



Equalizer VLB™

Superior Application Delivery in a Virtual World

Advanced Virtualized Application Traffic Management Optimized for VMware

Features

- Equalizer VLB™ and VLB Advanced™ are software driven capabilities of Equalizer E350, E450 and E650 models
- Full Integration with VMware Infrastructure® API retrieves real-time resource metrics from vCenter™ or ESX Server™
- Provides Virtualized application performance monitoring and proactive management
- Extends application level health checks to VMware
- Smart Control™ delivers rule based control of VMware server instances

Benefits

- Guarantees Virtualized application availability
- Optimize load balancing based on resource utilization
- Optimize hardware utilization and reduce over-provisioning
- Maximize Virtualized application performance
- Take full advantage of cost and energy saving benefits of virtualization technology
- Improves Virtual server and application manageability

Virtualized Servers and applications

Virtualization has emerged as the key technology for enabling efficient, cost-effective server deployment. Coyote Point developed Equalizer VLB specifically to add advanced integration capabilities to enhance the availability and performance of virtual server driven applications.

Equalizer VLB™ and Equalizer VLB Advanced™

Equalizer VLB provides two levels of comprehensive load balancing and application acceleration solutions to enhance scalability, availability and manageability of virtualized services. Equalizer VLB™ provides enhanced monitoring for VMware server while Equalizer VLB Advanced™ adds proactive, configurable rule sets for controlling VMware Infrastructure™.

IT business leaders can use VLB Advanced to ensure optimum utilization of virtual hardware resources by automating workload distribution across physical resources. Hot spots and the need to overprovision to handle load spikes are eliminated. The fiscal impact is reduced capital expenses (fewer servers) as well as lower operational expenses (power, cooling, and management). Combine this with the highest application availability, improved application response times and you have a complete solution that ensures the success of virtual server deployments.

Equalizer VLB and VMware® Servers

Equalizer VLB utilizes VMware's management API to retrieve the real-time virtual server performance information from VMware vCenter or ESX server (VMware infrastructure) to determine virtual machine status.

Equalizer EQ/OS with VLB combines awareness of application availability and server traffic trends with information from VMware servers and physical resource utilization to achieve higher application performance and availability compared to load balancing and virtualization working independently.

Make Equalizer your automated NOC manager

Equalizer VLB Advanced enhances the VLB feature-set, and also adds several features which allow VLB to control the behavior of virtual machines. Coyote Point has taken load balancing of VMware Infrastructure to the next level with Equalizer VLB Advanced™ by offering:

- VLB Smart Control: Advanced scripting via EQ/OS' best of breed graphical user interface.
- Improved monitoring and control of application performance and server responses incorporating Equalizer's network level application traffic monitoring
- The most advanced Load Balancing technology for VMware servers available today.

Equalizer VLB Advanced with Smart Control goes beyond load balancing available through VMware.

With VLB advanced, administrators can define threshold conditions that trigger a VMware response. VLB Advanced pulls resource information and pushes commands based on Smart Control scripts. Examples of actions and triggers supported by VLB Smart Control include:

- Auto-quiesce trigger events for multiple applications running on the same server or in different clusters, VLB will auto-quiesce servers that are not currently needed due to low traffic, freeing resources for other applications or to permit powering down unused physical servers.
- Auto-shutdown & Auto-on event triggers can automatically shut down or start a virtual server when the trigger event occurs.
- Auto-reboot triggers cause VMware ESX Server or vCenter to reboot a virtual server to restart a "crashed" application.
- Smart Control triggers activate to handle custom scripted situations. For example: "If a server in a VLB enabled cluster fails, or the number of currently active servers falls below a pre-set minimum, power-on a new server instance, or activate a warm-spare server".

