IDC Innovators

IDC Innovators: Multicloud Networking, 2020

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THIS IDC INNOVATORS EXCERPT FEATURES: VOLTERRA

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC Innovators: Multicloud Networking, 2020 (Doc # US46864120).

Why Volterra Was Chosen as an IDC Innovator

Volterra's SaaS-based platform consolidates networking, security, application delivery, and multiple native cloud provider services to integrate policy and centralize observability. As a result, the platform can simplify multicloud network operations and streamline network life-cycle management, providing infrastructure as code and a consolidated L3-7 network and security stack for both cloud and edge environments.

Volterra			
Founded 2017	**Number of Employees** 125	**Headquarters** Santa Clara, California	**Number of Customers** 50+
Product Name VoltMesh, VoltStack, and VoltConsole	**Founders** Ankur Singla and Harshad Nakil		**Typical Deal Size** $100,000
Profiled Product/ Service Hybrid/multicloud networking	**Funding** $50 million, with funding from Mayfield, Khosla Ventures, and M12 (Microsoft's venture arm) and strategic investors Itochu Technology Ventures, Samsung NEXT, and Telia Ventures		**Geographic Mix** (% of Revenue by Major Region) North America 35% Europe 40% Asia 25%

IDC Innovator Assessment

- Volterra aims to solve the challenge of distributing and automating cloud services wherever distributed apps and data need them. In response, Volterra provides a fully extensible networking, security, and infrastructure platform that addresses the rise of multicloud architectures and cloud-native apps.
- Volterra's platform includes VoltMesh for network and security services (including load balancing and API gateway, service mesh, routing, multilayer API, and app security); VoltStack, which

provides platform services for distributed apps and infrastructure (app fleet management, key management, identity management, clustering and scale out, and ZTP); and VoltConsole, a management portal that provides global visibility, dashboards, logs/metrics, multitenancy, and API integration.

• Volterra also has a global application delivery network that hosts workloads using VoltStack and provides multicloud connectivity and security services using VoltMesh.

Key Differentiator

Volterra points to several areas of differentiation, including the depth of its integrated services stack, which extends from L3 all the way to L7, with full support for cloud-native apps, containers, and microservices. Volterra emphasizes that the stack can be distributed globally across clusters and clouds, yet controlled centrally with end-to-end visibility. Volterra also notes that its platform, through its extensive functionality and RBAC, can help simplify and align operations between developers, DevOps, NetOps, and SecOps.

Challenges

Volterra is perhaps the most ambitious vendor in this IDC Innovators document, taking on the challenge of providing not merely multicloud networking but also cloud-native DevOps services across operational domains. That ambition might be rewarded, but it comes with additional competitive challenges.

IDC INNOVATORS IN MULTICLOUD NETWORKING

As enterprises execute their multicloud strategies, they recognize that infrastructure modernization is both required and highly challenging. This is particularly true of network infrastructure for multicloud.

Unfortunately, many enterprises often aren't fully cognizant of their networks' multicloud limitations until they experience them firsthand. By then, the network's inability to accommodate new requirements might result in an impairment of multicloud execution or a scaling back of plans, compromising the enterprise's realization of its multicloud strategy.

TECHNOLOGY DEFINITION

As enterprises have migrated applications to public IaaS clouds and SaaS environments, both the datacenter and the datacenter network effectively have become distributed. Multicloud networking is what has arisen in the wake of distributed workloads and the multicloud datacenter. Multicloud networking is designed to meet the need for a declaratively and simply managed, on-demand, elastically scalable, and highly available distributed network that spans hybrid and multicloud environment to support and deliver the applications and workloads that are the lifeblood of digital transformation.

Complexity is the enemy of agility. In networking, complexity invariably translates into costly and lengthy processes. This problem is compounded by the lack of cross-cloud networking expertise in most enterprise IT departments. To be fair, it isn't easy to come up to speed quickly on multiple IaaS cloud providers' architectures and network APIs and their growing array of network and security services, much less devise and implement a DIY approach that helps bring consistency and uniformity to the management and optimization of a network that spans clouds.

Multicloud network abstracts this complexity from the enterprise IT operators, simplifying the task of multicloud networking and bringing agility and flexibility to the network and the operating models that govern it.

IDC INNOVATORS INCLUSION CRITERIA

An "IDC Innovators" document recognizes emerging vendors chosen by an IDC analyst because they offer an innovative new technology or a groundbreaking business model, or both, and were approved by the IDC Innovators Review Panel. It is not an exhaustive evaluation of all companies in a segment or a comparative ranking of the companies.

An IDC Innovators document highlights vendors that meet the following criteria:

- In IDC's opinion, the company exhibits innovative technology or a new business model.
- The company has annual revenue under $100 million at the time of selection.
- Customers are currently using the company's products and services (i.e., the products and services are not conceptual or in the process of being released).
- The product, service, or business model must solve or help alleviate an IT buyer challenge.

In addition, vendors in the process of being acquired by a larger company may be included provided the acquisition is not finalized at the time of publication of the document. Vendors funded by venture capital firms may also be included even if the venture capital firm has a financial stake in the vendor's company.

LEARN MORE

Related Research

- *IDC PlanScape: Multicloud Networking* (IDC #US46574120, June 2020)
- *Worldwide Datacenter Network Forecast, 2020-2024* (IDC #US41313617, May 2020)
- *Five Major Datacenter Networking Trends in 2020 and Beyond* (IDC #US46240520, May 2020)
- *IDC Survey Spotlight: Requirement to Connect Sites to IaaS Clouds Drives WAN Modernization and Ecosystem Partnerships* (IDC #US46397220, May 2020)
- *IDC's Worldwide IT Cloud Services Taxonomy, 2019* (IDC #US45714519, December 2019)
- *AWS re:Invent: Networking Announcements Address Simplicity, Global Scale, and Expanding Use Cases* (IDC #lcUS45746419, December 2019)
- *Worldwide Datacenter Software-Defined Networking Forecast, 2019-2023* (IDC #US45603219, November 2019)
- *Market Analysis Perspective: Worldwide Datacenter Networking, 2019* (IDC #US45539519, September 2019)

Synopsis

IDC Innovators are emerging vendors with revenue <$100 million that have demonstrated either a groundbreaking business model or an innovative new technology – or both. This IDC Innovators study profiles four emerging vendors in multicloud networking: Alkira, Aviatrix, Nefeli Networks, and Volterra.

"The migration of workloads to clouds not only redefines the parameters of the datacenter network but also dramatically changes what's required of the network architecturally and operationally. The focus now is on abstracting and mitigating the complexity of networking optimally to disparate clouds, each with its cloud-specific APIs and networking constructs and services. IDC recognizes a strong field of start-up vendors addressing the challenge of multicloud networking." — Brad Casemore, research VP, Datacenter and Multicloud Networks at IDC

About IDC

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