Accelerate Google Cloud Platform Adoption With Alkira Cloud Service

Benefits of Joint Solution:

Enterprise-Grade Routing
Advanced routing controls across the Google Cloud environment utilizing Alkira's global routing policy.

End-to-End Cloud Network Segmentation
Network-wide segmentation and micro- segmentation for segregating GCP workloads and reducing security attack surface.

Cloud Firewall Security
Easily enforce uniform firewall security policy for Google Cloud single-region and multi- region application traffic.

Multi-Cloud Networking
Seamlessly and securely connect GCP workloads to multi-cloud and on-premises environments.

Deep Cloud Network Visibility
Single dashboard for operational visibility of cloud network health, availability, utilization and application traffic flows.

Better Together
GCP makes it easy for customers to purchase Alkira from their marketplace. If Google is already one of your preferred vendors, you can buy Alkira without needing an internal vendor review and potentially retire Google Cloud committed spend.

Cloud computing has enabled organizations to rapidly deploy servers, storage and applications at global scale, avoiding the time and cost barriers inherent to on-premises do-it-yourself (DIY) architectures. As more and more customers turn to the cloud for this very reason, cloud providers are investing heavily in their network infrastructure to increase their reach and improve service delivery. The network capacity, global reach and infrastructure resiliency that now underpins these global cloud networks rivals the world's largest telecommunications providers, however the latent potential in these networks has been unavailable or difficult to effectively access for traditional enterprise networking use cases.

Utilizing cloud provider network infrastructure within the enterprise would allow organizations to dramatically rethink the way they build and operate networks, unlocking performance gains, rapid provisioning and drastically improved TCO models. While DIY options do exist for building on top of these cloud networks, most come with significant sacrifices in the form of increased complexity, poor visibility, and the loss of network fundamentals, such as dynamic routing or basic troubleshooting tools. For most organizations this means the potential remains out of reach as they wait for the promise of hyperscale networking to meet the feature demands of enterprise networking.

Unlocking the Potential of Hyperscale Networking

Alkira Cloud Services Exchange allows organizations to leverage global high speed low latency Alkira Cloud Backbone with a rich set of routing capabilities and integrated security services, in order to network GCP workloads across single region, multi-region and multi-cloud environments. The elasticity of the underlying hyperscale infrastructure allows the Alkira platform to deliver instant response for the varying enterprise capacity needs at the required scale. This flexibility is essential for ensuring that enterprise capacity demands are met in a timely and cost-effective manner, eliminating dependency on lengthy private circuit delivery times and wasteful provision-for-peak approach.

The simple as-a-service consumption model of the Alkira solution is highly synergetic with the GCP consumption model allowing enterprises to easily operationalize their Alkira environment to support connectivity and security needs of the GCP environment.
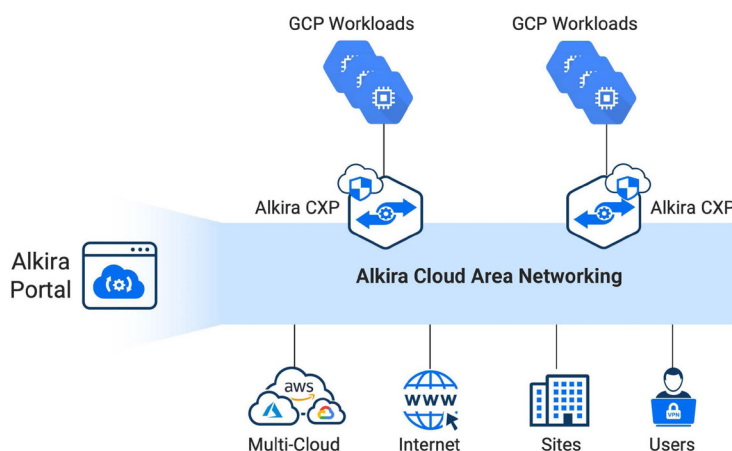
Figure: Alkira Cloud Services Exchange and Google Cloud Integration

Solution Details

With Alkira Cloud Services Exchange, enterprise cloud and multi-cloud networks are offered as-a-service and on demand. There is no need to procure any additional hardware equipment, install any additional software or learn any cloud architectures. The entire global network is modeled through the intuitive Alkira Portal in a point-and-click fashion.

The fundamental building block of the Alkira solution is the Alkira Cloud Exchange Point® (Alkira CXP), a multi-cloud point of presence with routing and network service capabilities. Alkira CXPs are geographically distributed around the world and are interconnected over the Alkira Cloud Backbone.

For internet access from the GCP workloads, such as operating system updates, access to code repositories, access to file-sharing applications and so on, an internet connector is provisioned in each of the Alkira CXPs. Stateful security controls can be applied to the internet-bound traffic using Alkira intent-based policy by selectively and symmetrically steering application traffic of interest to the next-generation firewalls provisioned within the Alkira CXPs.

Remote users, remote sites and on-premises data centers connected to the Alkira CXPs can by default communicate with GCP workloads residing in common network segments. Cross-segment communication can be enabled, if needed, for accessing shared application services, such as common directory services, print services, file stores and so on.

In such cases, cross-segment application traffic can be subjected to firewall security policy enforcement. The Alkira solution can also resolve IP address conflicts by applying network address translation (NAT) rules for traffic originating from segments with overlapping IP addresses destined for the shared applications.

Provisioning the entire global network is done in a single click based on the network and security design done in the Alkira portal using the intuitive point-and-click digital design canvas. At the end of the provisioning process all GCP workloads on-boarded onto the Alkira solution become part of the global network.

Deep cloud networking visibility exposed by the Alkira portal allows enterprises to eliminate operational blindspots for the GCP workloads, get valuable insights to remediate security risks, identify unused cloud resources, perform advanced troubleshooting, and enforce governance policies. In many cases a single operational dashboard of the Alkira portal replaces numerous management screens and dedicated software management products.

Summary

Alkira Cloud Services Exchange provides a seamless, secure and feature-rich experience of connecting GCP workloads to a global network extending over single or multiple Google Cloud regions and the multi-cloud environment. The Alkira solution harnesses the power of the vast Google Cloud backbone to deliver highly-scalable global connectivity for the most demanding modern enterprise needs in the cloud era.

About Google Cloud Platform

Google Cloud accelerates organizations' ability to digitally transform their business with the best infrastructure, platform, industry solutions and expertise. Google delivers enterprise-grade solutions that leverage Google's cutting-edge technology – all on the cleanest cloud in the industry. Customers in more than 200 countries and territories turn to Google Cloud as their trusted partner to enable growth and solve their most critical business problems.

About Alkira

Alkira the industry's first solution offering global cloud network infrastructure as-a-service. With Alkira, enterprises can have a consistent and significantly simplified experience deploying a global cloud network for end-to-end and any-to-any network connectivity across users, sites, and clouds with integrated network and security services, full day-2 operational visibility, advanced controls and governance. The entire network is drawn on an intuitive design canvas, deployed in a single click and is ready in minutes!

Alkira Cloud Service Exchange.
Network infrastructure on-demand.