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Cloud Backbone

HYBRID CONNECTIVITY

<Instructor Name>

ACE Solutions Architect

AGENDA

01 **AVIATRIX OVERVIEW**
Intro
Multicloud Network Architecture

02 **CLOUD BACKBONE**

03 **EDGE**
Extend Cloud to the edge
Equinix Edge

04 **ENTERPRISE ARCHITECTURES**

05 **DEMO & LAB**

Aviatrix Overview

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Building a Secure Cloud Network for the Ages

- Pioneers and experts in Networking, Security and Cloud technologies
- Recognized leader in emerging multicloud networking software market
- Enterprise-grade networking with security, agility and cost optimization
- Optimizes all major clouds for performance, security, service delivery
- Networking 600+ of the world's most innovative and recognized companies
- 10+% of Fortune 500 and 70 of Global 2K enterprises run on Aviatrix
- Global presence with 24x7 support
- "Customer for Life" philosophy

Customer / Partner for Life

Realized Value > Cost

Predictability of Outcome & Cost

Architecture Matters

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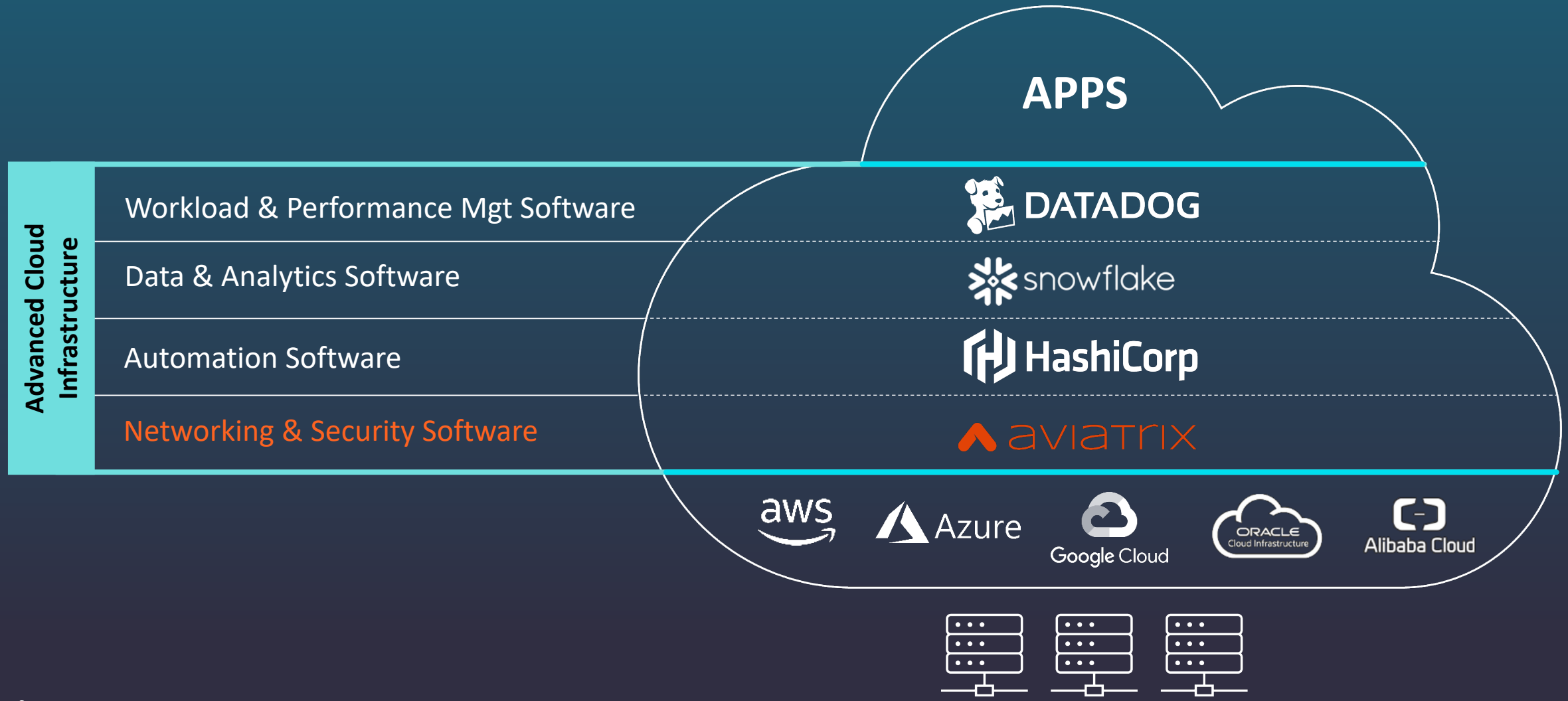
Abbott
abbvie
Adobe
Aflac
ABInBev
APPTIO
Audi
AVIS Budget
BAKER HUGHES a GE company
BankUnited
BHP
Biogen
BNY MELLON
CENTENE Corporation
CHANGE HEALTHCARE
Charter COMMUNICATIONS
chewy.com
CHS
Constellation Brands
covetrus
Cummins
DXC TECHNOLOGY
dentsu
e·on
FACTSET
FEMA
Ford
Genworth
GN
GUIDEWIRE
Heineken
Home Office
Informatica
inmarsat
Johnson Controls
Jefferies
Lufthansa Systems
lululemon
Mercedes-Benz
NASA
navitaire an AMADEUS company
NetApp
NIKE
PACCAR
pwc
Raytheon Technologies
RheinEnergie
Roche
SIEMENS
splunk>
Takeda
teradata.
THALES
UNITED AIRLINES
ULTA BEAUTY
VERINT
WiX
YARA

