

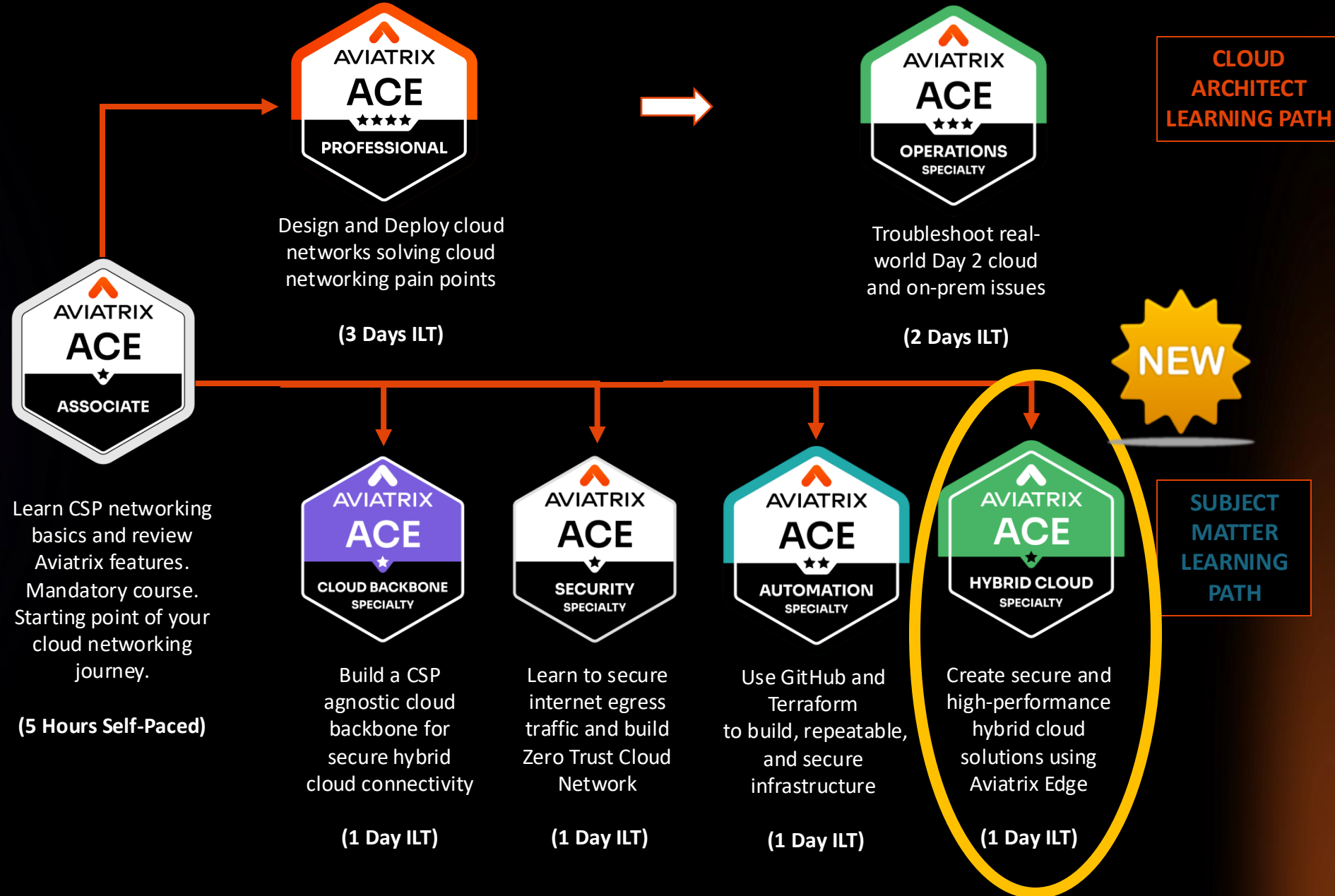


ACE Professional

DAY 1

ACE Team

ACE Learning Paths



ILT = Instructor Led Training



Meet the Solutions Architects – ACE Europe

Joe Amendolara

Joe Amendolara serves as a Senior Solutions Architect - ACE at Aviatrix, where he brings a wealth of expertise in network engineering and design. As a Cisco Certified Internetwork Expert (CCIEx4, HCIE), he possesses profound technical knowledge and mastery of advanced networking concepts.

Before joining Aviatrix, Joe held prominent roles at Orange Business Services as a Senior Infrastructure Integration Solution Consultant and at Huawei Technologies as an IP Solution Sales Manager. His extensive experience also includes key positions at Whirlpool Corporation and Dimension Data, where he refined his skills in network engineering and service delivery management.

