ACE Professional

DAY-1

Introduction

ACE Multicloud Networking Learning Paths
The industry's first and only multicloud networking certification

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

6 Hours
Learn CSP networking basics and SAP fundamentals with a focus on S/4HANA

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 Professional – Prerequisite and How to get certified

Prerequisite:

- ACE Associate

How to get certified:

- It is necessary to score at least *90%* on the completion of the Labs (*there are 10 Labs!*)
  - ➢ Automated script will evaluate the completion of each lab
- Attend the entire course
- Complete the final Survey

<u>Certification will be then delivered after approximately 7 business days!</u>

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Agenda – Day 1

Topics	Approx. Duration	Start time
Welcome / Logistics / Agenda / Intro	0:50	9:00 AM
CoPilot UI tour	1:00	9:50 AM
Break	**0:15**	**10:50 AM**
Knowledge Check: Design exercise	0:10	11:05 AM
LAB 1: Prof-Create VPCs/VNet using CoPilot	0:25	11:15 AM
MultiCloud Network Architecture (MCNA)	0:20	11:40 AM
Transit Networking	0:40	12:00 AM
Lunch Break	**0:50**	**12:40 PM**
LAB 2: Prof-(MCNA) Transit Networking	0:35	1:30 PM
Network Segmentation	0:40	2:05 PM
LAB 3: Prof-Network Segmentation	0:25	2:45 PM
High Performance Encryption	0:25	3:10 PM
Break	**0:15**	**3:35 PM**
Multi-Region / Multi-Cloud ActiveMesh	0:40	3:50 PM
LAB 4: Prof-HPE with ActiveMesh	0:30	4:30 PM
End		**5:00 PM**

Note: Schedule might change if modules are running longer than expected.

Agenda – Day 2

Topics	Approx. Duration	Start time
Day 1 Recap (Quiz)	0:25	9:00 AM
RBAC	0:25	9:25 AM
LAB 5: Prof-RBAC	0:20	9:50 AM
Distributed Cloud Firewalll	0:50	10:10 AM
Break	**0:15**	**11:00 AM**
Security	1:00	11:15 AM
Lunch Break	1:00	**12:15 PM**
LAB 6: Prof-Egress FQDN Filtering	**0:45**	1:15 PM
LAB 7: Prof-Distributed Cloud Firewall	0:50	2:00 PM
Break	**0:15**	**2:50 PM**
Site2Cloud	1:00	3:05 PM
LAB 8: Prof-Site 2 Cloud	0:45	4:05 PM
END		**4:50 PM**

Note: Schedule might change if modules are running longer than expected.

Agenda – Day 3

Topics	Approx. Duration	Start time
Day 2 Recap (Quiz)	0:25	9:00 AM
Walkthrough of Operational features of platform (Recap)	1:00	9:25 AM
LAB 9: Ops-Network Domains	0:25	10:25 AM
LAB 10: Ops-Connection Policy	0:30	10:50 AM
Break	**0:15**	**11:20 AM**
Routes Manipulation & NAT	0:50	10:35 AM
LAB 11: Ops-Routes Manipulation & NAT	0:35	11:25 AM
Lunch Break	**1:00**	**12:00 PM**
Edge Recap	0:40	1:00 PM
Operational Best Practices	0:30	1:40 PM
Break	**0:15**	**2:10 PM**
Let's Design Together! (breakout rooms)	1:30	2:25 PM
Survey + Closing Open Forum	0:25	3:55 PM
End		**4:20 PM**

Note: Schedule might change if modules are running longer than expected.

Microphone check:
What is your desired outcome of this training?

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What is Aviatrix?

