Virtual LoadMaster® Datasheet

DATA SHEET

Cloud & Virtual Application Delivery

Progress Kemp LoadMaster is a fully featured load balancer and application delivery controller (ADC) that supports all the major application workloads with easy-to-use templates. It offers key features such as SSL offload along with advanced authentication and traffic delivery options.
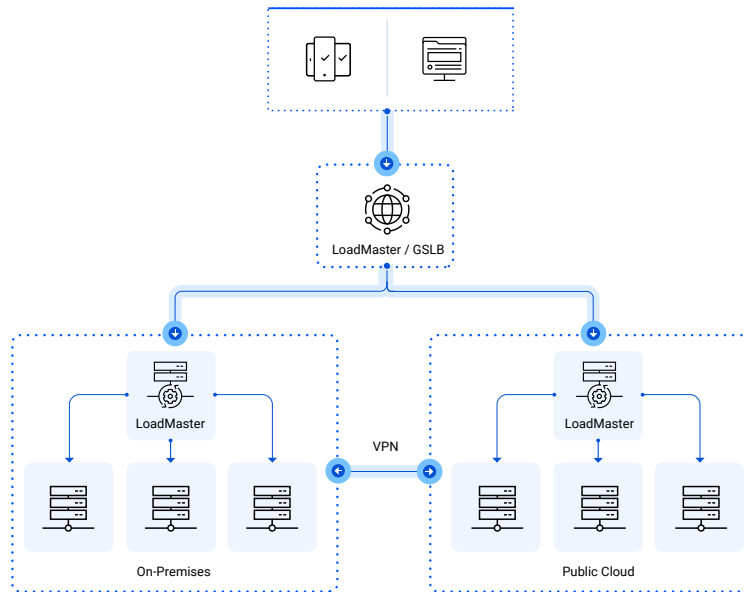

FIGURE 1- LOADMASTER HYBRID TOPOLOGY

Deliver Anywhere

Virtual LoadMaster (VLM) instances can be deployed on all major hypervisors and on leading public cloud services with a consistent set of features regardless of where deployed. Consistency across a wide range of platforms greatly simplifies cloud migration and hybrid cloud deployments with seamless migration and reduced management complexity.

Flexible Licensing

Virtual LoadMaster can be licensed using permanent, subscription licenses on each instance. A more flexbilble and scalable option we have called Pooled allows license mobility and dynamic growth options. Pooled licensing provides the flexibility to deploy and retire load balancing resources on-demand, greatly simplifying DevOps environments and application scaling.

Easily Managed

LoadMaster appliances can be managed via the intuitive web UI, via API (PowerShell/RESTful). Application templates simplify deployment and optimization, while the API provides an easy way to automate configuration and management tasks whether through DevOps toolsets or operational frameworks.

Support Subscriptions

LoadMaster support subscriptions offer flexibility, simplicity and value to meet your application delivery requirements and challenges. Support subscriptions are annual and can be upgraded and downgraded as application delivery demands change for maximum flexibility. The tiers are mapped to common customer challenges and requirements, simplifying the task of selecting the appropriate feature set and support levels.

LoadMaster annual subscriptions (VLM-1G and VLM-5G) and cloud (AWS & Azure) pay-as-you-go include an Enterprise Plus support subscription as standard.

LoadMaster Support Subscription Tiers

Each subscription tier adds to the features and services delivered by lower tiers as follows:

Standard support	Enterprise support	Enterprise Plus support
10x5 Customer Support	24x7x365 Customer Support	24x7x365 Customer Support
Software Updates	Software Updates	Software Updates
Security Patches	Security Patches	Security Patches
L4-L7 Application Delivery	L4-L7 Application Delivery	L4-L7 Application Delivery
Network Telemetry	Network Telemetry	Network Telemetry
Intrusion Prevention	Intrusion Prevention	Intrusion Prevention
	Edge Security Pack	Edge Security Pack
		Web Application Firewall (WAF) with updated reputation data daily
		GSLB with updated reputation data daily
		Floating License

Features

Network Telemetry

- Export network flow data to Flowmon Collector in the industry standard IPFIX protocol format.
- Leverage the power of Flowmon Collector to store and analyze flow data, gaining visibility into the entire application value delivery chain to identify bottlenecks, misconfigurations, and potential security issues.
- Combine LoadMaster-exported data with IPFIX data from other network nodes on Collector to gain a complete picture of your infrastructure.
- View LoadMaster data on Flowmon Collector in dashboards and widgets specific to LoadMaster and the Virtual Services defined on it.

