• Background
• Requirements & Goals
• Architecture
• Progress, Timeline & Release Plan
• Current Release is DSpace 1.5.1
  – Collection / Container / Item / Bitstream wired in.
  – Pluggable storage exists as extensions.
• 2.0 is JISC funded implementation of DSpace Architectural Review recommendations.
• Design influenced by ORE, JCR, FRBR, RDF, Fedora.
Requirements

• Backward Compatibility
• Extensible data model
• Extensible services model
• Operates “out of the box”
• Easily exported content
Goals

- Easy integration into emerging ecosystem including Sesame, Fedora, Sakai, etc.
- Pluggable storage, indexing, authentication, etc.
- Good performance / low resource use
- Straightforward extension / customization for local needs
• Layers: Kernel, Core Services, Applications

• Kernel:
  – Configuration
  – Framework using Spring, Guice

• Core Services:
  – Defined as Interfaces
  – Implementations provided
  – Can be replaced or augmented by Extension Services.

• Applications: JSPUI, Manakin (XMLUI), …
Architecture – Core Services

(Interfaces)

- Configuration
- User
- License
- Caching
- Search
- Kernel
  Spring / Guice
- Event
- Request
- Session
- SimpleStorage
- Repository
Architecture – Data Model

Asset (DspaceObject)

Property (dc: title) (ds:description) (dc:identifier) (dspace:partOfCollection) (dspace:hasItem) (dspace:hasLogo) ...

Container (Community) (Collection)

Item

Manifestation

Content (BitStream)
Progress

• Kernel
  – Complete, with unit tests
  – Active discussion on multiple Kernel use cases

• Core Services completed
  – Configuration
  – Cacheing
  – Session
  – Request
• Core Services stubbed
  − User (JDBC version expected 11/20/2008)
  − Repository (DSpace 1.5 under development)
  − Search (Interface in flux)
• Core Services incomplete
  − License
  − Event (expected 11/20/2008)
  − SimpleStorage (expected 11/20/2008)
Progress - Integrations

- Planned Integrations
  - JSPUI (Work beginning)
  - XMLUI (Work begun)
  - DSpace 1.5 Repository (Work in Progress)
  - Fedora Repository
Timelines & Release Plans

• Core Beta – Dec 2008
  - Kernel, core services interfaces and implementations.
  - Skeletons of application integrations.

• RC1 – Jan 2009
  - UI and repository functional

• RC2 – TBA/TBD

• 2.0 Release – TBD (Spring 2009?)
Community Opportunities

- Write Services
  - LDAP User Service
  - OpenID User Service
- Test ported Applications
  - XMLUI
  - JSPUI
- Port Applications
  - SWORD
- Update documentation
Related Projects

- DuraSpace
  - Pluggable Storage abstraction under DSpace and Fedora
  - Working towards metadata integration
Thank-you.

http://wiki.dspace.org/index.php/DSpace_2.0