Network Service Differentiation with Stateless Akros

Key Benefits

Shorter Paths to New Revenue
Customized services for each tenant come to life in a matter of minutes via simple API calls or Web UI configuration.

Native Multitenancy Minimizes Downtime
Per tenant QoS and innate HA managed without operator intervention makes true multitenancy effortless.

Increase Lifetime Value with Tenant Control
Tenants get exactly what they want through a simple-to-use dashboard with the right amount of control.

A New Approach to Network Services

The universe of cloud service providers is rapidly transforming with the onset of hyperscale clouds and the migration of workloads from on-premise to hosted environments. With these changes come new market pressures for service providers.

Today's enterprises require customized solutions tailored to meet their business goals. Beyond this, they need infrastructure that can be quickly deployed and is easy to manage.

Cloud service providers are struggling to meet these demands and stay ahead of the competition. While modernizations in compute and storage have given providers new tools for competitive differentiation networks have failed to evolve.

Cloud service providers are finding that both physical and virtual network functions are increasing overhead while only offering cookie-cutter solutions that fail to propel their businesses forward.

Differentiation with Akros Network Services Platform

Stateless has the key to competitive differentiation. The Stateless Akros network services platform allows providers to rapidly offer customizable network services to differentiate their offerings portfolio. Through the platform, providers can simply create unique strings of network functions, or network function chains, on a per-tenant basis.

Practical implementations of NFV have proven rebuilding hardware appliances in software is an inefficient way to approach multitenant networks at scale. Akros uses a completely different approach through its patented, first of it's kind architecture.

The network functions and underlying platform are designed from the ground up to operate seamlessly in a high-throughput, at scale environment, without having to worry about resource management.

By re-inventing network functions, Akros allows providers to differentiate their network services through the ability to rapidly offer customized services, productization at scale and fine grain control.
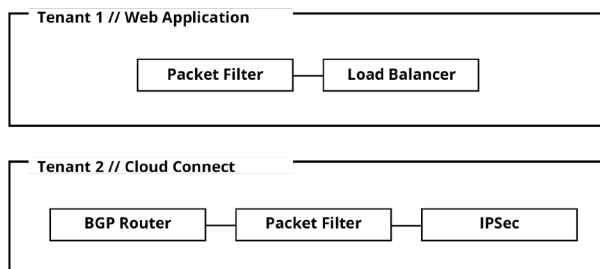
Shorter Paths to New Revenue

The Akros platform gives services providers the ability to quickly deploy new services that grow with the business to maximize profits. But this is not limited to individual offerings such as a firewall or a load balancer. Instead, providers can create completely customizable offerings on a per tenant basis without sacrificing network performance.

As shown in Figure 1, if one enterprise needs network services to support their web application while another needs network services to interconnect multiple hyperscale clouds, these chains could each be built and offered through the Akros platform.

All that is required from these service provider to build these isolated chains is a handful of simple API calls, and the services are ready in a matter of minutes. Providers have a shorter path to new revenue as they no longer need to account for a 4-6 week delay of building customized services.

Figure 1: Per-Tenant Network Function Chains

```
┌─────────────────────────────────────────────────┐
│ Tenant 1 // Web Application                       │
│                                                   │
│    ┌─────────────┐     ┌─────────────┐            │
│    │ Packet Filter│─────│ Load Balancer│          │
│    └─────────────┘     └─────────────┘            │
│                                                   │
└─────────────────────────────────────────────────┘

┌─────────────────────────────────────────────────┐
│ Tenant 2 // Cloud Connect                         │
│                                                   │
│  ┌───────────┐   ┌─────────────┐   ┌──────────┐   │
│  │ BGP Router │───│ Packet Filter│───│ IPSec    │  │
│  └───────────┘   └─────────────┘   └──────────┘   │
│                                                   │
└─────────────────────────────────────────────────┘
```

Native Multitenancy Minimizes Downtime

Network downtime is no longer acceptable for today's enterprises. It is more important than ever for cloud service providers to be able to manage multitenant offerings effortlessly. Akros makes true multitenancy in the network possible through per tenant quality of service (QoS).

With per tenant QoS, performance throughout a given tenant's network function chain can be guaranteed in a way that was never before possible. Performance no longer varies from one appliance to the next and noisy neighbors are eliminated.

Akros is built using a distributed systems architecture, which means providers no longer need to worry about HA pairs, or 2N deployments to minimize system downtime.

By simply plugging in the Akros system, high availability is guaranteed.

Service providers can now differentiate offerings from competitors based on guaranteed performance throughout a network service chain and increased uptime. Best of all, this can all be handled without operator intervention.

Increase Lifetime Value with Tenant Control

As IT accelerates throughout the infrastructure stack, tenants are more frequently looking to understand the status of their deployment in real-time. Akros makes this possible through a tenant view that gives users the visibility they need to take control of their isolated network services chains.

Tenants can view and modify their network settings through a easy to use dashboard that doesn't require extensive training and is designed with modern UX principles.

Providers are unburdened from attempting to replicate hyperscale interfaces while tenants control their environments seamlessly. This leaves providers perfectly positioned to differentiate their offerings while increasing customer lifetime value.

Akros in Your Environment

Akros delivers benefits that traditional physical and virtual network appliances are simply unable to match. In deploying the platform, providers are able to restore profitability and customer retention into their business model and reap the benefits of simplified management and maintenance. Deploy Akros in your infrastructure to claim your stake in the rapidly evolving cloud.

About Stateless

Stateless was founded with the mission of making networks dead simple to manage. We believe in partnering with our customers to turn networking into a competitive advantage and unleashing the power of their infrastructure stack. To learn more, visit us at BeStateless.com.