# InterMine

Generic object integration and warehousing

# **FlyMine**

An integrated database for *Drosophila* and *Anopheles* genomics

Richard Smith Genetics Department, Cambridge University

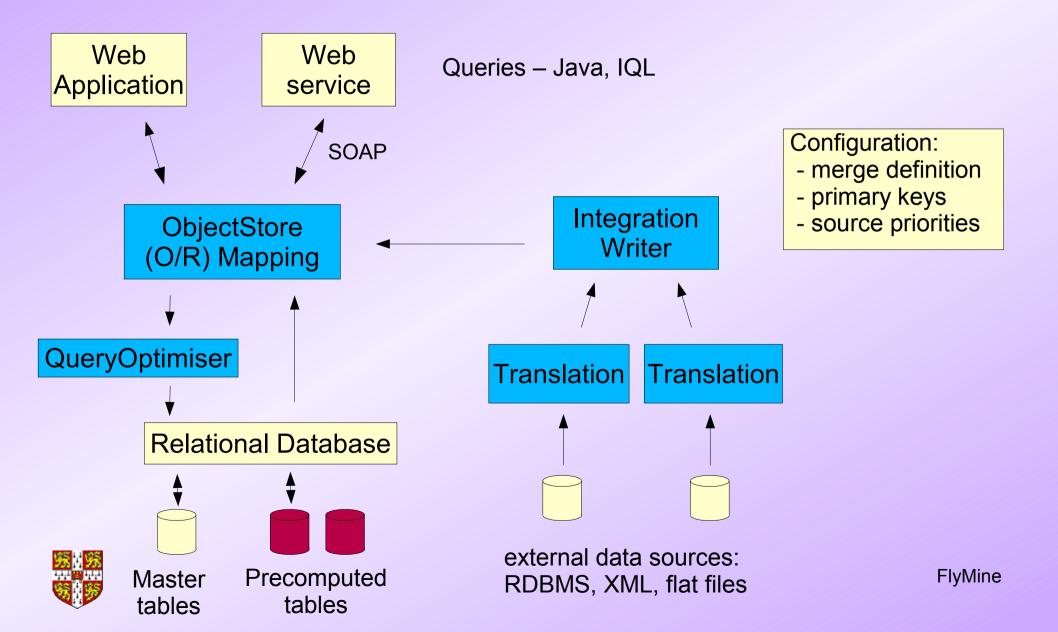


### InterMine Features

- simple, configurable integration of multiple data sources
- powerful object based query system, not restricted to 'fill in the blanks'
  - web site
  - programming interface
  - query language (OQL-like)
- query-optimised object warehouse
- object model supports multiple inheritance

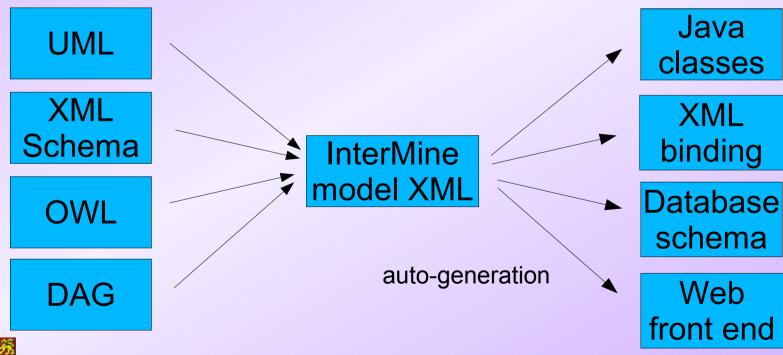


### InterMine Architecture



## Model Independent

- auto-generation from XML model definition
- single model or merge multiple





### Web Application

- navigate and query any InterMine model
- intuitive interface to create queries
- browse and export results
- save results as a bag use in other queries and logical operations
- simple definition of 'templates'
- save queries, bags and templates



## Web Application

#### **InterMine**

Object integration and warehousing software

Home Current query New query Examples Log in Help

Build your query using this page [help...]

#### Model browser

Click on "show" links to add fields to the results table

Employee show • age int show •

□ department Department? show •

🗈 company Company show 🗘

⊕ employees Employee collection show ◆

name String show ♥ fullTime boolean show ♥

name String show •

#### Constraints on the current query

Click on a class name to view its fields in the left-hand pane

Employee constrain & age int constrain &

> 45 🗯

department Department constrain and String constrain LIKE finance

#### Fields selected for output

Use "<" and ">" to choose the output column order

Employee [ x ]

Show results



## **FlyMine**

- Drosophila and Anopheles database
- extendible core model
- integrates standard formats
  - e.g. Sequence Ontology, ensembl, MAGE, PSI, GO, taxonomy
- customised InterMine web application
- future: chado, UNIPROT, protein structure
- could be applied to other organisms



### Acknowledgements

InterMine is available for download under LGPL

More information at www.intermine.org

Access to the FlyMine Beta at www.flymine.org

The FlyMine team:

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