BioPortal Architecture and Plans
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Outline

• Current Architecture
• Planned Architecture
• Plans
  – Current Development
  – Future Development
  – Not on the radar
Current Architecture

- BioPortal
- Other Applications

REST Layer

- Protégé
- LexGrid
- Hierarchy Cache
- Resource Index

Ontologies & Metadata
Planned Architecture

- BioPortal
- Other Applications
- RDF Triplestore (Ontologies & Metadata)
- Hierarchy Cache
- Resource Index
Current Development (I)

- Ontology Recommender (Done)
  1. Accept a paragraph or two of text
  2. Analyze its use of ontology terms
  3. Recommend closely matched ontologies
- Access control for ontologies (Done)
  - Private: Submitter designates user access
  - Licensed: Submitter provides license for user acceptance
- Improved support for OWL 2 (Done)
- Support for RDF triple-store (public alpha, Q3)
- Generate automatic mappings between all terms in all ontologies (Q1)
Current Development (II)

- *MyBioPortal*: limiting visible ontologies *(Q1)*
- Alternate entry points to limit visible ontologies *(Q1)*
- Improved ontology visualization *(Q2)*
- Removal of all usage of Flash technology *(Q1)*
- Allow installations to add/remove tabs *(Done)*
- Common Terminology Services v2 (CTS2) interface (proposed OMG standard) for BioPortal *(private alpha, Q1)*
Future Development

• Definite
  – Move infrastructure to cloud
  – Better integration with ontology editors

• Possible
  – UML support
No Current Plans

• **Workflows**
  – (beyond ontology status & notes)
• Common Logic
• Other file/model formats
• Rules
• Reasoning over ontologies