Solution Overview

Highlights

- **Accelerate services:** deliver new software-defined interconnects in seconds
- **Expand the ecosystem:** provide more direct connect options to cloud, XaaS, etc.
- **Level the playing field:** bring competitive interconnection services to any data center site
- **Build a foundation:** add services and increase profitability

Pluribus Interconnect Fabric

Move up the value chain with the Pluribus Adaptive Cloud Fabric™, the only network fabric optimized for multi-tenant data center operators to provide software-defined interconnection to cloud, XaaS and other service providers.

**Move up the value chain**

Multi-tenant data center operators are all looking to move up the value chain, beyond basic colocation services, in order to improve competitiveness and increase profitability. Building a software-defined interconnect fabric is the first step.

**Software-defined interconnection opportunities**

Enterprises and managed cloud service providers are increasingly looking to colocation and multi-tenant data centers (MTDCs) as an important component of their hybrid multi-cloud strategy. Industry analysts project that more than half of all computing workloads will remain in private clouds for the foreseeable future and many of those private clouds will be in MTDCs. As a result, software-defined interconnection services, including direct cloud interconnects, are becoming mission-critical and leading MTDC operators are investing in software-defined interconnection platforms.

Software-defined interconnection within and between MTDCs enables many use cases:

- Direct connect to public clouds
- Direct connect to SaaS, DRaaS, etc.
- IP transit access
- Private and public peering
- Any other interconnect that traditionally required a physical cross-connect
Requirements for a simplified, automated interconnect fabric

Delivering an interconnect fabric that can meet all of the above use cases – with high availability, security and operational efficiency – requires several capabilities:

- **Robust underlay networks**: Scale-out leaf-spine switching networks within each data center, and redundant low-latency data center interconnect links between data centers
- **Overlay network virtualization**: VXLAN or equivalent encapsulation and virtualized layer 2 and 3 (L2/L3) network services that can stretch across a multi-site fabric and support the full range of MTDC use cases, including:
  - Fully transparent Layer 2 “virtual cross connects”
  - Layer 2 multi-point bridge domains with flexible handoffs
  - Layer 3 virtual routing with anycast gateway
- **Network segmentation**: Isolation of customers and applications for multi-tenant security
- **End-to-end automation and management**:
  - Automation of both underlay and overlay networks
  - Open interfaces for integration into on-demand provisioning systems
  - Fabric-wide management, monitoring and visibility

The Pluribus Interconnect Fabric meets all of these requirements in a comprehensively integrated and automated solution that is simple to deploy and operate.

Pluribus Interconnect Fabric Solution

Software-defined interconnection is an ideal use case for the Pluribus Adaptive Cloud Fabric, which simplifies multi-site data center networking, seamlessly interconnecting geographically distributed locations into a unified network fabric. Built on open network switching with a controllerless SDN architecture incorporating network virtualization for secure multi-tenant segmentation and built-in monitoring and analytics for pervasive network visibility, Pluribus delivers the best network fabric for multi-site interconnection.

Solution components

- **Open network switching hardware** available from multiple vendors, providing choice and flexibility and eliminating vendor lock-in
- **Pluribus Netvisor ONE** network operating system and **Adaptive Cloud Fabric** software running directly on the open network switching hardware and integrating all required functions:
  - Best in class L2/L3 switching with open standards-based interoperability
  - Network virtualization using hardware-accelerated VXLAN tunnels
  - Rich set of virtualized, distributed L2/L3 service types supporting all interconnection use cases
  - Deep network segmentation across data, control and management planes
  - Comprehensive automation of underlay and overlay networks and services
  - Built-in flow monitoring and telemetry
- **Pluribus UNUM** graphical network management platform for complete life-cycle network and service management
- **NUM Insight Analytics** software for comprehensive monitoring and troubleshooting
A Pluribus Interconnect Fabric can provide rich interconnection services within a single data center site (as shown on the first page). Enterprises and service providers each connect to the fabric at a suitable port speed, e.g. 10G or 100G, and then have the ability to software define virtual connections to any other connected party, including public clouds, XaaS providers, ISPs and peering partners.

Interconnect fabrics become even more valuable when stretched across multiple data center sites enabling every tenant to directly connect to any cloud or other service provider in any site as if they were physically colocated in the same site. The resulting network effect substantially increases the value of every site in the fabric and enables more data center facilities to offer a rich ecosystem of interconnection partners previously available in only a few high-cost sites.

Benefit of a Pluribus Interconnect Fabric

• **Accelerate interconnect delivery:** reduce the time to deliver new interconnects from days or weeks to minutes or seconds
• **Expand the ecosystem:** provide more direct connect options to cloud, XaaS and other providers and peering partners
• **Level the playing field:** bring competitive interconnection services to any data center site and reduce the location lock-in of high-cost sites
• **Build a foundation for the future:** use the interconnect fabric to add new home-grown or partner-provided services, such as Internet exchange/public peering, disaster recovery as a service, or on-demand edge computing and storage

These benefits translate directly to increased competitiveness, revenues and profit margins. Best of all, the Pluribus Interconnect Fabric puts all of these benefits in reach of any MTDC operator with a comprehensively integrated solution that is simple to deploy and manage.

“*I couldn’t believe I could ‘get it all.’ Other solutions had a tenth the bandwidth, no pseudo-wire transparency or were simply limited in scale or multi-tenancy. Plus, I got analytics capabilities as a bonus without any additional equipment needed.*”

**Network & Security Manager**
European Colocation Provider with Five-site Pluribus Interconnect Fabric

It’s Time to Move Up the Value Chain

Take the first step to delivering better interconnection experiences. Contact Pluribus Networks or one of our solution partners today.