Business-Critical Applications
Require Business-Critical Infrastructure

APPS

Advanced Cloud Infrastructure

Workload & Performance Mgt Software

Data & Analytics Software

Automation Software

Networking & Security Software

DATADOG

snowflake

HashiCorp

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aws

Azure

Google Cloud

ORACLE
Cloud Infrastructure

Alibaba Cloud
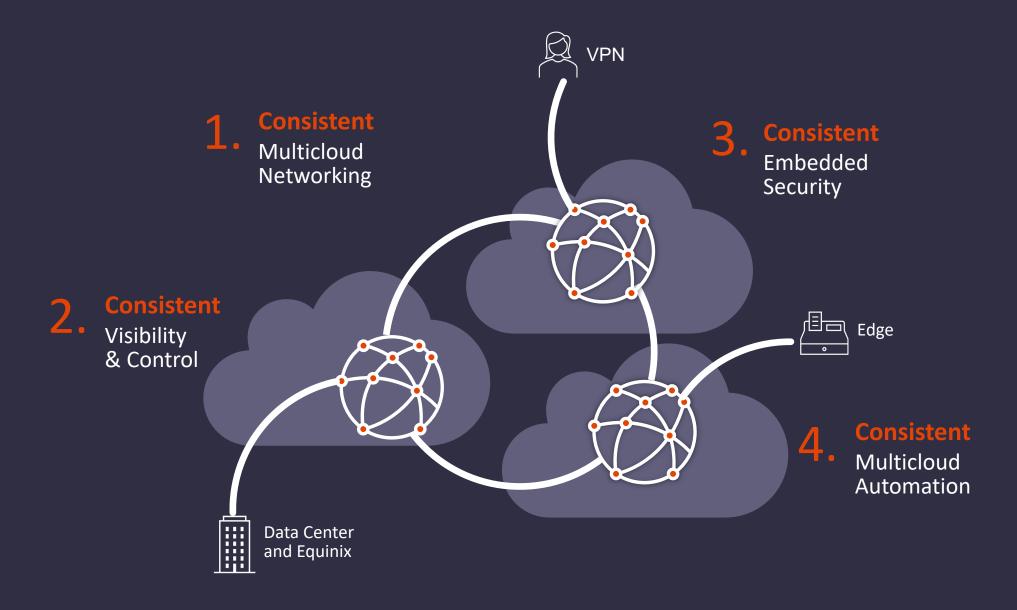
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Secure Cloud Networking™

What is it?

Aviatrix Upgrades
Native Cloud
Networking

1. **Consistent** Multicloud Networking

2. **Consistent** Visibility & Control

3. **Consistent** Embedded Security

4. **Consistent** Multicloud Automation

VPN

Edge

Data Center and Equinix

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Top Pains Aviatrix Relieves – What's Yours?

1. Multicloud Networking

- Overlapping IP CIDRs, Overlay IP (SAP/AWS)
- Multicloud Automated Route Propagation
- BGP Into Cloud / Traffic Engineering
- Extending Cloud Ops Model to Edge / Equinix

2. Operational Visibility & Control

- Network Flow Analytics
- Dynamic Topology Mapping
- Packet Capture, Ping, Traceroute
- CostIQ Shared Services Cost Allocation

3. Security Risks and Costs

- Distributed Firewalling IN the network
- High-Performance Encryption (up to 100 Gbps)
- NGFW Service Insertion
- Automated Threat Detection and Mitigation

4. Multicloud Simplicity, Agility, Speed

- Beyond Native Cloud Connectivity
- IN the cloud, not just TO the cloud
- Multicloud Terraform Provider
- Self-Service Portal e.g. ServiceNow

SAP Migrations | Customer Onboarding | Acquisition Integrations | Skills Shortage | Resource Efficiency

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What Makes
Aviatrix
Unique?

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Aviatrix Cloud Networking Platform

Secure Cloud Networking optimizes business-critical application availability, performance, security, and cost.