Today's Cloud Operating Model Requires Advanced Cloud Services & Infrastructure



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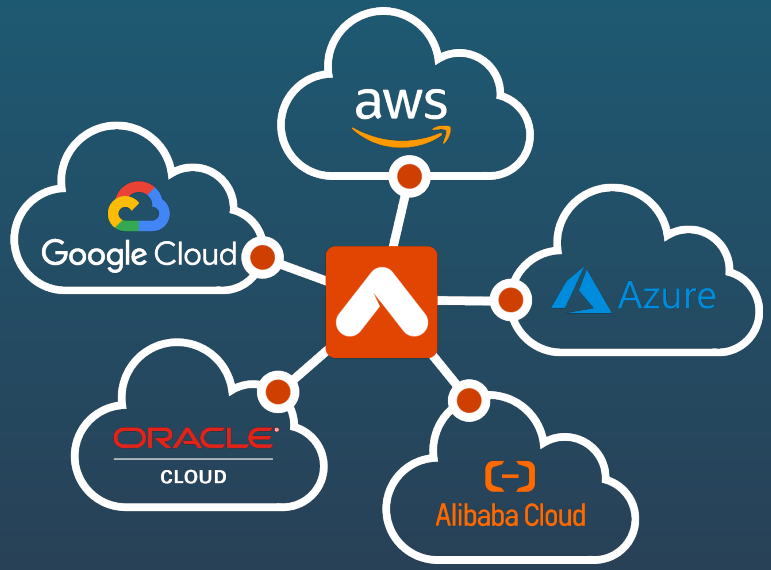
Cloud Networking is Fundamentally Different and Difficult

- Mission critical applications require a secure and stable infrastructure
- Business downtime costs millions and reputational risk
- Limited cloud native functionality puts your business at risk
- Skill gaps slow down cloud adoption and costs IT cycles
- Cloud Native Networking is complex, unintuitive and is unique within each cloud
- Today's cloud operating model requires a purpose-built solution for cloud networking and security



"In the Cloud… good enough is no longer good enough."

