GMOD Web API

Josh Goodman
FlyBase

Current APIs

- BioMart (Web service)

- InterMine (Web service)

- Chado APIs

  - Hibernate (Java)

  - Ibatis (Java)

  - Class::DBI (Perl)

  - Modware (Perl)

- XORT (XML)

- Others...

Why?

- Various web services are incompatible
  - Different data models
  - Different APIs

- Not everyone uses Chado (nor will they)

- Current APIs are language or system specific

API Goals

- Simple and lightweight

- URL based

- Language and data model neutral

- Improve high level cross database information exchange

- Versioned URLs for stability

Result Formats

- Result lists (XML and maybe JSON)

- Gene records in Generic Gene Page (GGP) XML

- Others?...

Queries

- Full text searches of genes
  - http://flybase.org/gmod/v1/search/fulltext/RNA%20binding
- Ontology terms
  - http://flybase.org/gmod/v1/search/ontology/mitotic%20spindle%20elongation
- Orthologs
  - http://flybase.org/gmod/v1/search/orthologs/WBGene00006570
- Gene record retrieval (GGP XML)
  - http://flybase.org/gmod/v1/fetch/FBgn0026250

What Next?

- Does this make sense?

- Who is interested?

-