# DATA CENTER INTERCONNECT WITH STATELESS LUXON

**Use Case Document** 



# **MARKET OPPORTUNITY**

Enterprises are shifting IT operations from on-premises data centers to third-party providers in an effort to decrease operational expenses and capital outlays.

With this shift, enterprises are also deploying geographical dispersed interconnected footprints to reduce latency to end-users as well as for protection from outages or mission-critical operational support.

But, enterprises lack the tools and staffing to effectively deploy networks across third-party footprints. As such, enterprise are looking for partners that can deliver a diverse set of high-quality connectivity options.

This shift is creating immense growth in third-party data center deployments with colocation providers and cloud manager service providers (MSPs), which has lead to a groundswell in interdata center traffic.

Amidst these trends, providers have an opportunity to monetize existing network infrastructure in new ways by creating an innovative multitenant fabric that is interconnected across portfolio data centers.

# **TOOLS FOR SUCCESS**

Colocation providers and cloud MSPs have been successful in monetizing Layer 1 network services like physical cross-connects and IP service.

Providers have tried to translate this approach to data center interconnectivity by deploying Layer 2 point-to-point WAN solutions to connect tenants across portfolio sites. However, providers have found each deployment is operationally intensive with long quote-to-cash time frames and is difficult to modify once live.

To build a product around data center interconnect, providers need to implement natively multitenant solutions that dynamically route users to their desired cage without lenghty deployment cycles and manual operator intervention.

# **INTRODUCING STATELESS LUXON**

Stateless Luxon is the first platform for software-defined interconnect (SD-IX). Through the platform, colocation and cloud MSPs can deliver, control and monetize interconnect points through simple software.

With Luxon, providers can build a data center interconnect product and seamlessly deliver Layer 3+ network capabilities like BGP routing, NAT and packet filtering through a unified scale-out cluster.

These Layer 3+ services give providers the power to extend connections outside the physical data center and seamlessly deliver connectivity to other portfolio sites, opening the doors for greater monetization of tenant connections.

# **LUXON FOR DATA CENTER CONNECT**

Luxon is deployed as a consolidated scale-out cluster of commodity hardware that is made for high-scale, high-throughput, mutlitenant environments.

In deploying Luxon for data center connect, providers have a unified slution to provide a portfolio of data center connectivity products including:

- inter-site connectivity
- · back-up and disaster recovering
- routing to another data center for greater hyperscale connectivity options
- · SD-WAN aggregation and transport.

To deploy data center interconnect, providers place the scale-out cluster composed of x86 servers and Openflow enabled switches in their meet-me rooms.

The cluster can front-end Layer 2 WAN connections enabling a multitenant architecture that leverages the underlying connectivity.

### **FEATURES AND BENEFITS**

#### **MULTITENANCY**

The key to building a successful data center interconnect product is multitenancy. This allows for each tenant to establish different network configurations while data remains completely isolated and secure.

Luxon delivers a truly multitenant solution where providers can configure completely isolated and customized networks for each tenant.

This reduces provider CAPEX as infrastructure sprawl is eliminated and engineers have a single system to deploy and control all tenant networks.

#### **AUTOMATION**

One of the largest struggles for providers deploying Layer 2 interconnect solutions is the manual nature of deployment, updates, growth and failover.

Luxon brings new levels of automation to colocation providers and cloud MSPs so services are deployed without impacting network overhead.

With Stateless' patented architecture scaling, growth and failover is handled without operator intervention.

The most crucial information for each tenant's connections, frequently referred to as network state, is stored in a highly-performant, distributed database which is replicated throughout the cluster.

In the case of failover, traffic flows on one node are automatically redirected to healthy nodes in the system. Because network state is stored across the cluster, this occurs without disruption or downtime.

The same methodologies allow for updates to take place without dropping a single connection and dynamic expansion and contraction of tenant traffic while maintaining consistent Quality of Service (QoS).

#### **EVOLVABILITY**

Today, enterprises are using dynamic deployment strategies that change frequently and rapidly. For providers, deploying traditional network appliances and keeping a consistent configuration for the assets depreciable life is no longer an option.

With Luxon, network functions are deployed as microservices, meaning they are broken down into composable pieces that can be easily strung together for each tenant and can be added and removed from a network without affecting deployments.

Network functions are added to the system rapidly. Providers do not have to wait for software version updates or deploy new network appliances for every new tenant use case.

## **FINANCIAL IMPACTS**

Luxon can be used for multiple interconnect use cases including data center connectivity and cloud connectivity. When deployed for these use cases, providers can expect the following financial impacts:

- · Accretive margins
- 100%+ internal rate of return (IRR)
- \$100K scaled terminal monthly recurring revenue(MRR) per cluster
- Potential \$9MM+ value creation (15X) per facility

## **ABOUT STATELESS**

At Stateless, we are reinventing network connectivity.

Stateless delivers an industry-first SD-IX platform that gives network providers the power to monetize their connectivity assets while streamlining network operations and minimizing capital outlays.

The revolutionary Stateless platform gives users the power to optimize existing network assets to control and connect every endpoint, including portfolio data centers, tenant sites and hyperscale clouds.

Learn more at www.bestateless.com.