



Eclipse Open Healthcare Framework Workshop for IHE/HIMSS Participants

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Outline

- What's OHF?
- How does OHF help implement IHE?
- What's new for 2008?
- Connectathon 2008



Eclipse Open Healthcare Framework (OHF)

- Project within Eclipse formed for the purpose of expediting healthcare informatics technology.
 - extensible frameworks and tools which emphasize the use of existing and emerging standards
 - currently provide tools and Frameworks for HL7, IHE, Terminology, Devices, and epidemiological modeling and visualization



Initial Contributions to OHF

○ Mayo Clinic

- Implementation of the HL7 Common Terminology Service API



○ Jiva Medical

- HL7 V2.x and V3 messaging models and tools



○ Inpriva

- Security, Auditing, Authentication Framework components



○ IBM

- XDS and PIX/PDQ client side actors, Web Service "bridge" to these actors, WADO client and STEM



OHF Resources

- Website: www.eclipse.org/ohf
 - General user information, documentation, downloads, bugzilla link
- Newsgroup:
<http://www.eclipse.org/ohf/newsgroup.php>
 - Great for posting questions so that the whole community can benefit from answers and subsequent discussions.
- Wiki:
<http://wiki.eclipse.org/index.php/OHF>
 - Developer information

OHF for IHE

- OHF provides client side implementations of several key IHE profiles.
 - ATNA: Audit Trail and Node Authentication
 - PDQ: Patient Demographics Query
 - PIX: Patient Identifier Cross-Referencing
 - XDS: Cross-Enterprise Document Sharing
 - XCA: Cross-Community Access
 - XUA: Cross-Enterprise User Authentication
- Each of these transactions can be invoked via POJOs, Eclipse Plugins or Web services via the OHF Bridge.

Adoption of OHF (2007)

- IHE North American Connectathon – January
 - 9 systems (OpenEMR, Cap Med, Practice Partner, Bell Canada, Med Commons, MedQuist, Blueware, Accenture, IBM)

- United States National Health Information Network Prototype - January
 - Used in all 3 geographies in the IBM contract

- IHE European Connectathon - April
 - 3 systems (OpenEMR, IcoServe, Synapsis)

- MECIDS Public Health Affinity Domain Project - ongoing

New for 2008

- New APIs for XDS, ATNA
 - CP work on XDS Error Handling
- XDS.b: Cross-Enterprise Document Sharing (Web Services)
- XCA: Cross-Community Access
- XUA: Cross-Enterprise User Authentication

XDS Response - Java

- ITI CP 28 consolidates XDS Error handling
 - Source and Consumer
 - XDS.a, XDS.b
- XDS API modified to unify responses under single type
- See: XDSResponse model
 - Scope: XDS Source, Consumer

XDS.b Consumer

- Two major APIs
 - Registry Stored Query
 - Retrieve Document Set
- Registry Stored Query
 - Valid for XDS.a and XDS.b
 - XCA support

XDS.b Consumer

- Retrieve Document Set
 - Valid for XDS.b **only**
 - New API for 2007
 - User constructs a RetrieveDocumentSetRequest
 - See example code
 - Pass map of repositoryUniqueId => Web service endpoint URLs
 - Can generate from RHIO Config
 - XCA Support

XDS.b Source - Java

- One major API
- Provide and Register
 - Valid for XDS.a and XDS.b

XDS.a vs. XDS.b in OHF

- XDS.a Consumer
 - org.eclipse.ohf.ihe.xds.consumer.Consumer
 - Transactions
 - Registry Query (A only)
 - Registry Stored Query
 - Retrieve Document By URL (A Only)
- XDS.b Consumer
 - org.eclipse.ohf.ihe.xds.consumer.B_Consumer
 - Transactions:
 - Registry Stored Query
 - Retrieve Document Set (**NEW**) (B Only)

XDS.a vs. XDS.b in OHF

○ XDS.a Source

- org.eclipse.ohf.ihe.xds.source.Source
- Transactions
 - Provide and Register Document Set

○ XDS.b Source

- org.eclipse.ohf.ihe.xds.source.B_Source
- Transactions
 - Provide and Register Document Set

○ CDA Extraction Utilities work for both

ATNA Updates - Java

- Changed API slightly to support holes found in Connectathon testing
 - **auditSourceId and initiatingUser now defined in global scope by implementer (*you*)**
 - auditSourceId for Connectathon = Your System Name ("OTHER_IBM", etc)
 - See example code for details
- Bridge users: handled behind the scenes



ATNA TLS Enablement - Java

- Same as last year, full support
- We will provide Java Keystore and master Truststore for each OHF user
- See OHF Wiki for more details

RHIO configuration

- XDS.b introduced need for pseudo-configurability (repositoryUniqueId)
- Previous configuration paradigm for Bridge users only
- Now available for all Bridge and Plug-in Users
- We will provide config file for Connectathon and HIMSS