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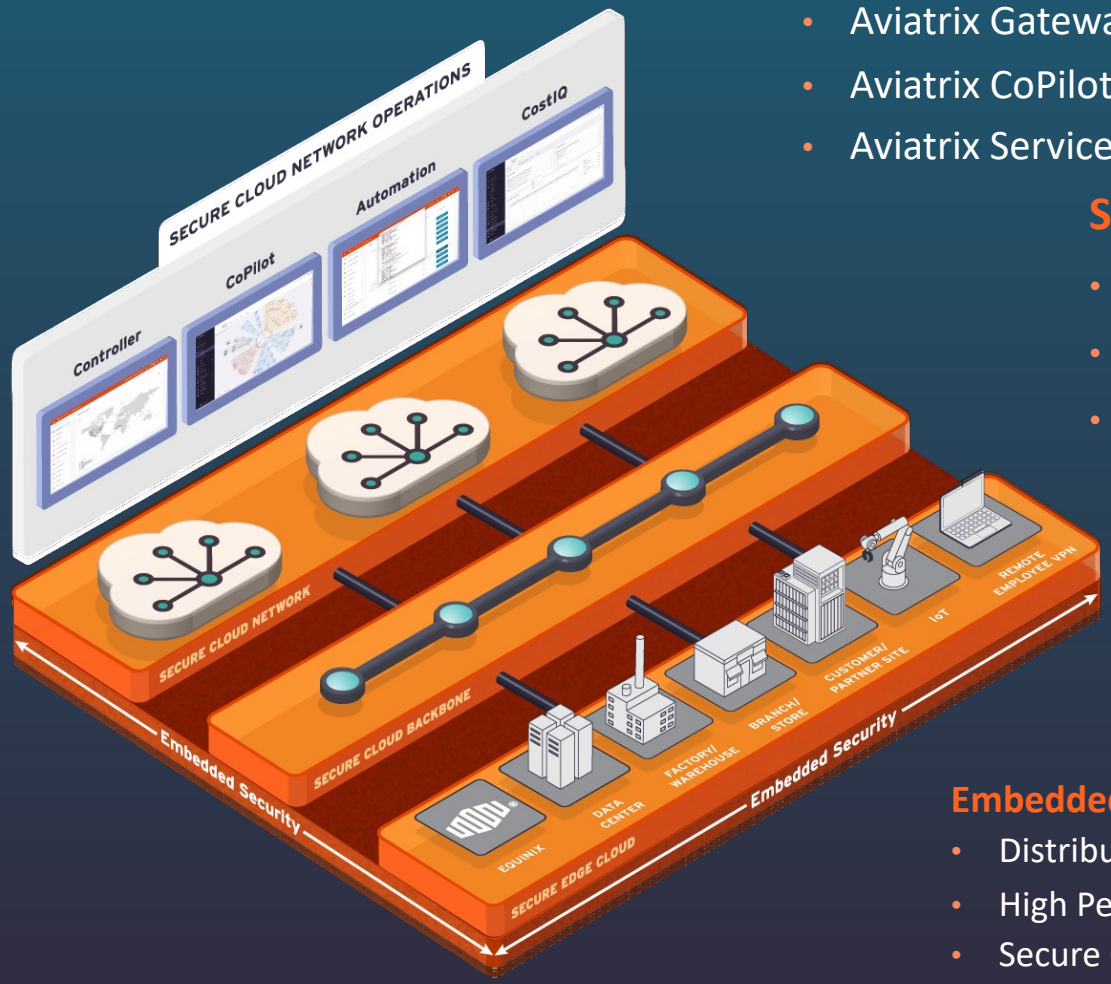
Aviatrix Secure Cloud Networking

Cloud Agility and Automation with Enterprise-Grade Resiliency and Security



Secure Cloud Network

- Aviatrix Gateway distributed multicloud dataplane with embedded security
- Aviatrix CoPilot centralized network and security operations center
- Aviatrix Service Provider terraform for IaC module development

Secure Cloud Backbone

- High-performance multicloud transit networking
- Enterprise-grade operations and troubleshooting
- Advanced, embedded zero-trust security

Secure Edge Cloud

- Extends cloud operational model to edge locations
- Enterprise: High-performance encryption between cloud and on-prem
- Equinix Edge: Deployed on hosted Equinix Network Edge platform

Embedded Security

- Distributed Cloud Firewalls
- High Performance Encryption – up to 100 Gbps
- Secure Cloud Egress
- Distributed Threat Protection and Prevention
- L7 Firewall Service Insertion

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Top Aviatrix Customer Use Cases

Datacenter Evacuation | Mission-Critical Apps | M&A Integration | Multicloud

Our Products

Secure Cloud Networking

Embedded Cloud Network Security

Secure Cloud Network Edges

Cloud Network & Security Operations

Advanced Technical Services

Single or Multicloud Environments

Our Solutions

Secure Cloud Networking

Secure Egress

Secure Cloud Backbone

Secure Cloud Edge

Secure Cloud Networking for SPs

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Multicloud Network Architecture (MCNA)

