DSpace RoadMap

2009-2010

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Highway

- 2009
- Open Issues
- 2010
- Governance

Wednesday, October 14, 2009
DSpace today thrives on contributions
Direction driven by those able to contribute
Roadmap is a synthesis of those directions
Below are Ideas toward next releases
Look for conclusions after this meeting
2009 – DSpace 1.5

- DSpace 1.5 and 1.5.1 as year began
- Maven build and overlay system
- XMLUI (Manakin) as well as JSPUI
2009 – DSpace 1.5.2

- SWORD module/version 1.3.1 supporting the sword standard version 1.3
- Cocoon upgraded to 2.2
- Fix for the UTF-8 issues with the XMLUI
- New authentication methods: Hierarchical LDAP and Shibboleth
- Full update translations: German, Italian for both XMLUI and JSPUI and Ukrainian for JSPUI
- New translations for 1.5.x: Greek and Thai
- Graceful resolver for urn in the item page for the JSPUI
2009 – DSpace 2.0

- Technology preview assembled for OR2009
- Subsequent incremental development
- Service manager integrated into DSpace 1.6
- Needs community support to become complete
Releasing Soon.

Embargoes, Batch Metadata Editing, Statistics, and much more ...

Covered by Stuart Lewis in following presentation
Leave aside the numbering:

• More service / component orientation
• More generalized data model
• Straightforward migration
• Apply current dev, design, community techniques
Issues
Issues – Code migration

- Modularity / Components
- Refactoring into the right ones
- Always 90% done
- Extensibility
- Best guesses lead to success (eventually)
- Maintaining and migrating local modifications
Issues – Data migration

- Upgrading data model means updating database
  - ... and in the worst case the content store - but not likely

- Using a data model means changing the code
  - ... and perhaps evolving local procedures and authorization
Issues – Two Uls

- Expensive to maintain two
- Tradeoff: double work vs mismatched features
- Neither is universally accepted
- JSPUI: dated, flawed organization
- XMLUI: XML is hard, tech has bugs, less efficient
Issues – Service platforms

- DSpace 1: None (implied, JVM, JSP, Cocoon)
- DSpace 2: Custom; Spring (or flexible)
- Gaining momentum: OSGi (outside DSpace)
Issues – Dev community

- Small (dedicated!)
- Varying availability
- Widely distributed
- Working to local needs
Issues, Issues, Issues

- Code migration
- Data migration
- Two UIs
- Service platforms
- Dev community
Solutions – Code

- Maven: Already improved in 1.5.x
- Refactor and repackage
- Sort out overlays
- Need best practice examples!
- Multiple overlays = unpredictable.
- Service managers and components
Solutions – Data

- Incremental migration
- New model alongside old data
- Augment data as required
- Move to new code
Solutions – One UI?

• Inevitably XMLUI / Manakin?
• Resolve differences in embedded logic
• Provide migration for customized JSPUIs
  • Subcommunities?
• Address problems real and perceived
  • Cookbooks
Solutions – Svc Platform

- Ensure DSpace 1.6 (2.0) Service framework stays current and plays well with others
Solutions – Dev Team

- Get more committers?
- Less tech / specialists?
- Share more components
- Rely on adjacent teams
- Get more commitment?
2010 - Trends

- Service framework: OSGi?
- Modularity (reuse from other projects)
- Governance (Apache, community, cross project models)
OSGi

• Just another service framework?
• Embraced by Sakai and Fedora Repository
• “Proven” in Eclipse

Bundles:
• Standard dynamic loading / unloading
• Evolving (domain specific) dependency / API standards
Governance

• Apache Model embraced by committers
• Voting by “PMC”: -1, 0, or +1
• Majority for procedural issues
• Minimum of (3) +1 for releases
• -1 can “Veto” a code change.

• Who becomes the PMC?
• Default: existing committers
Opportunity

- Directions and technologies of DSpace and Fedora are similar
- Pause and look at possibilities
- Join together and avoid disparate development efforts
Proposal

- DSpace and Fedora committer communities consider and develop a recommendation for aligning and integrating the DSpace 2 and Fedora Repository efforts into a feature complete upgrade for turnkey institutional repository users.
TimeLine

- 4Q09 “Now”
- DSpace 1.6 release
- Release Manager for “next”
- What goes in “next”
- 1Q10 “Develop”
- 2Q10 “Push to Release”
- 3Q10 ??
Links

http://www.dspace.org
http://www.duraspace.org
http://www.apache.org/foundation/voting.html
http://www.apache.org/foundation/how-it-works.html
http://www.osgi.org/
Want to Discuss?

After 1.6

(and into the evening)
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