



McKesson Makes Application Hosting for Hospitals Faster, More Efficient

MCKESSON

COMPANY PROFILE

McKesson Managed Services hosts hospitals' clinical, financial, and electronic health record (EHR) applications, helping them to drive efficiency and provide better care.

CHALLENGE

The application hosting team at McKesson must meet stringent performance-based SLAs even as it rapidly grows its customer base and infrastructure.

SOLUTION

Using ExtraHop to analyze real-time wire data, McKesson gains the correlated, cross-tier visibility needed to quickly triage and troubleshoot performance problems.

BENEFITS

- 90% reduction in mean-time-to-resolution (MTTR)
- 75% improvement in Citrix launch and load times
- Avoidance of SLA penalties
- More than \$660,000 in annual cost savings
- Retirement of legacy infrastructure monitoring tools

“ExtraHop enables us to solve incredibly complex problems in a matter of hours. Extrapolated across our business, we’re saving at least \$400,000 annually in terms of time spent troubleshooting.”

—Scott Checkoway, Director of Application Hosting, McKesson Managed Services

Challenge

No other industry stands to reap as much benefit from information technology as healthcare. In addition to improved efficiency and quality of care, hospitals can receive significant financial incentives from U.S. federal government for meaningful use of EHR systems.

“Hospitals turn to McKesson Managed Services so that they can focus on healthcare strategy and patient care,” says Scott Checkoway, Director of Application Hosting at McKesson.

As McKesson's application hosting business rapidly expanded, the company needed to reliably troubleshoot performance problems even with exponential increases in complexity. The traditional way of solving problems was not working. “We could not afford to gather experts in every discipline to diagnose and fix problems. To meet our commitments to customers and scale our operations, it was clear that we needed a way to triage and troubleshoot issues more efficiently,” says Checkoway.

Solution

To improve application and infrastructure visibility, McKesson deployed ExtraHop to analyze its wire data—all L2-L7 communications, including full bidirectional transactional payloads.

Winning Over Skeptics

“I was a tremendous skeptic at first, but now I am a believer,” says Doug McMartin, Director of Application Hosting Development at McKesson. “My epiphany came when ExtraHop helped to solve long-running performance issues with our applications delivered over Citrix XenApp. We had brought in Citrix consultants for a four-month engagement without solving this problem, but with ExtraHop we easily uncovered the root cause in under 10 minutes.”

Equipped with ExtraHop, the McKesson application hosting team found that failed DNS record lookups were adding significant latency to Citrix launch and load times. Each failed DNS record lookup took approximately five seconds to resolve, and some application launches triggered more than five of these lookups. By removing bad records, McKesson saw average application launch times drop from 40 seconds to 12 seconds—nearly 75 percent faster.

Visibility for All Teams

McKesson uses ExtraHop to gain visibility that is valuable for numerous roles: Citrix engineers, DBAs, Active Directory architects, network engineers, virtualization architects, application support teams, and IT management.

- **Troubleshooting** – The application hosting team uses ExtraHop to identify the cause of problems before contacting domain-specific experts. This streamlined process is more than 90 percent faster than the old way of troubleshooting problems.
- **Continuous improvement** – Because the application hosting team can see dependencies across the entire environment, they can spot previously hidden inefficiencies such as slow SQL queries.
- **SLA tracking** – McKesson can now track and report on KPIs and SLAs for each customer. They have dashboards that track real-time Citrix login times, for instance.
- **Security** – By monitoring all communications on the wire, McKesson has been able to identify potential data leakage and malware.
- **Application development** – The application development teams at McKesson use ExtraHop in development and testing. The team in charge of Paragon application development used ExtraHop to identify a medication order process that was making too many database calls, for instance.

Benefits

Equipped with correlated, cross-tier insight from ExtraHop, McKesson can grow its hosting business more efficiently while delivering excellent application performance.

More Efficient IT Operations

With a troubleshooting process that is 90 percent faster and less reliance on specialist skills, McKesson saves more than \$660,000 annually. “Before, we would have deployed a team of specialists for weeks to manually troubleshoot poor performance,” says Checkoway. “ExtraHop enables us to solve incredibly complex problems in a matter of hours. Extrapolated across our business, we’re saving at least \$400,000 annually in terms of time spent troubleshooting.”

McKesson now relies on IT operations staff with more generalist skills who can use ExtraHop to solve problems that in the past would have required many specialists. “ExtraHop enables us to grow our hosting business efficiently, and we saved over \$260,000 in staffing in our first year,” explains Checkoway. “With our new model, we require only two-thirds of the engineers that we would have required previously to support new sites. For

example, we need just one Citrix engineer to support four new sites compared to 2.6 Citrix engineers with the old model.”

Satisfied Hosting Customers

For McKesson Managed Services, the performance of their hosted applications is paramount. By fixing failed DNS record lookups and subsequent optimizations, McKesson now enables caregivers to launch Citrix-hosted applications in just 10 seconds, on average. This means that customers save costs by having McKesson host their applications while also enjoying fast application performance.

Consolidated IT Management Toolset

Because of ExtraHop, McKesson is in the process of retiring legacy management tools, such as CA Spectrum, which will save thousands of dollars in annual licensing. “Our next-generation operations architecture includes ExtraHop, which provides us with wire data—communications between systems—and Splunk, which provides us with machine data,” says Checkoway. “We have greater visibility than ever before.”

ExtraHop is the global leader in real-time wire data analytics. The ExtraHop Operational Intelligence platform analyzes all L2-L7 communications, including full bidirectional transactional payloads. This innovative approach provides the correlated, cross-tier visibility essential for application performance, availability, and security in today’s complex and dynamic IT environments.

To learn more, visit www.extrahop.com or call +1 877-333-9872.

CITRIX LAUNCH AND LOAD TIMES



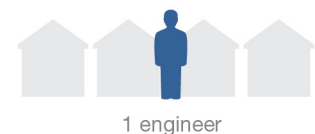
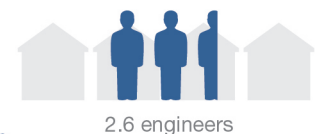
BEFORE ExtraHop



AFTER ExtraHop

McKesson improved Citrix application launch times by 75 percent with ExtraHop.

STAFFING COSTS FOR FOUR SITES



McKesson avoided more than \$260,000 in staffing costs in its first year with ExtraHop.

