

TYROLIT Delivers Resilient DNS and DHCP with BlueCat; Looks Ahead to IPv6



Organization
TYROLIT, A Company of the
SWAROVSKI Group

Industry
Manufacturing

Products
BlueCat DNS/DHCP Server
(formerly Adonis)

BlueCat Address Manager
(formerly Proteus)

Results
Increased the reliability of
DNS/DHCP core services

Reduced network administration
time and effort

Increased network visibility and
control over "everything IP"

Implemented a robust IPAM
solution that is ready for IPv6

The Challenge

TYROLIT (www.tyrolit.com) is one of the world's largest producers of grinding, cutting, drilling and dressing tools, as well as machines for the construction industry. A member of the Swarovski Group, the family-owned company, founded in 1919, is based in Schwaz, Austria, and has over 4,500 employees at 27 production locations in 12 countries.

As a technology-driven manufacturer, TYROLIT's focus on innovation extends to its global IT infrastructure, which is managed from the company's headquarters

in Austria. TYROLIT's environment is comprised of virtual servers with Citrix XenApp technology and thin clients/notebooks. Its network spans numerous remote sites worldwide and encompasses some 15,000 IP addresses. In January, 2010, TYROLIT experienced a serious crash of its Microsoft DHCP server, which impacted its operations and caused the company to begin looking for a more resilient, hardware-based DNS and DHCP solution to replace its Microsoft DHCP servers.

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Markus Vetter
System Administrator
TYROLIT

“Our employees, distributors and customers all depend on the network to communicate and do business,” explains Markus Vetter, system administrator, TYROLIT. “DHCP, together with DNS, is a service that is fundamental to the operation of our network. When these core network services fail, business essentially stops because there are no further services available. Any outage can cause production delays that cost us money and impact our reputation, which makes DNS/DHCP resiliency and uptime a major concern. The severe Microsoft DHCP outage we experienced reinforced the need for a rock solid DNS/DHCP solution to support our global enterprise.”

The Solution

TYROLIT selected BlueCat to deliver reliable DNS and DHCP after thoroughly testing the solution for about one month.

“We looked at some other DNS/DHCP solutions, but found them to be much more complicated,” says Vetter. “We liked BlueCat because it was very easy to use with a straightforward and intuitive Web-based GUI for centrally managing DNS, DHCP and IP Address Management.”

The solution consists of one BlueCat Address Manager (formerly Proteus) Virtual Server for centralized IP Address Management, one central BlueCat DNS/DHCP Server (formerly Adonis) cluster in Austria and seven BlueCat DNS/DHCP Virtual Servers distributed throughout the organization. DNS is fully running on BlueCat DNS/DHCP Server and completely integrated with Microsoft Active Directory (AD). To ensure availability and uptime, DNS and DHCP failover has been configured between remote sites around the world and the central site in Austria. A hub and spoke DHCP failover design provides redundancy at every layer, both locally and across the WAN.

The implementation of BlueCat’s DNS and DHCP solution took only a few weeks. A BlueCat System Engineer worked onsite for one day to assist with the deployment. All other issues and questions that TYROLIT had were solved remotely. BlueCat Support staff provided all necessary assistance to migrate from Microsoft and get the solution up and running quickly.

The Results

“We initially chose BlueCat to avoid the ‘worst case,’ a costly DNS or DHCP outage that would cripple our network, delay our production and put our business at risk,” Vetter says. “But in addition to making our core networks much more redundant and resilient, BlueCat is also saving us administration time and effort. With our previous Microsoft solution, there was more work for our staff to do each week to administer the DHCP service. Having a single management console instead of a separate console in each location has tremendous advantages in terms of efficiency and making things easier for our staff. It’s like having a cockpit heads-up display for all network-related topics and tasks.”

With BlueCat, TYROLIT now has centralized configuration management for all DNS, DHCP and IP Address Management services worldwide. Tight integration between DNS, DHCP and IPAM means that whenever an IP address is assigned, DNS and DHCP are automatically updated for the lifecycle of that IP address.

“One feature we find indispensable is the ability to perform network discovery and IP reconciliation with BlueCat Address Manager,” says Vetter. “Using this powerful feature, we can quickly find IP conflicts between the IPAM system and the network, reclaim unused IP addresses for reuse, locate rogue devices on the network and even document the physical location (switch port) of any connected IP address.”



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TYROLIT has established BlueCat Address Manager as the central control point in their network. The company is also working with BlueCat to cluster DNS and DHCP services in their remote offices to make them even more redundant and resilient.

“What continues to impress us most about BlueCat is its responsiveness and commitment to customer satisfaction,” says Vetter. “If we have a problem, we can always reach someone at BlueCat who can help us immediately. We would recommend BlueCat to other organizations because of the professionalism and expertise of its staff and Support helpdesk.”

“Looking ahead, IPv6 will be the next big challenge for us,” Vetter concludes. “Having a central repository of all IP address information means that we are much better prepared for the inevitable transition to IPv6. With BlueCat’s IPv6-ready DNS, DHCP and IPAM solutions already in place, we expect that the move to IPv6 will be as smooth and easy as the move from Microsoft DNS and DHCP.”



www.bluecatnetworks.com