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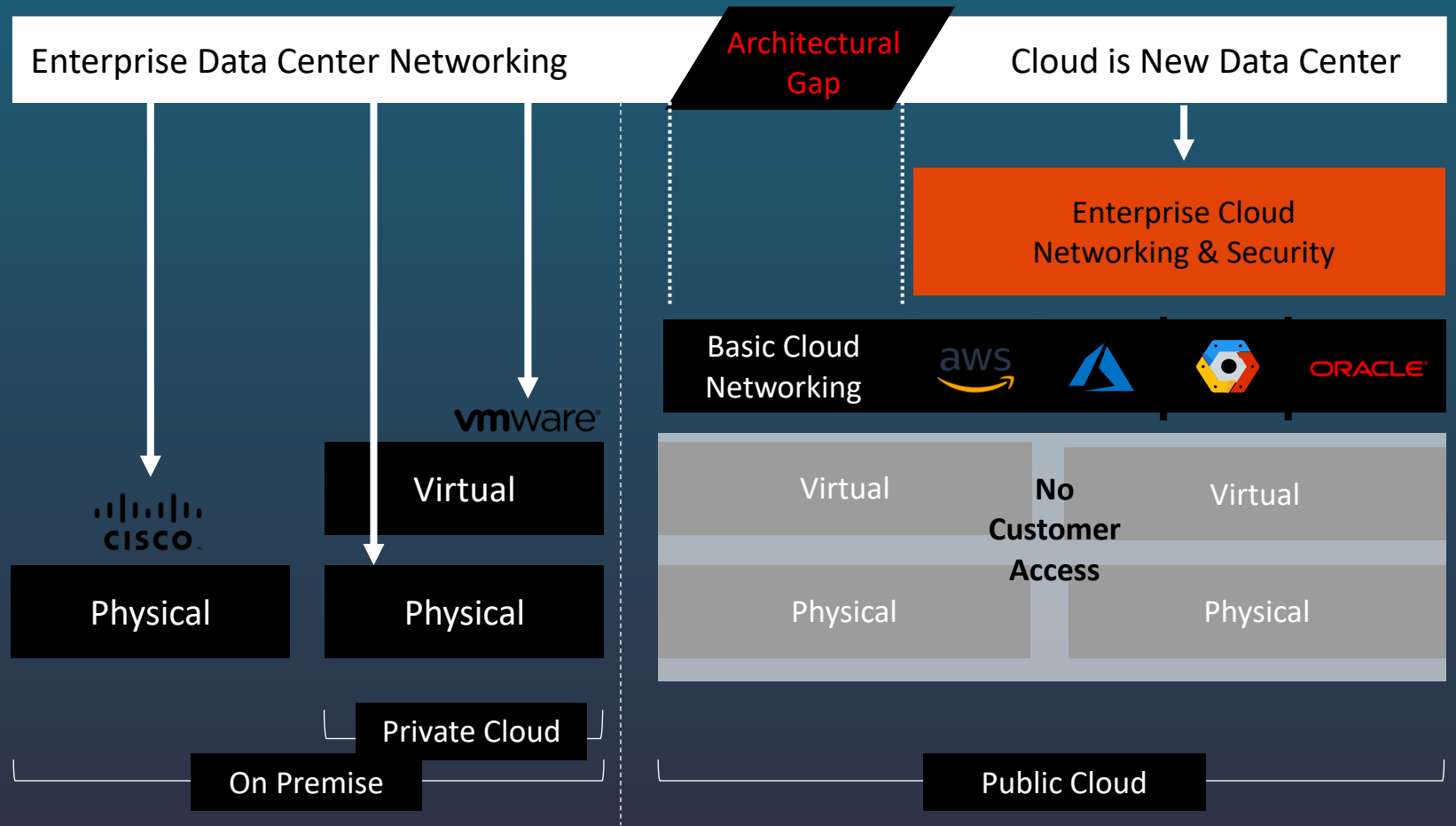
