GMOD Web API

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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?