SOLARWINDS

Oceaneering International

CASE STUDY - ORION

Business Problem

Oceaneering International is a global oilfield provider of engineered services and products. The company primarily serves the offshore oil and gas industry, with a focus on deepwater applications. Through the use of its applied technology expertise, Oceaneering also serves the defense and aerospace industries.

Founded in 1964, Oceaneering has grown from an air and mixed gas diving business in the Gulf of Mexico to a diversified, advanced applied technology organization operating around the world. The company is now comprised of 58 offices, 10 offshore vessels and more than 6,500 employees.

With a diverse mix of business offerings and locations, the company's IT staff faces the challenge of providing and supporting state-of-the-art technology and ensuring that globally distributed employees and customers are experiencing peak network performance. Moreover, they get to work on projects that would make any true-blooded network engineer envious, such as tracking down bandwidth problems caused by World of Warcraft players aboard a submarine with only a 256K satellite link and setting up live Internet video feeds from tethered underwater robots (ROVs) two miles under the sea off the coast of Africa – not your normal nine to five.

Oceaneering's Network Management Challenge

Like most companies, Oceaneering's IT staff is relatively small given the infrastructure that they are responsible for managing and supporting. A subset of the IT staff is specifically charged with managing and monitoring the entire global network and all of its associated devices. This is not an easy task considering that their corporate network includes several LANs and vLANs comprised of 85 routers, 300 switches, 287 servers, and a VoIP infrastructure consisting of an additional 40 network devices and a total of 2,500 phones globally.

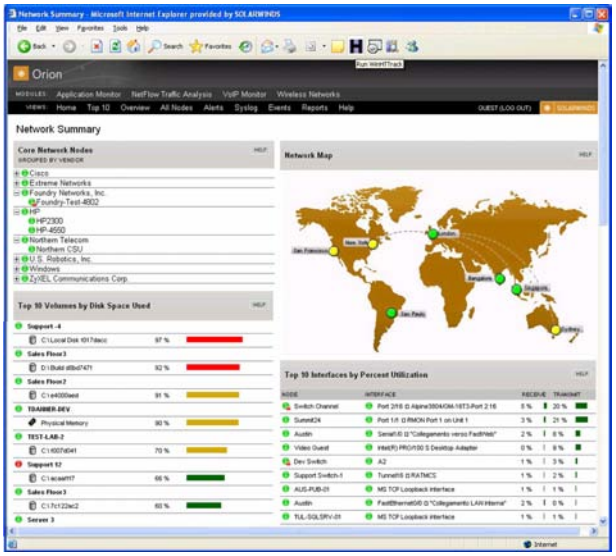
With many different types of devices to keep track of and multiple locations to manage, Oceaneering needed a network management solution that:

- Supported a complex, multi-vendor, heterogeneous network environment
- Required little to no training to implement and operate
- Could manage remote locations from a central console
- Scaled with the network as the company continues to grow
- Provided different views of network status based location and permissions

SolarWinds Network Management Solution

Oceaneering initially implemented CiscoWorks to manage their network, but found that it was too complicated, required a full-time person to monitor the monitoring solution and only supported 80% of their total network. Oceaneering Communications Manager Mark Stevens started looking for an alternative solution. That's when he downloaded a free 30-day trial of SolarWinds Orion. Stevens knew right away it was the solution he had been looking for.

Orion is an easy-to-use, Web-based network performance management platform that scales with the rapid growth of Oceaneering's network and expands with their network monitoring needs. Through its module architecture, Stevens was able to easily expand Orion to monitor the company's bandwidth usage, network traffic patterns, VoIP quality, application uptime and much more – all vital features given Oceaneering's unique monitoring needs.



"We tried CiscoWorks and it required too much management and configuration to be effective in our environment. I downloaded a trial of Orion and knew immediately it was what we had been looking for."

While managing the global network of 58 offices seems like quite a feat for a small IT staff, Stevens' four-person group is also responsible for the overall health of 10 LANs that reside on offshore vessels and are connected to the corporate network via satellite links. According to Stevens, the integration of NetFlow Traffic Analyzer with Orion is especially helpful in these situations.

The offshore vessels tend to experience bandwidth issues more frequently than terrestrial locations. This is primarily due to inclement weather. Prior to implementing SolarWinds solutions, Oceaneering's network engineers would perform PING tests to learn the status of network interfaces on the vessels. The problem was that they could successfully PING an interface one minute and the next minute it would go down; the staff was potentially unaware of this situation until they performed another PING test at the end of the day. With SolarWinds NetFlow Traffic Analyzer, traffic is monitored in real time and an automated e-mail is sent to the network engineers every two minutes reporting the status of the interfaces. The Orion platform and its modules have not only helped the team become more proactive in monitoring the network, but have also enabled them to track performance trends.

"Orion gives me a living, breathing sense of the network," said Stevens. "I know how my network performs, what the traffic trends look like, who goes down daily or weekly, and what bounces every day. For example, when our boats go under a thunderstorm and lose connectivity with their satellite, I now know - thanks to Orion - that is a normal action. But if something doesn't follow a trend line, I know immediately that we might have a more serious issue at hand."

SolarWinds VoIP Monitoring Solution

Stevens' team is also responsible for the call quality on 2,500 phones and network devices that comprise Oceaneering's global VoIP infrastructure. The team had tried a VoIP monitoring solution from Cisco, but quickly realized that they were in need of more comprehensive solution.

"The Cisco solution would monitor a single site, but not a global infrastructure," said Stevens. "All of the other products that I considered were either too expensive or required so much manpower that you had to dedicate someone fulltime just to run the monitoring system."

SolarWinds VoIP Monitor integrates directly with Orion, enabling network engineers who are familiar with Orion to get immediate value from the product, including detailed analysis of VoIP performance. There's no need for re-training or learning a new system. VoIP Monitor's plug-and-play functionality and affordable price tag were exactly what Oceaneering needed.

Business Results

While Oceaneering still has plenty of work to do, Orion and its modules have increased the IT team's productivity and impacted the bottom line by helping achieve 99% network availability.

"Orion also frees us from long days and nights at the office," added Stevens. "We don't have to live in the NOC any longer as a result of Orion's ability to send alerts to wireless devices. We can watch our network all the time, no matter where we are. We can actually go out and have lives and feel confident that we're not missing anything that is happening with the network."

"Orion and all of its modules give me a living, breathing feel of the network. We basically monitor the world from right here."

Overall, Oceaneering is very pleased with their investment in SolarWinds solutions which they feel paid for themselves a couple of times over in the first few months after implementation. The products have delivered everything that Stevens and his team hoped for, including a platform that:

- Is easy to use and maintain
- Helps the IT team maintain 99% network availability
- Builds historical trends of network issues
- Enables network engineers to be proactive in monitoring network devices
- Monitors a global VoIP infrastructure
- Doesn't break the budget