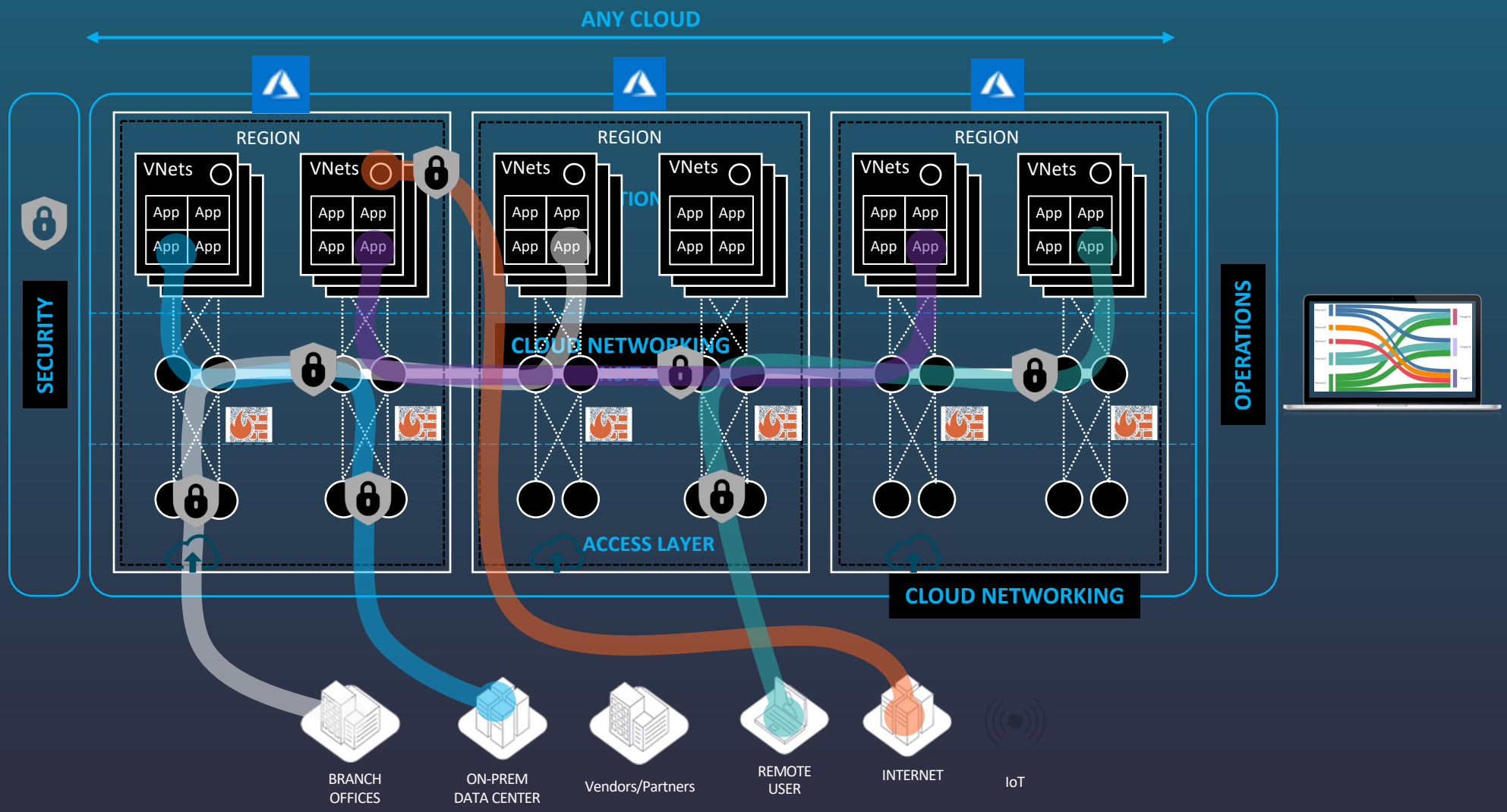
Enterprise Cloud Network Architecture?

