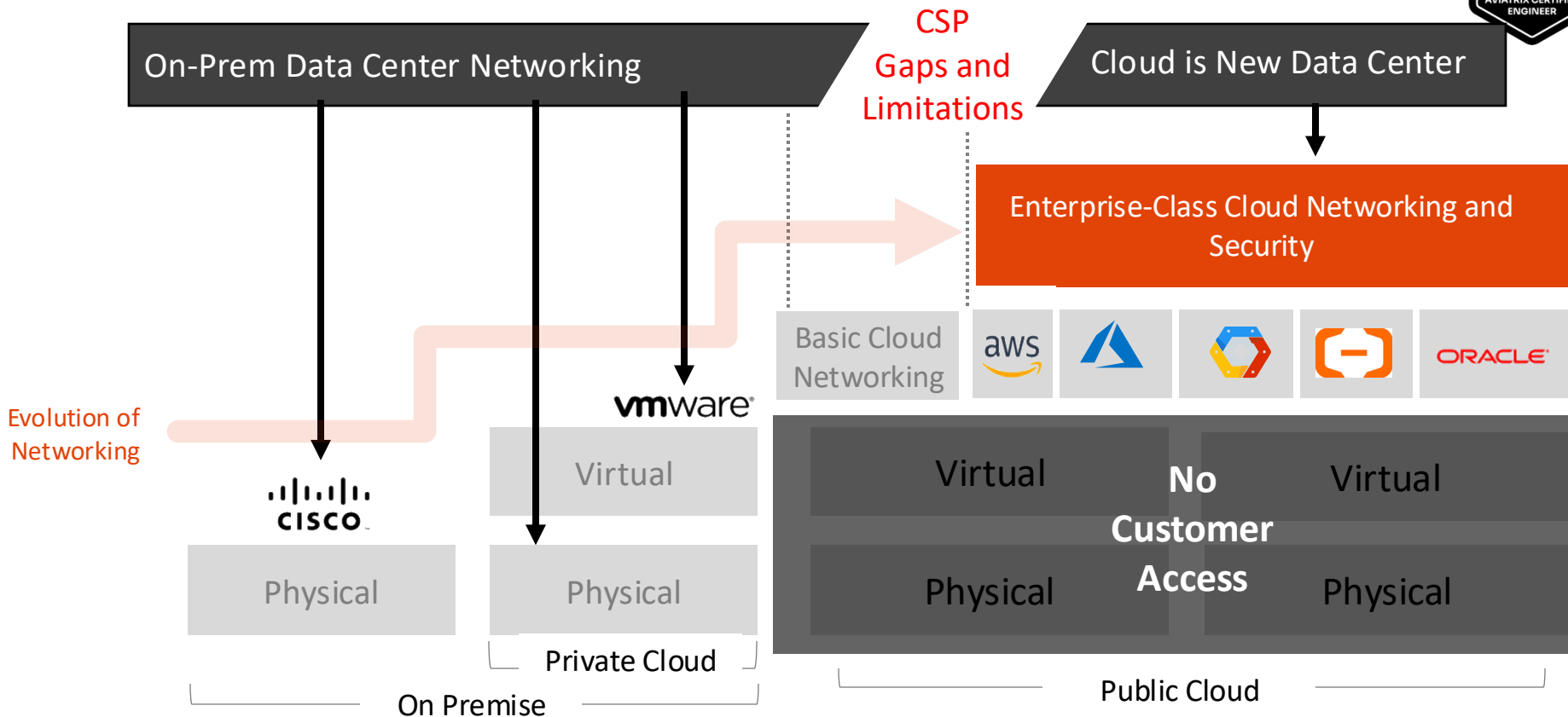# Multi-Cloud Network Architecture
MCNA

ACE Team

CSP Networking Has Gaps | You Need a Cloud Agnostic Product (Hint: Aviatrix)

On-Prem Data Center Networking

CSP Gaps and Limitations

Cloud is New Data Center

Enterprise-Class Cloud Networking and Security

Evolution of Networking

Basic Cloud Networking

aws

ORACLE

vmware

Virtual

Physical

Private Cloud

On Premise

Virtual

No Customer Access

Virtual

Physical

Physical

Public Cloud

Cloud Expertise Development

The Challenge

Identifying what's required for secure cloud networking

The Approach

Cloud experts collaborating intensively for a week

The Outcome

Comprehensive cloud reference architecture

Seven years ago, Aviatrix assembled a team of cloud networking specialists to tackle a fundamental question: **"What would you need to do secure cloud networking in the cloud as far as a reference architecture is concerned?"** Through intensive collaboration, these experts developed a groundbreaking reference architecture that would serve as the foundation for the Aviatrix Cloud Firewall.

