LoadMaster 8020

- High-Performance application delivery
- Intelligent load balancing with SDN Adaptive
- TLS (SSL) Offload

![Diagram of LoadMaster 8020 features]

**FEATURE** | **BENEFIT**
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High performance Layer 4 and Layer 7 load balancing | Consistent delivery of high volume enterprise application workloads
Java™, PowerShell and RESTful APIs | Simplified orchestration and management of appliances using existing tools
Highly available pairs with stateful failover | Easily meet application delivery SLAs with HA and global server load balancing
SSL acceleration and offload | Reduced server overhead and improved end user experience
Web Application Firewall Pack (AFP) | Protect applications against known and emerging vulnerabilities and simplify PCI compliance
SDN Adaptive load balancing | Avoid service degradation due to network issues by including SDN metrics in load balancing decision
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
Dual power supplies | Increased service resilience

**Intelligent Application Delivery for Large Scale Workloads**

The LoadMaster™ 8020 appliance represents the ultimate in application delivery performance and functionality for high volume environments. It offers the best quality of experience for connected users with throughput of over 30Gbps and advanced application delivery features that maintain performance by intelligently adapting to changing network environments. Appliances may be configured as a highly available pair and use the built in global server load balancing for resilient application delivery across sites and in the data center.

The 8020 enables secure and scalable delivery of enterprise workloads such as SAP® and Oracle® and can support over 75 million concurrent connections. Configuration is simplified via the use of application templates which are included for all the major application workloads including Microsoft® Exchange, Skype® for Business and Sharepoint®.

The security of applications is enhanced with features such as a Web Application Firewall (WAF), intrusion detection and authentication services while application resilience to network bottlenecks is delivered with SDN Adaptive. SDN Adaptive integrates with leading SDN controllers to intelligently deliver applications using not only application level health checks but also SDN performance and status metrics.
Specifications Master 8020

Specifications version 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)
- Up to 1000 Virtual and 1000 Real Servers
- 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
- VLAN Trunking (802.1Q)
- Link interface bonding (802.3ad)
- Edge Security Pack (Pre-Auth & SSO)

Performance

- Max Balancer L4 throughput up to 31.6Gbps
- Max Balancer L7 throughput up to 30Gbps
- 450,000 L7 (http) requests per second
- 525,000 L7 concurrent connections
- 75,800,000 L4 concurrent connections
- TLS (SSL) Acceleration
  - 2K Keys up to 30,000 TPS
  - 1K keys up to 46,000 TPS

TLS (SSL)

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

Health Checking & High Availability

- ICMP health checking
- Layer 7 checking against any target server port
- Active/Hot Standby configurations for High Availability
- Stateful Failover
- Global Server Load Balancing (GSLB) for multi-data center resilience included as standard

Administration

- Flexible administration Options
  - Web User Interface (WUI)
  - SSH
  - Console
  - RESTful API
  - Java™ API
  - PowerShell API
- Hardware remote access controller
- Wizards for simplified deployment
- Context based help (WUI)
- Real time display of performance and availability
- Application templates for all major workloads
- Remote syslogd support
- Automated configuration backup
- Selective restore of configuration
- Connection draining for managed outages
- Comprehensive logging and reporting
- SNMP support
- Diagnostic shell with in-line tcpdump
- IPSec VPN to public cloud services

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)

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 Functionality

- Web Application Firewall (WAF)
- Optional Application Firewall Pack (AFP) for daily WAF rule updates
- SNORT-Rule Compatible L 7 Intrusion Prevention System (IPS)
- Permit /Deny Access Control Lists
- IP address filtering
- IPsec Tunnel support
- DDoS mitigation, including L7 rate based attacks

Hardware Platform

- Intel® Xeon® 10 Core Processor
- 6 X 10Gb SFP+ Direct Attach Ports
- 64 GB RAM
- Local admin via serial and VGA/USB
- Dimension (2U): 434mm (W) x 684mm (D) x 87.3mm (H)
- Weight: 11.7kg (25.7 lb)
- 495W Hot-plug, Redundant (1+1) PSU

* Specifications are subject to change without prior notice.