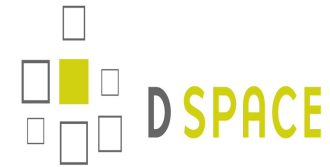


DSpace 2.0 Overview

November 2008

Bradley McLean

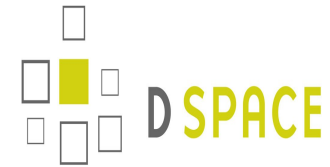
DSpace Foundation



DSpace 2.0

- 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

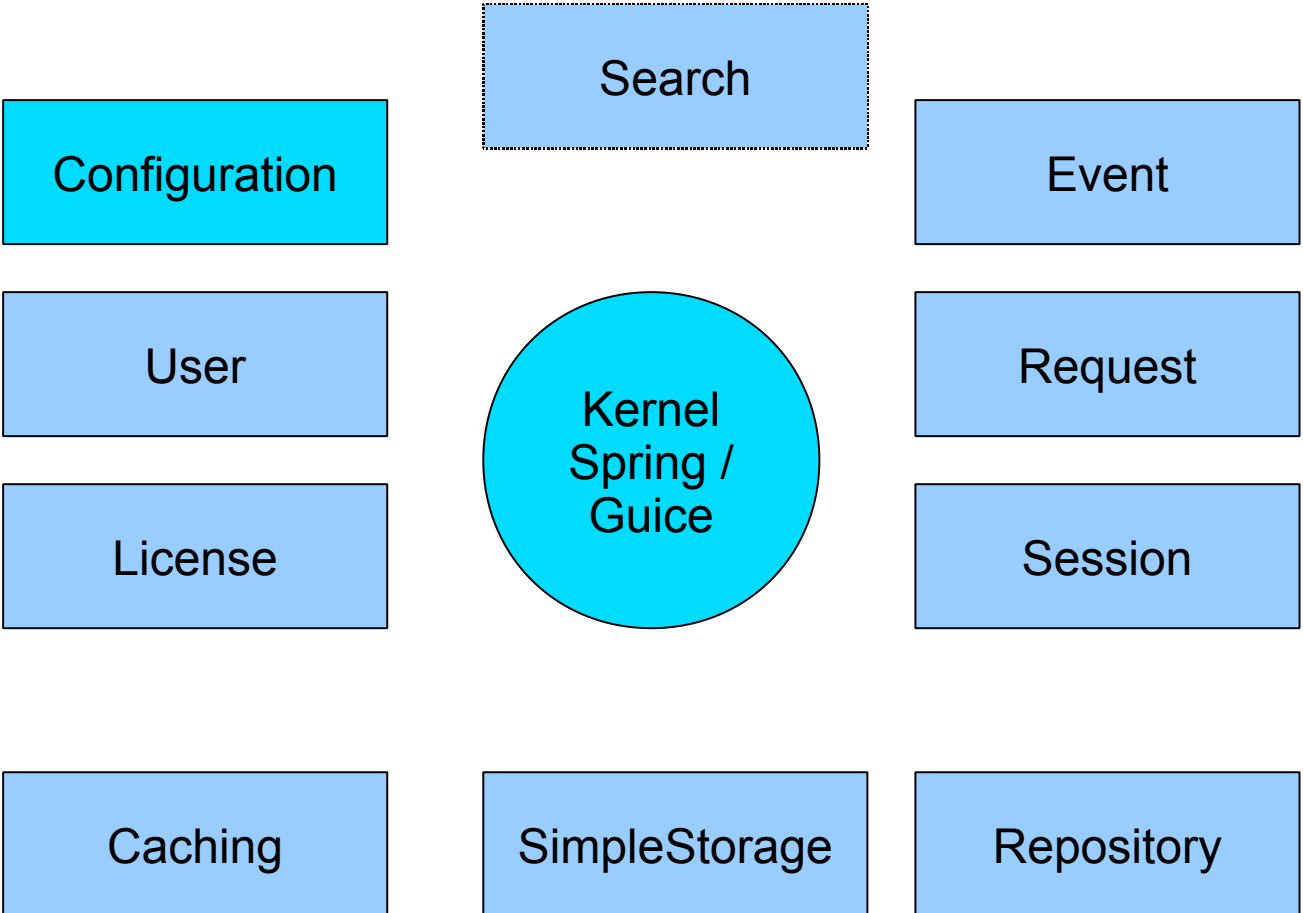
- Backward Compatibility
- Extensible data model
- Extensible services model
- Operates “out of the box”
- Easily exported content