Joe's technical acumen encompasses a diverse range of areas, including:

- ❑ Multicloud Networking and Security
- ❑ QoS and Multicast Implementation
- ❑ IPv6 Solutions Deployment
- ❑ Cisco ACI (Application Centric Infrastructure)



<https://linkedin.com/in/joe-amendolara>

ACE Professional – Prerequisite and How to get certified

Prerequisite:

- ACE Associate

Certification Requirements:

To achieve certification, you must fulfil the following criteria:

- 1. Lab Completion:** Successfully complete at least **80%** of the labs, which equates to approximately 9 out of 12 labs. An automated script will assess the completion status of each lab.
 - 2. Course Attendance:** Full attendance is mandatory. Missing any class session will be considered a "no-show" for the entire course.
 - 3. Final Survey Completion:** You are required to complete a brief final survey, which should take no more than 3 minutes.
- By adhering to these guidelines, you will be well on your way to obtaining your certification.
- **The certification will be issued approximately seven business days after the final day of training.**



The ACE Associate certification is a mandatory step

- You are welcome to attend the training, but the ACE Associate certificate is a must to get the ACE-Pro certificate
- If after successfully finishing this training, should you proceed to attain ACE-Associate certification, kindly reach out to ace@aviatrix.com to request your ACE-Pro certificate

It is a manual process and can take a minimum 5 business days

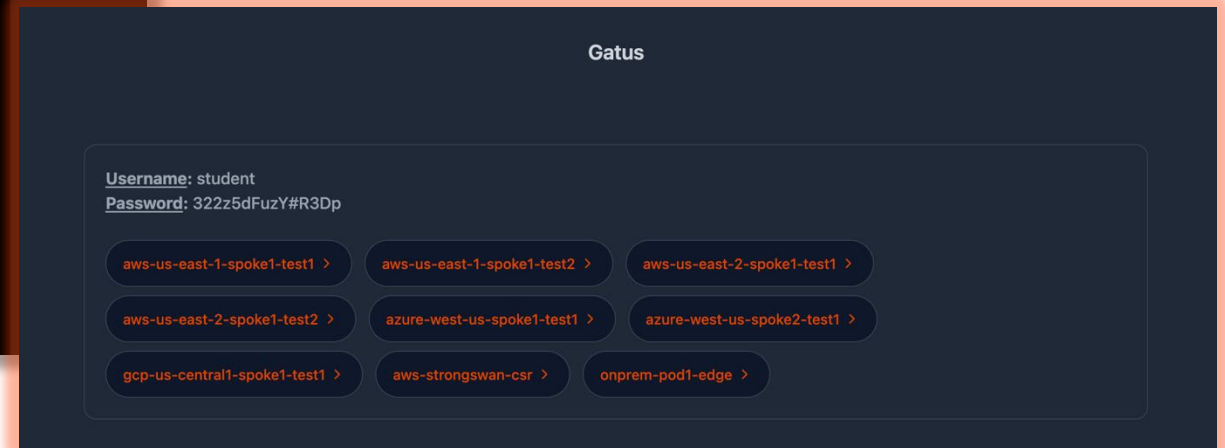
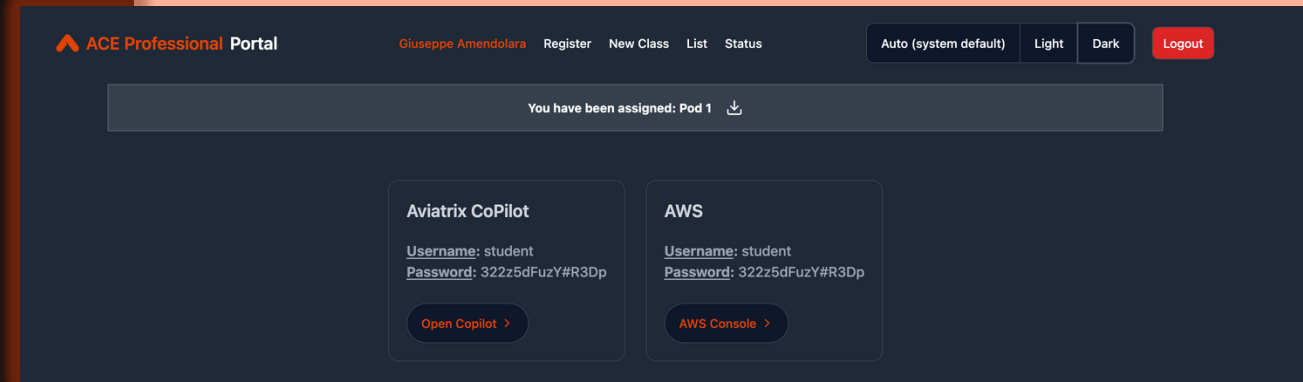
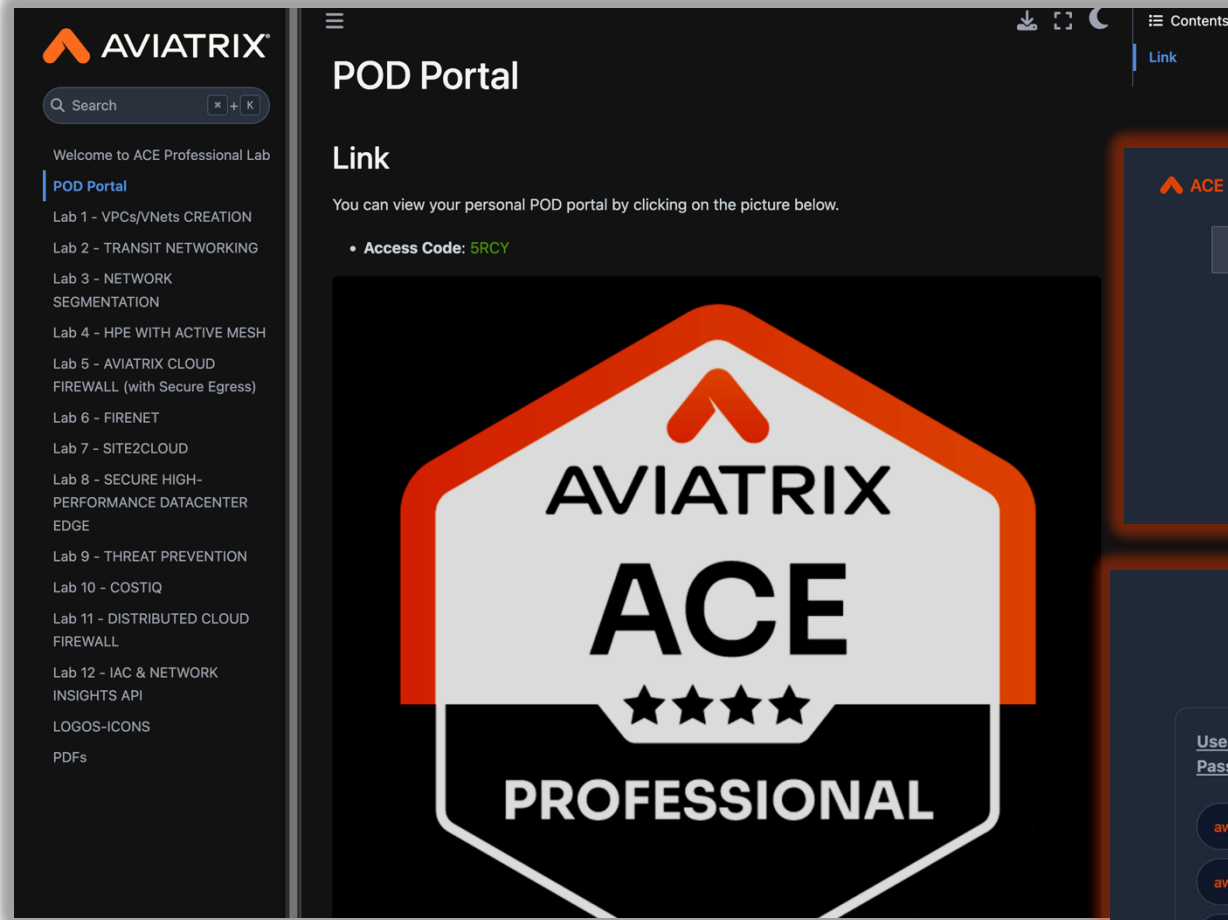


