City of Airdrie

Infoblox
CONTROL YOUR NETWORK

Profile

The Customer:
Located just north of Calgary, the City of Airdrie is one of the fastest-growing communities in Canada. With a population of 45,000, the city provides a small-town lifestyle with a full complement of big-city amenities.

Applications:
- Infoblox Trinzic® DDI appliance running in Infoblox Grid™ mode
- Infoblox NetMRI® analysis tool

Challenges:
The City of Airdrie sought to upgrade its network management system to improve resiliency, increase operational efficiency, and speed problem resolution.

Solution:
- Improved network resiliency
- Increased efficiency of network management
- Accelerated diagnostics and problem resolution
- Anticipated rapid return on investment

"Infoblox can help you extend your capabilities and improve resource utilization while simplifying day-to-day tasks and delivering greater long-term efficiency."

"With Infoblox NetMRI, we can quickly identify and solve potential network issues before they become problems."

Paul Hurst, Network Engineer, City of Airdrie

The Customer

The City of Airdrie's IT department is responsible for providing a wide range of computing services to city employees, from managing approximately 500 workstations and a fast-growing number of city-owned mobile devices to maintaining key applications such as e-mail and productivity software. The IT group also helps to ensure reliable wired and wireless network connectivity so that city employees can deliver high-quality services to citizens. In addition, the IT group offers free Wi-Fi in municipal buildings, allowing citizens to gain guest access to the Internet when they visit.

The Challenge

The IT group needed to improve the reliability of domain name system (DNS) and dynamic host configuration protocol (DHCP) services while enhancing functionality. "The existing Microsoft-based environment could not deliver the resiliency we needed. DNS services were integrated into Active Directory—which worked, but maintenance on domain controllers impacted DNS services, so we needed a solution that allowed us to perform security maintenance without impacting daily operations," says Paul Hurst, network engineer for the City of Airdrie. "The Microsoft environment also lacked the reporting capabilities we needed for monitoring utilization and conducting diagnostics. DHCP services were also lacking, and a single DHCP server to service all devices was just not working for us, so we needed a solution that provided the organization with a high-availability DHCP environment for employees and guests," says Hurst.

At the same time, the IT group wanted to improve the efficiency of IP address management (IPAM). "It was a tedious, manual process that involved numerous spreadsheets," says Hurst. "To make changes, we had to manually verify the criteria for each device, assign the IP address, and then upgrade the record on the appropriate spreadsheet. This labor-intensive process slowed provisioning and kept us from other, more strategic projects."

As time-consuming administrative tasks piled up, the IT group realized it was time for a change. "Tracking addresses by spreadsheets and relying on vulnerable server-based DNS/DHCP services were not practical long-term solutions," says Hurst. "From an administration standpoint, it was requiring a lot more manual labor to manage what should have been simple IP management tasks."

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The Solution

After researching its options, the city's IT group decided to upgrade its network management system to a virtual appliance–based solution from Infoblox. The city implemented the Infoblox Trinzic DDI appliance, which allows the IT department to manage, control, and optimize its DNS, DHCP, and IPAM functions as part of a single, unified system.

"The Infoblox solution gives us the flexibility to use a virtual or physical environment depending on our needs," says Hurst. "Its hardened architecture was one of the selling points for us—the Active Directory Integrated DNS has no protection against DNS Poisoning and we could not perform DHCP Fingerprinting with the Microsoft environment, but with Infoblox we can take a breath, knowing the appliances are built for the purpose they are being used," says Hurst.

The Infoblox solution also can deliver the resiliency that the city previously lacked. The solution's high-availability Infoblox Grid architecture establishes a distributed relationship among individual or paired appliances to remove single points of failure and other operational risks common in legacy DNS, DHCP, and IPAM environments. The Grid also provides resilient network services, failover, recovery, and seamless maintenance, enabling the city to eliminate the single points of failure inherent in the previous management structure.

The IT group added the Infoblox NetMRI analysis tool, which monitors, detects, and reports on network issues. "The NetMRI appliance allows us to gain that deep dive into the hardware from an asset management perspective," says Hurst. "With Infoblox NetMRI, we can quickly identify and solve potential network issues before they become problems."

The Result

The Infoblox solution also helps simplify management. "IT staff can now conduct DNS and IPAM functions from a single pane of glass," says Hurst. "Using a centralized dashboard, IT staff can quickly review the IP map and see exactly what devices are being used, whether they are active in DHCP, and whether an address is fixed or not fixed. Instead of having to gather information from multiple components, all IP access information is now available through a single interface."

Centralized management also speeds diagnostics. "Previously, we would have to use many tools across many different applications to determine whether a problem is being caused by a switch, workstation, cable, or other device," Hurst says. "Now we can look at a single interface and identify issues rapidly. In three clicks, I know exactly what is going on."

By helping to simplify management, the Infoblox solutions will help the city rapidly recoup its investment. "Efficiency gains will help us achieve a return on our investment," says Hurst.

Infoblox monitoring and reporting capabilities are also helping the city avoid unnecessary purchases. "By monitoring the utilization and health of network components, we can better determine when we need to make upgrades," says Hurst. "In some cases, we might find that we can delay upgrades and put off new expenditures."

Perhaps most important, IT staff can now focus on more strategic projects. "Eliminating time-consuming administrative processes will allow our staff to add approximately 10 to 15 new projects each year," says Hurst.

Investing in a true enterprise solution has been well worth it, according to Hurst. "Many network management systems on the market just give you the basics. But if you are looking for an enterprise solution, the bare minimum does not cut it. Infoblox can help you extend your capabilities and improve resource utilization while simplifying day-to-day tasks and delivering greater long-term efficiency."

About Infoblox

Infoblox (NYSE:BLOX) helps customers control their networks. Infoblox solutions help businesses automate complex network control functions to reduce costs and increase security and uptime. Our technology enables automatic discovery, real-time configuration and change management and compliance for network infrastructure, as well as critical network control functions such as DNS, DHCP and IP Address Management (IPAM) for applications and endpoint devices. Infoblox solutions help over 6,100 enterprises and service providers in 25 countries control their networks.

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