



# Eclipse Open Health Framework Creation Review

Oct 20<sup>th</sup>, 2005

# Overview

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- This activity addresses part of an need to improve the levels of interoperability between applications and systems within and across healthcare organizations – corporate and regions.
- This project will implement extensible frameworks and exemplary tools for implementations of key health informatics standards based components.
- This project supports the objectives of governments to encourage the use of interoperable open source infrastructure to lower integration barriers. (USA, UK, Canada, Australia, etc.)
- The frameworks, components and tools created by this project will be used by vendors and integrators to build workstation applications, gateways and server applications in healthcare infrastructures.
- The components will leverage large investments in cross industry middleware and back end systems already widely used.

# Standards Community

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- OHF is not about creating standards, it is about building extensible frameworks for implementing accepted and emerging standards. The Eclipse OHF team members work with the following standards groups.
  - **HL7** HL7 is a key medical IT standards group, specializing in medical document and message structures, reference information models, clinical decision support systems, context management systems and other systems. HL7 also lobbies on medical IT issues including privacy. EOHF works with both the Control & Query and Tools sub committees. [www.hl7.org](http://www.hl7.org)
  - **OMG/HL7** OMG's Healthcare Domain Task Force has joined with HL7 to jointly develop common services standards. These are common services that are used to build health IT applications. EOHF will work with this group to provide the underlying support infrastructure for these services and where appropriate implement these services. (e.g. record location services) <http://www.omg.org/news/releases/pr2005/03-08-05.htm>
  - **ASTM** ASTM E31 committee for health Informatics creates standards in a number of areas including architecture, content, storage, security of medical information, as well as continuity of care records (CCR), transcription services, etc. <http://www.ncvhs.hhs.gov/010201h9.pdf>
  - **DICOM** DICOM creates standards for the transmission and sharing of images used in medical application – primarily radiology. <http://medical.nema.org/>
  - **CEN** OEHF works with members of CEN committees, mostly in Europe and Australia.
  - **IHE** Although a vendor organization and while claiming not be a standards organization, IHE sets the requirements for interoperability testing. It creates profiles (use cases) and states what standards will be used to implement the profiles and how the designated standards will be used (resolves optional feature problems) [www.ihe.net](http://www.ihe.net)

# OHF Scope



The OHF Project:

- Develops health domain specific frameworks and tools
- Collaborates with other projects to develop underlying IT infrastructure for health domain requirements
- Work items are mostly driven by health interoperability standards & legislation:

<b>Information Exchange</b>	<b>Security and Management</b>	<b>Healthcare Services</b>
HL7 v2, v3 & CDA DICOM Archetypes (+ CEN 13606) IHE Profiles (XDS) ASTM CCR	HIPAA IHE Secure Node + ATNA HL7 CCOW XACML CEN 13606	OMG HDTF services (CTS, RLAS, etc) CEN HISA Analytics HL7 EHR-S

# Project Leadership



Member	Role	Association(s)
Ken Rubin	Lead Architect	EDS, OMG/HL7
Grahame Grieve	Committer /Architect (HL7)	Jiva Medical, HL7
Don Jorgensen	Committer /Architect (Security)	Inpriva, IHE, HL7
Adam Flinton	HL7 Tooling Lead	NHS, HL7
Eishay Smith	Committer	IBM
Geoff Roberts	Committer (HL7)	Quest , HL7, NCEE
Kim Clohessy	OHF Project Lead	Jiva Medical
Brian Barry	Analytics Lead	Bedarra Research Labs
Dmitry Bakuntse	Infrastructure	International Technology Group
Paul Trevithick	Committer (Trust)	Social Physics
Russ Hamm	Committer (CTS)	Mayo Clinic

# Participants

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- Vendors
  - Jiva Medical
  - Inpriva
  - Bedarra Research Labs
  - IBM
  - ITG
  - Social Physics
- Users
  - NHS (UK)
  - EDS
  - VA / DoD (USA)
  - Health Infoway (Canada)
  - NITIZC (Netherlands)
  - Mayo Clinic
- Standards Groups
  - HL7
  - OMG / HL7 Health Services
  - IHE (Integrating the Health Enterprise)
  - ASTM E31
  - DICOM
  - CEN

# Eclipse Components

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- The OHF intends to build upon other Eclipse projects
  - Eclipse SDK
  - Eclipse RCP
  - GEF
  - EMF
  - UML2
  - XSD
- Subject to license issues, OHF will take advantage of other open source projects: e.g.
  - Apache

# Plan

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- OHF has a broad vision, but our approach is very pragmatic:
  - Staged development, where each phase has well defined deliverables and a realistic schedule
  - Customer/user involvement during each phase to validate development plan
  - Each major development cycle (~1 yr) will produce deliverables for end user consumption
- To be successful in the medical IT business the project team will need to work closely with:
  - international standards bodies.
  - key end users that will help drive requirements
  - key vendor organizations that drive the industry.
- To date the project team has built relationships with several organizations
  - HL7, OMG, ASTM, IHE
  - NHS (UK), HHS (US), DOD (US). Infoway (Canada) others
- The OHF project is working with these organizations to identify, scope and prioritize requirements and component development.

# Development schedule

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- **Prototype and Planning** Dec 2005
  - Detailed Development Plan for first release.
  - Prototype HL7 V3 tooling
  - Prototype IHE Secure Node
  
- **First Release†** Dec 2006\*
  - Basic version of Information Exchange
    - (HL7 V3 & CDA + CCR, DICOM)
  - IHE Secure Node Framework +
  - Analytics Platform + CTS Reference Implementation
  
- **Product Level Release** Dec 2007\*
  - Supported versions of products in First Release
  - Analytics EHR reporting, interfaces and adaptors
  - Additional components as identified in 2006 †

\* Regular milestones for all stages, target every 8 weeks

† Components will be scheduled as resources and committers are identified

# Questions?

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- Project Proposal:  
<http://www.eclipse.org/proposals/eclipse-ohf/index.html>
- Newsgroup:  
<news://news.eclipse.org/eclipse.technology.ohf>