LAB POD Policy

- LAB POD will be destroyed if a person doesn't show up on day1.
- If a person shows up on day2, they can attend the training without the LAB POD.
- They will not be issued the ACE-Pro Cert.

Warm-Up (very important!)

- POD Portal: <https://docs.aviatrixlab.com/ace-pro/docs/home.html>



Agenda – ACE PRO Day 1



Topics	Approx. Duration	Start time
Welcome / Logistics / Agenda / Intro / Warm-Up	0:50	9:00 AM
CoPilot UI tour	1:00	9:50 AM
Break	0:15	10:50 AM
LAB 1: Create VPCs/VNet using CoPilot	0:30	11:05 AM
MultiCloud Network Architecture (MCNA)	0:20	11:35 AM
Transit Networking	0:50	11:55 AM
Lunch Break	1:00	12:45 PM
LAB 2: (MCNA) Transit Networking	0:55	1:45 PM
Network Segmentation	0:30	2:40 PM
LAB 3: Network Segmentation	0:30	3:10 PM
Break	0:15	3:40 PM
High Performance Encryption - HPE	0:25	3:55 PM
Multi-Region /Multicloud ActiveMesh	0:40	4:20 AM
End		5:00 PM

Agenda – Day 2



Topics	Approx. Duration	Start time
Day 1 Recap (Quiz)	0:20	9:00 AM
LAB 4: HPE with ActiveMesh	0:50	9:20 AM
Security	0:50	10:10 AM
Break	0:15	11:00 AM
LAB 5: Aviatrix Cloud Firewall	0:50	11:15 AM
Firewall Network - FireNet	0:45	12:05 PM
Lunch Break	1:00	12:50 PM
LAB 6: Firewall Network with PAN	0:55	1:50 PM
Site2Cloud	1:00	2:45 PM
Break	0:15	3:45 PM
LAB 7: Site2Cloud	0:30	4:00 PM
LAB 8: Aviatrix Edge	0:30	4:30 AM
END		5:00 PM