Multi-Cloud Networking



Cloud Network Reference Architecture

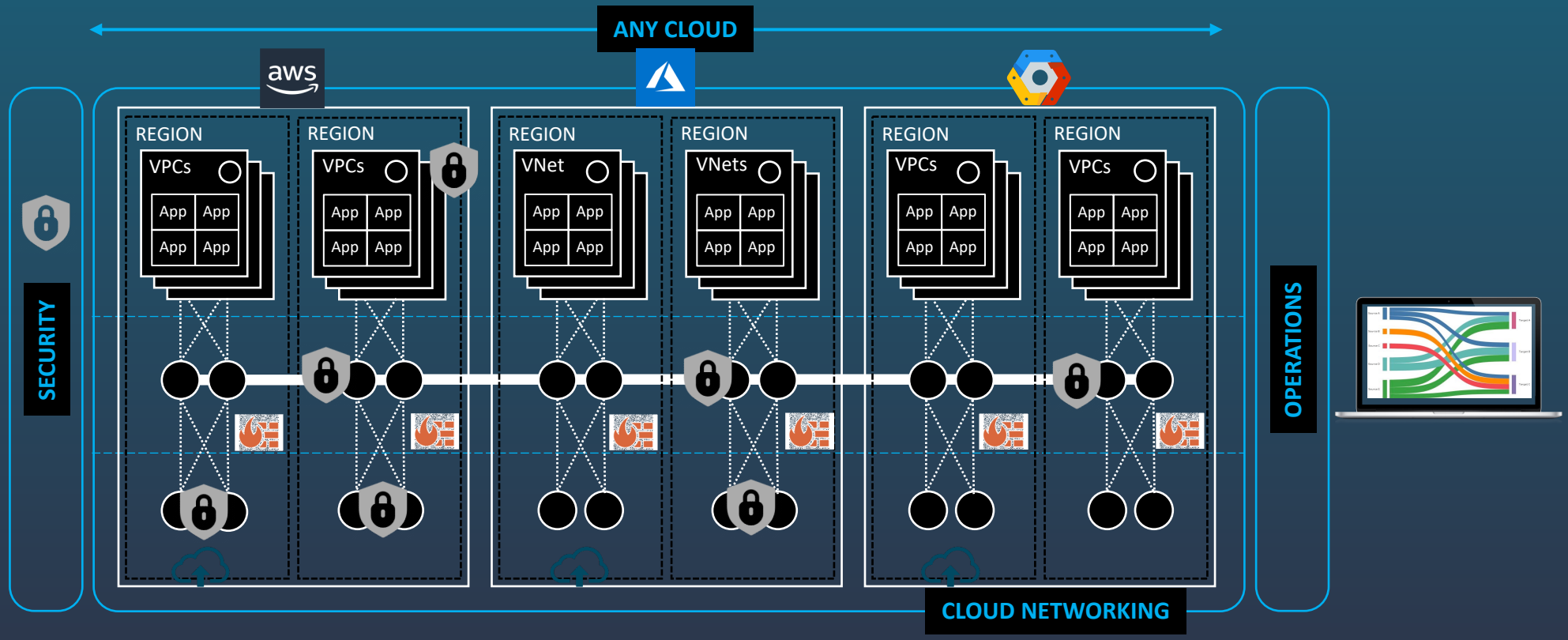
- Single Cloud, Multi-Region, Multi-Account
- Repeatable Network Design & Infrastructure as Code Automation
- Service Insertion & Chaining
- Consistent Security Policy
- Common Operational Visibility and Control



Multi-Cloud Network Architecture (MCNA)

- **The Blueprint of Your Multi-Cloud Network Design**

- **Single Cloud, Multi-Region, Multi-Account**
- **Repeatable Network Design & Infrastructure as Code Automation**
- **Service Insertion & Chaining**
- **Consistent Security Policy**
- **Common Operational Visibility and Control**



Aviatrix Platform Components

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Aviatrix Software

Aviatrix Controller

The Brain. Software download from CSP Marketplaces.
Only one required, manages control plane, never in data plane

