## Xena Networks



# VulcanVE

## Stateful Traffic Generator and Analyzer

VulcanVE is the Virtual Edition of Vulcan which is designed for stateful traffic load testing and performance analysis.

VulcanVE can be installed on "off-the-shelf" hardware that meets the minimum specified requirements. VulcanVE can be managed using VulcanManager and/or VulcanAutomation. VulcanVE is ideal for both lab testing of Ethernet based networkequipment as well as WAN testing.

VulcanVE offers stateful end-to-end testing of network appliances such as switches, firewalls, routers, NAT routers, proxies, bandwidth shapers, and more. The platform is also suitable to characterize entire network infrastructure performance such as SD-WAN.

Developers of Ethernet-based network appliances can characterize their performance by measuring connection establishment and teardown rates, packet forwarding rate at large numbers of connections and identify performance bottlenecks. The platform is also ideal for rapid validation of performance or regression testing.

Developers of stateful network security devices such as next-generation firewalls (NGFW) can measure TLS handshake rate, TLS throughput, TCP CC/CPS, and HTTP CPS/TPS. Users can also replay their own PCAP files to the DUT for performance verification.

VulcanManager is ideal for ad-hoc test execution whereas VulcanAutomation enables user customizable test suites.



### **FEATURES**

- Stateful TCP traffic load generation with extreme performance
- High throughput of TLS encrypted traffic
- Configuration and tuning of Ethernet, IP and TCP header fields for advanced traffic scenarios
- Switched and routed network topologies, TCP proxy and NAT support
- User-friendly and responsive UI for explorative testing and in-depth analysis.
- Automation framework for regression and benchmark testing.
- Extensive live stats and test reports

#### **XENA LICENSING**

- Licensing model: Floating
- Software updates and support included
- VulcanManager & VulcanAutomation included

	VulcanVE-300	VulcanVE-500	VulcanVE-700
Minimum performance on EXSi/VMXNET3 *)			
TCP/TLS throughput	5Gbps/(2.5Gbps)	10Gbps	-
TCP/TLS connections per sec	150kcps/(1kcps)		-
Minimum performance on EXSi/MLNX **)			
TCP/TLS throughput	-	-	95Gbps/(20Gbps)
TCP/TLS connections per sec	-	-	1500kcps/(5kcps)
Capacity			
TCP/TLS concurrent connections	500k/25k	2.5M/100k	10M/500k
Supported vCPUs	6	8	14
Minmum Required Memory	16GB	24 GB	64GB
Minmum Required Disk Space	40GB	40GB	40GB
P/N	VulcanVE-300-12M	VulcanVE-500-12M	VulcanVE-700-12M

\*) Dell PowerEdge 7515, ESXi 7.0 U2 or later

\*\*) Dell PowerEdge 7515, ESXi 7.0 U2 or later, Mellanox CX-6 Dx

