

F5 Volterra Edge Cloud

A cloud-continuum—from centralized cloud to network and edge—that drives business and autonomous transformation



KEY HIGHLIGHTS

SaaS-based service delivery across a fleet of distributed edge environments

Application identity, access control, secrets and keys management for zero-trust security at the edge

Global backbone for high performance connectivity across edge and cloud

Consistent services across heterogeneous edge environments simplifies operations

Edge computing is providing the opportunity to transform multiple industries, offering localized data analysis, artificial intelligence, process automation and other digital capabilities. This is in contrast to current cloud-based infrastructure offerings that rely on a centralized architecture. The drawback of centralized architectures is they cannot cost-effectively support the ultra-low latency and extreme throughput demanded by localized workloads at the edge.

Instead, cloud capabilities must be localized at the source of business data to form an edge cloud, which places computing, storage and networking resources where the data is—at the edge of the network. An edge cloud will be a fundamental asset for innovation, opening new market opportunities and transforming business processes. Organizations need to start preparing and implementing edge clouds now to dynamically address and grow new business opportunities.

F5 Volterra edge cloud solutions provide a secure and distributed cloud environment to deploy, secure and operate applications across diverse edge environments. Key capabilities include application and infrastructure management as well as secure connectivity across edge sites and public clouds. VoltStack is a cloud-native software stack that integrates compute, storage, networking and security for customers to manage their distributed edge workloads. VoltMesh is a secure connectivity service that seamlessly connects edge sites to each other and to public cloud providers with zero-trust and application-level security.

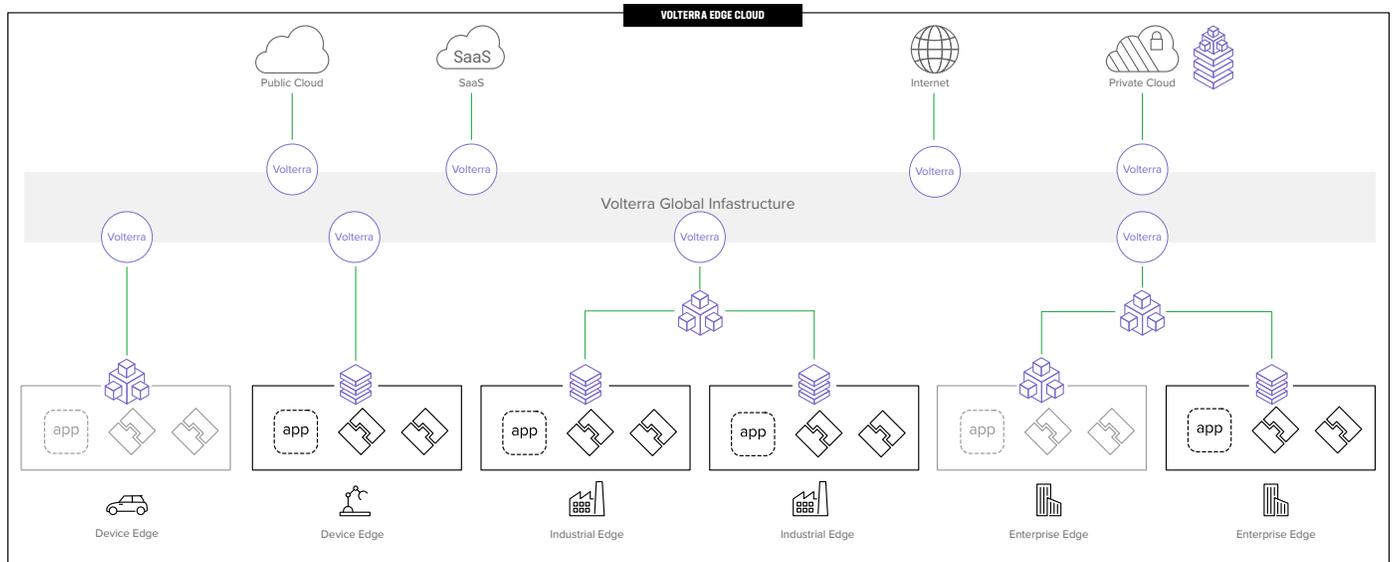


Figure 1: Volterra provides a distributed app gateway for centrally managed network and security services.

Challenges Addressed

1. Complexity introduced by monitoring heterogeneous edge environments and operating a fleet of distributed applications and data
2. Managing policies and security profiles of distributed infrastructure, apps and data at the edge of the network
3. Delivery of reliable and high performing connectivity across edge and multi-cloud

Benefits

Simplification of Edge Fleet Management and Operations

SaaS-based deployment and lifecycle management of hardware and infrastructure software allows customers to focus on application software development.

Integrated Security from Edge to Cloud

Protect the fleet of edge infrastructure and apps from Internet vulnerabilities and physical tampering, to reduce downtime. Secure connectivity across cloud and edge enables improved productivity for DevOps and SRE.

