Simplify the Network to Scale Hyper-Converged Infrastructure Deployments

Legacy networks have emerged as a significant inhibitor to Hyper-Converged Infrastructure (HCI) deployment success. The challenge is that traditional, legacy networks are hardware-defined and built upon an expensive multi-tier architecture requiring many different devices. Adding to the complexity and inflexibilities of legacy networks, the network remains independent from applications and infrastructure resulting in the HCI team being highly dependent on the network operations team to make changes due to static configurations.

The unfortunate reality is that the legacy network is not aligned with modern infrastructure, nor is it optimized to support virtualized services. Legacy networks lack programmability and automation, and interconnecting multiple data centers is complex and requires expensive additional equipment. The challenges are further amplified by a lack of pervasive end-to-end performance visibility which inhibits the ability to manage performance proactively and achieve optimal service availability, performance and quality. The virtualization of compute and storage have demonstrated what's possible when the right technology is deployed. Consequently, a virtualized network is essential to realize the network agility needed to support HCI with cloud-like scale, elasticity and adaptability.

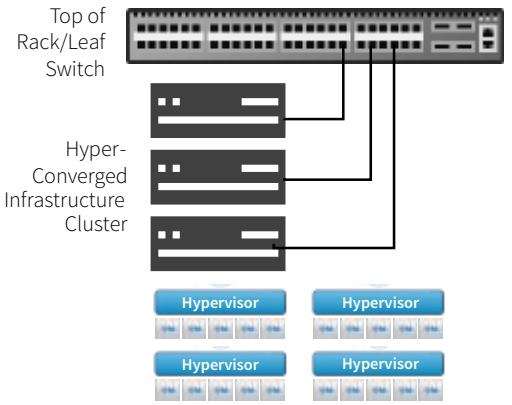
The Adaptive Cloud Fabric Empowers HCI to Make It Smarter

Based upon the next-generation of Software-Defined Network (SDN) technology, the Adaptive Cloud Fabric™ from Pluribus Networks allows organizations to eliminate network complexity, automate operations, improve resiliency and gain pervasive visibility, while significantly reducing costs and accelerating the time to value for HCI deployments.

As the ideal foundation to optimize HCI architectures, such as Nutanix™, VxRail™, and VMware® vSAN, the Adaptive Cloud Fabric empowers organizations to speed their transition to a completely software-defined data center (SDDC) with a simpler, more transparent and non-disruptive architecture that makes it easier to deliver, manage, and secure service delivery across the enterprise. The simplicity of the Pluribus Adaptive Cloud Fabric makes the network fundamentally transparent, with cloud-like scale, elasticity and adaptability, enabling the IT organization to focus on applications and services.

Seamless Provisioning Across Compute, Storage and Network

The Pluribus Adaptive Cloud Fabric is easy to deploy, and provides a simple centralized, single point-of-control to provision and manage all devices across the fabric regardless of their location. Integrations with VMware vCenter allow one-touch provisioning for network, compute and storage to administer HCI services and the network in unison.



Pluribus Netvisor ONE OS Deployed on Open Networking Hardware

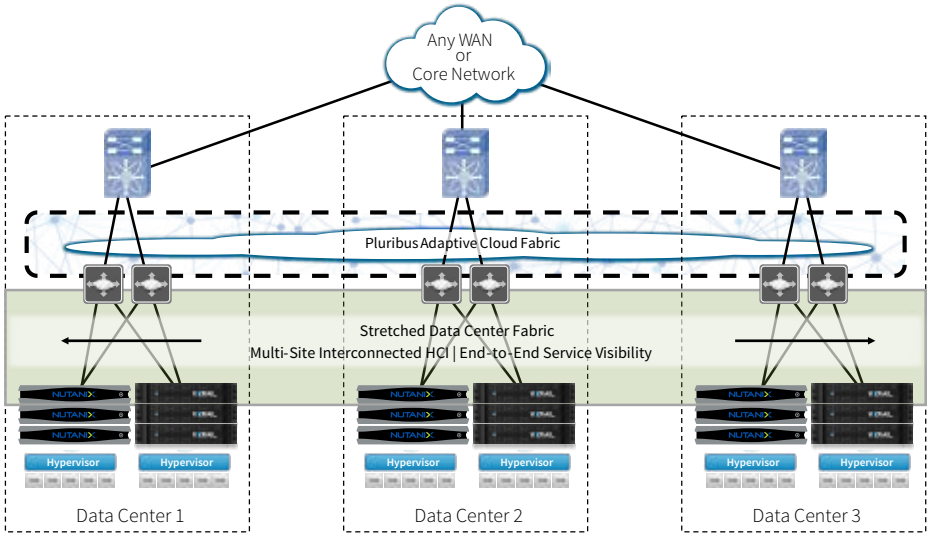
This empowers the HCI administrator to provision the network, HCI services and workloads from vCenter without requiring any intervention from the network operations team. Consequently, the HCI administrator can now define network resources and services to scale the network with the service layer with a single action, eliminating network complexity. This allows automating tasks such as VLAN creation across the fabric for new VM or workloads, switch configurations based on distributed vSwitch teaming policies and zero-touch multicast configurations for vSAN.