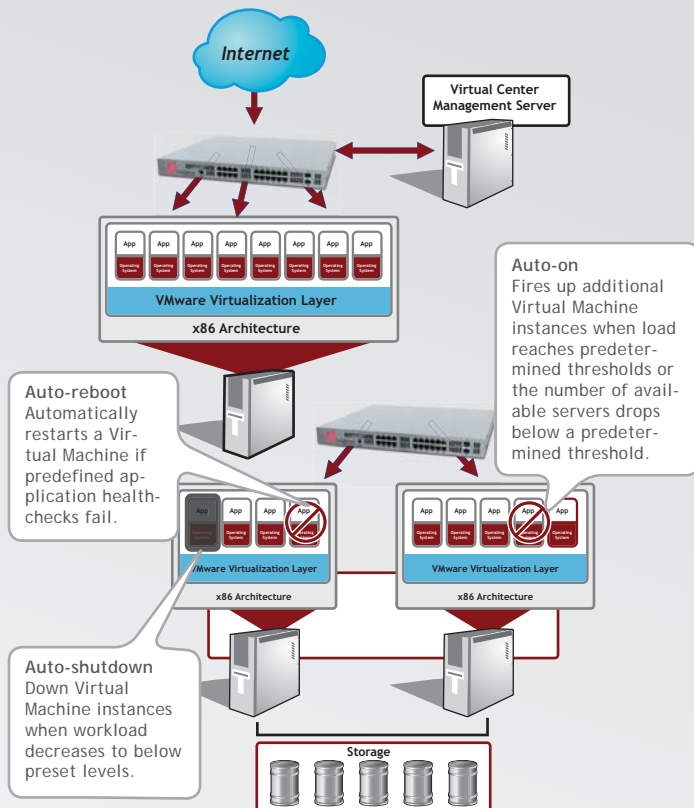
Equalizer VLB™

Equalizer VLB™ and Equalizer VLB Advanced™ Compatibility

- VLB Basic is included as a standard feature in the E350GX and E450GX.
- Equalizer VLB Advanced™ is an available option on the E350GX and E450GX.
- Equalizer E650GX includes both VLB Basic and VLB Advanced as standard features.

Complements VMware DRS and vMotion

VMware DRS collects resource usage information for all hosts and virtual machines in the cluster and generates recommendations for the placement of the virtual machines and the host machine power state. DRS moves virtual machines based on CPU and Memory resources available to a server. VLB Advanced adds the ability to configure triggers that will allow VMware DRS and vMotion to move, restart or shut down virtual machines based on additional performance metrics not tracked by VMware. This visibility includes proactive virtual machine management in response to application performance, application availability and network traffic patterns.



Let us hear from you.

An industry pioneer, Coyote Point has been at the forefront of application delivery since 1999. For more information, contact your local reseller, visit www.coyotepoint.com or call (877) 367-2696.



Equalizer VLB and VLB Advanced Specifications

VMware Compatibility

ESXi Server, ESX Server, vCenter™

Applications Supported

All Web/HTTP based applications, including PHP, ASP, Oracle, Apache, etc. Microsoft Products including SharePoint, Exchange, Outlook Web Access and Remote Desktop. SSL VPN, Database clustering, Email services, Streaming Media.

Supported Protocols

Most TCP/IP and UDP based protocols including HTTP, HTTPS, SSL, SMTP, POP, IMAP, FTP, SQL, DNS, WAP, RADIUS.

Load Balancing Policies

Server latency, adaptive weighted server latency, least connections, weighted least connections, round robin, weighted round robin, direct server measurement and custom user defined policies.

Virtual Server & Application Failure Detection

Layer 7 via active content verification. Layer 4 via ICMP and TCP health check.

VLB Advanced Smart Control for VMware

- Auto-quiet
- Auto-shutdown
- Auto-on
- Auto-reboot
- Smart Control Triggers
 - Active Server in a cluster
 - CPU Load (from VMware)
 - Memory Usage (from VMware)
 - Server Weight

Fault Tolerance / Business Continuity

Full system-level redundancy supported (requires two Equalizers). Server heartbeat and configuration data exchanges over attached Ethernet(s).

Management

Secure Web based administration and management GUI, SNMP alerts, command line interfaces via Serial, SSH. All smart controls can be configured to send alerts to administrators when triggered.

Reporting

Records up to seven days' performance history. Delivers highly detailed graphical reports with very fine granularity.

Support

There are no additional support costs related to Equalizer users implementing Equalizer VLB or VLB Advanced. VLB service and support is included with an active support contract on the Equalizer supporting the VLB software.