Performance Optimization and Cost Reduction

SaaS-based delivery of platform services, coupled with a high performance global network, significantly reduces the cost of deployment, operations and application downtime at the edge.

Use Cases

SECURE GATEWAY FOR DISTRIBUTED EDGE

VoltMesh at the edge consolidates network routing, application load balancing, API gateway, and security services with centralized policy, operations and observability. Volterra's global network adds high performance and secure connectivity across edge and cloud, reducing fleet complexity.

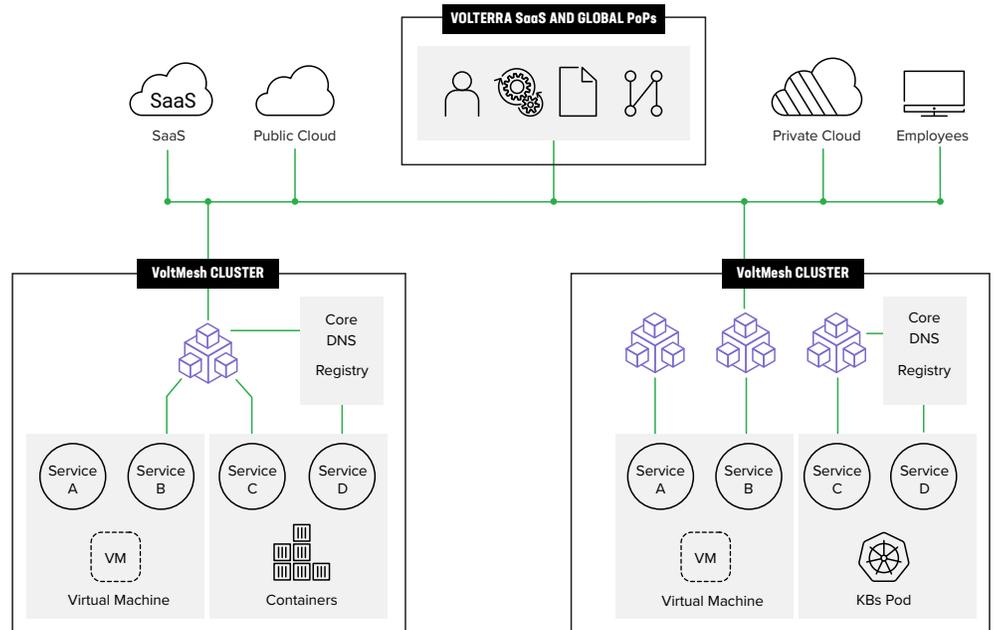


Figure 2: VoltMesh consolidates network services with centralized operations.

DISTRIBUTED APPLICATION AND FLEET MANAGEMENT

VoltStack consolidates compute, storage and network services with centralized operations of a fleet of distributed nodes. Kubernetes API automates application deployment, scaling, security and operations across the fleet without the burden of operating multiple individual clusters.

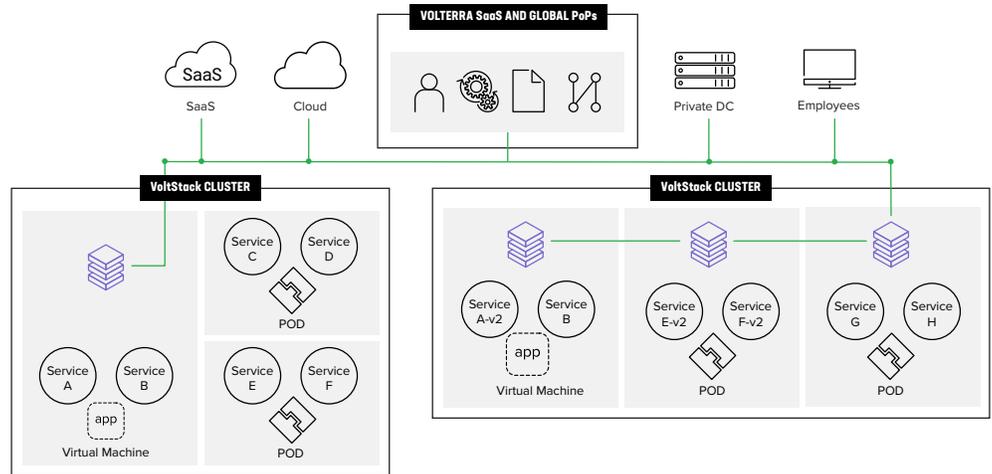


Figure 3: VoltStack simplifies operations of distributed nodes.

About Volterra

Volterra provides a comprehensive SaaS platform to deploy, connect, secure and operate distributed applications and data across multi-cloud and edge sites.

Learn more about Volterra Edge Cloud solutions

Visit: volterra.io

Contact Technical Sales: sales@volterra.io

