- ▪ *Disaster Recovery*
- ▪ *Multi-site Load Balancing*
- ▪ *Location Awareness*

LoadMaster™ *GEO (GLM)* offers the ability to move past the single datacenter, allowing for multi datacenter load balancing and high availability. GLM ensures that even when a primary site is down, traffic is diverted to the disaster recovery site. LoadMaster™ GEO also includes the ability to ensure clients seamlessly connect to their fastest performing and geographically closest datacenter.

The LoadMaster™ GEO offers the same management interfaces as KEMP's Server Load Balancer (LoadMaster™) hardware appliances, including all the technology such as syslog logging, email notifications, interface bonding, and Gigabit support. LoadMaster™ GEO provides advanced application health checking, to ensure that unavailable services or datacenters are not visible to clients. Health checking can occur at the services level or even the site level, allowing for flexible decision making on when traffic should be diverted per Fully Qualified Domain Name (FQDN).

LoadMaster™ GEO offers "Round Robin" load balancing for all active datacenters, which includes support for weights and a chained failover option for disaster recovery. LoadMaster™ GEO securely and seamlessly integrates with LoadMaster™ to offer "Real Server Load" load balancing, in which LoadMaster™ GEO uses local datacenter metrics provided by LoadMaster™, allowing clients to connect to the least busy datacenter. Added to this is location awareness of your clients which results in your clients being redirected to the most appropriate datacenter based on their location.

LoadMaster™ GEO can be deployed in a distributed (Active/Active) high availability configuration, with both appliances securely synchronizing information. Introducing LoadMaster™ GEO in your existing Authoritative Domain Name Services (DNS) requires minimal integration work and risk, allowing you to fully leverage your existing DNS investment.

LoadMaster™ GEO is easy to set up, and easy to manage. LoadMaster™ GEO is a self-contained 'plug and play' appliance that doesn't require the additional installation of software on your servers. Network management is made easy, administrators can deploy new servers and take individual servers offline for routine maintenance without disrupting services to end-users. Integrating the LoadMaster™ GEO into an existing DNS infrastructure can be done with no service impact and allows for distributed administration.
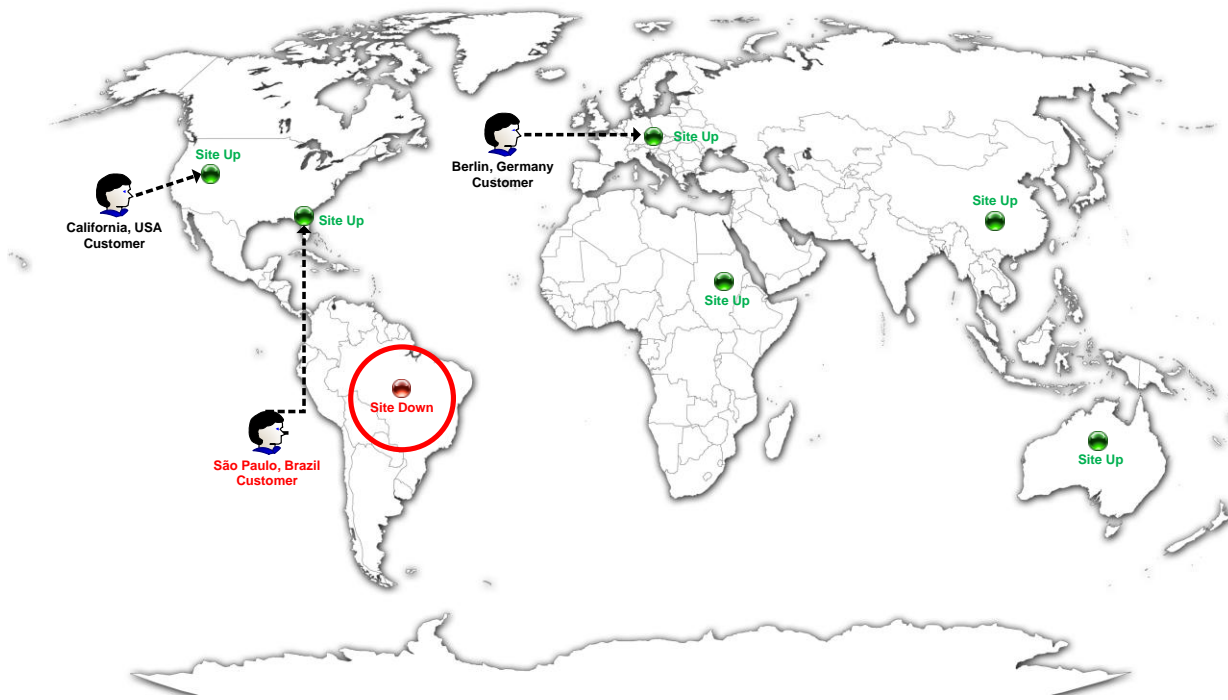
High Availability & Reliability

