

# LoadMaster 1500/2500/2400/2460/2860/3500/3620/5500

## Version 4.2

### Release Notes Version 1

*KEMP Technologies, Inc.*

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#### Platform Compatibility

The KEMP Technologies LoadMaster 4.2 release is supported on the following platforms:

- **KEMP Technologies LoadMaster 1500**
- **KEMP Technologies LoadMaster 2500**
- **KEMP Technologies LoadMaster 2400\***
- **KEMP Technologies LoadMaster 2460**
- **KEMP Technologies LoadMaster 2860**
- **KEMP Technologies LoadMaster 3500**
- **KEMP Technologies LoadMaster 3620**
- **KEMP Technologies LoadMaster 5500**

\* For LoadMaster 2400's with one red front panel LED, please contact KEMP Technologies for hardware adjustment details.

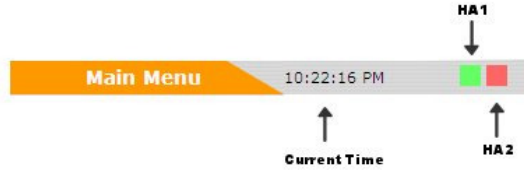
#### New Features

The following features are introduced in the KEMP Technologies LoadMaster 4.2 release:

- **Highly Available Enhancements**
  1. Heartbeat data path between LoadMasters can be configured over a specific network port. This option can be found in the WUI under ▶ System Configuration ▶ Interfaces ▶ [Select Interface] ▶ Use for HA checks
  2. A preferred LoadMaster can be set to remain active (primary) during a failover cycle. This option can be found in the WUI under ▶ System Configuration ▶ Miscellaneous Options ▶ HA Parameters ▶ Switch to Preferred Server
  3. Failover data can be synchronized over selectable interfaces. This option can be found in the WUI under ▶ System Configuration ▶ Miscellaneous Options ▶ HA Parameters ▶ HA Update Interface
  4. Multiple LoadMaster Highly Available pairs are now supported on one logical network. Each HA Virtual ID maps to the following UDP ports (ID 1 = 694, ID 2 = 695, ID 3 = 696, ID 4

- = 697, ID 5 = 698 ... ). This option can be found in the WUI under ▶ System Configuration ▶ Miscellaneous Options ▶ HA Parameters ▶ HA Virtual ID
5. Select which LoadMaster is primary, secondary or enable and disable support for HA. These options can be found in the WUI under ▶ System Configuration ▶ Miscellaneous Options ▶ HA Parameters ▶ HA Mode
- **Email Alerts** — Onboard email alert system for Emergency, Critical, Error, Warn, Notice, Info events. Each event can be delivered to unique email addresses. Configurable SMTP server with delivery authorization supported. These options can be found in the WUI under ▶ System Configuration ▶ Logging Options ▶ Email Options
  - **Foreign Real Server Support** — Real Server(s) no longer are required to be on a logical local network to LoadMaster. This option can be found in the WUI under ▶ System Configuration ▶ Miscellaneous Options ▶ L7 Configuration ▶ Enable Non-Local Real Servers
  - **Virtual Service level Default Gateway** — The default gateway for LoadMaster can now be overridden by Virtual Service level default gateways. This option can be found in the WUI under ▶ Virtual Services ▶ View/Modify Existing ▶ [Select Virtual Service] ▶ Advanced Properties
  - **Microsoft Internet Information SSL Certification import** — Personal Information Exchange (PFX) files can be directly imported into LoadMaster using the WUI. This option can be found in the WUI under ▶ Virtual Services ▶ View/Modify Existing ▶ [Select Virtual Service] ▶ SSL Properties
  - **Connection Draining Support** — Current connection status is available on a per Virtual Service and Real Server level. To offline a Real Server simply administratively disable the Real Server, monitor connections and then take the Real Server offline. This option can be found in the WUI under ▶ Statistics ▶ [Select Virtual Services or Real Servers button]
  - **Advanced HTTP Health Checking** — In addition to the HTTP HEAD response code check, LoadMaster now supports a GET request, which allows for examining page content. Patterns are based on regular expressions. Health checking HTTP requests are also configurable to HEAD or GET. This option can be found in the WUI under ▶ Virtual Services ▶ View/Modify Existing ▶ [Select Virtual Service] ▶ Advanced Properties
  - **Configurable L7 Origin Address** — Virtual Services using the “Force L7” feature can be configured to use a specific IP Address for communication to Real Server(s). This feature is used in conjunction with the Additional Subnet feature. This option can be found in the WUI under ▶ System Configuration ▶ Miscellaneous Options ▶ L7 Configuration ▶ Non Transparent Subnet specific Origin Address
  - **Introduction of the “Service Type”** — LoadMaster now supports predefined advanced configuration of common Internet Protocol such as HTTP, HTTPS, and Remote Terminal Protocol. This option can be found in the WUI under ▶ Virtual Services ▶ View/Modify Existing ▶ [Select Virtual Service] ▶ Service Type
  - **WUI Access to both HA Partners** — Each LoadMaster appliance in a HA configuration can now be accessed by the WUI. By default access is provided by the Network Side (port 0) IP Address for local administrative tasks only. Managing of the HA pair should always be done using the shared IP.
  - **Web User Interface (WUI) Enhancements**

