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Applying the complementarities of SKOS and RSS to create a general and unified Search User Interface over multiple existing Information Sources the case of ASKOSI/GLISP

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Modeling

- Actors
- Use cases
- Information structure
- Transactions
- System Architecture

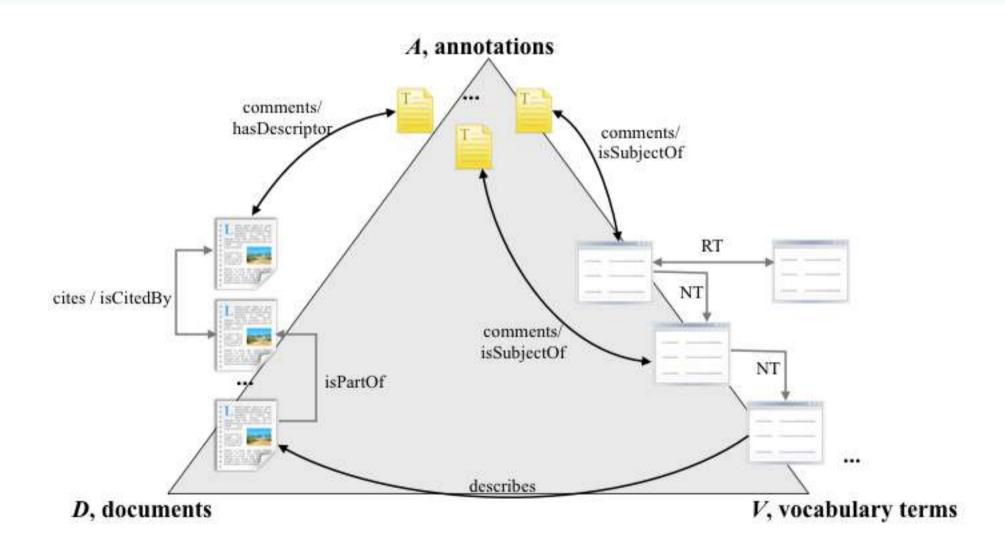
The Actors

- Professionals
 with some common interest / practice
- Organisations producing information useful to these professionals
- Networks trying to coordinate all stakeholders

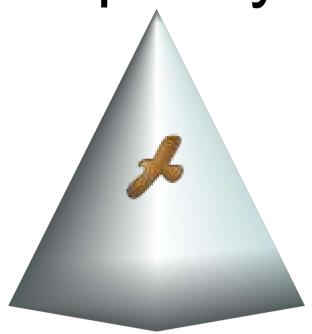
Use Cases

- Discovering
- Sharing
- Learning
- Applying
- Writing
- Publishing
- Structuring
- Management

Information Structure



And now let's go... for a speedy demo



based on data and needs from Belgium Poison Centre http://www.poisoncentre.be



Documents & Data

Metadata to...

- Identify: document access and deduplication
- Describe: title/abstract to decide if the document may be interesting for the user
- Relate: series, versions, authors, publishers, citations...
- Index/Classify: essential criteria about document source, value, allowed/targeted audience and topics covered
- Manage: statuses, dates, responsible persons...
 - + attached full text, data set and other digital media...

Annotations

- " Social " Platform on Internet to create/share:
- Basket: « Working sets »
 of discovered document & data
 (discovery, learning, applying)
- Tag: personal / shared classification
 of discovered document & data
 +Comment documents, data, vocabulary terms
 (learning, sharing, writing, structuring)

Vocabularies

Browsing to...

- Learn about a domain using its specialized « encyclopedia »
- Discover available information (hub to available databases)

Automatic search expansion :

- Input field « autocomplete »
- Multilingual search support
- Search for a Concept expanded to its specific concepts

Managing to...

