solrizer

pragmatically connecting search, management and indexing in a repository solution

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solrizer

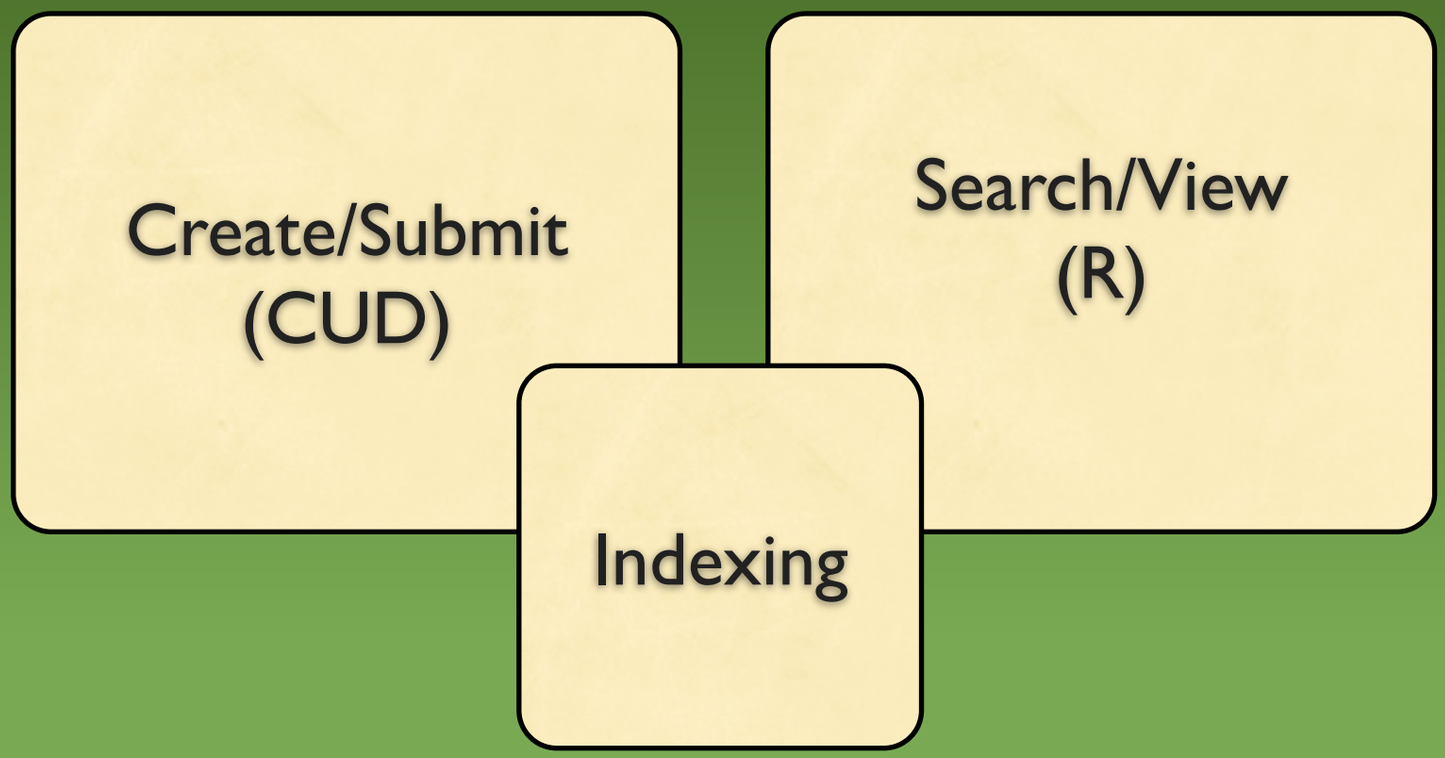
define indexing logic in scripting language (ruby)

allow indexing approach to evolve continually (iterative development)