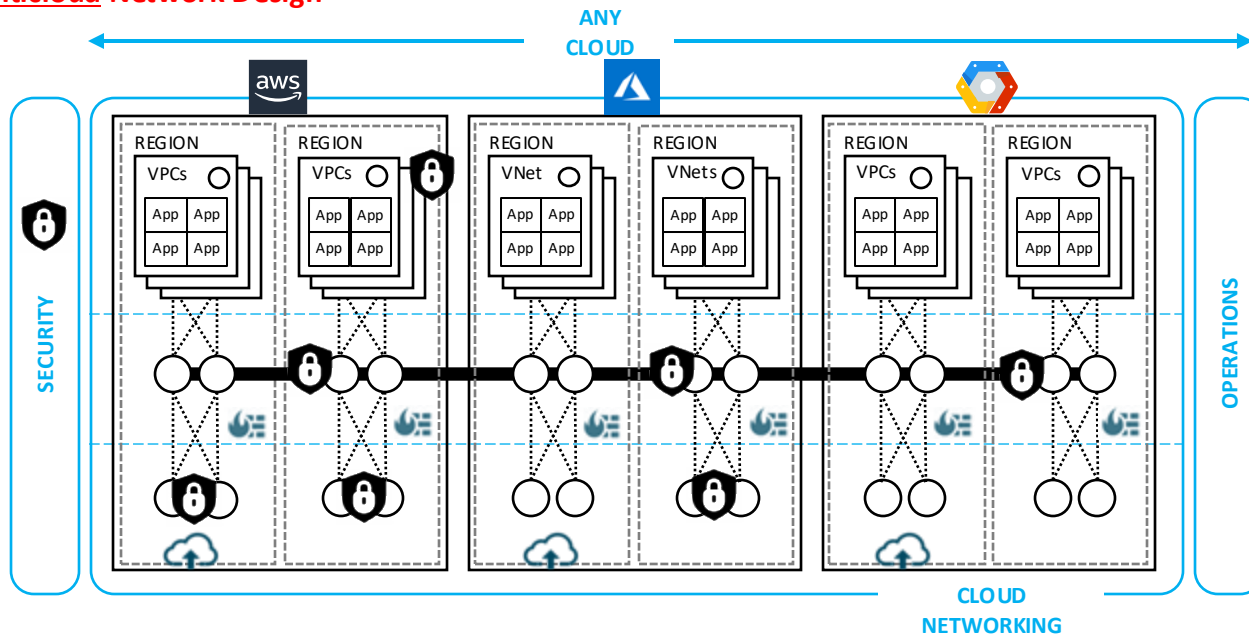# Cloud Network Reference Architecture (Single Cloud)

