Global Dispatch™

Intelligent Multi-Site Load Balancing for Application Performance and Business Continuity

Global Dispatch is an intelligent, DNS-based load balancing solution that provides high availability and optimum performance for geographically distributed business applications.

Global Dispatch helps in reducing operating costs and enhancing the end-user experience by ensuring that traffic is always directed toward the most available, responsive sites.

Specifications

Platform Support
- Oracle SPARC CPU line
- Intel CPU Family
- AMD CPU Family
- IBM PowerPC

OS Support
Resonate Global Dispatch runs natively, in either homogenous or heterogeneous environments on:
- Oracle Solaris
- Microsoft Windows Server
- Linux
- AIX

Load Balancing Techniques/Policies
- Round Robin
- Weighted Round Robin
- Latency
- Load
- Latency/Load

Load Determinants
- Connect
- URL Connect
- Custom Script
- Load Server
- TCP Connect
- ICMP Ping
- Reverse DNS Lookup

Management
- CLI and Windows client
- Solaris and Linux platforms
- Customizable API

Reporting
- Granular reporting on Nodes Services and Site
- Both real-time and elapsed time reporting capabilities
- Can track historical performance and compare with current performance.

Resonate, Inc.
90 Great Oaks Blvd, Suite 205
San Jose, California 95119, USA
Phone: 408-545-6501
Sales email: sales@ResonateNetworks.com
General email: info@ResonateNetworks.com
Global Dispatch - For Maximum Multi-Site Predictability and Performance

Organizations worldwide are distributing their critical business applications across multiple geographically dispersed sites in order to increase performance, availability and resiliency of these important business assets. With this trend, however, the network administrator is faced with a new set of challenges involving efficient delivery of the applications, as well as management of the load balancing infrastructure.

Global Dispatch is an intelligent, agent-based service level load balancing solution that provides high availability and optimum performance for geographically distributed business applications. Global Dispatch enables management of globally distributed traffic to ensure traffic is always directed toward the most available, responsive sites, while its powerful management tools gather critical site metrics that help in the decision making process. Its flexible, native software solution layers onto existing infrastructure, including existing DNS and local server load balancing solutions, enabling companies to quickly and easily deploy a redundant site and ultimately deliver a great end user experience.

Global Dispatch efficiently routes traffic to the best site, regardless if the site is Resonate load-balanced, 3rd party load-balanced, or even a single-server site.

Global Dispatch features a wide array of real-time and historical reporting capabilities that help isolate and troubleshoot network issues. Global Dispatch reporting also provides “what-if” calculations to show which POP would have been selected when primary sites are unavailable. Persistency and Persistent Load Balancing

Global Dispatch assigns user requests to the same POP that handled the prior request so that server databases across sites need be synchronized only periodically. This “sticky session” capability helps reduce the high costs of real-time data synchronization by utilizing state information already stored in the server’s database.

Group-level Personalization

Global Dispatch’s group-level personalization provides the flexibility to direct users to specific servers and applications for tailored content (or to reduce WAN charges). Users are identified by their IP address and can be routed to the site with the content most applicable to them.

Global Dispatch features flexibility in its capacity to act as either a delegate or a proxy to the authoritative DNS server. When Global Dispatch is a delegate of the authoritative server, hostnames such as www.domain.com and ftp.domain.com are delegated as subdomains to Global Dispatch. When the Scheduler acts as a proxy to the authoritative DNS server, it can also handle requests for domain.com, where it is treated as a peer to the authoritative DNS server.

For example, a request originating in Japan will be automatically routed to the Tokyo POP instead of one in Denver. The user will see content created specifically for the Japanese market, including localization, specific product lines, ‘Japanese-centric’ marketing, etc.

Dynamic Load Balancing and Failover Modes

Global Dispatch allows the administrator to switch between load balancing and fail-over operation at the click of a button. GD Schedulers can also be load balanced for fail-safe availability.

Increase Visibility into User and Group

Global Dispatch features a wide array of real-time and historical reporting capabilities that help isolate and troubleshoot network issues. Global Dispatch reporting also provides insights into user and group-level behavior that facilitates faster and more user-centric networking decisions.

Increase Intelligence and Simplify Management with Global Dispatch Manager

Global Dispatch Manager enables administrators to easily set up, configure and manage multiple geographically distributed sites through an intuitive graphical console. The system gives administrators a single comprehensive view into their Global Dispatch sites, as well as user behavior, and can be accessed locally or remotely via a secure browser connection. Once the Global Dispatch sites are up and running, detailed statistics can be gathered through the Global Dispatch Manager to provide valuable usage information that helps administrators troubleshoot and fine-tune site configuration, as well as make better marketing and business decisions about the overall deployment.

Global Dispatch employs a comprehensive approach to gathering intelligence from each POP, including health of each location, as well as overall traffic and system efficiency. Global Dispatch logs the results of all DNS requests including the source IP address of the DNS query, the physical POP chosen, and the IP address returned. GD Manager provides easy access to statistics such as:

- Current size of cache in bytes or # of entries
- # of hits / misses on the cache
- Average time for GD to respond to DNS requests
- # of requests for particular host name
- # of times POP was selected in response to DNS request
- Current status of all POPs
- # of times a latency measurement failed (from a POP)