Web Application Firewall (WAF)

- Real-time application threat mitigation
- Updated reputation data daily
- Threats mitigated
  - Cookie tampering
  - Cross site request forgery
  - Cross site scripting
  - Data loss prevention
  - SQL injection
- PCI-DSS Section 6.6 compliance

Edge Security Pack

- Microsoft TMG replacement
- Pre-authentication
- Multi-domain authentication & SSO
- X.509 client certificate authentication
- Custom login forms
- Two-factor authentication
- OIDC, SAML, Active Directory, RADIUS & LDAP
- Forms to Forms based authentication

Intrusion Prevention

- Snort compatible IPS
- Allow/Deny IP by address (Global and per VS)

Global Server Load Balancing (GSLB)

Scheduling and Balancing

- Round Robin
- Weighted Round Robin
- Chained Failover (Fixed Weighting)
- Regional
- Real Server Load
- Location Based
- Scale to 256 nodes per FQDN
- Use EDNS to direct client traffic

Security

- Allow/Deny List (Access Control List)
- Updated reputation data daily
- DDoS mitigation

Health Checking & Failover

- ICMP health checking of server farm machines
- Layer 4 TCP checking
- HTTP/HTTPS health check
- Active/Active High Availability

L4-L7 Application Delivery

General

- Server Load Balancing (SLB) for TCP/UDP based protocols
- TLS (SSL) Offload
- Layer 7 Content Switching
- Transparent caching for HTTP/HTTPS
- Compression of static and dynamic HTTP/HTTPS content
- HTTP/2 Support

- Up to 1000 total Virtual Services and SubVSs
- Up to 1000 total Real Server IP addresses
- Unlimited assignment of IP:port combinations to VSs and Sub VSs
- NAT-based forwarding
- Support for Direct Server Return (DSR) configurations
- Configurable S-NAT support
- VLAN Trunking (802.1Q)
- Link interface bonding (802.3ad)
- IPv6 Ready certified
- IPv6 support for addressing and features
- IPv6 to IPv4 gateway/proxy using a NIST IPv6 Ready network stack

Health Checking

- Aggregated health checks
- ICMP health checking
- Layer 7 checking against any target server port
- Active/Hot Standby configurations for High
- Availability
- Stateful Failover
- Scale-out Clustering

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
- Session reconnection for Microsoft RDS

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
- Global Server Load Balancing (GSLB)
- AD Group based traffic steering

SSL/TLS Features

- Configurable TLS (1.0, 1.1, 1.2, 1.3) and SSL (2.0, 3.0)
- Support for EV (Extended Validation) certificates
- OCSP certificate validation
- Server Name Identification (SNI) support
- Support for up to 1,000 TLS (SSL) certificates
- Automated TLS (SSL) certificate chaining
- Certificate Signing Request (CSR) generation
- FIPS 140-2 Level 1
- STARTTLS mail protocols (POP3, SMTP, IMAP)

Administration

- Change auditing
- Web User Interface (WUI)
- SSH & physical console
- RESTful and PowerShell APIs
- VMware vRealize Orchestrator
- Context based help (WUI)
- Real time display of performance and availability
- Application templates
- Remote syslog support
- Automated configuration backup
- Selective restore of configuration
- Connection draining
- Comprehensive logging and reporting
- SNMP support
- Diagnostic shell with in-line tcpdump

Security

- Common Criteria (ISO/IEC 15408) Certified
- Allow/Deny List (Access Control List)
- IP address filtering
- IPsec Tunnel support
- DDoS mitigation, including L7 rate-based attacks
- IPSec VPN to Azure, AWS, and public clouds
- Authenticated NTP

LoadMaster 360

- Application analytics and telemetry
- Incident management
- Certificate lifecycle management
- Enhanced Web Application Firewall (WAF)
- LoadMaster License Management and Repository
- Advanced User Insights

Perpetual Licensing

Perpetual licenses are available across all cloud and hypervisor platforms. Apply a support subscription to a perpetual license to define the support level and features enabled.

