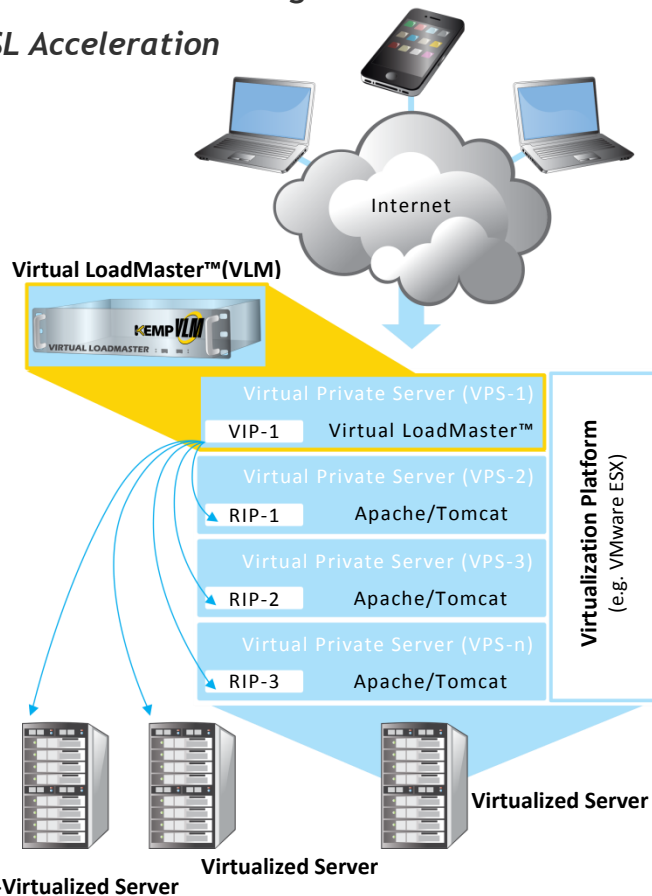


- ◆ *Application Delivery Optimization*
- ◆ *Server Load Balancing*
- ◆ *SSL Acceleration*



The Virtual LoadMaster™ (VLM) is a virtual appliance version of the award-winning LoadMaster™ family of advanced server load balancing and application delivery optimization appliances.

Virtual LoadMaster™ installs and runs as a hardened, 'Guest' operating OS/Application on a dedicated virtual machine. It provides the same features of the LoadMaster™ appliance including L4 load balancing, L7 content switching, SSL Offload, Server and Application Health Checking, IP and L7 Persistence, Caching, Compression, IPS and much more. It also supports stateful Active/Hot-standby configuration between two VLMs for redundancy and high-availability. All controlled by the same intuitive, easy-to-use Web User Interface as the hardware appliance version of the LoadMaster™.

The LoadMaster™ is an essential component of high availability, clustering and fault tolerance, all of which provide the infrastructure for reliable Internet sites and large corporate intranets.

Combining the latest advancements in Layer 4 and 7 server load balancing technology with high-performance hardware platforms, the LoadMaster™ is a value leader in purpose built Internet Traffic Management appliances.

Feature	Benefit
High Performance L4/7 Server Load Balancing	Ensures each user gets the best application experience possible
Active/Hot-Standby, with Stateful Failover	Provides 99.999% high-availability of application servers and removes SLB as single point of failure
Server Hardware and Application Health Checking	Guarantees user requests will be directed to only "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	Enables site administrators to optimize server traffic according to content type (images, multi-media, apps)
SSL Acceleration/Offload	Optimized server performance and user experience for encrypted application content
Compression, Cache	Reduces latency associated with internal network while further optimizing performance over existing ISP link
Intrusion Prevention Systems (IPS)	Helps thwart application-level threats, even with SSL- encrypted traffic

Standard

- Server Load Balancing (SLB) for TCP/UDP based protocols
- Layer 7 Content Switching
- Advanced, App-Transparent Caching Engine for HTTP/HTTPS protocols
- Optimized Compression for Static and Dynamic HTTP/HTTPS Content
- Layer 7 Intrusion Prevention System (IPS), SNORT-Rule Compatible
- Up to 1000 Virtual Services
- IPv6 support for addressing and features
- IPv6 - IPv4 bidirectional conversion
- NAT-based forwarding
- Support for Direct Server Return (DSR) configurations
- Support for MS Terminal Services with Session Reconnection Built-in
- Configurable S-NAT support
- VLAN Trunking (802.1Q)
- Link Interface Bonding (Modes supported: 802.3ad, Link Failover)

SSL

- Support for EV (Extended Validation) Certificates
- PCI-DSS ready SSL Implementation
- Support for up to 1000 SSL Certificates
- Support for Third Party Certificates
- Automated SSL Certificate Chaining
- SSL Certificate Signing Request (CSR) Generation
- STARTTLS offload for mail protocols (POP3, SMTP, etc.)
- FIPS 140-2 Level 1 capable

Health Checking & High Availability

- ICMP health checking of servers
- Layer 7 checking for DNS, FTP, HTTP, IMAP, NNTP, POP3, SMTP, WTS (RDP), TELNET
- Automatic reconfiguration for defective real servers

Administration

- Fully configurable using Web User Interface (WUI)
- Secure, SSH and HTTPS (WUI) remote access for administration
- Easy start and maintenance using wizards
- WUI-based Help Assistant
- Virtual Service Configurations can be edited and tuned on-the-fly
- Real time performance and availability displays
- Preconfigured Applications templates



- Console port for local administration
- Remote syslogd support
- Selective restore of LoadMaster™ and Virtual Service data
- Support for Connection Draining
- Download software updates for LoadMaster™ firmware
- WUI Log Reporting with Tabbed Browser Support
- SNMP support for event traps & performance metrics
- Diagnostic shell with in-line tcpdump

Scheduling and Balancing Methods

- Round Robin
- Weighted Round Robin
- Least Connection
- Weighted Least Connection
- Agent-based Adaptive
- Chained Failover (Fixed Weighting)
- Source-IP Hash
- Layer 7 Content Switching

Sticky (Persistence) Connection Options

- Source IP (L4)
- 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 Functionality

- Layer 7 Intrusion Prevention System (IPS), SNORT-Rule Compatible
- Global & per VS Black list and White list (Access Control List)
- IP address filtering
- Firewall filtering (everything forbidden except VS's)
- DDoS mitigation, including L7 rate based attacks

* Specifications are subject to change without prior notice.