Agenda – Day 3



Topics	Approx. Duration	Start time
Day 2 Recap (Quiz)	0:20	9:00 AM
ThreatIQ and CostIQ	0:20	9:20 AM
LAB 9 : Threat Prevention	0:30	9:40 AM
LAB 10 : CostIQ	0:20	10:10 AM
Distributed Cloud Firewall	0:50	10:40 AM
Break	0:15	11:30 AM
LAB 11: Distributed Cloud Firewall	1:15	11:45 AM
laC and Network Insights API	0:20	1:00 PM
Lunch Break	1:00	1:20 PM
LAB 12: laC and Network Insights API	0:25	2:20 PM
Design Exercise Recap	0:20	2:45 PM
Break	0:15	3:00 PM
Let's Design Together! (breakout rooms)	1:00	3:15 PM
Design Presentations	0:30	4:15 PM
Survey + Closing	0:15	4:45 PM
End		5:00 PM



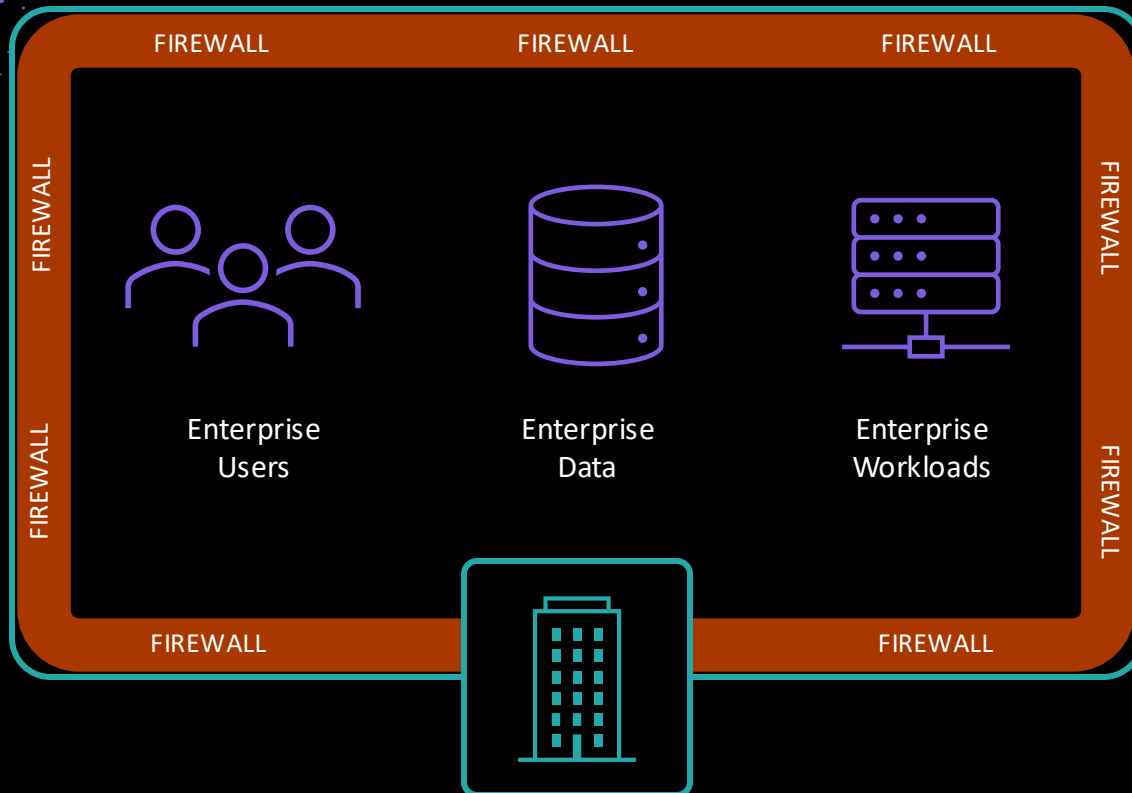
Who we are? What we do?

The Cloud Security Challenge

SECURING THE NEW ATOMIZED CLOUD PERIMETER

The Enterprise Network

A physical building with a cable to the Internet



The Cloud Network

A highly dynamic and distributed environment



The New Perimeter

Every Virtual Private Cloud (VPC), Kubernetes cluster, serverless function, PaaS service, and API endpoint