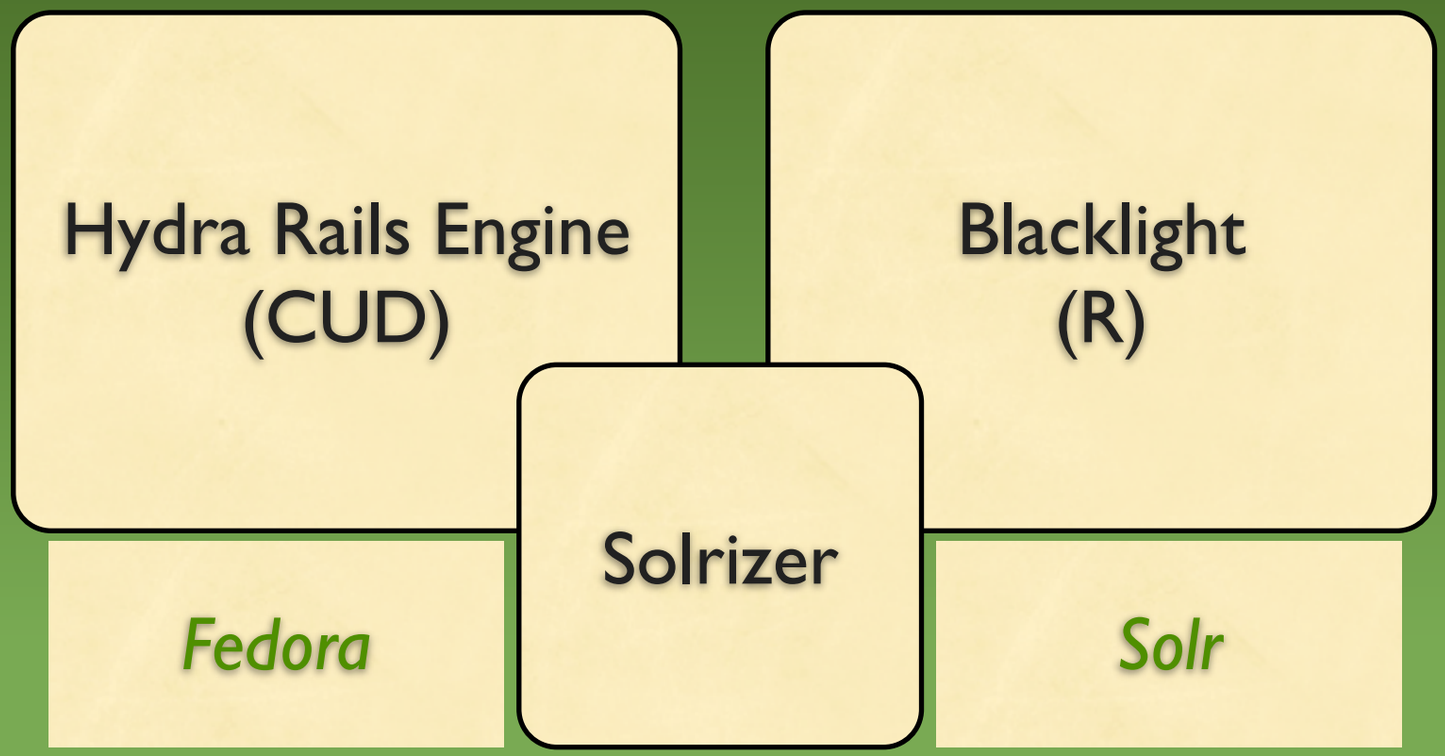
track indexing algorithms within models (DRY)

Bonus: new paradigm for mapping xml to application vocabularies!

CRUD in Repositories



CRUD in Hydra Heads



methodologies for indexing

RDBMS

RDBMS + solr

fedora + gsearch + solr

fedora + ~~shelver~~ + solr

fedora + solrizer + solr

RDBMS alone

- search index bound to data model
- no full-text indexing

RDBMS + solr/lucene

+ fulltext index

+ index is separate from data model

- tools often underestimate conceptual differences inherent in solr-style search

fedora + gsearch + solr

+ index full text and xml metadata!

+ freestanding tool specifically for indexing

+ created & maintained by Gert Pedersen

- XSLT (transformations vs. logical processing)

- lucene-oriented rather than solr-oriented

fedora + ~~shelver~~ + solr

(this is what we did in SALT)

+ ruby based

+ freedom to iteratively refine indexing logic

- code sprawled -- fails DRY principle

http://bit.ly/bJr4O3

http://github.com/sul-dlss/salt/blob/master/lib/shelver/indexer.rb

fedora + solrizer + solr

+ freedom to iteratively refine indexing logic

+ models define their own indexing (DRY)

+ could index anything - not just fedora objects

http://github.com/mediashelf/shelver

solrization process

1. retrieve object by pid (unless an object was already passed in)
2. look up all *known models* for the object
3. with each model, load the object & call to_solr
4. save cumulative document to solr

what's currently fedora-specific

index_objects assumes you want to search in fedora for objects to ingest

the lookup for *known models* assumes fedora objects & active-fedora models

.. both of these could be refactored to be generic.

Bonus: Opinionated Metadata (OM)

allows you to declare mappings between (arbitrary) xml and your application vocabulary

active-fedora uses these to provide a default indexing algorithm (*zero code*)

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http://mediashelf.eu
http://yourmediashelf.com/blog