FLUKE networks

Case Study

The Seattle Mariners

The Seattle Mariners ball club raises the roof on cutting edge technology and recruits the EtherScope™ Network Assistant for fast troubleshooting and proactive maintenance

When the Seattle Mariners ball club opened its state-of-the art Safeco Field in 1999, it took the international spotlight as one of baseball's premier ballparks. From its innovative architecture famous for its retractable roof, to the equally awe-inspiring natural setting overlooking the Puget Sound and downtown Seattle skyline, and its great sightlines of game action – Safeco Field offers baseball fans a unique experience that's hard to match in Major League Baseball. With all stadium, press, scouting and business operations relying on its network, the Mariners can't afford to drop the ball on network maintenance and troubleshooting.

Overview

The Mariners' network consists of over 50 switches and hundreds of computers and IP telephones. Over 350 terminals support one of the largest concession systems in all of sports. There are 50 retail point-of-sale computers, which along with remote retail stores, process transactions for more merchandise sold per person than any other ball club.

On the front office side, there are 300 PCs and 40 servers running Windows 2000 and 12 active VLANs. There are also wireless applications including ticketing scanners and a wireless network for journalists in the press box. WAN links connect several remote sites including merchandise stores throughout the city, the Spring Training facility in Peoria, Arizona and VPN or dial up connections for baseball scouts all over the world.

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> – Dave Curry
> IT Director, Seattle Mariners

To support this network, IT Director, Dave Curry enlists a team consisting of an applications developer, a retail systems administrator, a LAN administrator, and a technical and scout support lead. The IT group is focused on handling Safeco's network management issues 24/7, especially on game day.

Challenge

During the off-season and away-games, the IT support team functions much the same as other IT groups. They deal with email, network and virus problems, while trying to find time to do proactive maintenance and development. On game day, the IT team is on deck for point-of-sale support, ticketing issues, credit card processing, bullpen phones as well as manning the IT hotline. The IT support team must be ready to troubleshoot and fix problems on the fly for virtually any network slow-down or hiccup that may pop up. "We have to see problems on the network very quickly," explains Dave Curry. "We need to be totally prepared."

The Mariners need to analyze configurations, check broken or problematic switches, and assess network statistics. Particular network troubleshooting and maintenance requirements are:

- VLAN visibility to instantly find potential and actual problems on site
- VLAN support for other VLANs including the catering office, facility management and security management

- Identifying configuration problems proactively (e.g. a wrong subnet mask sends packets where they shouldn't)
- Seeing where network traffic comes from to spot viruses before they do damage
- Switch visibility so they can install and configure a new switch when necessary

Solution

To give them better visibility into both proactive and reactive troubleshooting, the IT team looked to the EtherScope Network Assistant. EtherScope is a portable Gigabit LAN network analyzer designed to help network technicians and managers identify and solve problems faster. With EtherScope, the Mariners have visibility into VLANs that they didn't have before: the ability to see interface status, connected host details and trending data. When troubleshooting, they can plug into any 10/100 Gigabit copper port on the network and instantly see the nearest switch for switch details and port statistics.

EtherScope's problem discovery immediately displays items shortly after plugging into the network. "We instantly found IP configuration problems that may have been there a long time. It was startling when we found problems the very first time we turned it on," says Curry.

On-going maintenance and performance is always an issue, and the Mariner's plan to upgrade network core switches to increase performance. "We know we have to be prepared for even more traffic on the network, plus we plan to incorporate streaming video across our network in the near future" states Curry. All of the upgrades require better network performance of the core

Photo by Ben VanHouten

infrastructure. "We know that by using EtherScope we're able to see end points and completely diagram the network. EtherScope allows us to see the entire network so we don't have to label every cable, which is very time consuming. We don't even have to go through command process or use a web-based utility. Now with full visibility we can watch things as they go up and down on the network."

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