Hylandora

Strategies for Cross-Platform Interoperability Between Hydra and Islandora

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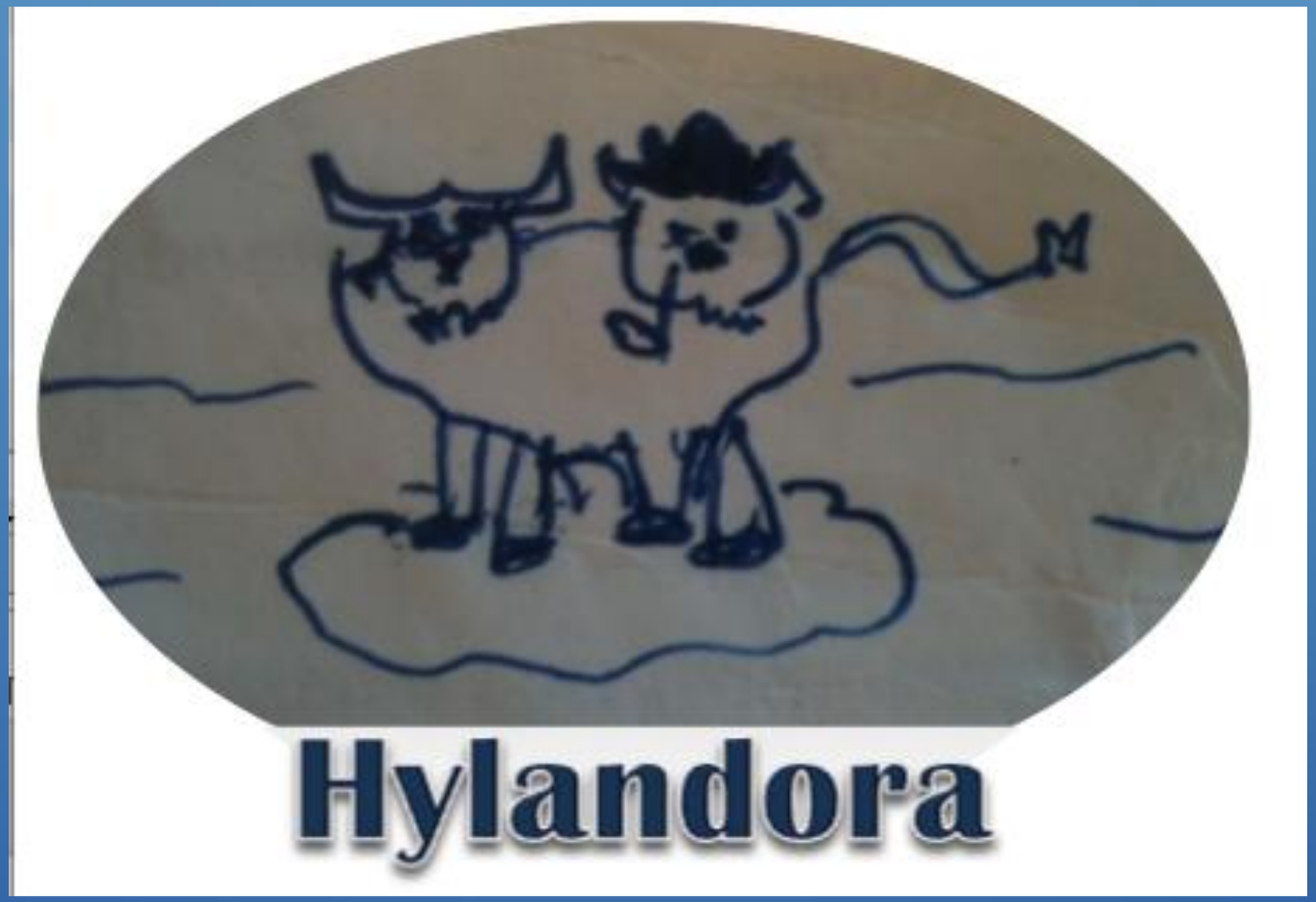