	VLM-1G	VLM-5G	VLM-MAX	VLM-GEO
Public Cloud and Hypervisor	✓	✓	✓	✓

Pooled Licensing

Pooled Licensing is a yearly subscription allowing the overall pool capacity to be licensed dynamically to LoadMaster instances. Delivered through LoadMaster 360.

Subscription Plans	2Gb	5Gb	10Gb	20Gb	50Gb
Public Cloud and Hypervisor	✓	✓	✓	✓	✓

Subscription Plans	100Gb	200Gb	300Gb	400Gb	500Gb
Public Cloud and Hypervisor	✓	✓	✓	✓	✓

Subscription Licensing

Subscription licenses are available for one or three years on all cloud and hypervisor platforms. Enterprise Plus support subscription included as default.

	VLM-1G	VLM-5G
Public Cloud and Hypervisor	✓	✓

PAYG Licensing

PAYG (Pay-As-You-Go) licenses provide hourly usage licenses on Azure and AWS that includes platform usage and Kemp instance licensing. All PAYG Virtual LoadMasters include WAF and GEO (GSLB) with updated reputation data daily and Edge Security Pack as standard and do not require any additional subscription purchase.

	VLM-FREE	VLM-1G	VLM-5G	VLM-MAX
Public Cloud (Azure & AWS)	✓	✓	✓	✓

SPLA Licensing

Service Provider Licensing Agreement (SPLA) provides monthly usage licenses.

	VLM-SPLA-50	VLM-SPLA-100	VLM-SPLA-500	VLM-SPLA-3000	VLM-SPLA-GEO
Public Cloud and Hypervisor	✓	✓	✓	✓	✓

LoadMaster Platform Support

Virtual LoadMaster on Hypervisor

Virtual LoadMaster is available on Hyper-V, VMware, Nutanix, XEN, KVM and VirtualBox.

	VLM-1G	VLM-5G	VLM-MAX
Subscription Tiers Supported	All	All	All
Licensing model supported	Perpetual, Subscription	Perpetual, Subscription	Perpetual
Licensed Performance			
Load Balancer Throughput	1000 Mbps (1 Gbps)	5 Gbps	Uncapped*
SSL TPS	1,000	5,000	Uncapped*
Layer 4 Concurrent Connections	3,000,000**	3,000,000**	Uncapped*
Max Servers/ Virtual Clusters	1,000/1,000	1,000/1,000	1,000/1,000

Virtual LoadMaster on Cloud

Virtual LoadMaster is available on Azure and AWS and their Government variants.

	VLM-1G	VLM-5G	VLM-MAX
Subscription Tiers Supported	All	All	All
Licensing model supported [§]	BYOL, PAYG	BYOL, PAYG	BYOL, PAYG
Licensed Performance			
Load Balancer Throughput	1000 Mbps (1 Gbps)	5 Gbps	Uncapped*
SSL TPS	1,000	5,000	Uncapped*
Layer 4 Concurrent Connections	3,000,000**	3,000,000**	Uncapped*
Max Servers/ Virtual Clusters	1,000/1,000	1,000/1,000	1,000/1,000

[§] *BYOL (Bring-Your-Own-License) instances are subject to cloud platform charges based on the VM size deployed. PAYG (Pay-As-You-Go) is an hourly billing scheme that includes the Kemp license and cloud platform charges.*

* Performance dependent on allocated system resources.
**Based on minimum 2GB memory configuration for a VLM

∞ All specifications are subject to change without prior notice.

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