Aviatrix ACE Associate

INTRODUCTION

ACE Solutions Architecture Team

Joe Amendolara

Joe Amendolara is a Senior Solutions Architect at Aviatrix.

He is a member of the ACE Team, that is responsible for delivering high quality trainings, under the supervision of **Shahzad Ali**, content lead for the Aviatrix Certified Engineer (ACE) Program, the industry's first multicloud networking certification.

https://www.linkedin.com/in/joe-amendolara/

ACE Program and ACE Associate Introduction

Industry's First

Industry's first multi-cloud networking education & certification.

Networking Focused

Develop advanced networking security, and operational competencies in the public cloud.

Learning Tracks

Associate, Professional, Design, Specialties (Security, Backbone, Automation, etc.)

ACE-Associate

Cloud networking introduction. Usually, it is a 4 to 5 hours.

High Level

Covering topics at a high level

Fast Paced

Focused with a lot of concepts – can be overwhelming!
https://community.aviatrix.com

aviatrix

ACE Multicloud Networking Learning Paths

The industry's first and only multicloud networking certification

https://aviatrix.com/ace/

Standard Learning Path

6 Hours
Learn CSP networking basics and review Aviatrix features

3 Days
Deploy proven design patterns for a multicloud network architecture

Weeks
Design a highly available, scalable, and secure multicloud architecture

Optional Specialty Trainings

4 Hours
Use IaC tools to build, enhance, and secure infrastructure

4 Hours
Use the Aviatrix backbone to build hybrid connections

16 Hours
Troubleshoot real-world Day 2 cloud issues

4 Hours
How to secure the network deployed inside the cloud

ACE-Associate Prerequisite & How to get Certified

Prerequisite:

- Basic networking understanding (Router, IP Address, Subnet, TCP/IP, etc.)

How to get Certified:

1. Create Aviatrix ACE Academy Account: https://ace.aviatrix.com/
2. Complete the LAB assignments
   - https://docs.aviatrixlab.com/flightschool/docs/home.html
   - Total five labs: Complete **4** Labs. 1 bonus.
   - An automated script will evaluate the completion of all labs.
   - PODs will be torn down as soon as the training has been completed.
3. Complete the Survey.

Outcome

1. Learners will be able to describe the shift from on-premises to cloud networking and understand why that shift is relevant today

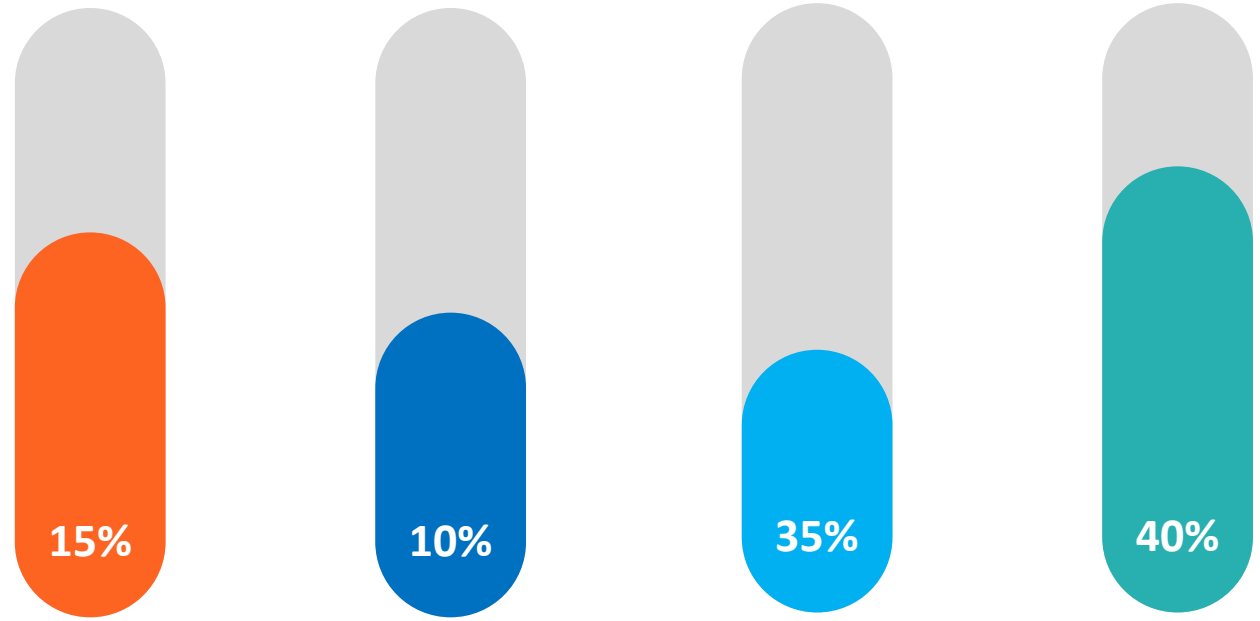
2. Learners will be able to recognize the basic native networking capabilities of the primary cloud service providers and understand when to best leverage each one in their ecosystem