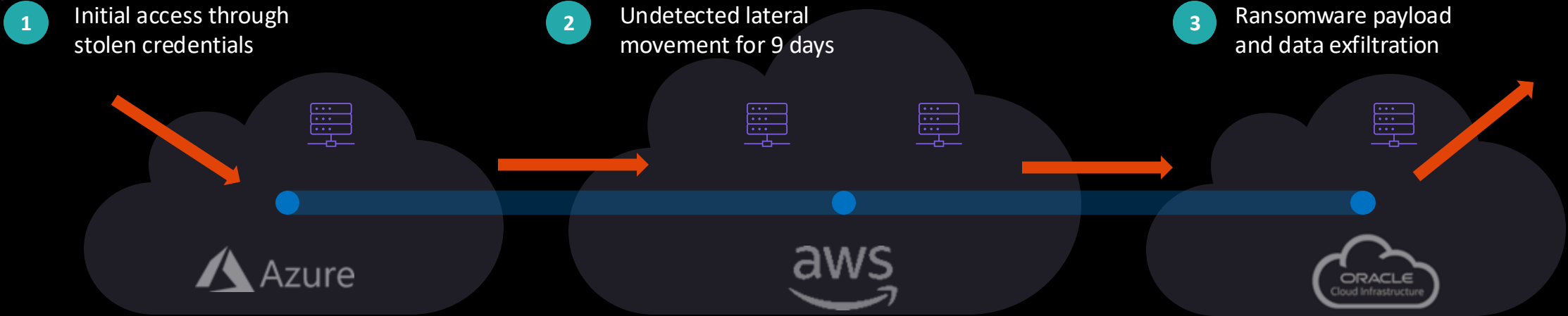
Anatomy of Today's Threats

RECENT SUCCESSFUL ATTACKS ARE FOLLOWING THE SAME PATTERNS

Identity Compromise

Lateral Movement

Total Chaos

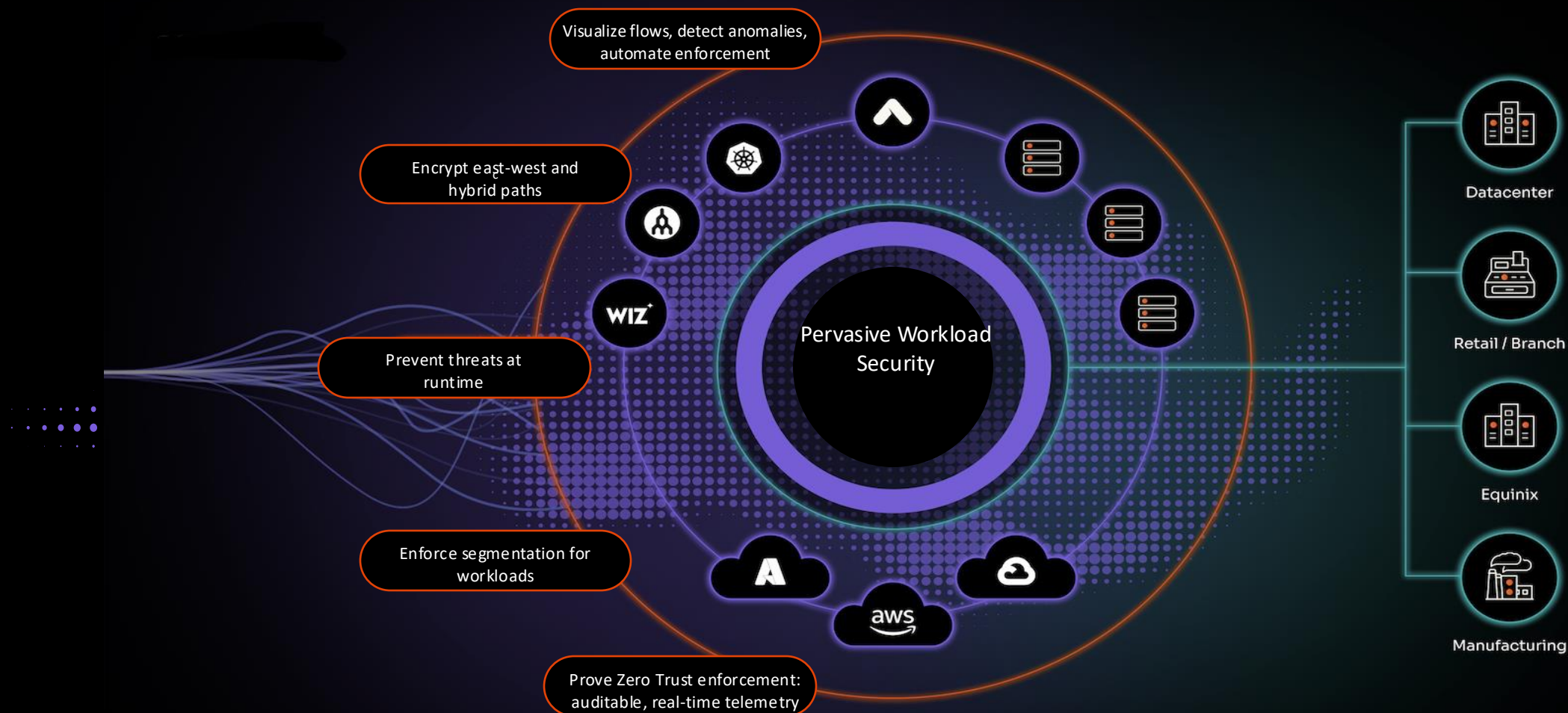


UHG Operational Disruption and Impact

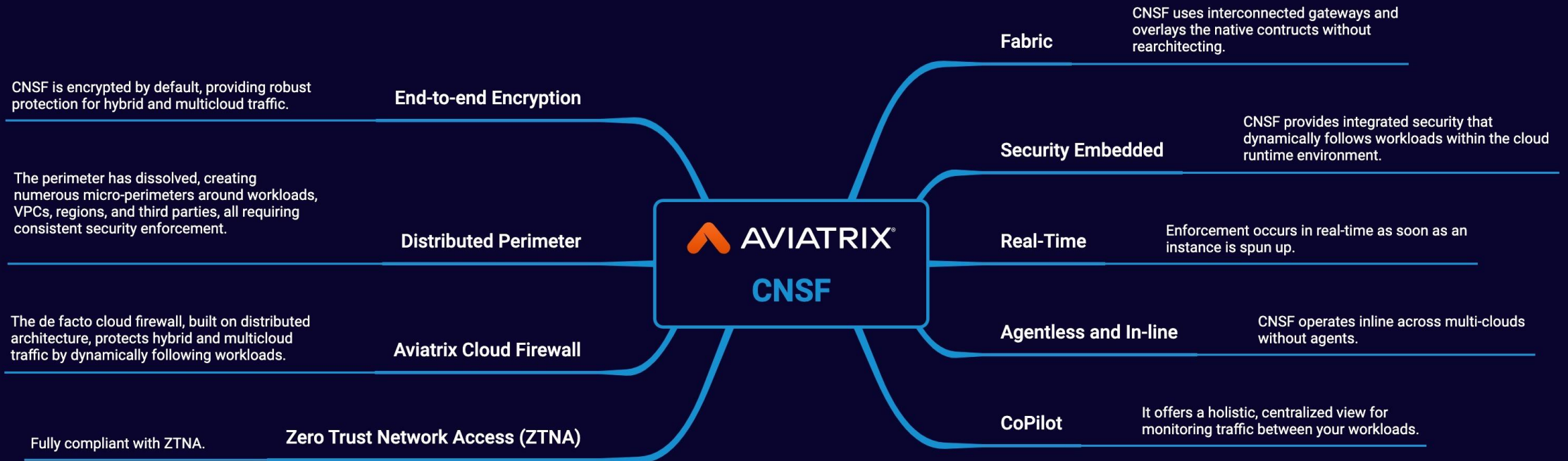
- **\$22M ransom paid in Bitcoin** — yet stolen data remains in the hands of threat actors, signaling a failed containment
- **190 million Americans exposed**, including full identity profiles (names, DOBs, SSNs, driver's license numbers) — the largest healthcare breach in U.S. history
- **Nationwide halt in claims processing** disrupted patient care and provider payments for weeks — forcing Congressional intervention and federal investigation
- **\$3.96B in damages reported** — including \$3.09B in remediation and \$867M in operational losses, with long-tail legal and reputational fallout still unfolding

The Solution – “Security From The Inside Out”