1. The real-time status of each LoadMaster in a Highly Available pair is displayed in the upper left screen. Green = Active, Red = Down, Blue = Passified, Gray = Unknown (HA1 and HA2 status is displayed vi Shared IP access **only**.) In addition the current time is displayed in the upper left corner of the screen.



2. Historical summary statistics can now be viewed for the last 60 Sec, 5 Mins, 30 Mins, 1 Hour. This feature can be found in the WUI under [▶ Statistics ▶ \[Select Virtual Services or Real Servers button\]](#)
  3. The current date, time, time zone, and NTP Server can be set. These options can be found in the WUI under [▶ System Configuration ▶ System Administration ▶ Date/Time](#)
- **Purge Historical System Logs** — Historical log information can be purged. This option can be found in the WUI under [▶ System Configuration ▶ Logging Options ▶ Log Files ▶ Reset Logs](#)
  - **Timestamp Support L7 Virtual Service** — Enable or disable Timestamp information in the SYN packet. Please only change this option with approval from the KEMP support team. This option can be found in the WUI under [▶ System Configuration ▶ Miscellaneous Options ▶ L7 Configuration ▶ Enable L7 Timestamps](#)
  - **Enhanced Active Cookie** — When this option is enabled, the LoadMaster will incorporate the client's source port number in the Active Cookie value issued. This option can be found in the WUI under [▶ System Configuration ▶ Miscellaneous Options ▶ L7 Configuration ▶ Add Port to Active Cookie](#)

## Known Issues

This section contains a list of known issues in the KEMP Technologies LoadMaster 4.2 release.

- **Symptom:** Forced link speed causes loss of link. LoadMaster may enter a passified state and reboot spontaneously. Local console access to LoadMaster will show a red background when in passified mode.
- **Condition:** Cisco Catalyst 2950 class switches with a hard coded link speed.
- **Workaround:** Set both the switch and LoadMaster to auto negotiate and reboot.

## Resolved Known Issues

The following issues are resolved in the KEMP Technologies LoadMaster 4.2 release:

- **Symptom:** Cross scripting vulnerability could fail PCI-DSS audit scan.
- **Symptom:** 100% CPU and "LoadMaster slowness" issues accompanied with "Being too busy" in the logs. Race condition corrected.
- **Symptom:** Layer 7 header injection causes delay in traffic flow.
- **Symptom:** Inaccurate calculation in the adaptive scheduling algorithm could cause traffic to flow to the incorrect Real Server.
- **Symptom:** LoadMaster stops responding due to kernel panic. This occurs when enabling the Not Available Server feature and making a configuration change.
- **Symptom:** Rolling back a firmware patch LoadMaster will display the incorrect running version.
- **Symptom:** Third party certificates with special character in the files names could not be deleted.
- **Symptom:** Excessively high memory usage with high TPS SSL Virtual Service.
- **Symptom:** Real Server statistics are inaccurate after administratively disabling and enabling a Real Server.
- **Symptom:** During failover, RDP persistence information not retained with Inter HA L4 TCP Connection Update and Inter HA L7 Persistency Updates enabled.
- **Symptom:** Performing a "Logoff" during a Windows Terminal Server session with SSL encryption enabled, fails due to inaccurate propagation of TCP packet type.
- **Symptom:** Invalid separator character permitted in NTP hosts using Web User Interface.
- **Symptom:** Web User Interface displays on screen errors when adding Virtual Services/Real Server on VLANs.
- **Symptom:** Traffic restricted to Not Available Server when Packet Filtering enabled.
- **Symptom:** Patching with Web User Interface displays broken images.

## Related Technical Documentation

Technical documentation is available on the KEMP Technologies web site located at:

<http://www.kemptechnologies.com/support/Documentation/index.shtml>

(username – support, password – kemptech)