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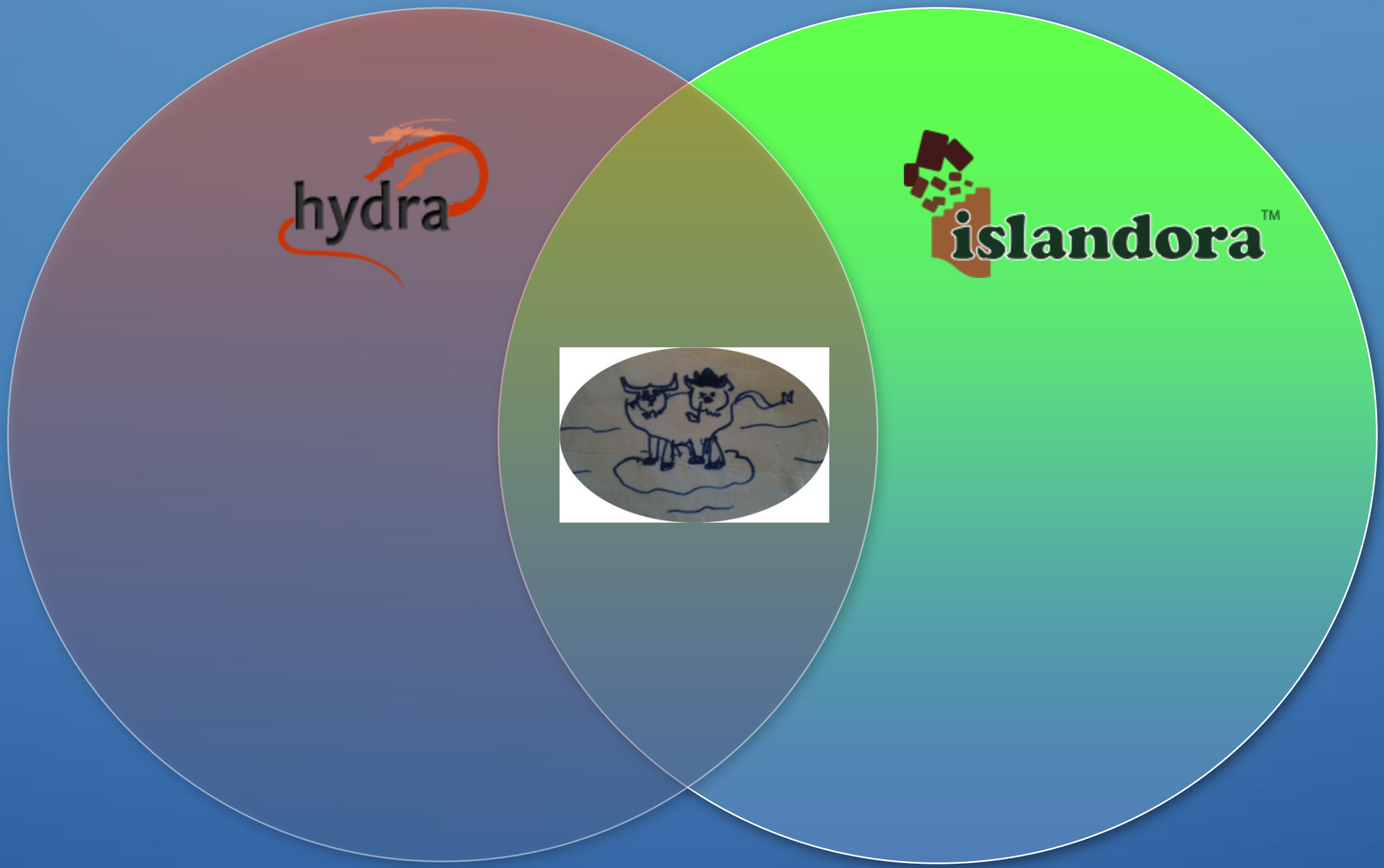

What is Hylandora?

A strategy for cross-framework interoperability.

The overlap of the Hydra and Islandora application frameworks enabling shared code, shared CModels and Object models, shared Objects and shared Views

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Level 1

- 2 Heads / Solution Packs on one Fedora
  - 1 Fedora supporting 1 instance of Hydra and 1 instance of Islandora with separate objects in separate collections
  - More efficient and effective Fedora repo management

Level 2

- Cross-Platform Read Access
  - Islandora-views of Hydra-created and managed objects + Hydra views of Islandora-created and managed objects
  - Requires cross-platform Rights awareness (solr & Fedora)
    - Map (Hydra) rightsMD onto XACML for Islandora use
    - Have XACML point to rightsMetadata and Fedora would enforce in the usual way
    - Islandora to adopt (Hydra) rightsMetadata

Level 3

- Drupal Front-End, Hydra Back-end
  - Drupal-input of Hydra objects (via a web-form, e.g.) + Drupal views of Hydra objects
  - e.g. a Drupal campus, backed with a Hydra-based repository
  - A Hydra campus wanting to use an Islandora sprout, or Hydra DAM in an Islandora VRE

Level 4

- Cross-Platform Management of Objects
  - Islandora management of Hydra-created objects
  - Hydra management of Islandora-created objects

Other Opportunities

- Shared Object models / datastreams
- Shared CModels (e.g., “books”, “collections”)
- Shared Code
  - Disseminators
  - Solrizer
  - Other?

