



Testing and Tools Committee Meeting

June 7-8, 2011

NIST HQ, Gaithersburg, MD

Attendees

- Diane Azais - NIST
- Linan Wang - NIST
- Eric Poiseau -
- Karima
- Peter
- Chris C
- Chris L
- Cor
- Rob
- Steve
- John G
- Mary Laamanen
- Gavin
- Bill M
- Andrew M
- Lisa
- Didi

Minutes

2011-06-07

- Presentations from the day's meeting are uploaded to the ftp site:
ftp://ihey2@ftp.ihe.net/Testing_and_Tools/Meetings/2011-06-07
- Review development status of existing tools and development plans: capabilities, gaps that need to be addressed; links needed between tools
 - Gazelle: Eric Poiseau/IHE-E
 - Eric presented a set of slides on the architecture and functionality of Gazelle and led discussion with group

- Up to now Gazelle has not been installed by vendor for internal testing; this is a goal that we should try to meet as soon as possible
- Managing and referencing value sets is an important capability that needs to be added for various uses, including Meaningful Use testing in US
- Need to improve performance of the application; sometimes there is considerable delay in launching tests: have gathered data at Connectathons to find ways to optimize performance
- Need to add function to assign tests to a group of monitors (rather than individual monitors only)
- Need feed subscription function to update participants on status of tests (particular feeds for groups of users, monitors, etc.)
- Need to improve installation and documentation
- Need to extend automation of gathering test results from external tools
- Manpower resources allocated to Gazelle test management tools and Product Registry have declined
- External Validation Services have required growing resources
- Simulators: Working on Lab, XUA, others
- Test descriptions and test scripts: Steve Moore/IHE-NA
 - Steve Moore presented slides on the current status of test tools and test script development
 - Development work is lagging publication of new profiles
 - Steve has list of priorities for North American Connectathon based on input from testing team
 - Has approximately 3.5 fte to allocate to testing management and tools development
- Validation Tools: NIST teams (Rob, Bill, John, Andrew)
 - Bill Majurski presented the XDS Toolkit; refinements continuing including addition of message validator
 - Toolkit includes three “test engines”: a client/server model for XDS registry/repositories; a message validation service; simulators built on message validator
 - Many users have Toolkit designed behind their firewalls
 - Currently installation is via a .war file built on Tomcat server; could

potentially develop VM alternative

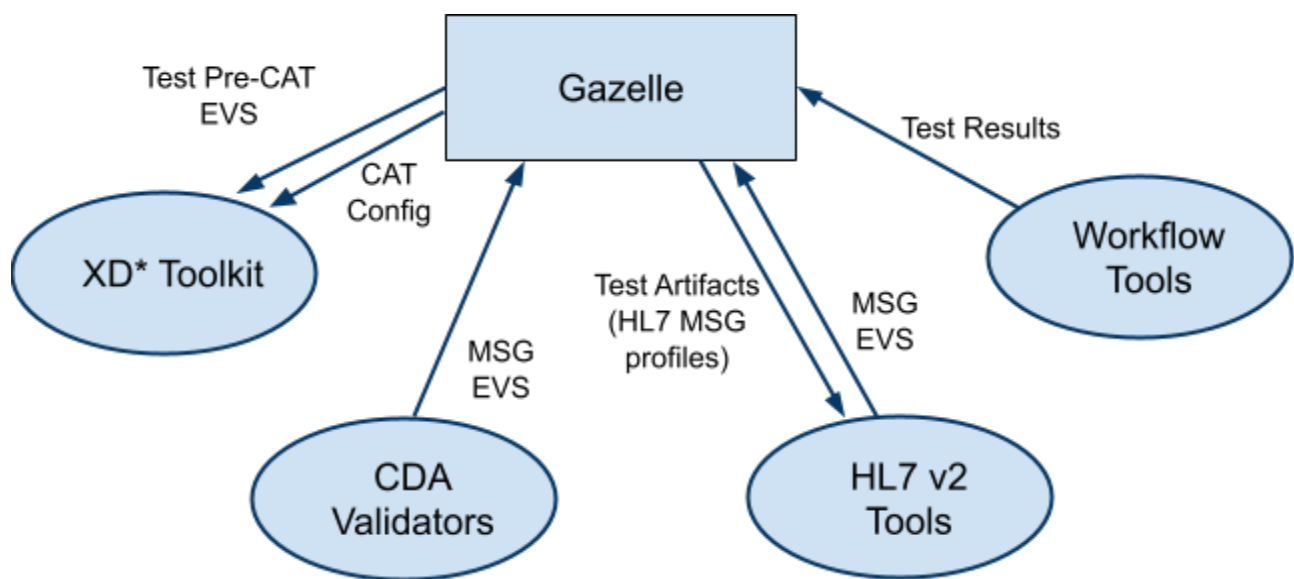
- Intends to add drop down selector for configurations specific to different Connectathons and regional deployments
 - Some regional projects (NHIN, epSOS) require different metadata requirements
- Mary Laamanen presented the support NIST is providing for NHIN
- NHIN has more requirements in header; makes it a challenge to get to validating message body
 - Intend to develop new NHIN validation tools based on XD* toolkit
 - Adding XCPD simulators for NHIN testing; might be possible to use these tools for IHE as well; first version will be US-specific in terms of demographic information, patient identifiers; develop different user interfaces/packaging for different regional projects
 - SAML validator and simulator being developed with outside vendor; based on Java 5 without schematron
 - Goal for NIST is to deliver to NHIN by this fall
- Rob Snelick presented on PIX/PDQ tools; provide validation of messages and content; used for Connectathons beginning in Fall 2010; needs to be linked into Gazelle for pre-connectathon testing to record results in pre-testing data base; provides instant feedback to testing participants that can greatly expedite bug fixing, etc.
- NIST teams focusing on their own domains, but trying to find areas of architectural commonality and developing generalized tools that allow for generation of multiple specific tool sets
 - Test Case Management Tool to enable domain experts to develop tools
 - Implementation Guide Authoring Tools to allow generation of more testable specifications to begin with
 - Reusable test cases that can be adopted from domain to domain
- John Garguilo presented on NIST activities to support testing in IHE PCD domain
- PCD profiles focus on semantic message content, code sets and

