RED HAT AND HEALTHCARE

Healthcare leadership increasingly relies on information technology to promote patient safety and reduce medical errors, while improving outcomes and controlling the cost and complexity of patient care. Red Hat, the world’s leading provider of open source solutions, provides the security, reliability, and interoperability infrastructure essential to this demanding environment, all while reducing the complexity and cost of your IT infrastructure. Red Hat Solutions enable your healthcare organization to focus on your primary goal of care delivery.

The open source, collaborative development model is the right approach to address the most pressing challenges in healthcare IT today. For example, open source implementations of actual standards for clinical data exchange is essential to testing and fulfilling true clinical interoperability. Whether you are focusing on an internal project to update core clinical systems, or collaborating with a community to build a shared infrastructure for health information exchange, Red Hat has the tools to assist in achieving your goal.

INFRASTRUCTURE SOLUTIONS: AFFORDABLE, RELIABLE, SECURE

RED HAT ENTERPRISE HEALTHCARE PLATFORM

A cost-effective open source information technology platform with services designed to meet the mission-critical demands of healthcare organizations. It provides a reliable, affordable information technology platform for delivering safe, high quality patient care. It does this by packaging Red Hat® Enterprise Linux®, JBoss Enterprise Middleware, updates via Red Hat Network and dedicated customer support and services specifically tailored to the needs of healthcare environment.

“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. I suggested that Linux might provide us with security, reliability, and cost reduction.”

— Dr. John Halamka, CIO, Beth Israel Deaconess Medical Center

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**Red Hat Enterprise Linux**

Patient lives depend on the reliability of your information systems. Rigorously tested by Red Hat and the broader open source community, Red Hat Enterprise Linux provides superior reliability on affordable hardware platforms. Red Hat Enterprise Linux Advanced Platform integrates virtualization and clustering technologies, delivering high availability while reducing capital and operating expense. Red Hat Enterprise Linux customers also benefit from one of the industry’s largest and fastest-growing set of certified applications.

The confidentiality of patient data is critical to healthcare organizations. Red Hat Enterprise Linux includes extensive, integrated security features such as SELinux (co-developed by the National Security Agency and Red Hat), Position Independent Executables (PIE), auditing, and ExecShield to protect your information against accidental and deliberate intrusion. Red Hat’s security response team works 24x7 to insure that any newly discovered exploits that have business impact are immediately addressed.

**JBoss Enterprise Application Platform**

With limited budget, healthcare organizations need to maximize the value of any investment they make. Whether you’re migrating to a more flexible, standards based environment, or building next generation applications, JBoss Enterprise Application Platform allows your healthcare organization to balance innovation with enterprise stability. Technologies for application presentation, services hosting, and data persistence are integrated into a single middleware solution at a fraction of the cost of traditional Java offerings. JBoss Enterprise Application Platform from Red Hat is the trusted, affordable platform for J2EE software development and deployment.

**FREEIPA**

FreeIPA allows healthcare organizations to reduce the risk of an internal breach and maintain HIPAA compliance by centrally managing and correlating vital security information including:

- Identity (machine, user, virtual machines, groups, authentication credentials)
- Policy (configuration settings, access control information)
- Audit (events, logs, analysis)

“Our healthcare customers depend on our solutions to care for patients 24/7. They require highly reliable systems with highly responsive support. Red Hat Enterprise Linux is designed to provide a very flexible approach to business continuity, giving us the mission-critical reliability we need for patient care at a much lower cost.”

- Michael Simpson, Senior Vice President/GM, McKesson Provider Technologies

“Security was one of our top priorities, and Red Hat provided an amazing solution for us. As a Medicare intermediary and carrier, we have to deal with many strict government regulations. The security and protection of our health care records is extremely important within our corporation, and Red Hat helped us to achieve this level of security.”

- Highmark, Inc.
RED HAT NETWORK

The modern Integrated Delivery Network (IDN) is an organization with thousands of distributed compute nodes. Red Hat Network technology enables an IT organization to manage thousands of systems as easily as managing a single system. With Red Hat Network, you can remotely manage, update, and monitor your systems, whether they’re in a remote clinic or in your data center.