Current Status

- Met several times over the last year
  - RIRI 2011
  - Code4Lib
  - Visit to Stanford

Cross-platform Read

- Currently we have cross platform read access
- Ingest with Hydra
- Display with Islandora

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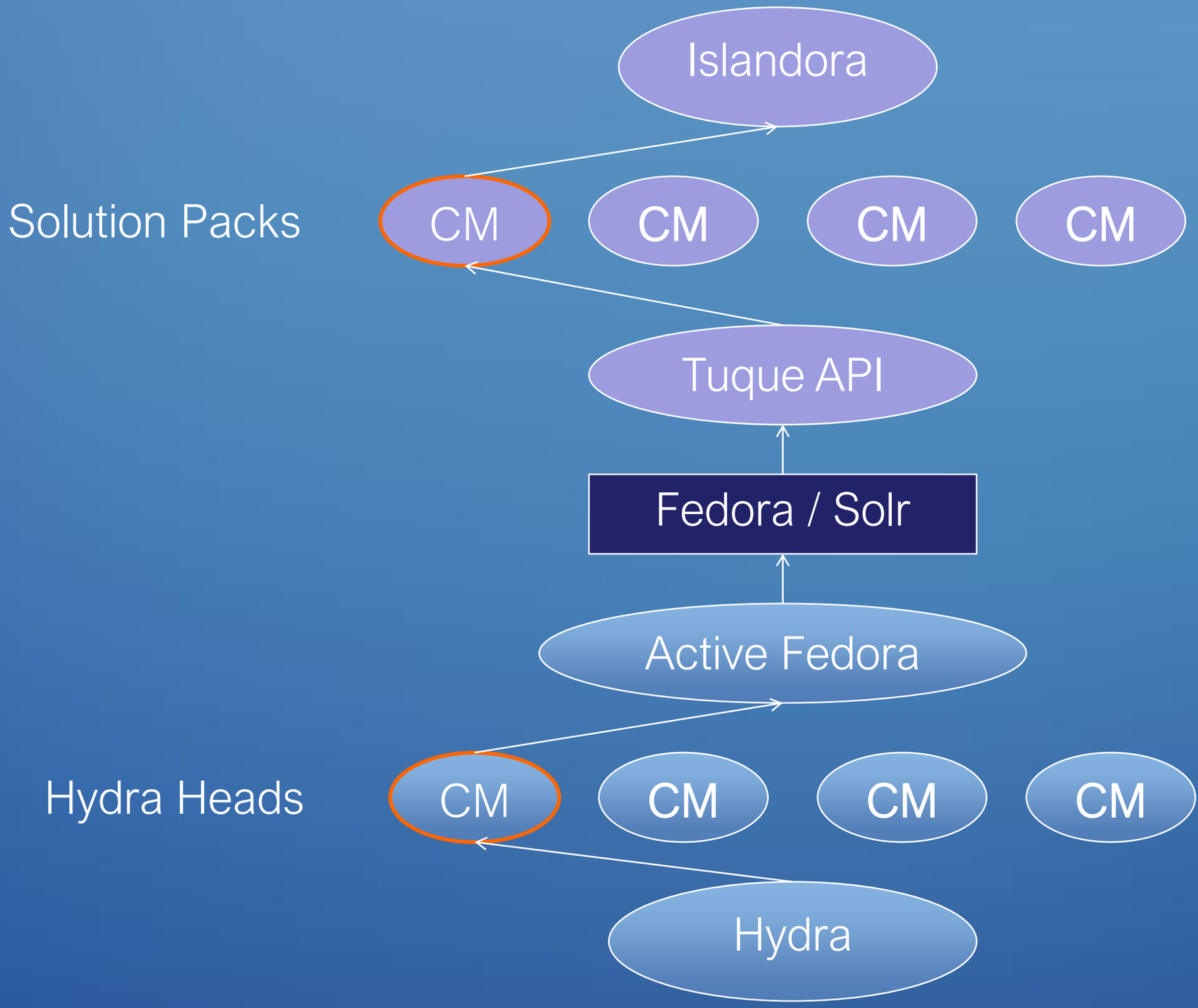

Code

- https://github.com/jonathangreen/islandora_solution_pack_hypatia

Shared Datastreams

- Hydra rightsMetadata
  - simple, straightforward XML datastream encoding access control
  - set policy for both solr and Fedora
- contentMetadata
  - structural metadata for objects (akin to a METS StructMap)
  - encodes sequence for applications such as page turners
  - Cmod

Shared Models

- CModels/specs for objects
  - books, maps, newspaper collections, etc.
- CModels/specs for collections
  - data sets, herbarium collections, etc.

Crosswalks & Shared Code

- Common SDefs
  - getImage, getMods, etc.
- Crosswalking via Methods / Disseminators
  - Hydra -> Islandora SDeps
  - Islandora -> Hydra SDeps

Questions

- What use cases / examples do you have of need for Hylandora?
- What's the best way to share content models between frameworks?
- Does it make sense to converge on one metadata scheme for <descMD,contentMD,other>?
- Is rightsMD a useful cross-platform complement to Fedora XACML?