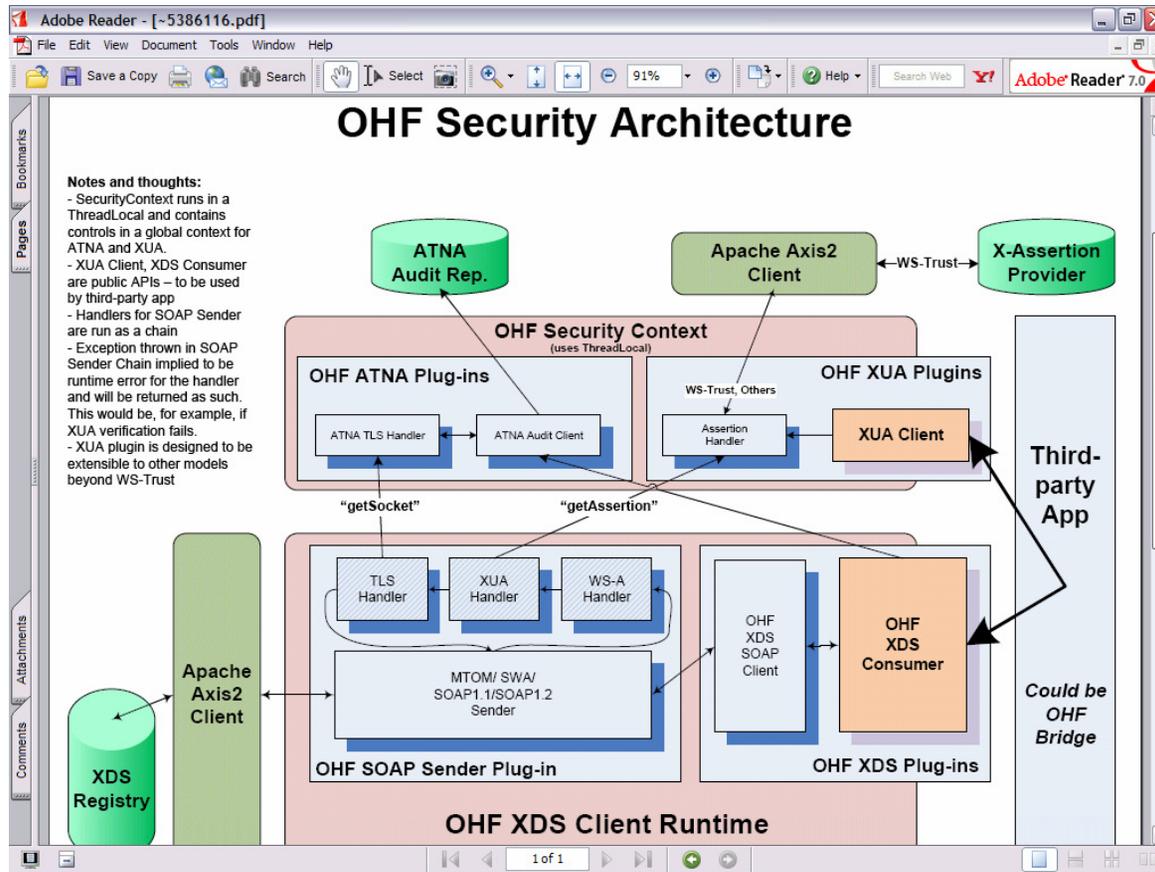
XCA Support

- XDS.b Java and Bridge API's support the 'homeCommunityId'
- minimal management of 'homeCommunityId'
 - Allowed to be added to stored queries
 - Returned on query/retrieve responses
 - RetrieveDocumentSet (ITI-43) implementation will send request to initiating gateway, if a homeCommunityId is present
- Rule of thumb: "copy through"



XUA Support

- Still in development



Connectathon 2008

- OHF 'plan' at Connectathon 2008
 - Will provide a RHIO configuration XML that works with our configuration plugin
 - Will provide Java keystore / master truststore if needed
 - Will be present to help with OHF related questions
 - Will maintain a Skype chat and info/FAQ web page for the event (like last year)

Connectathon 2008

○ Release Timeline

- Now: OHF plug-ins available in Eclipse CVS
- Next week: Binaries of OHF PIX, PDQ, XDS, and ATNA plug-ins on Eclipse.org
 - Support for XDS.b and XCA
- Following week: Binaries of OHF Bridge on Eclipse.org
- Soon: XUA support in plug-ins and Bridge

Tips

- Expose yourself!
 - Let us know you plan to use OHF at Connectathon! We're here to help.
- Ask questions on newsgroup or mailing list, REPORT BUGS!
 - So everyone benefits!
- Begin MESA Testing EARLY!
 - Start with last year's tools if you want 😊
- Come to Connectathon prepared!
 - Don't get frustrated if you don't finish on Tuesday 😊



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