Aviatrix Gateways

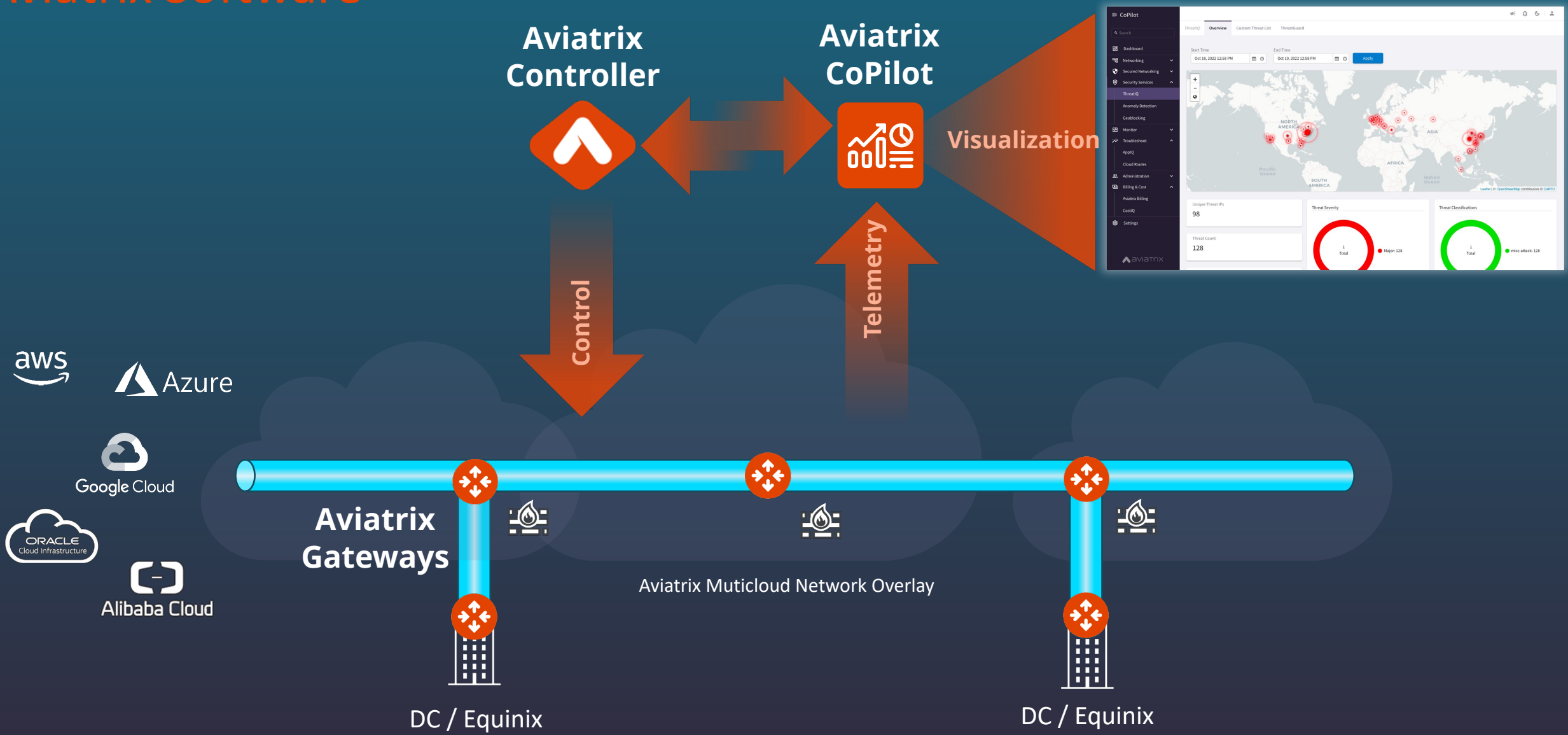
Foundation of Aviatrix Multicloud data plane. Operates on cloud compute.

Advanced cloud network routing, network telemetry, traffic inspection and policy enforcement

Aviatrix CoPilot

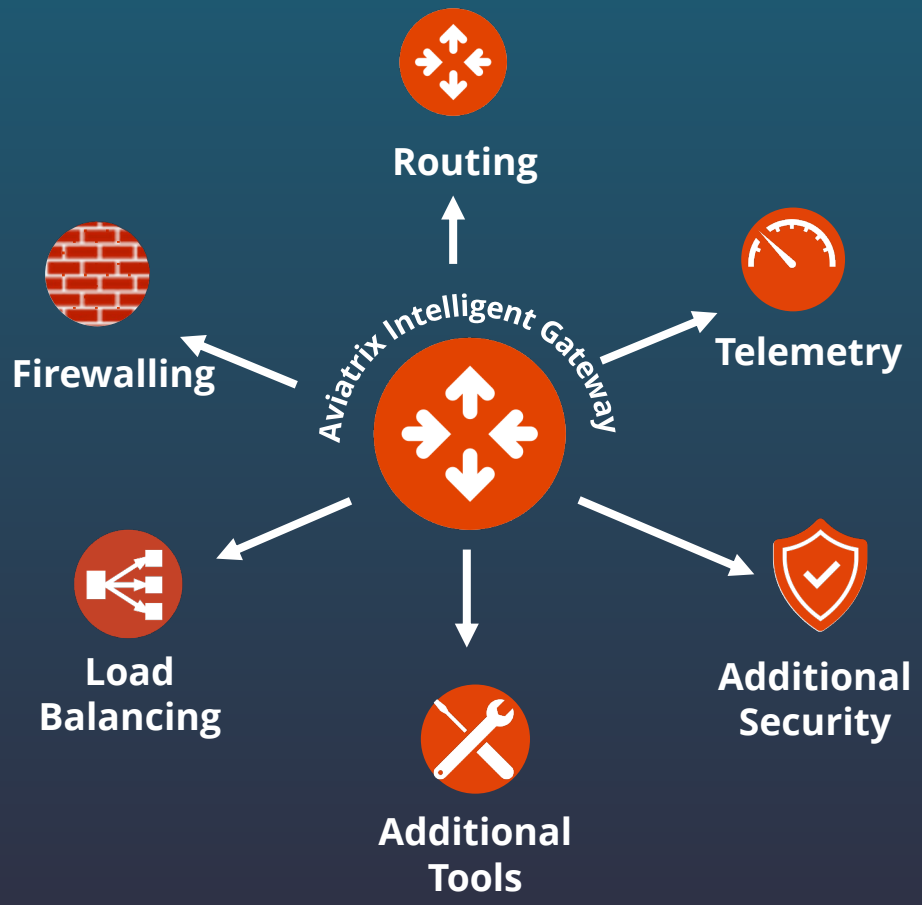
Aviatrix interface to Controller and enterprise-grade visualization.
Supports RBAC, programmable policy intent, export base Terraform

