



Partners HealthCare Improving the Health of Medical Care Systems

Boston-based Partners HealthCare is a large integrated network of hospitals that includes Mass General, Dana Farber and Brigham & Women's.

THE CHALLENGE: IDENTIFY AND SOLVE APPLICATION AVAILABILITY AND PERFORMANCE ISSUES

Medical staff members at Partners HealthCare hospitals require immediate and reliable access to patients' medical records to ensure proper and prompt care. There are 27,000 desktops throughout the organization's distributed environment of seven hospitals. Of them, 2,800 are in open patient care areas and are considered "ownerless" because doctors and nurses use whatever system is closest at hand to access patient information.

Because these devices are shared, no single user has responsibility for reporting application or device availability issues, and therefore problems typically go unreported or unidentified. Medical personnel simply move on to the next system to perform their jobs. This situation frustrated medical staff and IT support staff alike — especially when multiple workstations experienced problems.

Partners HealthCare, like most large organizations, had solutions to monitor network and server performance, but these didn't provide a full picture of the state of applications and systems on end-user devices. Partners sought to proactively detect and remotely monitor whether or not there was a problem on these desktops. "The traditional tools just weren't working for us," said Ethan Fener, associate director of Application Development. "We needed a better way to identify and resolve performance issues to ensure application and desktop availability."

The organization also required a solution that would automatically monitor all of the active applications running on clinical devices — both off-the-shelf and internally developed — which included everything from hospital information systems and nurse scheduling applications to imaging software and dietary menu selection. Partners required a solution that worked within its architecture, was easy to deploy, would provide real-time data, scale to potentially tens of thousands of machines and not break what was already in place.

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ETHAN FENER

Associate Director of Application Development, Partners HealthCare

Key Benefits

- Desktop downtime reduced to near zero
- Reduced costs by eliminating unnecessary desk-side visits
- Improved application and system performance across distributed clinical devices
- Time-to-resolve metrics improved by faster problem identification

IMPLEMENTING CITRIX EDGESIGHT

Partners became aware of Citrix EdgeSight™ end-user systems management software as a possible solution to these challenges, and after determining it offered the best solution on the market, put the software through its rigorous implementation process. This process includes everything from a 14-page questionnaire to a pilot test to ensure it wouldn't conflict with other applications. The software met the challenge and was soon rolled out to 2,800 devices throughout Partner's network of hospitals. "The EdgeSight solution deployed seamlessly and began collecting useful data immediately," recalled Fener. "Instantly we had the power to identify and update specific devices which were not performing well; devices that previously sat unused."

REDUCING DEVICE UNAVAILABILITY TO NEAR ZERO

He continued, "As soon as we deployed EdgeSight, the results were stunning. We were able to reduce the number of unavailable clinical devices by 70 percent in the first month alone." Over time, the number of unavailable devices was reduced to near zero. This allowed Partners' Information Systems group to change its help desk approach. Previously, when a machine locked up, historical data — which would have provided insight into the cause — got lost upon reboot.

Now, because the EdgeSight agent is continuously recording data locally, Partners can look at exactly what was going on prior to a reboot and forensically piece together why the device froze.

In addition, rather than sending out a field tech to visit a device, Level 2 help desk technicians first review and analyze EdgeSight reports using the software's intuitive interface to identify a machine that is not performing. If a problem can't be fixed remotely, a problem ticket is opened and a field tech is dispatched. As a result of having better visibility into problems on the desktop, Partners is able to allocate resources more appropriately, dispatching higher-cost resources only when needed.

MEANINGFUL METRICS PROVIDE A WEALTH OF INFORMATION

EdgeSight comes with more than 100 standard reports capturing metrics on application performance, errors and crashes as well as connections with servers and network resources. Partners is also able to monitor the health of each device by reporting on CPU utilization, memory and hard disk availability. In addition, EdgeSight provides the ability to create custom reports. "EdgeSight provides us with a wealth of information we lacked previously — especially around network utilization and

performance," said Mindy Hynes, Information Systems project specialist. "So when people are complaining, not about things being broken but things being slow, we can actually look at slow, we can actually look at how a desktop is maintaining its connection and response time to a particular server, whether it's a file server or a database server." EdgeSight maintains that information locally and reports it up to the central server daily, so Partners can profile normal behavior and benchmark against it.

PUTTING THE FOCUS BACK ON PATIENT CARE

Implementing EdgeSight to monitor and manage the performance and availability of Partners hospitals' end-user devices and applications has met a critical need for the medical personnel who rely on these systems. Prior to the deployment, Partners' physicians and other caregivers experienced continual frustration with unavailable clinical devices, which were an impediment to delivering optimum patient care. "Before, all we had were users calling to say a system was slow or not performing without any more than that to go on," says Fener. "Now we have smiling users and objective data because of the proactive approach we can take with EdgeSight."

About Citrix EdgeSight: Citrix EdgeSight™ offers the best performance and end-user experience management for all applications, enabling businesses to leverage the full breadth of Citrix application delivery solutions. It is composed of two product offerings: Citrix EdgeSight™ for End Points provides performance management for ALL applications running on the end-users system; and Citrix EdgeSight™ for Presentation Server provides performance management for applications virtualized with Citrix Presentation Server.