

Certifying Network Paths for Visual Communications at Oregon State University

Background

Applications such as VOIP and visual communications have stringent performance requirements as they operate in real time over the network. In the case of visual communications, high definition video along with an increased use of video in the classroom require high levels of network performance with minute levels of tolerance.

Business Problem

At Oregon State University the network consists of a widespread collection of diverse networks, each administered in similar, yet not exacting ways by various IT departments. In this way, the network mimics a larger cloud network managed and operated by numerous service providers.

When issues did arise, Oregon State University lacked tools that would allow them to see the end-to-end network performance across internal and external networks, limiting their ability to pinpoint the precise location and cause of network issues. While Oregon State previously used traceroute and ping, these tools are really for a quick peek and are not comprehensive diagnostic tools.

These issues affected the ability of Oregon State to deliver reliable visual communications to students and staff.

Solution

Oregon State University chose PathView specifically for certifying network paths for visual communications. With PathView, the IT organization is able to continuously monitor remote network performance, diagnose the precise problem anywhere along the network path and produce the necessary reports to show where and when the problems occur.

The most significant benefits Oregon State see from PathView are:

- 1) The backend algorithms which have proven to be accurate in determining the probable root causes.
- 2) The integrated links to the online database and reports of probable causes, diagnostic measures and possible resolutions allow easier communication and collaboration between IT departments.

PathView reports are generated as PDFs with integrated links to powerful database information. These reports have helped to increase the knowledge of those things that network administrators need to pay attention to, such as jitter, latency, data loss and overall bandwidth, and provides Oregon State University with a great starting point for technical conversations. Additionally, in every case the diagnostic and remediation information provided when there was a problem has been accurate in its analysis, simplifying the task of network troubleshooting.

Customers Conclusions

Using PathView we were able to pinpoint accurately every case where a far-side LAN network data switch had a duplex-mismatch, or where a WAN network was congested. This was possible because PathView saw through our cloud as well as the clouds of our carriers.

Through PathView analytics, we can effectively monitor the visual communications metrics along each and every point on the network path. PathView takes the phrase "I think it's the network" and turns it into, "I can say with X% probability that the problem is Y." Without PathView, network management and in particular visual communications management, is simply a guessing game."