- 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

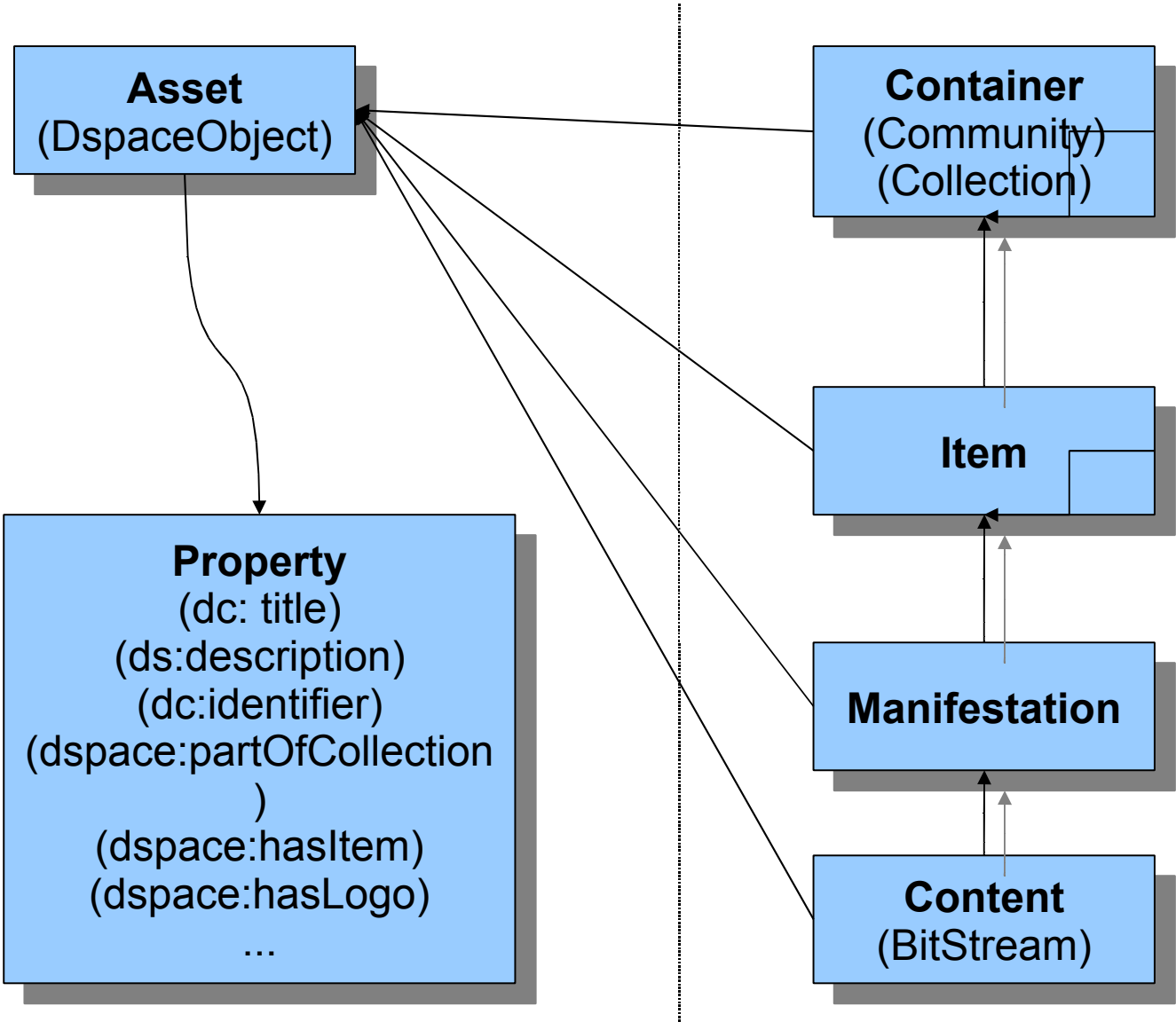
- Layers: Kernel, Core Services, Applications
- Kernel:
 - Configuration
 - Framework using Spring, Guice
- Core Services:
 - Defined as Interfaces
 - Implementations provided
 - Can be replaced or augmented by Extension Services.
- Applications: JSPUI, Manakin (XMLUI), ...

Architecture – Core Services

(Interfaces)



Architecture – Data Model



- 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

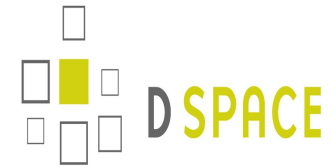
Timelines & Release Plans

- 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

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



Thank-you.

http://wiki.dspace.org/index.php/DSPACE_2.0