- **Single Cloud, Multi-Region, Multi-Account**

- **Repeatable Network Design and Infrastructure as Code Automation**

- **Service Insertion and Chaining**

- **De facto Cloud Firewall**

- **Common Operational Visibility and Control**
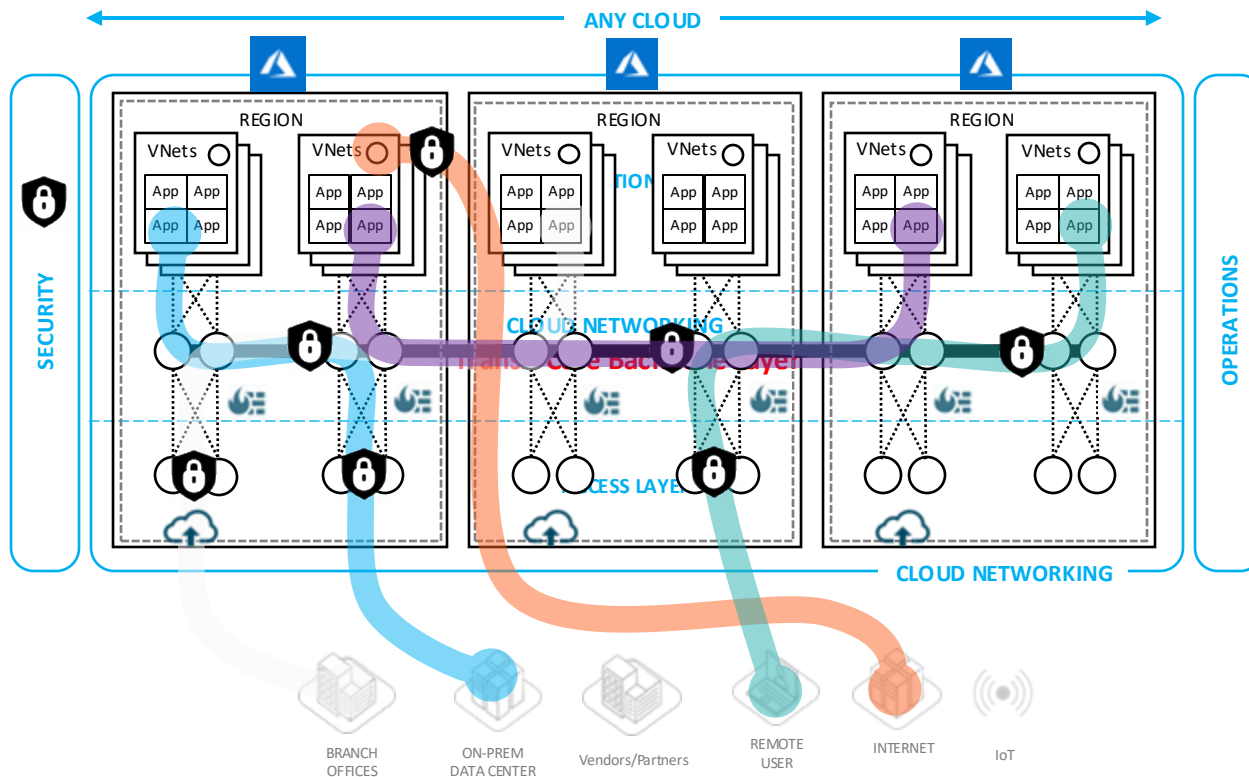
Multicloud Network Architecture (MCNA)

The Blueprint of Your <u>Multicloud</u> Network Design

- **Multicloud, Multi-Region, Multi-Account**

- **Repeatable Network Design and Infrastructure as Code Automation**

- **Service Insertion and Chaining**

- **D facto Cloud Firewall**

- **Common Operational Visibility and Control**

The Multi-Cloud Network Architecture (MCNA)

