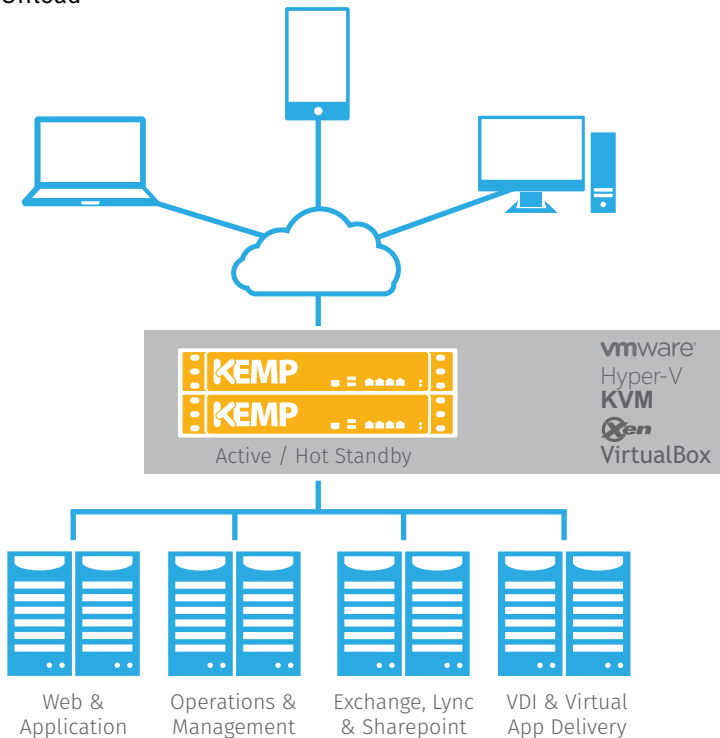


LoadMaster™ VLM

- Application Delivery Optimization
- Server Load Balancing
- SSL Offload



The Virtual LoadMaster™ is an essential component to include for high availability of critical line of business applications, internet facing web services and corporate intranets in private and hybrid cloud deployments.

Hardware-Level Performance in a Virtual Package

The Virtual LoadMaster™ (VLM) delivers the award-winning LoadMaster™ advanced server load balancing and application delivery functionality on VMware, Hyper-V, KVM, Xen and Oracle Virtual Box.

Virtual LoadMaster™ installs and runs as a hardened virtual appliance on a dedicated VM. It features the same capabilities of hardware-based LoadMasters™ including L4 load balancing, L7 content switching, SSL Offloading, Application Health Checking, L7 Persistence, Content Caching, Data Compression and Intrusion Prevention. Controlled by an intuitive Web User Interface, the VLM provides an easy-to-use platform for delivering application delivery in virtualized environments.

The Virtual LoadMaster™ is an essential component to include for high availability of critical line of business applications, internet facing web services and corporate intranets in private and hybrid cloud deployments.

Combining the latest advancements in Layer 4 to Layer 7 application delivery technology, LoadMaster™ is the Load Balancer of choice for providing high availability services in cloud, web and application infrastructures.

FEATURE	BENEFIT
High performance L4/L7 server load balancing	Ensures each user gets the best application experience possible
Web application firewall pack (AFP)	Protection against application level attacks and simplifies PCI-DSS compliance
Server and application health checking	Guarantees user requests will be only be directed to available servers and available applications
IP and L7 persistence	Ensures that users maintain continuous connections with the specific server where their transactional data is available even if the IP address changes during session
Layer 7 content switching	Optimize server traffic according to content type
TLS (SSL) offload	Optimizes server performance and user experience for encrypted application content
Compression and caching of content	Reduces internal network latency and optimizes bandwidth for best possible client experience
Intrusion Prevention Systems (IPS)	Thwarts application threats in both non-encrypted and encrypted traffic streams

LoadMaster™ VLM

Data Sheet

	VLM-200	VLM-2000	VLM-5000	VLM-10G
Support Level Included	1 st Year Basic	1 st Year Basic	1 st Year Basic	1 st Year Basic
Max Real (Physical/VM) Servers †	1,000	1,000	1,000	1,000
Max Virtual Services (VIP) †	256	1,000	1,000	1,000
Max Balancer Throughput † *	200Mbps	2,000Mbps	5,000Mbps	10Gbps
TLS(SSL) Transactions Per Second (TPS) † *	200	1,000	10,000	12,000

† All figures are maximum licensed values.

* Actual performance is dependent on the host hardware configuration including processor, memory, networking, and overall system architecture.

Specifications 7.1

Standard

- Server Load Balancing (SLB) for TCP/UDP based protocols
- TLS (SSL) Offload
- Layer 7 Content Switching
- Advanced application transparent caching for HTTP/HTTPS
- Optimized compression of static and dynamic HTTP/HTTPS Content
- SNORT-rule compatible Layer 7 intrusion prevention system (IPS)
- IPv6 support for addressing and features
- IPv6 - IPv4 bidirectional conversion
- NAT-based forwarding
- Support for Direct Server Return (DSR) configurations
- Session reconnection for Microsoft remote desktop services (RDS)
- Configurable S-NAT support

Edge Security Pack

- Microsoft TMG replacement
- Pre-Authentication & SSO
- Multi-Domain authentication
- X.509 client certificate authentication
- Custom login forms
- Two factor authentication

Health Checking & High Availability

- ICMP health checking
- Layer 7 checking against server port
- Active/Hot Standby option
- Stateful Failover

TLS (SSL)

- Configurable TLS (1.0, 1.1, 1.2) and SSL (2.0, 3.0)
- EV (Extended Validation) certificates
- Server Name Identification (SNI)
- Up to 256 TLS (SSL) certificates
- Automated TLS (SSL) certificate chaining
- Certificate Signing Request (CSR) generation
- STARTTLS offload for mail protocols (POP3, SMTP, IMAP)
- FIPS 140-2 Level 1 mode

Administration

- Flexible administration Options
 - Web User Interface (WUI)
 - SSH
 - Console
 - RESTful, JAVA and PowerShell APIs
 - VMware vRealize Orchestrator
- Wizards for simplified deployment
- Context based help (WUI)
- Real time status/performance display
- Application templates
- Comprehensive logging and reporting
- SNMP support

Scheduling and Balancing Methods

- SDN Adaptive
- Round Robin
- Weighted Round Robin
- Least Connection
- Weighted Least Connection
- Agent-based Adaptive
- Chained Failover (Fixed Weighting)
- Source-IP Hash
- Layer 7 Content Switching
- Global Server Load Balancing (GSLB)
- AD Group based traffic steering

Session Persistence

- Source IP (L4)
- TLS (SSL) SessionID (L4)
- HTTP/HTTPS Browser-session (L7)
- HTTP/HTTPS WebClient-session (L7)
- RDP Login ID (L7)
- Port Following for mixed HTTP/HTTPS sessions

Security

- SNORT-Rule Compatible L7 Intrusion Prevention System (IPS)
- Permit /Deny Access Control Lists
- IP address filtering
- DDoS mitigation, including L7 rate based attacks
- IPSec VPN to Azure, AWS and vCloud Air public clouds