specific semantic constraints

- Building Rosetta Terminology Mapping system: essential piece for getting at semantic message-level conformance
- Working to harmonize tools and model with Continua
- Supporting testing with IHE Korea in July
- Andrew McCaffrey presented on NIST's document validation service
- Communication, collaboration, reporting and scheduling
 - Establish annual goals
 - Connectathon testing
 - New profiles and high-priority capabilities required to support profiles
 - Domain project managers have primary responsibilities to track need for tools to support profiles
 - New tests defined and entered in Gazelle and pre-Connectathon tests get created
 - Need a mechanism for sharing the input of domain project managers with Testing and Tools for planning and strategic purposes
 - Project managers should have strong influence to decide what new profile are to be supported
 - Need to record agreements on commitment and report regularly on timelines for development and maintenance
 - Need consistent mechanism to track versions and releases of tools to ensure latest are being used, bug fixes are disseminated, etc.
 - Mechanisms to gather input from Connectathons
 - Survey tools: each has separate mechanisms
 - Bug tracking site linked to Gazelle
 - Bug tracking site for pre-Connectathon tools
 - Bug tracking via email for XDS
 - Deployment input
 - Communication
 - Need better organization of biweekly meetings to facilitate substantive

reporting on projects in progress, ownership and status

- **Action Item:** Chris Carr to develop standing agenda for Testing and Tools calls with rotating status updates from each project team
- Need a shared reference point for project ownership and status
 - **Action Item:** Karima Bourquard will provide adapted version of project tracking tool
- Support of other projects - How does work performed for other projects (eg, NwHIN and epSOS) get incorporated into IHE tooling?
 - Important to develop tools at high-level that allow testing from a single tool in different configurations and settings
- Process for committing to development projects
 - Claim on central tracking document and announce to committee before beginning
 - Project Managers define list of projects for support of testing profiles
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- Bringing in new national deployment committees
- Architecture discussion: current tools and processes



Overall IHE Test Tools Architecture

Proposed Additions

Simulation Management ← API
Expert System Call-out → Start test (p,P) ← Test Done (Rests)
Context Management/Sharing
CAT Auto Conformance Test grading
Common Test Language
Test Case Management Tool

- Joint Development Planning:
 - Review of Plans for Next 6 Months
 - Establish joint collaborative goals
 - Gaps in tool set
 - Support of new domains and profiles
 - New test management capabilities
 - Integration of test management, test definitions, validation tools
 - Support of non-Connectathon testing
 - Persistently available testing services
 - European project support
 - US "meaningful use" testing and certification support
 - Other projects and testing opportunities
- Organization and accessibility of tools
 - Users want to find tools needed for a specific Connectathon
 - Want to be able to browse a database by profile

- Current version is a [simple Wiki page that needs updating](#)
- Test case authoring and management tools
- Implementation Guide authoring tools; potential use for managing profile authoring process
- Quality management for testing process
- Identify shared priorities for development and integration of tools into Gazelle
- Development tracking and reporting process

- Documents for Review:
 - [Tool Inventory and development status](#)
 - [Gazelle Roadmap v3](#)
 - [List of known testing events \(Connectathons, etc.\)](#)
- Deliverables:
 - Diagram of existing tools showing their interactions
 - Development reporting process and documentation tools
 - Next steps; ongoing discussion; future meetings
- Connectathon Manager Training and Credentialing