

# Sun Java™ Composite Application Platform Suite Health Services Framework

Servicing Integrated Health Applications



## Highlights

### Potential business benefits

- Accelerated deployment cycle
- Minimized development, management, and enhancement costs
- Real-time operations visibility

### Technical benefits

- Best practices solution for health informatics professionals
- Foundation for best-of-breed application service management
- Rapid customization and delivery
- Manageability of services
- Ongoing reusability
- Reduced complexity
- Standards enforcement



## Sun Java™ CAPS

### Overview

As health care providers seek continued improvements in business flexibility and cost reduction, integration technology continues to be regarded a critical enabler. For health informatics professionals in IT and information management, the technology also offers opportunities to share data from best-of-breed applications, reduce unnecessary data entry, and improve overall data quality. Just as important as selecting the right integration platform is the development, use, and sharing of best practices methods and tools for supporting health IT and informatics professionals. The Sun Java™ Composite Application Platform Suite (CAPS) Health Services Framework (HSF) is designed to address key challenges in this area.

### Challenges

As health care communities become more reliant on converged IT services and real-time access to information becomes commonplace, maintaining the availability and integrity of these services and supporting interfaces is placing significant pressure on hospital informatics staff.

In many cases, IT infrastructure is outsourced to third-party suppliers whose systems need to be integrated with other suppliers' systems. Information about application and infrastructure performance is required to support supplier management. Quality and cost pressures demand reusability, as well as sharing of solutions and services for health care informatics environments.

The convergence of IT services provides new opportunities for health care informatics skills development and transfer. Java CAPS offers a technology platform to facilitate a service-oriented view of the IT landscape, but new business services need to be developed that meet these challenges head on.

### Sun solution overview

The Java CAPS HSF is a prebuilt framework designed to meet this type of need. It provides error handling, alerts, and logging services that can be leveraged across multiple Java CAPS installations in any health care organization. HSF services are built using the process orchestration, channel management, data mapping, Java Message Service (JMS) and Java 2 Platform, Enterprise Edition (J2EE™) design patterns already available within Java CAPS. The HSF is fully extensible, allowing new services to be added during initial deployment or over time.

The solution is based on Sun's best deployment practices and development standards, and meets performance and scalability demands. It delivers a centralized repository of support services (including logging) and central archive of resulting service data, including:

- Prebuilt services for error reporting, alerting, logging, unique ID, payload, and custom user field services
- Error reporting, alerting, and logging services, offering an opportunity to standardize codes across the enterprise

- Configuration information stored in repository database for standardization and maintenance
- Documentation and working samples
- Logging service configurable to write to the runtime repository database or text file, plus transactional sending of logging events

#### Technical overview

- Built with Java CAPS using eGate™ Integrator and Java 2 Platform, Standard Edition (also known as JDK™ 1.4.x)
- Relational database support for Oracle® (8.1.7, 9i, 10g) and SQL Server 2000
- Invocable via Java API from Java CAPS or J2EE interface
- HSF entry point exposed as an external JMS allows invocation of HSF via a client API that uses a JMS API supported by eGate Integrator
- Leverages Java CAPS connection handling with database resource adapter implementation
- Alerting service sends e-mail for HSF event
- Payload service in ASCII text or Base 64 encoding
- User fields service stores name and value pairs in runtime repository database

#### Delivering results

The Java CAPS Health Services Framework is available through Sun Consulting, delivered as a component of service engagements. More detailed information is available by e-mailing [healthcare@sun.com](mailto:healthcare@sun.com).

#### About Sun

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