3. Learners will be able to recognize the native constraints in visibility, security, and control

4. Learners will be able to define how the shift to the cloud has created new possibilities and risks for security

5. Learners will be able to identify alternative solutions to enhance visibility and global monitoring capabilities, and learn how to reduce cloud costs when it comes to cloud networking

Aviatrix Certified Engineer Associate - Agenda



AWS Networking 101

AZ, Regions, VPC, Route Tables, IGW, VGW, AWS-TGW, Direct Connect

Azure Networking 101

AZ, Regions, VPC, Route Table, VNG, vWAN, Express Route

Multicloud Network Architecture

Layered Architecture, Consistent across clouds, repeatable, simplify designs

Aviatrix Platform Overview

Features, Functionalities, Comprehensiveness

LAB PODs For Attendees

About Aviatrix

We are the Cloud Networking Experts

One cloud networking platform creates the visibility, security and control your business needs to adapt with ease and move ahead at speed.

Enterprises Choose Cloud Networking Experts

Why Not Use CSP Native Networking?

Build

- Cloud provider is Go-Build mentality
- Reference architectures doesn't fit customers expectations
- Lack of common architecture in multiple clouds and minimal features when extending to on-premises

Operate

- Disconnected Day 2 Operations
- Lack of visibility and troubleshooting
- Missing operational data

Cost and Skillgap

- Unknown and unpredictable cost
- Heavy data processing charges, including Egress
- Expert level skillset needed

Aviatrix Solving Challenges for Enterprises in Public Cloud

Build

- Cloud provider is Go-Build mentality
- Reference architectures doesn't fit customers expectations
- Lack of common architecture in multiple clouds and minimal features when extending to on-premises

Operate

- Disconnected Day 2 Operations
- Lack of visibility and troubleshooting
- Missing operational data

Cost and Skillgap

- Unknown and unpredictable cost
- Heavy data processing charges, including Egress
- Expert level skillset needed

Aviatrix helps enterprises build – Fast and Right – Greenfield or Brownfield

Provides Multicloud Networking Software (MCNS) reference Architecture (MCNA)

Simple and familiar tools and operationalizing best practices in Public Cloud

Day 2 Ops ready visibility and tooling

Zero data processing charges

Simple design, deploy and run

Aviatrix Cloud Networking Platform

Software Components

aviatrix®

Aviatrix Secure Cloud Networking

Own Your Cloud Network

Aviatrix Controller

Operates on your cloud EC2/VM.
The Brain. Download from CSP Marketplaces.
Never in the data plane.

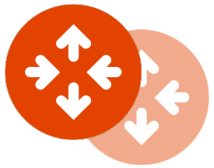
Control Plan

Aviatrix CoPilot

Operates on your cloud EC2/VM
Advanced day2 ops and enterprise-grade visualization.
Never in the data plane.