Solution highlights:

- Simple, software-defined holistic architecture seamlessly interoperates with existing networks
- Programmability, automation and visibility across network, compute and storage
- Distributed interconnection across HCI nodes to support data replication and HA/DR
- Scales from several nodes to hundreds of nodes with linear performance
- Seamlessly interconnects virtualized and bare metal services

Simple, Scale-Out Flexibility

The Adaptive Cloud Fabric architecture provides resilient, high-performance interconnection across HCI nodes for reliable, distributed, and high-performance data replication, resource sharing, and workload mobility. Capacity is elastic and can scale from several nodes to hundreds of nodes with linear performance. The Adaptive Cloud Fabric can be implemented within a single data center, or can be distributed geographically to enable synchronous replication between two or more data centers. This enables transparent operations with complete network and compute elasticity across data centers to meet stringent active-active data protection and disaster recovery (DR) requirements. To support interoperability with existing investments, multiple geographically distributed data centers can be interconnected over any WAN or dark fiber connection without network reengineering or complex protocols.



The Adaptive Cloud Fabric stretches distributed Hyper-Converged Infrastructure deployments across multiple data centers for synchronous replication and active-active HA/DR requirements

Comprehensive End-to-End Visibility Across Network, Compute, and Storage

The Adaptive Cloud Fabric has embedded telemetry on every port to monitor all service and application flows at the speed of the network.

The embedded telemetry exposes important service behavior and performance characteristics such as application type, connection state, and end-to-end connection latency. Pluribus vProbe technology extends visibility into VMware servers to expose performance related characteristics of application traffic traversing the hypervisor. Leveraging the embedded telemetry, Pluribus Insight Analytics™ provides a comprehensive application-aware Performance Management dashboard that delivers end-to-end visibility across the network, compute, and storage layers. The dashboard provides real-time and historical views into east/west and north/south traffic, as well as virtualized workloads traversing the hypervisor. Visibility can extend from a single location or across a multi-site fabric to identify and triage performance issues to quickly isolate problem root cause and assure service availability, performance and quality.

Network Virtualization Enables Dynamic Security

Fabric-wide security services enable granular control and policies to be applied on a per-user, per-application basis. The network virtualization capabilities power highly granular user and traffic segmentation that allows administrators to define isolated user groups that can span across multiple locations with complete workload mobility. The flexible segmentation capability is ideal to segregate development, test and production environments for an HCI deployment.

The Value of Simplicity

The Pluribus Networks approach to next-generation data center architectures delivers an open, virtualized and programmable network fabric that ensures the optimum performance and availability of HCI clusters with simplified management and powerful performance analytics. Enabling freedom from legacy network constraints, the Pluribus Adaptive Cloud Fabric is powered by the Netvisor ONE OS and a wide range of Open Networking switches including devices from Dell EMC, D-Link Systems, Edge-core, and the Pluribus Freedom™ series network switches. These next-generation data center switches are purpose-built for software-defined and virtualized data centers of all sizes and deliver a cost-effective, high-performance, and highly scalable network foundation for demanding HCI deployments and virtualized workloads.

The combination of Open Networking hardware and the Pluribus Adaptive Cloud Fabric delivers a capability set that is designed to empower any size organization to do more with their next-generation data center architectures while eliminating complexities, reducing risk, and speeding the time to value for their HCI investments.

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