Application Layer

Critical app workloads and revenue generation

Transit Core Backbone Layer

Interconnection infrastructure

Access Layer

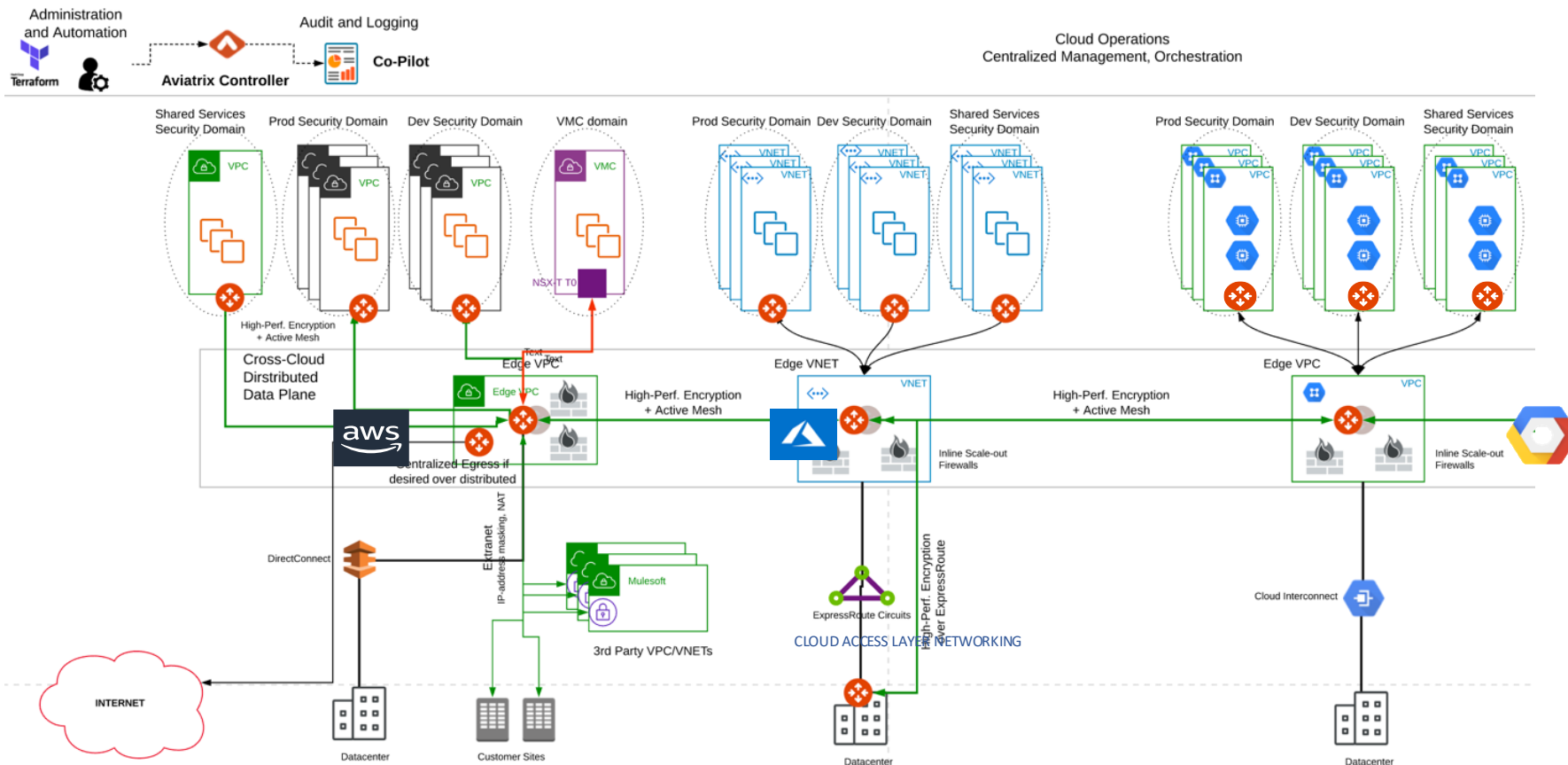External network connections
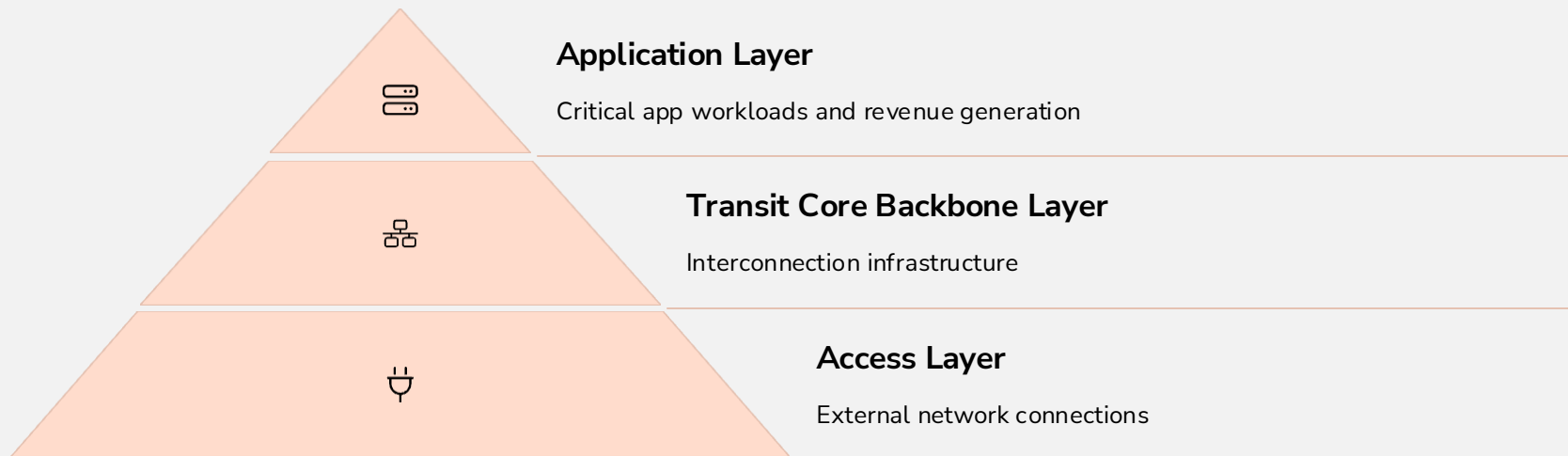
Building on their cloud expertise, Aviatrix developed the Multi-Cloud Network Architecture (MCNA), a distinctive three-tier architecture that effectively interconnects cloud regions, service providers, and external networks while maintaining end-to-end security.

This tiered structure forms the networking foundation of the Aviatrix solution, providing a standardized yet flexible framework that can be implemented across multiple cloud environments or within a single cloud service provider's ecosystem.

Customer's HLD | 3 Years Long Project | MCNA