As a healthcare provider, you are faced with a combination of operational, regulatory, and informational challenges. Your organization must manage a complex set of public/private information partner relationships, which are further complicated by the growth of the data over time. Integration of information is a key factor of the many decisions that drive everything from research to management of the clinical patient data.

“A service-oriented architecture does not solve your data problem; it merely exposes it”

A service-oriented architecture (SOA) for healthcare must address issues of data and communications interoperability. Traditional SOA technologies ignore the data, only tackling the issue of protocols. Healthcare organizations are turning to the Red Hat SOA technology to address both data and communication issues.

A BETTER WAY TO WORK WITH DATA ACROSS DIVERSE SYSTEMS

SOA solutions for healthcare from Red Hat begin with the MetaMatrix Enterprise Data Services Platform. MetaMatrix Enterprise Data Services Platform is a powerful management system. It provides tools for creating data services, a repository for storing data service definitions with relevant metadata, and a robust execution environment that provides enterprise-class performance, data integrity, and security. MetaMatrix lets you transform the data you have into the data you want. It allows multiple, distributed data sources—relational databases, XML, flat files, web services, HL7—to be transformed into a single, read/writeable data source with a single common interface. With MetaMatrix, your healthcare organization can create unified views of your data.

Once data has been converted into a more useful form, MetaMatrix connects to another data source—the JBoss Enterprise SOA Platform. The SOA Platform is a high-performance enterprise service business that supports a federated architecture, providing process orchestration, messaging routing, and registry capabilities in conjunction with additional data connectors.

Web services built on the JBoss Enterprise Application Platform can be connected to the SOA Platform to process the data being routed by the SOA Platform and transformed by MetaMatrix.

ELECTRONIC MEDICAL RECORDS

Sophisticated electronic medical records (EMRs) offer web service interfaces for integration. Unfortunately, these web service interfaces are often difficult-to-use and have limited security and auditing capabilities.

MetaMatrix works smoothly with EMRs such as Epic to present a standardized web interface that also integrates security and auditing capabilities. Applications can then securely access this standardized interface via web services to modify patient data.

SINGLE VIEW OF THE PATIENT

Patient data is frequently scattered across multiple databases. MetaMatrix provides a single read/write view into multiple databases—like InterSystems Caché. Physicians can now have a single view of a patient instead of consulting multiple applications and databases.

When multiple project teams maintain duplicate or inconsistent data sources, organizations lack a single, integrated view of enterprise data that is fully accurate and accountable in real time.

MetaMatrix Enterprise Data Services Platform helps reduce the time and cost of software development and integration. It bridges the gap between the data you have and the data you need.