Management Plane

Aviatrix SMART Gateways



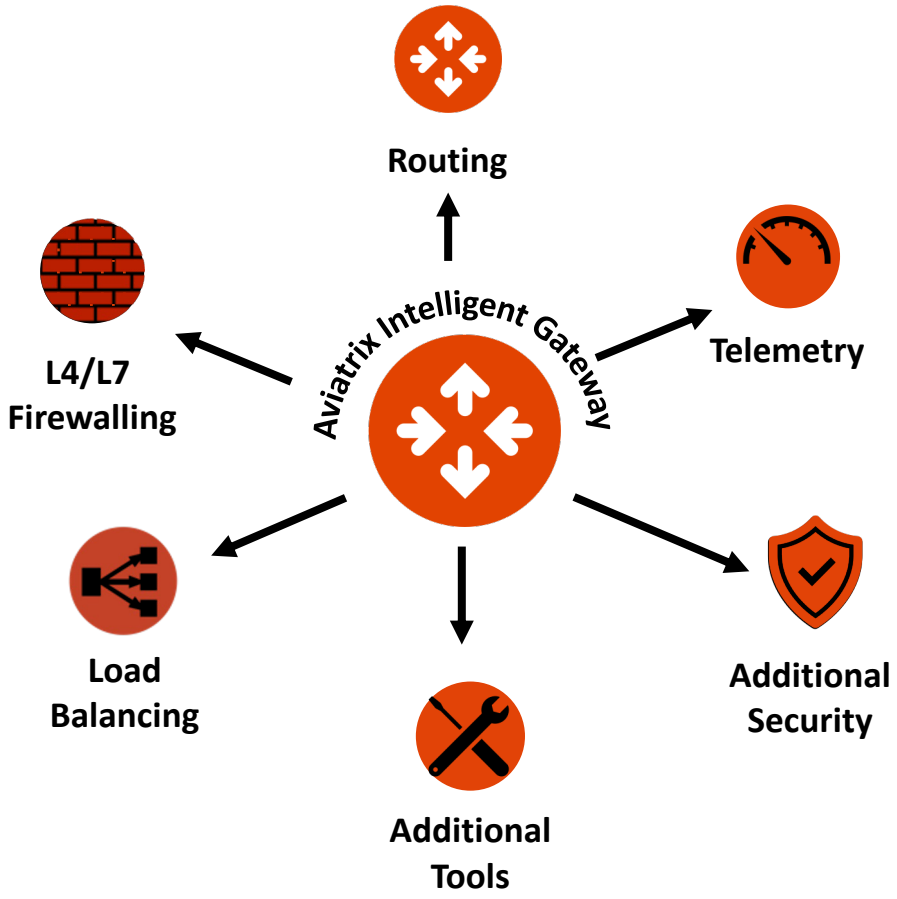
Operates on your cloud EC2/VM.
Advanced networking, security, and policy enforcement.

Data Plane

SMART: Secure, Multicloud-Aware, Application-Aware, Resilient, and Telemetry Provider

