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Regional US Healthcare system continues strengthening its network with Infoblox

THE CUSTOMER

Headquartered in the United States, this healthcare system operates 28 hospitals across six states, and employs over 50,000 people.

Networking is a critical element of the system's operations, enabling connectivity for its life saving efforts within its facilities, as well as providing remote access, which became increasingly critical during the pandemic.

The organization operates multiple data centers including a primary hub where 4,300 Windows Servers are deployed. There is also a secondary data center and smaller data centers and points of presence in surrounding states. The major geographies are connected with symmetrical, redundant 10 Gigabit connections.

THE CHALLENGE
Making the network easier to manage

The healthcare system had a number of different challenges and pain points that Infoblox helped solve. The first key challenge was a need to migrate away from Microsoft-based DNS and DHCP resources in order to get better control, visibility and scalability over IP address management operations. There was also a need to ensure the highest levels of availability and resilience to support their mission-critical operations.

The IT systems engineer leading the Infoblox projects noted that he was tasked to formally overhaul the system's IP addressing strategy for devices that need an unchanging IP address. That was a challenge of management and automation since some of the existing tools that his team was using didn't enable the granular control needed. "With our legacy tools, you basically had access to everything, or you had access to nothing," he relates.

Customer: Regional Healthcare System
Industry: Healthcare
Location: United States of America

INITIATIVES:

- Improve network visibility and reliability
- Automate IP address management
- Replace legacy Microsoft environment

OUTCOMES:

- Enabled network automation that enhanced time management
- Minimized network downtime, improved network responsiveness
- Enabled delegation of specific functions, with customized scripts

SOLUTIONS:

- Infoblox NIOS DDI
- BloxOne Threat Defense
- Network Insight

THE SOLUTION

Improving network resilience with Infoblox

A key accomplishment they were able to achieve with the Infoblox deployment was improved availability and resilience. The IT lead explains that whenever there has been what could accurately be called a network outage, DHCP and DNS services continue to work. The improved resilience is due to the deployment at the various hospitals that have onsite Infoblox technology. "The Infoblox solution supports DHCP, failover associations and a host of effective high availability features that gives our team a lot of confidence," explains the IT engineer. "Infoblox just works, so we don't worry about DHCP and DNS."

Bringing more control to users with delegation

With a big network there are always different departments that might want to adjust a service, which might have network impact. The IT engineer explains that he had a person in one department that had to take down a set of systems once a month, usually in the middle of the night to not affect system performance during work hours. The task involved actions between one data center and another and required updates for three DNS records. "All she needed was access to those three records and that's it," he recounts. "If she didn't get it, basically, myself or somebody else would have to be on with her at 1:30 in the morning to get it done."

Thanks to the delegation capabilities now present in Infoblox, they were able to delegate control such that the user gained self-service access to make the required change. The change could also have been set up as a scheduled task to automatically execute when needed.

Delivering a source of truth to enable systems management

Having control over a distributed network often involves working with multiple tools and technologies. The visibility that comes from Infoblox helps inform the organization's use of Microsoft System Center Configuration Manager (SCCM) for management of IT operations. By making use of Microsoft Active Directory Sync alongside the network information that Infoblox masters, they were able to completely overhaul their Active Directory replication topology to make it far more efficient and accurate. This process also helped to improve management and operation for other Microsoft services that rely on SCCM. "Infoblox is our source of truth from an IP network geography perspective," explains the engineer.

THE RESULTS

Enabling customization and automation

Another key benefit from the Infoblox deployment is the ability to customize and automate operations. When the team needed to deploy a specific piece of software to a specific hospital, there were often some challenges with the way that the network was defined that made deployment cumbersome.

To that end, they wrote a tool taking heavy advantage of the Infoblox web API to get the specific customization and automation capabilities they needed. So instead of a more manual, multi-step process to get the network setup for a specific new piece of hardware or software, the Infoblox-powered script does the job through a more efficient, optimized approach. He explains that "with the Infoblox API, we were able to script a tool that enabled a better workflow for our operations. That's not easily done with most DDI platforms."

Keeping their network in great shape

Much like healthcare is a partnership between patients and healthcare providers, network health is also about partnership. The healthcare system directly benefited from Infoblox professional services to help with the initial migration from Microsoft DNS and DHCP services. The regular stream of updates to Infoblox firmware and software enables the team to continuously improve operations and meet the ongoing day-to-day needs of the system as a whole. The engineer concludes: "Infoblox has been a great partner and helps me and my team to get the job done."

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For more information

Core networking

To learn more about how you can easily deliver better networking experiences from anywhere, visit the Infoblox website or try Infoblox for free today.

BloxOne DDI

Learn more about how you can simplify your cloud experience and unleash the full potential of SD-WAN. Speak with an Infoblox Cloud Specialist or start your free trial for 60 days today.

BloxOne Threat Defense

Learn more about how you can proactively detect malware and protect your users and data via DNS. Speak with an Infoblox representative or start your free trial of our BloxOne Threat Defense technology today.

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Infoblox unites networking and security to deliver unmatched performance and protection. Trusted by Fortune 100 companies and emerging innovators, we provide real-time visibility and control over who and what connects to your network, so your organization runs faster and stops threats earlier.

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