



SOLUTION BRIEF



Network Infrastructure On-Demand: The Alkira Solution Brief

Embracing the Cloud Era

The cloud era has arrived. Organizations are increasingly transitioning business-critical applications from on-premises data centers to public cloud and SaaS environments. While compute, storage, and applications have comprehensively evolved beyond virtualization and automation to simple as-a-service offerings, network and security have not kept pace. Modern enterprises fully recognize the critical necessity to bring network and security into the cloud era, enabling IT organizations to power digital transformation at the speed of rapidly evolving business needs.

The Challenge

Building a secure, scalable, and resilient cloud network that connects remote users, on-premises locations, and AWS VPCs is often a daunting and frustrating experience. Inserting next-generation firewalls to enforce organizational security policy for cloud applications adds even further complexity.



Colocations

- ✓ Traditional approaches leveraging physical colocations lack cloud networking capabilities beyond AWS Direct Connect, limit geographical reach, result in long provisioning times, and carry high upfront costs.



Do-it-yourself Cloud Networking

- ✓ SD-WAN and cloud-specific solutions are challenged by insufficient cloud networking expertise, limited enterprise-grade capabilities, and lack of a uniform operating model between cloud and on-premise networking environments.



Cloud Orchestration Tools

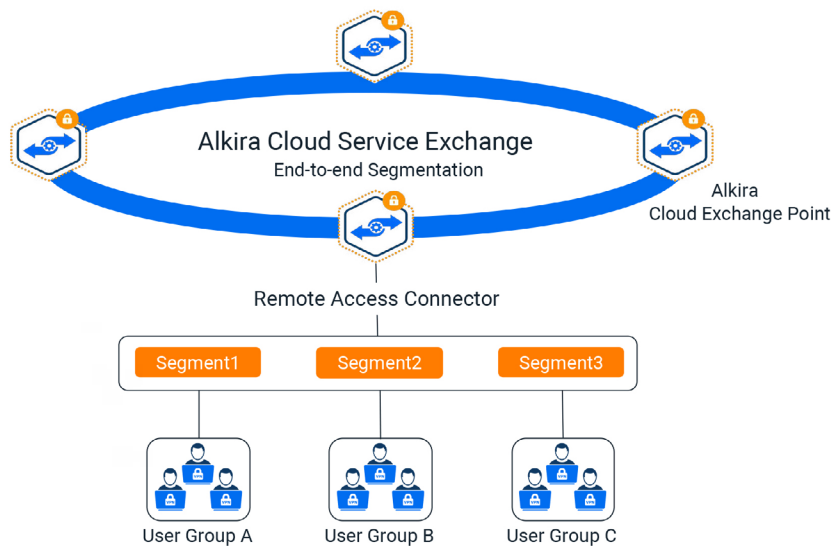
- ✓ This incremental approach forces enterprises to learn both cloud-specific networking and security constructs, as well as the operation of the orchestration tool itself.
- ✓ An innovative solution is needed to address the challenges around networking and security for the cloud.



Solution

The Alkira Platform is the industry’s first solution offering global unified network infrastructure as-a-service for enterprise networking and security needs. It comprises the following main solution elements:

- ✓ Global high-speed, low-latency unified backbone built upon underlying hyperscale cloud infrastructure
- ✓ Globally distributed Alkira Cloud Exchange Points (CXPs) – virtual points-of-presence with full enterprise-grade networking capabilities
- ✓ Diverse set of on-premises and cloud connectors for flexible onboarding
- ✓ Network services marketplace featuring Alkira and 3rd party network services hosted on Alkira virtual infrastructure
- ✓ Portal with intuitive graphical user interface for provisioning, management, and operational needs



With the Alkira Platform, enterprises can have a consistent, feature-rich, and significantly simplified experience achieving the following for AWS cloud environments:

- ✓ Deploy global any-to-any enterprise-grade network connectivity across remote users, on-premises locations, and AWS workloads residing in single or multiple global regions
- ✓ Integrate cloud firewall security services for AWS workloads with intent-based policies, symmetric traffic steering, and full life-cycle management
- ✓ Gain full day-2 operational visibility, advanced routing controls, and governance for the AWS cloud network

The Alkira Platform approach unlocks digital transformation by solving the most acute enterprise challenges around networking and security for AWS environments. Enterprises can now confidently transition applications from on-premises data centers into AWS and further increase cloud adoption.



Benefits



Fast Cloud Networking Time to Service

Alkira slashes complexity and time to service with its Platform approach. No hardware to procure and install, no software to download and configure, no cloud networking architecture to learn. The entire cloud network connecting remote users, on-premises sites, and AWS VPCs is drawn on an intuitive design canvas, provisioned in a single click, and is ready for use in minutes instead of months!



Cloud Firewall Security for AWS Workloads

Easily provision globally distributed next-generation virtual firewalls in the Alkira virtual infrastructure. Leverage Alkira intent-based policies to symmetrically steer any on-premises and AWS single or multi-region cloud application traffic of interest to the firewalls and enforce firewall zone-based security policy. The Alkira solution performs full lifecycle management for the firewalls, including health, availability, and auto-scale.



End-to-End Cloud Network Segmentation

Segmentation is part of Alkira's zero trust network architecture. It effectively restricts communication between AWS VPCs connected to different network segments. This allows segregating resources and reducing the security attack surface for AWS workloads. Intra-segment communication can be further subdivided into micro-segments with firewall service insertion. Inter-segment communication can be allowed for shared application services use cases, like M&As, partner connectivity, and IT as-a-service.



Deep Cloud Network Visibility

The Alkira portal offers deep operational visibility into cloud network health, availability, utilization, and application traffic flows for the AWS cloud environment. Enterprises can achieve operational excellence without the need to procure and deploy additional management software tools.



Elastic Scale and High Availability

Alkira offers redundant multi-gigabit access connectivity options for users, on-premises sites, and AWS VPCs. The Alkira unified backbone connects single region and multi-region AWS cloud environments with multi-ten gigabit speeds over AWS's high-speed, low-latency backbone. Alkira's highly available global virtual infrastructure is backed by SLA guarantees. Network services, such as next-generation firewalls, deployed in the Alkira Cloud Exchange Points horizontally auto-scale up and down based on real-time capacity demand.

How It Works

- ✓ Register for Alkira service and access the portal
- ✓ Select geographical regions for your global cloud network on the map
- ✓ Add remote users, on-premise sites, and AWS VPCs, while assigning desired network capacity, network segments, and billing tags
- ✓ Add firewalls and intent-based policies
- ✓ Provision everything in 1-click!