addressing and configuration for
- modern network environments. • Get introduced to CloudVision for basic network automation and management.

MODALITIES This course is taught over five days in live Instructor-Led

Training (ILT) or Virtual Instructor-Led Training (vILT) formats. For Self-Paced Training (SPT), the total duration of the course is approximately 45 hours. Instructor-Led Training



Self-Paced Training

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.







