



RED HAT AT BETH ISRAEL DEACONESS MEDICAL CENTER

The healthcare industry faces serious challenges associated with the demand for reliable and secure IT infrastructures that must fit within budget constraints. Dr. John Halamka, MD, MS understands these demands as he serves as Chief Information Officer of Harvard Medical School, Chief Information Officer of Beth Israel Deaconess Medical Center, Chairman of the New England Health Electronic Data Interchange Network (NEHEN), Chief Information Officer of the Harvard Clinical Research Institute (HCRI), and an Associate Professor of Emergency Medicine at Harvard Medical School.

A strong advocate of open source, Halamka is responsible for all clinical, financial, administrative, and academic information technology serving 3,000 doctors, 12,000 employees, and one million patients. He oversees the HIPAA transactions exchanged among the payers and providers in New England and also oversees the data management of clinical trials associated with Harvard Medical School. Challenged with finding a reliable and cost-effective solution for Beth Israel Deaconess Medical Center (BIDMC), a Harvard teaching hospital and leading medical institution, Halamka turned to Red Hat's open source solutions. "IT budgets are small, so we don't have much money to spend, but we have to be obsessed with security, privacy, and reliability because in this industry when services go down, people die," said Halamka.

For BIDMC, Halamka wasn't looking for an operating system that could provide additional features. "My challenge was to find an operating system without the virus of the month, without patches that I must apply, and without downtime created because there is so much feature creep that the operating system becomes unstable and has memory leaks," said Halamka. "I suggested that Linux might provide us with security, reliability, and cost reduction."



BIDMC maintains a data center with 146 mission-critical applications, categorized as Quadruple A, Triple A, and Single A applications. All are vital to the functioning of the hospital and are related to the hospital's code paging system, order-entry applications, results-ordering applications and more. In late September 2007, Halamka will bring 100 percent of BIDMC's mission-critical infrastructure pertaining directly to its Triple A applications to an environment based on Red Hat solutions. The hospital's previous environment, consisting of monolithic HP-UX boxes, will migrate to 30 HP commodity workstations running Red Hat™ Enterprise Linux™. "Red Hat solutions will provide us with high reliability and security, reduced TCO with lower costs from the use of commodity hardware, and a strategy that allows me to support our mission-critical Triple A application levels," said Halamka. "I haven't found another operating system that incorporates all of those benefits. We expect true zero downtime with our Triple A applications because our clusters will be geographically isolated across two physical locations."

Three years ago, Halamka began introducing open source solutions to BIDMC's backoffice. He began by replacing the hospital's utility services with open source, delivering extraordinarily robust performance and uptime that proved to the hospital's internal culture that moving to Linux could produce high levels of reliability. Next, Halamka explored open source solutions for BIDMC's application hosting, a sophisticated web of applications producing millions of millisecond transactions per year. Rob Hurst, a senior Caché administrator, executed proof of concepts with Red Hat solutions and was able to demonstrate the solutions' high levels of achievement. "We were able to demonstrate to the organization that there was no loss of function in migrating to open source solutions," said Halamka.

Visit <http://www.redhat.com/solutions/healthcare/> in the coming months to learn more from Halamka, Hurst, and the BIDMC team as they continue to port additional applications to Linux, scaling Red Hat solutions throughout their IT infrastructure.