INFORMATION MANAGEMENT SOLUTIONS: RAPID, RELIABLE ACCESS TO INFORMATION

METAMATRIX DATA SERVICES PLATFORM

Healthcare IT organizations face numerous information challenges such as providing access to data from disparate sources, resolving semantic differences between sources and consumers of data, and providing performance to meet service-level agreements. MetaMatrix Enterprise Data Services help healthcare organizations efficiently bridge the gap between diverse existing enterprise data sources and the new forms of data required by new projects, applications, and architectures. By providing a single, real-time read/writable view into your data, MetaMatrix can complement EMPI systems that don’t have native data aggregation capabilities, support HIPAA compliance by mediating and auditing data access, and perform clinical data exchange to extract clinical data from a proprietary schema into a standard schema such as IHE. MetaMatrix Data Services Platform offers healthcare organizations the tools necessary to deliver correct, on demand patient information at the point of care.

GLOBAL FILE SYSTEM

The growing use of longitudinal data in clinical decision support applications and the need for on demand, electronic patient care information means that data volumes are also increasing. Global File System (GFS) with integrated high availability clustering from Red Hat provides a scalable, high performance, reliable cluster file system that can expand to meet the growing needs for information storage.

INTEROPERABILITY: RELIABLE, SECURE EXCHANGE OF DATA BETWEEN DIFFERENT SYSTEMS

Initiatives to improve the quality of care and patient safety are driving increased investment in healthcare IT systems. In order for these systems to be effective, they need to be integrated into the overall IT fabric.

“We are currently running all our Linux servers on HP Proliant hardware. We’ve have been extremely happy with the reliability and stability of our Red Hat environment and the ease of maintenance and patch updates.”

– Baptist Memorial Health Care

“Red Hat enabled us to create a highly efficient disaster recovery system that expedited restoration time from days to seconds. This means we make patient data readily available and provide the highest level of care at all times.”

– Florida Hospital, part of the Adventist Healthcare System

“Due to Red Hat’s Cluster Suite, storage for our cardiology PACS system has experienced zero downtime to date. We feel this is phenomenal performance in 24/7 healthcare environment where every minute downtime affects our efficiency as a healthcare provider. Using Red Hat has improved our ability to care for our patients.”

– HealthFirst

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RED HAT ENTERPRISE MRG*

The growing use of IT in healthcare is increasing the amount of data that needs to be exchanged. Traditional message transports for HL7 either do not scale or are proprietary and expensive. Red Hat Enterprise MRG implements the open Advanced Message Queuing Protocol standard to provide affordable, scalable message transport.

ENTERPRISE SERVICE BUS

Red Hat’s Service Oriented Architecture Platform provides an open, flexible standard for healthcare interoperability. Route and transform messages between disparate clinical systems with different transports. Mediate interactions between enterprise applications, business services, business components, and middleware to integrate and automate business processes.

PARTNER ECOSYSTEM

Red Hat’s healthcare partners provide complete solutions for their customers. McKesson, GE Healthcare, InterSystems, Misys, Quovadx, Cerner, Sage Software, Oracle, IBM, HP, Dell, Intel, and AMD are among the many healthcare partners that provide solutions for healthcare with Red Hat.

STANDARDS DEVELOPMENT ORGANIZATIONS

As a part of our commitment to open standards and interoperability to improve healthcare globally, Red Hat will continue to contribute to many leading healthcare organizations including:

- Health Level 7 (HL7)
- Object Management Group (OMG)
- Health Services Specification Project (HSSP)
- Integrating the Healthcare Enterprise (IHE)
- Healthcare Information and Management Systems Society (HIMSS)
- Certification Commission for Healthcare Information Technology (CCHIT)
- North Carolina Healthcare Information and Communications Alliance (NCHICA)

To Learn More

Red Hat continues to develop innovative open source solutions for healthcare. For more information, visit us online at http://www.redhat.com/healthcare and sign up for our healthcare email alert, or contact us at healthcare@redhat.com

*General availability in 2008. For more information, contact us at healthcare@redhat.com.