Mastering the Challenges of Managing Application Infrastructure

Enterprises and service providers need robust network fabrics to deliver the high application performance that drives satisfaction for both internal users and external customers—especially where revenue-generating services are concerned. This infrastructure might support a web presence, e-commerce sites, customer-facing portals, or internal business-critical applications.

For these important applications, global server load balancing (GSLB) technology is often implemented to distribute the load across different sites or to implement disaster recovery (DR) plans.

DNS-based Load Balancing Built into the Market’s Leading DNS Appliance

Infoblox, the leader in enterprise-grade DNS appliances, offers robust, highly intelligent GSLB functionality—built into our leading authoritative DNS appliances. Infoblox DNS Traffic Control enables networking teams to get the best of DNS and GSLB in one integrated solution.

Intelligent approach to DNS-based load-balancing

Acting as the authoritative DNS server, Infoblox DNS Traffic Control returns the IP address of the ideal server. Traffic is intelligently directed based on the client’s location, the server’s location, and the server’s availability. Intranet users’ locations are provided by integration with IPAM and Extensible Attributes; Internet users’ locations are provided by a GeoIP map. Network administrators can also predefine customized load balancing rules including ratio, round-robin, and network topology.

Key Features

- **Integrated GSLB functionality** with an authoritative DNS server that directs user traffic to the optimal destination server
- **User’s location** provided by Infoblox IPAM Extensible Attributes or GeoIP
- **Tight Integration with Infoblox Grid™** to allow all GSLB settings to be managed from a single centralized console
- **DNSSEC and External DNS Security** enable secure load balancing with protection against DNS-based DDoS and stealth attacks
- **Multiple algorithms** to distribute the load, including round-robin, weighted round-robin, location-based, and availability-based
- **Automated health checks** including HTTP/S, SIP, ICMP and SNMP to make sure that users are directed only to available servers
- **Enhanced reporting** for better visibility and planning purposes

![Figure 1: Integrated DNS and GSLB with Infoblox](image-url)
Unified Management
Leveraging patented Infoblox Grid™ technology, all DDI and GSLB functions are managed from a single console globally—delivering lower cost, ease of use, and significantly reduced management effort and errors compared to multi-vendor deployments.

Disaster Recovery
Infoblox DNS Traffic Control performs automatic server health checks in order to route traffic around servers that are unresponsive or overwhelmed.

Troubleshooting and Optimization
Built-in reports on server utilization and response time make it easy to optimize network performance and troubleshoot network problems.

Benefits
Infoblox DNS Traffic Control integrates multiple functions into a single management console and eliminates the need to deploy, configure, and manage multiple devices.

DNS Traffic Control brings the following benefits:

• **Reduced capital and operating costs** with a fully integrated approach to manage both DNS and GSLB on the same equipment and console
• **Integration with IPAM** that provides Intranet users' location (analogous to GeoIP for Internet users)
• **Enhanced user experience** since user traffic is directed to the most efficient location
• **Fully integrated DNS infrastructure** that is secure against DDoS and malware attacks
• **Additional performance visibility** with enhanced data for troubleshooting and capacity planning

Summary
In today's high-stakes environment, network teams need a consolidated architecture that is easy to manage and offers the best user experience. Infoblox DNS Traffic Control is the solution.