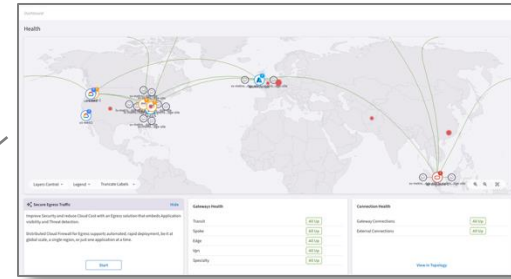
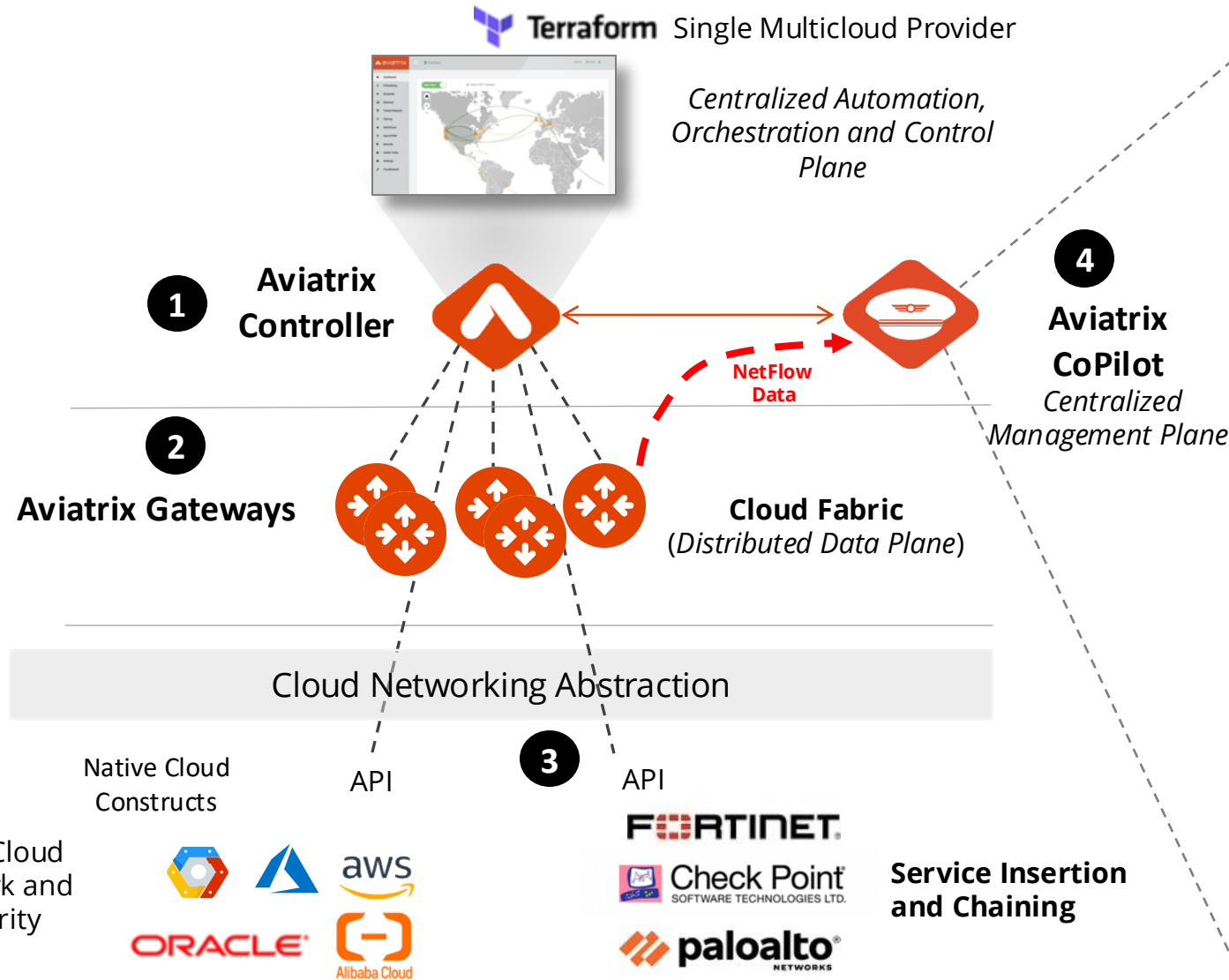
CLOUD NATIVE SECURITY: EMBEDDED, NOT BOLTED ON



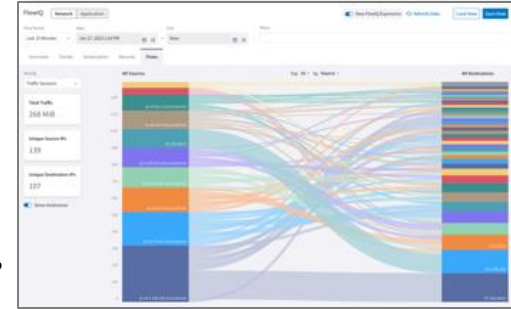
CNSF – Characteristics



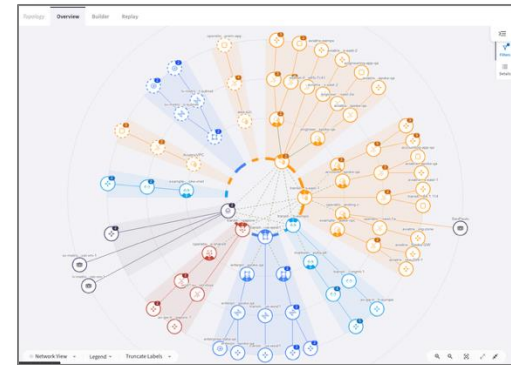
Aviatrix Cloud Native Security Fabric (Enterprise)



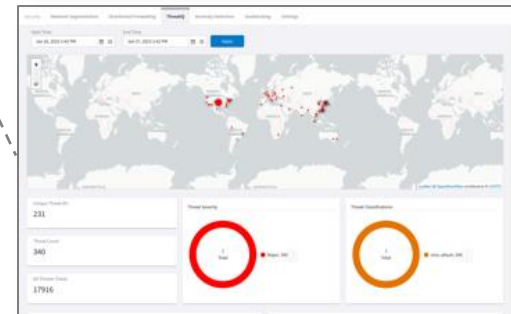
Multicloud
Operational
Visibility



FlowIQ
Multicloud
Traffic Flow
Analysis



Multicloud
Dynamic
Topology
Mapping



ThreatIQ



There are two products: Aviatrix Enterprise and Aviatrix PaaS

Aviatrix – Characteristics of the Cloud Native Security Fabric (CNSF)