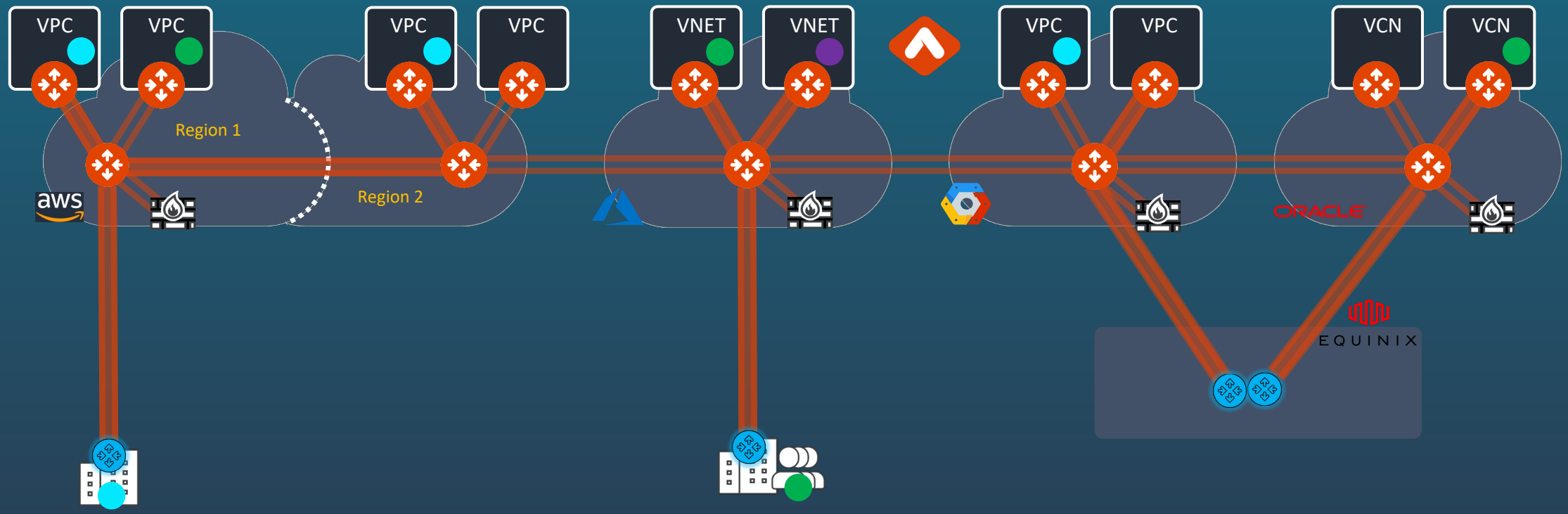
Aviatrix Software



Embedding Intelligence in the Aviatrix Data Plane

- **Intelligent Routing**
  - Dynamic Traffic Engineering
- **Distributed Firewalling**
  - L4 / L7, Programmable Intent
- **Telemetry**
  - Network, Security and Cost
- **Load Balancing**
  - Intelligent Load Balancing, Bi-Directional Hashing
- **Additional Security**
  - IDS/IPS, URL Filtering, Vulnerability Scanning Threat Detection, Anomaly Detection
- **Additional Tools**
  - Auto-scaling, Packet Capture, Ping Trace-Route





Repeatable Architecture
One robust architecture across single-cloud or multi-cloud environments

Ensure Network Correctness
Alleviate manual complexities and errors by automating/provisioning routes

Achieve Operational Visibility
Real-time network data and analytics that make troubleshooting easy

High-Availability
Highly-resilient architecture minimizes downtime for mission-critical applications

End-to-End Encryption
High performance encryption – 50x the industry standard

Automate Network Segmentation
Easily configure communication between workloads, users, and sites across multiple clouds

Service Insertion & Secure Ingress/Egress
Rapidly deploy firewall, FQDN filtering, & monitoring/analytics across your network

Threat Identification & Remediation
Identify, notify, & block threats to your network