DSpace 2
Service Manager Framework

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The Kernel can be started and stopped easily. The Init class provides for a known way to fire it up and register it as an MBean correctly.

The service manager implementation can be replaced by something like OSGi later if desired.
The core services define the functionality of DSpace 2 and provide access to DSpace data. They manage storage/content, users, permissions, and assist with caching and event handling. The services can be controlled via configuration and overridden via plugins and providers.
DS2 Service Manager

Developers can add packages to the system at runtime or load them at start. Synchronous services must start with the system. Asynchronous services can come and go at runtime. Developer packages can be added to the system at runtime or loaded at start only.

org.dspace.servicemanager
DS2 Authentication

User Authenticated already?

Y

Request

N

Anon User

PrincipalProvider
(encoded)

PrincipalProvider
(basic auth)

PrincipalProvider
(headers)

PrincipalProvider
(user/pass query)

None Found

AuthPrincipalManager

N

Principal

No Match

AuthNGroupsProvider
(host domain)

AuthNGroupsProvider
(email domain)

AuthNGroupsProvider
(IP address)

AuthNGroupsProvider
(username)

Return 401

AuthNProviderManager

AuthNProvider
(Certificate)

AuthNProvider
(IP address)

AuthNProvider
(Database)

AuthNProvider
(LDAP)

AuthNProviderManager

AuthNGroupsManager
The AuthZProviders can return Allow, Deny, or Continue. Allow will cause the chain to stop and give access. Deny will also stop the chain and will return authorization required. Continue will allow the chain to continue (effectively means this provider does not have enough info to Allow or Deny). If all providers say Continue then access is denied.
DS2 Storage Service

StorageService (API)
- StorageWriteable (mixin)
- StorageSearch (mixin)
- StorageVersionable (mixin)

StorageEntity
- Identifier
- Metadata

EntityLocatorService
EntityRelationService

Custom

The Cloud

The Cloud

Fedora Commons™
DURASPACE™
JCR
Alfresco
Xythos®

QuickTime™ and a decompressor are needed to see this picture.