

# App Security and Performance

DELIVER AND PROTECT APPLICATIONS ACROSS ANY INFRASTRUCTURE

## OVERVIEW

The rise of cloud-based workloads (public, private or hybrid) is resulting in significant changes in app development and deployment, including:

- Microservices and modular designs are being used regularly—new apps are not monolithic anymore
- APIs are extensively used for communication across microservices (not just externally)
- Apps are in multi-region and/or multi-cloud deployments using distributed clusters

As a result, the requirements for app infrastructure now include increased performance for API and multi-cluster traffic, automated API security, and the ability to provide end-to-end visibility, policy control and management across clusters and cloud providers. In a nutshell, with modern apps being modular and distributed, and their numbers growing rapidly, it is becoming harder to properly connect, secure and observe them.

To address this evolving set of app networking and security challenges, Volterra provides an integrated and distributed solution through its global app delivery network (ADN) with its VoltMesh service running on it. The Volterra ADN with VoltMesh provides Layer 7 DDoS, WAF and API security coupled with globally distributed load balancers—removing the need to deploy load balancers in every location and piling up hardware or software appliances (DDoS/WAF/GLB).

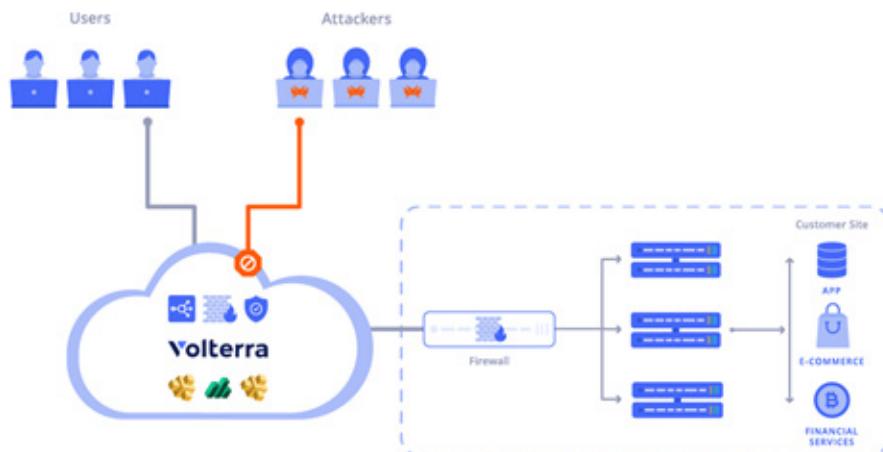


Figure 1. DDoS attack protection

## CHALLENGES ADDRESSED



Protect against both volumetric (DDoS) and application-layer attacks (up to API-layer)



Improve performance and reliability of modern microservices-based, distributed apps



Integrate and simplify the operation of multiple security and networking services

## VOLTERRA GLOBAL HIGH-PERFORMANCE APP DELIVERY NETWORK (ADN)

Volterra's ADN takes advantage of a 10Tbps+ private backbone to provide VoltMesh-based global load balancing and multi-terabit capacity protection against DDoS. In addition to leveraging Tier 1 service providers such as Telia, NTT and CenturyLink for network capacity, the Volterra ADN is high-capacity peered with most major SaaS providers and has dedicated connectivity to public cloud providers. Together, this provides customers with low latency and highly secure connectivity for their critical applications.



## KEY CAPABILITIES

- L3-L7 DDoS and bot mitigation
- Network-based web app firewall (WAF)
- Automated API discovery and control
- Distributed load balancer and API gateway
- Unified analytics and observability
- Centralized management through SaaS-based portal

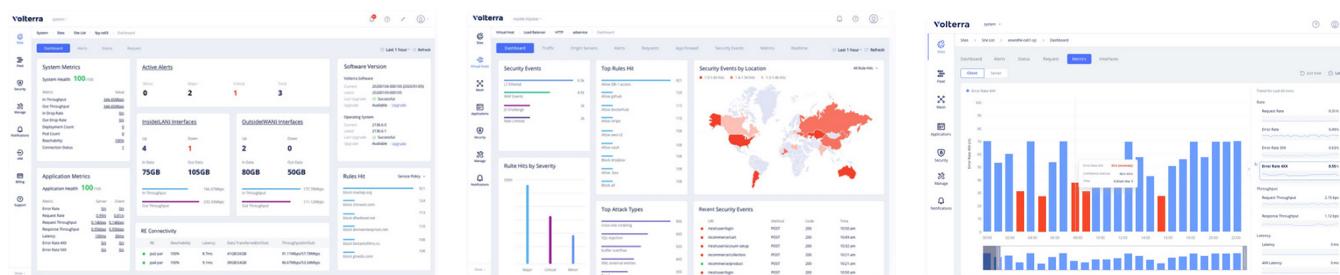


Figure 3. VoltConsole dashboards

### About Volterra

Volterra provides a distributed cloud services platform to deploy, network and secure applications across multi-cloud and the edge.

### Learn more about Volterra multi-cloud solutions

Visit: [volterra.io](https://volterra.io)

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