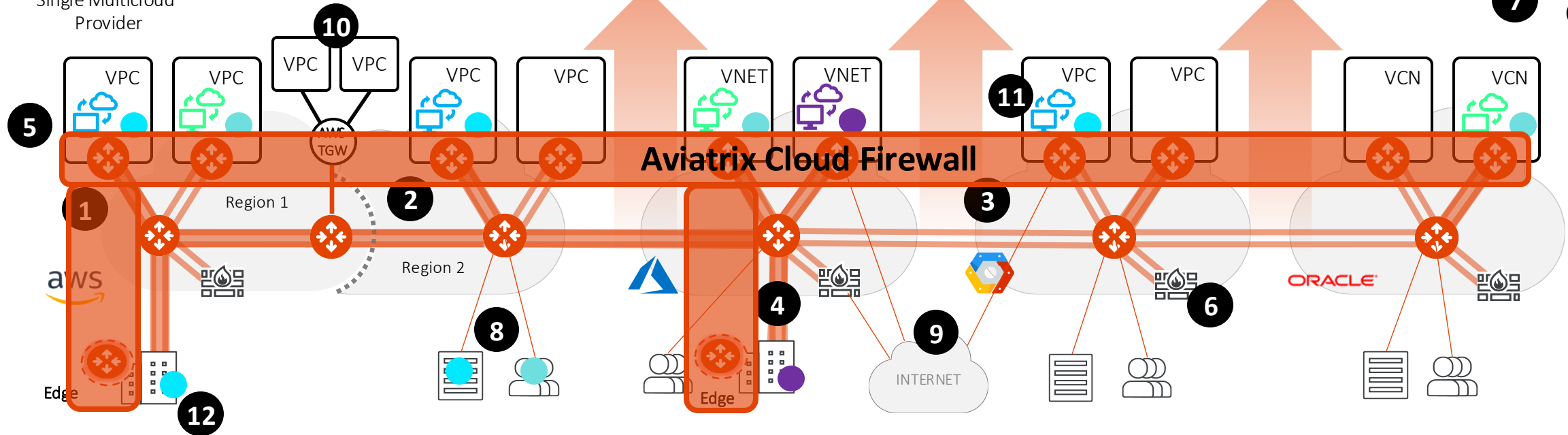
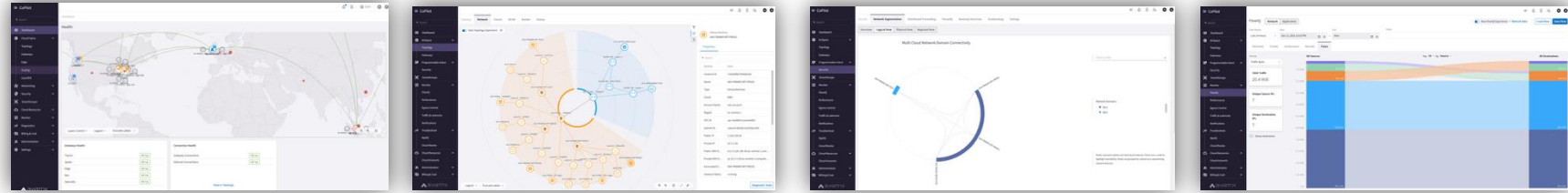


Aviatrix
CoPilot

Aviatrix
Controller



Terraform
Single Multicloud
Provider



1. Single Cloud
Multi-Account
High-Availability (Active-Active)
Secure Hybrid-Cloud Connectivity

2. Multi-Region

3. Repeatable Design

4. High-Performance Encryption

5. Network Segmentation
(aka Macro-Segmentation)

6. Service Insertion & Chaining

7. Enterprise Operational Visibility

8. Secure Cloud Access
(User VPN)

9. Aviatrix Cloud Firewall
(Secure Cloud Egress)

10. Cloud-Native

11. Micro-Segmentation

12. Distributed Cloud Firewall

13. Secure High-Performance
Datacenter Edge

 Abbott	 abbvie	 Adobe	 Aflac	 ABInBev	 APPTIO		 AVIS Budget	 BAKER HUGHES a GE company	 BankUnited
 BHP	 Biogen	 BNY MELLON	 CHOICE HOTELS	 CENTENE Corporation	 CHANGE HEALTHCARE	 chewy.com	 CHS	 Constellation Brands	 covetrus
 Cummins	 DELL	 dōTERRA	 DXC TECHNOLOGY	 e.on	 FACTSET	 FEMA	 Ford	 Genworth	 GN
 GUIDEWIRE	 Heineken	 Home Office	 IHG	 Informatica	 inmarsat	 Johnson Controls	 Jefferies	 Lufthansa Systems	 lululemon
 LG	 Mercedes-Benz	 NASA	 navitaire an amadeus company		 NIKE	 PACCAR	 pwc	 Raytheon Technologies	 RheinEnergie
 Roche	 salesforce	 SIEMENS	 splunk	 Takeda	 THALES	 UNITED AIRLINES	 VERINT	 WIX	 YARA



Next: Walkthrough of CoPilot UI