

Large North American National Wireline ISP



Profile

The customer:

The wireline division of a national integrated communications provider

The challenge:

Maintain low DNS response times to increase customer satisfaction while reducing overall operational costs

The solution:

- Infoblox Grid™
- 23 Infoblox DNS caching appliances

The results:

- Deployment costs lower than the cost of upgrading the legacy system
- Enhanced visibility and reliability
- Reduced DNS latency that improved customer experience

The Customer

The customer is the wireline ISP division of a major North American national integrated communications provider. It delivers a range of broadband Internet services to retail and enterprise customers.

The Challenge

The customer needed to update its Domain Name System (DNS) infrastructure to reduce overall operational support costs—including licensing and maintenance expense. The incumbent vendor of proprietary DNS software was attempting to force the customer to accept a forklift upgrade to a new platform, triggering expensive new license and platform costs. The customer evaluated vendors to determine whether a more cost-effective approach with sufficient future-proofing could be found. In order to eliminate dependencies on server hardware and software integration issues, evaluators were willing to consider an appliance-based solution. They were also concerned about the level of effort required to support an in-house DNS system that required frequent server operating system (OS) patching, updates, and troubleshooting.

Operational concerns included the need to maintain a low DNS response time in order to deliver high customer-satisfaction levels, since DNS latency is a key parameter that affects customer experience and therefore impacts customer churn.

A second concern was the placement of remote DNS servers close to customers at the network edge. This was desirable to reduce DNS latency, but a distributed DNS system has the potential to stress the internal operations team, who need a centralized view of network conditions with remote visibility of all DNS servers. Also a factor was the ability to provide automated failover in disaster-recovery scenarios.

The Infoblox Solution

The customer deployed 23 Infoblox DNS caching appliances in 6 locations across the country. The appliances were installed as a distributed system under the control of the Infoblox Grid™. A central Grid Master appliance provides centralized visibility and a complete repository of all DNS server configurations and status, as well as a single web-based GUI console.

Under failure conditions, a single appliance failure can be handled automatically by deploying local high-availability appliance pairs. When a new appliance is installed, it receives an IP address and connects to the Grid Master, which downloads its configuration automatically without the need to dispatch technicians to configure the newly installed appliance.

The Grid enables remote configuration and automates many routine, manual server-administration tasks, freeing key technical staff while eliminating the risk of outages due to manual configuration errors. The Grid also automates disaster recovery failover—without manual scripting or command line interface (CLI)-based configurations.

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The central GUI enables administrators to view all DNS conditions at every server from one console and all configurations and updates to be applied from the Grid Master automatically. For larger server populations this saves considerable operations time.

The customer deployed DNS appliances in a Grid, with server placement in high-availability pairs. The central management and visibility of the Grid made it possible to distribute servers close to customers to maximize availability and minimize DNS latency—without stressing the internal operations team.

The Results

The Infoblox distributed DNS system was deployed at much lower cost than prior proprietary software—without additional staffing and without sacrificing management control, visibility, or reliability. Future enhancements are expected that will add better DNS reporting visibility for improved troubleshooting and capacity planning as DNS, Internet, and web traffic increases.

And placing DNS servers closer to customers in a distributed system has reduced DNS latency, with a major positive impact on customer experience.

About Infoblox

Infoblox (NYSE:BLOX), headquartered in Santa Clara, California, delivers network control solutions, the fundamental technology that connects end users, devices, and networks. These solutions enable more than 7,000 enterprises and service providers around the world to transform, secure, and scale complex networks. Infoblox (www.infoblox.com) helps take the burden of complex network control out of human hands, reduce costs, and increase security, accuracy, and uptime.