Infoblox
NEXT LEVEL NETWORKING

CASE STUDY

University of North Texas Upgrades Its Network Infrastructure, Simplifies Cybersecurity with Infoblox

UNT

UNIVERSITY OF NORTH TEXAS®

Customer: University of North Texas

Initiatives
- Save time and resources
- Automate network systems
- Update active directory
- Improve reporting
- Easily scale network for rapid growth
- Improve cybersecurity posture

Challenges
- Network management
- Integrated cybersecurity ecosystem

Solutions
- Grid Technology with 21x1425 appliances
- DNS Security
- Reporting
- BloxOne™ Threat Defense
- Considering BloxOne DDI™ (Discovery Park Think Tank)

Measurable Outcomes
- Time to create networks: reduced from 3 weeks to seconds
- Creating zones, adding roles and permissions from 15+ clicks to 1
- Load reduced on the Grid by 90%

The Customer

The University of North Texas (UNT) is one of the most comprehensive public research universities in the United States. As one of the nation's largest universities, UNT has 4,600 faculty and staff and over 39,000 students, which is a 3% increase in student population from the 2018-2019 school year. UNT's massive network spans across campus locations in Denton, Frisco, McKinney, Dallas and online, in addition to data centers, wireless network, Emergency Operations Center, the Ft. Worth Science Center and the new Discovery Park Think Tank in Frisco, Texas. UNT has been a loyal and expert Infoblox customer for twelve years and counting, having implemented its first Grid technology in 2007.

Dr. Blair Copeland, Network Engineer Lead at UNT is a core networking veteran and industry expert at leading large teams and managing large networks and emergency operations centers for disaster recovery. He is also an expert at integrating networking and cybersecurity initiatives as well as other fields of study. He sets an extremely high bar of excellence, as he has nearly completed his second Ph.D.

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Dr. Blair Copeland,
Network Engineer Lead, Ph.D., University of North Texas

The Challenge

UNT's growing network and evolving threat landscape have driven several corporate initiatives for both networking and cybersecurity teams. UNT has experienced rapid network growth over the past twelve years, especially recently. Such intense university population and network growth previously motivated the customer to consolidate services within the entire UNT system. This year, however, UNT urgently needed to upgrade its existing Infoblox implementation in order to manage its booming network more efficiently and more securely than ever before.

Current initiatives include improving network system efficiency in order to save time and resources, automating the entire network and continue to manage it via an API, and helping his team better understand and gain visibility on all users and devices coming onto the network. The team was also tasked with updating active directory information and reporting to be consistent.

UNT also needed to improve its overall cybersecurity posture with a solution that would easily scale. The customer looked to maximize efficiency by integrating with existing security tools already in place, improve network access control, proactively prevent and stop data exfiltration attacks, and to pinpoint any potential cyberthreats that may come onto the network in real time.

A True Partnership – Scaling the Network for Twelve Years and Counting

After partnering with Infoblox for twelve years and counting, UNT's most important solution criteria continue to be network reliability, manageability and the ability to import its records through an API. Dr. Copeland also describes applications such as email service as "absolutely critical" at UNT. "The resiliency and manageability of our recently upgraded Infoblox network services directly impact the ability to operate all applications, including email", Dr. Copeland states.

As a result, UNT has been able to save significant amounts of time and resources by automating its entire network and by managing services and reporting through an API. "Infoblox has made managing and securing the network efficient enough so that I can focus my attention where it needs to be," Dr. Copeland explains. "Management tasks that were previously handled manually are now taken care of automatically." For example, creating networks now takes the customer a few seconds instead of three weeks, identifying lease times has reduced load on the Grid by 90%, and creating zones and adding roles and permissions now takes 1 click as opposed to 15 or more. Scaling for immediate and future network growth can now happen automatically, such as UNT's ability to automatically provision new IP addresses in seconds for UNT's new biomedical wing.

Filling Cybersecurity Gaps with Integrated, Automated Protection

In addition to managing the network more efficiently, UNT also looked to easily improve its cybersecurity posture to scale. The customer especially needed an easy-to-manage solution that would automatically detect and prevent against data exfiltration and other DNS-based malware threats. UNT also required its cybersecurity solution to integrate with security tools that the team already had in place that would scale to the university's rapidly evolving network infrastructure.

"We turned to Infoblox again to fill the gaps with our existing cybersecurity tools and to share information across silos, while also strictly governing network access control," Dr. Copeland explains. The customer also needed an automated cybersecurity solution that would allow for data exfiltration prevention and better network visibility with streamlined security operations capabilities.

With the efficiencies and network automation the customer now has at its fingertips, the university's IT and security teams now have more time and resources to focus on potential critical incidents rather than managing its network manually. "We see the value of Infoblox's cybersecurity offering clearly. It lets my team get reports where they need to go automatically, and it makes navigating the unique higher education threat landscape – and the political landscape – easier."

Looking to the Future

The customer can now maintain its well-deserved reputation as a forward thinking and innovative university with an eye to the future. UNT is considering taking its networking experience to the cloud for its newly announced Discovery Park, the region's largest research park that hosts the Center for Information and Computer Security, College of Information and College of Engineering.

For More Information

Learn more about how you can easily upgrade your higher education institution or enterprise's cybersecurity posture from anywhere here. You can also try Infoblox's hybrid security offering free for 60 days.