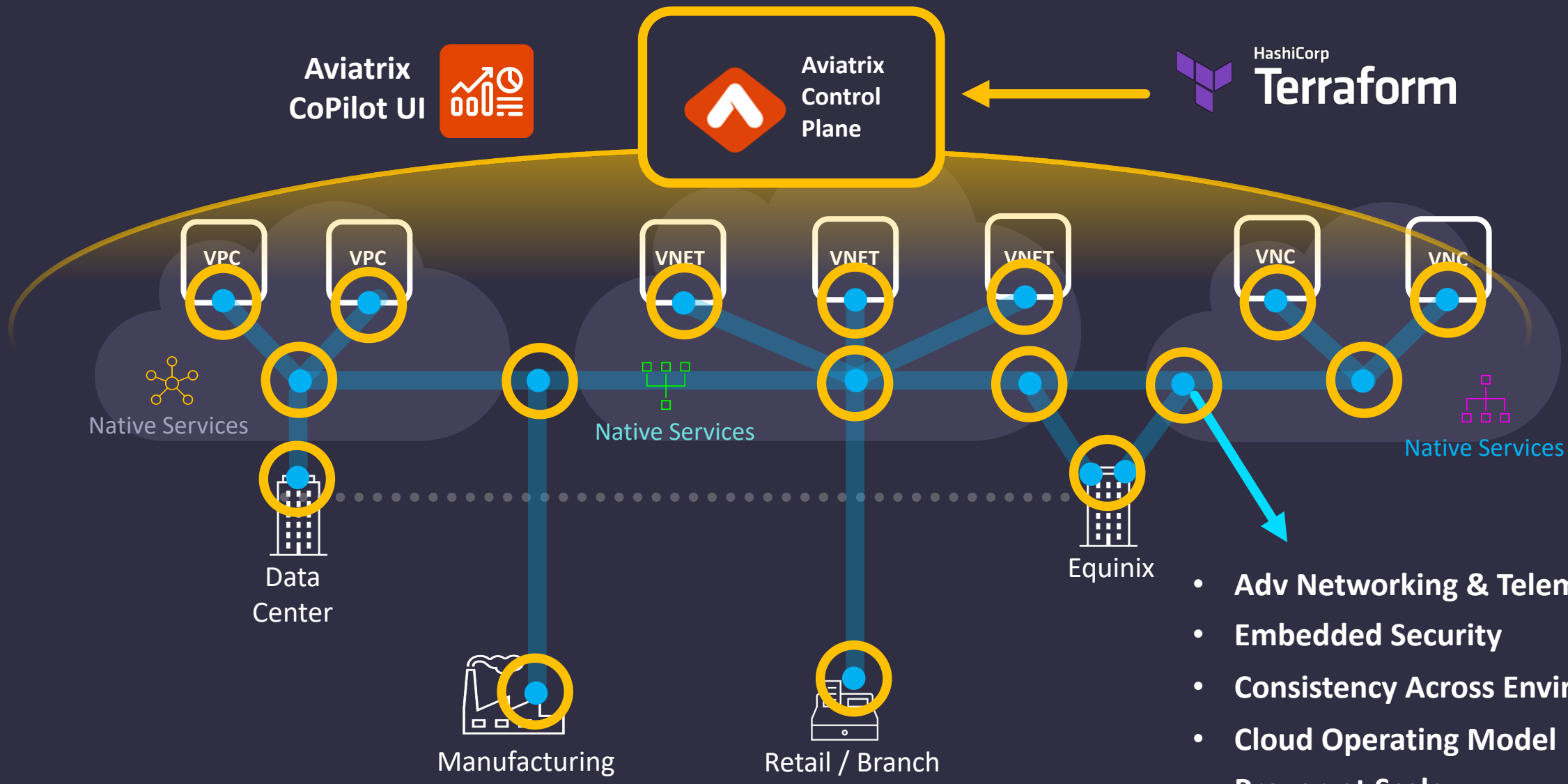
Embedding Intelligence in the Aviatrix Data Plane (SMART GWs)

- **Intelligent Routing**
  - Dynamic Traffic Engineering
- **Distributed Cloud Firewalling**
  - L4/L7, Zero-Trust Policy Approach
- **Telemetry**
  - Network, Security, and Cost
- **Load Balancing**
  - Intelligent Load Balancing, Bi-Directional Hashing
- **Additional Security**
  - IDS/IPS, URL Filtering, Vulnerability Scanning, Threat Prevention, Anomaly Detection, Geo-Fencing, etc.
- **Additional Tools**
  - Auto-scaling, Packet Capture, Ping Trace-Route



SMART: Secure, Multicloud-Aware, Application-Aware, Resilient, and Telemetry Provider

Aviatrix Secure Cloud Networking is a Programmable Distributed System



- Adv Networking & Telemetry
- Embedded Security
- Consistency Across Environments
- Cloud Operating Model
- Proven at Scale

Next: Introduction to Public Cloud Networking