Multicloud Networking

Operational Visibility

Programmable Intent

Embedded Telemetry and Distributed Control

Aviatrix CoPilot™

Aviatrix Cloud Fabric

Aviatrix AirSpace | Distributed Data Plane
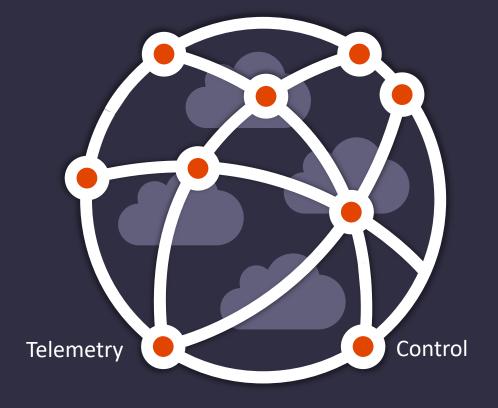
Embedded Telemetry
See Everything

- Network Traffic Telemetry
- Security Telemetry
- Cost Telemetry
- Application Telemetry

Distributed Control
Control Everything

- Distributed Firewalling
- Intelligent Traffic Control

Aviatrix Cloud Fabric

Telemetry

Control

Aviatrix CoPilot | **Programmable Intent**

IF < DEFINED TRAFFIC IS SEEN >
THEN < EXECUTE INTENDED ACTION >
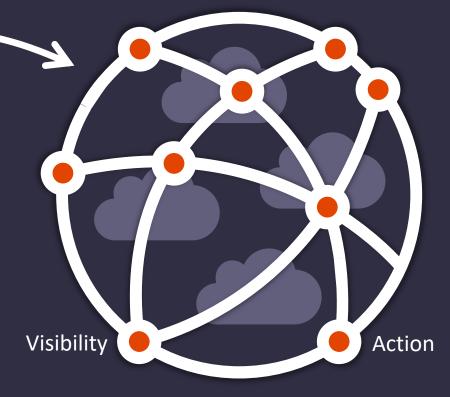
Aviatrix Cloud Fabric

Security Actions
- Block or Allow
- Network Segmentation
- Micro Segmentation
- Domain Name Filtering
- Threat Detection and Mitigation
- Anomaly Detection

Traffic Control Actions
- Optimize Path
- Low-Cost Path
- High-Performance Path
- Packet Capture
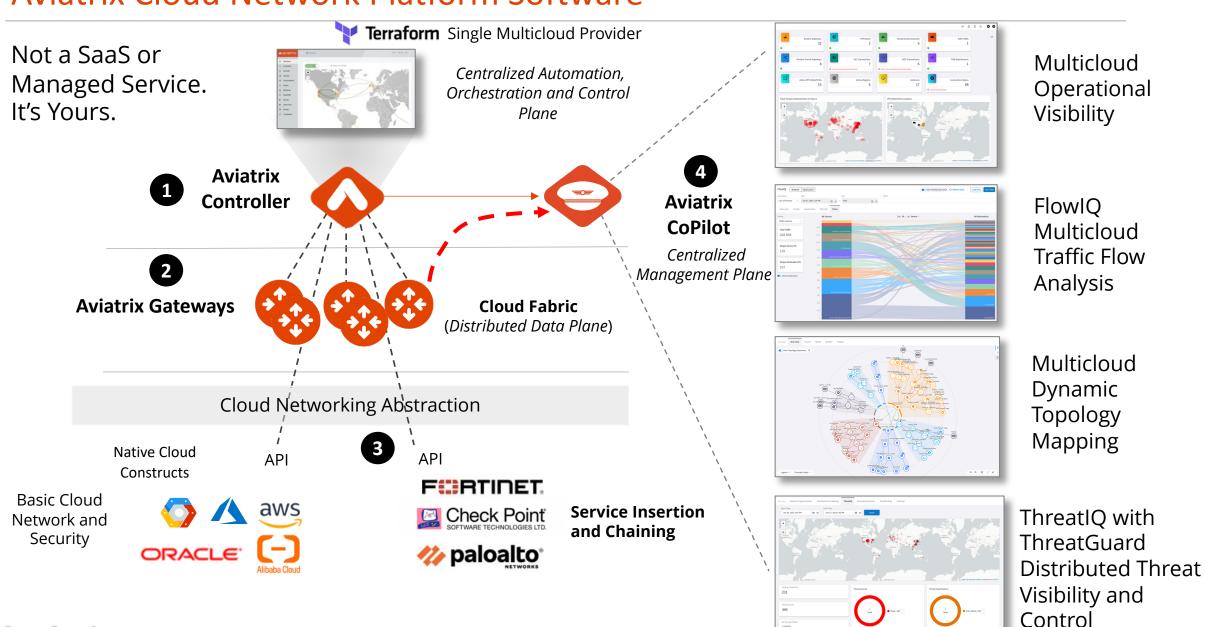- Log for Audit
- Direct to Honey Pot