LoadMaster™ GEO helps prevent service outages by quickly detecting server and datacenter failures and then directing traffic. Monitoring and load balancing are based on layers 3 and 4 of the Open Systems Interconnection Basic Reference Model (OSI). Included in HA is the ability to have two appliances, protecting against introduction of a single point of hardware/network connectivity failure. Each individual LoadMaster™ GEO can also be configured to provide network link-layer redundancy.

Location Awareness

The GLM can determine the location of a client in real time and direct them to the most appropriate datacenter based on this location resulting in intelligent redirection of clients.

Speed

LoadMaster™ GEO's intelligence ensures that your mission-critical servers are continuously available and performing reliably. LoadMaster™ GEO can monitor server and application load. This information is then used to intelligently direct user requests to the cluster that is most available. By intelligently redirecting traffic, LoadMaster™ GEO eliminates server overload conditions and round trip propagation delays that may slow performance, allowing you to increasing end-user application speed.

Scalability

LoadMaster™ GEO solves the scalability "dilemma" by continuing to support increasing network server workloads and still providing high reliability. LoadMaster™ GEO offers:

♦ Intelligently distributes traffic across server arrays or data centers, reduces the need for increasingly larger and more expensive servers to accommodate increases in network traffic and enables many inexpensive servers to function as a single, virtual server.

♦ Reduces the single point of failure and expense inherent with a single large server, and allows for the orderly addition of new servers, or the routine maintenance or upgrades of servers without disrupting service to the end user.

♦ Can be used with multiple heterogeneous hardware platforms

 * Specifications are subject to change without prior notice.

Features and Specifications

Standard

- Multi-site Load Balancing
- VLAN Trunking (802.1Q)
- Link Interface Bonding (Modes supported: 802.3ad, Link Failover)
- 4X Gigabit Ports
- Up to 15,000 Max DNS Queries Per Second (QPS)

Health Checking and High Availability

- ICMP health checking of server farm machines
- Layer 4 TCP checking
- Automatic reconfiguration for defective real server machines
- Active/Active configurations for High Availability

Administration

- Fully configurable using Web User Interface (WUI)
- Secure, SSH and HTTPS (WUI) remote access
- Easy start and maintenance using wizards
- WUI-based Help Assistant
- FQDN Configurations can be edited and tuned on-the-fly
- Real time performance and availability displays
- Console port for local administration
- Remote syslogd support
- Download software updates for GEO firmware
- WUI Log Reporting with Tabbed Browser Support
- SNMP support for event traps & performance metrics

Scheduling and Balancing Methods

- Round Robin
- Weighted Round Robin
- Chained Failover (Fixed Weighting)
- Real Server Load

Security

- Black List (Access Control List system)
- IP address filtering
- DDoS mitigation

Hardware Platform

- 4 X GbE Auto-negotiating, Full Duplex Eth. Ports
- Bootable DOM (No Hard Disks)
- 1 GB RAM
- Local admin via console/VGA and USB
- Dimensions: 426 x 419 x 44 mm. (1U)
- Weight ~ 13.23 lbs (6kg)
- 180W ATX power supply