- Create consensus about Terminology but also about Concepts between domain leaders involved
- Detect new concept / term appearing in a domain
- Classify information in correctly sized sets (matrix of criteria)

Some applicable standards to convey these Information

Documents & Data :

- Metadata :
 - **Dublin Core** (overall structure), Schema.org?
 - Web Linking (IETF 5988)
 - **VoID** to document browsable relations between Concepts/Documents/Data
 - SKOS for authority lists (vocabularies)

Search:

- RSS2 or AtomRSS + OpenSearch
- Management :
 - AtomPub (OAI-ORE and/or OData) for « REST » CRUD operations
 - Specific **XML** or **RDF** schemas for specialized contents

Annotations:

RSS2 and AtomRSS + AtomPub

Vocabularies :

Similar to Documents & Data but with SKOS as main metadata schema

Actors - Use Cases - Information

Users

- discover Documents & Data,
- share Annotations on multiple Platforms,
- learn Concepts/Vocabularies, study Documents,
- apply Knowledge using and creating Data,
- write new Documents about their findings;

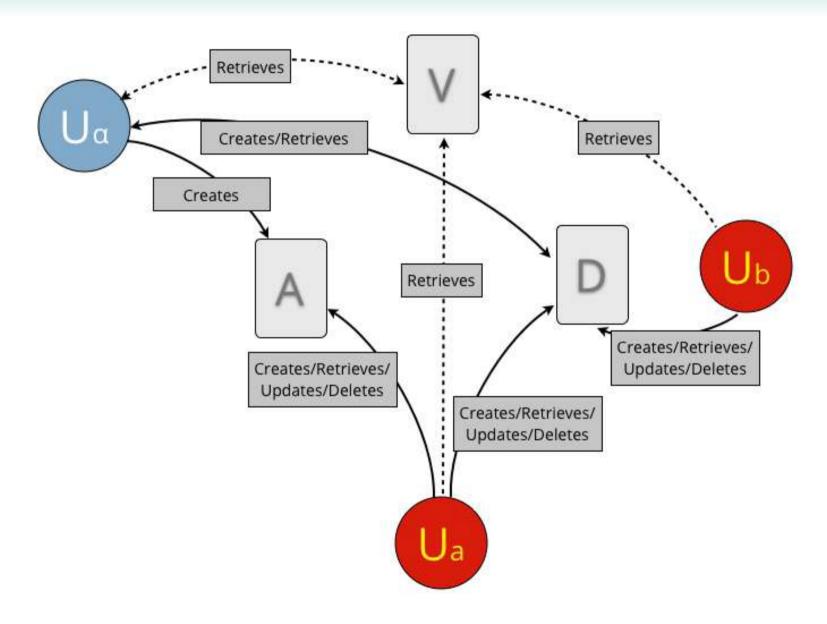
Information Services

publish Documents & Data indexed using Vocabularies;

Networks coordinate many actions of the Comm.of Practice +

structure Vocabularies & Metadata standards.

Basic CRUD Transactions



System Architecture

- Users with their Internet Browsers
- Internet Browsers able to mash Information from many sources and to <u>annotate them</u>: GLISP Browser Application (JavaScript)
- Standard compliant Information sources
- ASKOSI.org, a central hub providing :
 - Essential structuring information about applications and their inter-relations (should support VoID)
 - Vocabularies (SKOS: concepts, authority lists) gathered from any available sources

Users Benefit: Unified Interface & Transactions

- Searching (« à la Google », using Vocabularies)
- Tagging (folksonomies or Vocabularies)
- Commenting
- Cataloguing (identification, classification, description, inter-relations)
- Indexing (free text + using Vocabularies)
- Publishing in a controlled and discoverable way
- Structuring (conceptual framework)
- Managing (workflow + who ? what ? when? How ?)
 from multiple Sources and Applications

Sharing our Practice!

- ASKOSI.org Wiki: http://www.destin-informatique.com/ASKOSI/
- Demonstration and tests:
 http://www.destin-informatique.com/scheme/
- Source code on Google Code (GPL): http://code.google.com/p/askosi/
- Announcements: @DESTINformatiqu
- We always like to learn more about needs from Communities of Practice and their Knowledge Networks.