Visibility

Action

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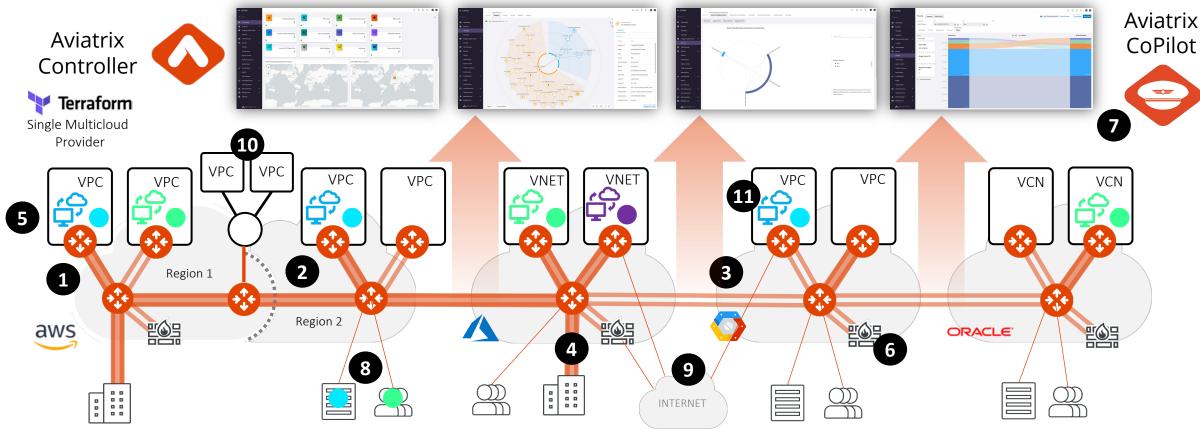
Aviatrix Solution Components

Aviatrix Cloud Network Platform Software

Terraform Single Multicloud Provider

Not a SaaS or Managed Service. It's Yours.

Centralized Automation, Orchestration and Control Plane

(1) Aviatrix Controller

Multicloud Operational Visibility

(4) Aviatrix CoPilot
Centralized Management Plane

FlowIQ Multicloud Traffic Flow Analysis

(2) Aviatrix Gateways

Cloud Fabric
(Distributed Data Plane)

Multicloud Dynamic Topology Mapping

Cloud Networking Abstraction

Native Cloud Constructs

API (3) API

Basic Cloud Network and Security

FORTINET

Check Point SOFTWARE TECHNOLOGIES LTD.

Service Insertion and Chaining

ORACLE
Alibaba Cloud
aws

paloalto NETWORKS

ThreatIQ with ThreatGuard Distributed Threat Visibility and Control

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Aviatrix – Foundation of Your Multicloud Networking and Security

1. Single Cloud
   Multi-Account
   High-Availability (Active-Active)
   End-to-End Encryption
   Network Correctness

2. Multi-Region

3. Multicloud Repeatable Design

4. High-Performance Encryption

5. Network Segmentation

6. Service Insertion & Chaining

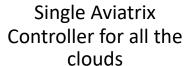7. Enterprise Operational Visibility

8. Secure Cloud Access

9. Secure Ingress and Egress

10. Cloud-Native

11. Distributed Cloud Firewall

Aviatrix Controller

Single Aviatrix Controller for all the clouds

Do not need to sign a separate licensing agreement with Aviatrix to get started

Controller can be launched from any cloud provider's Marketplace (Pay-As-You-Go/metered: Best for PoC and single use case)

You can also use your Cloud Provider Credits (like AWS Marketplace credits)

Enterprise Agreement: Production deployment (most enterprises)

Next: Walkthrough of CoPilot UI

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