

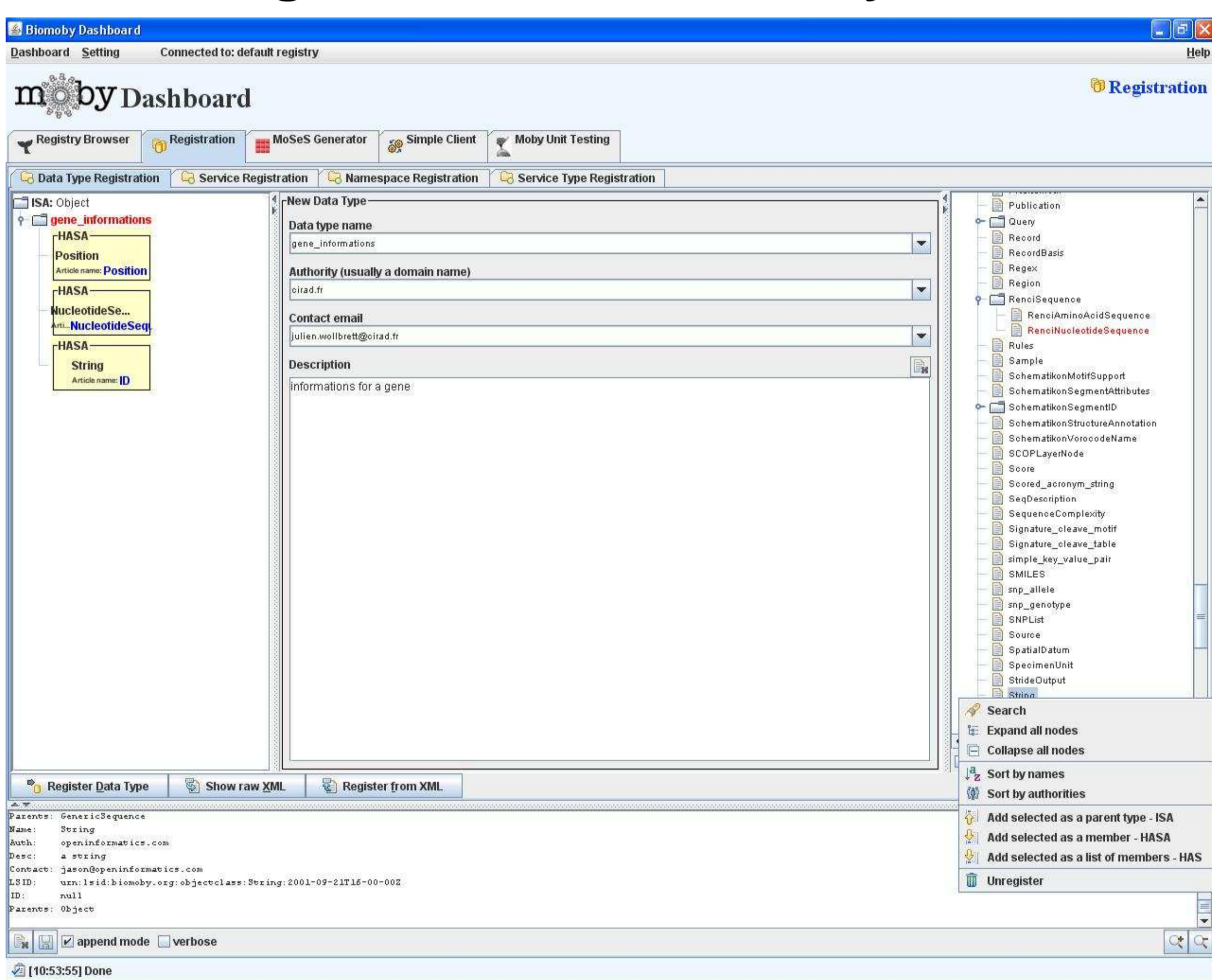
BioMoby Converter: a plug-in to automatically register an OWL ontology into a BioMoby registry

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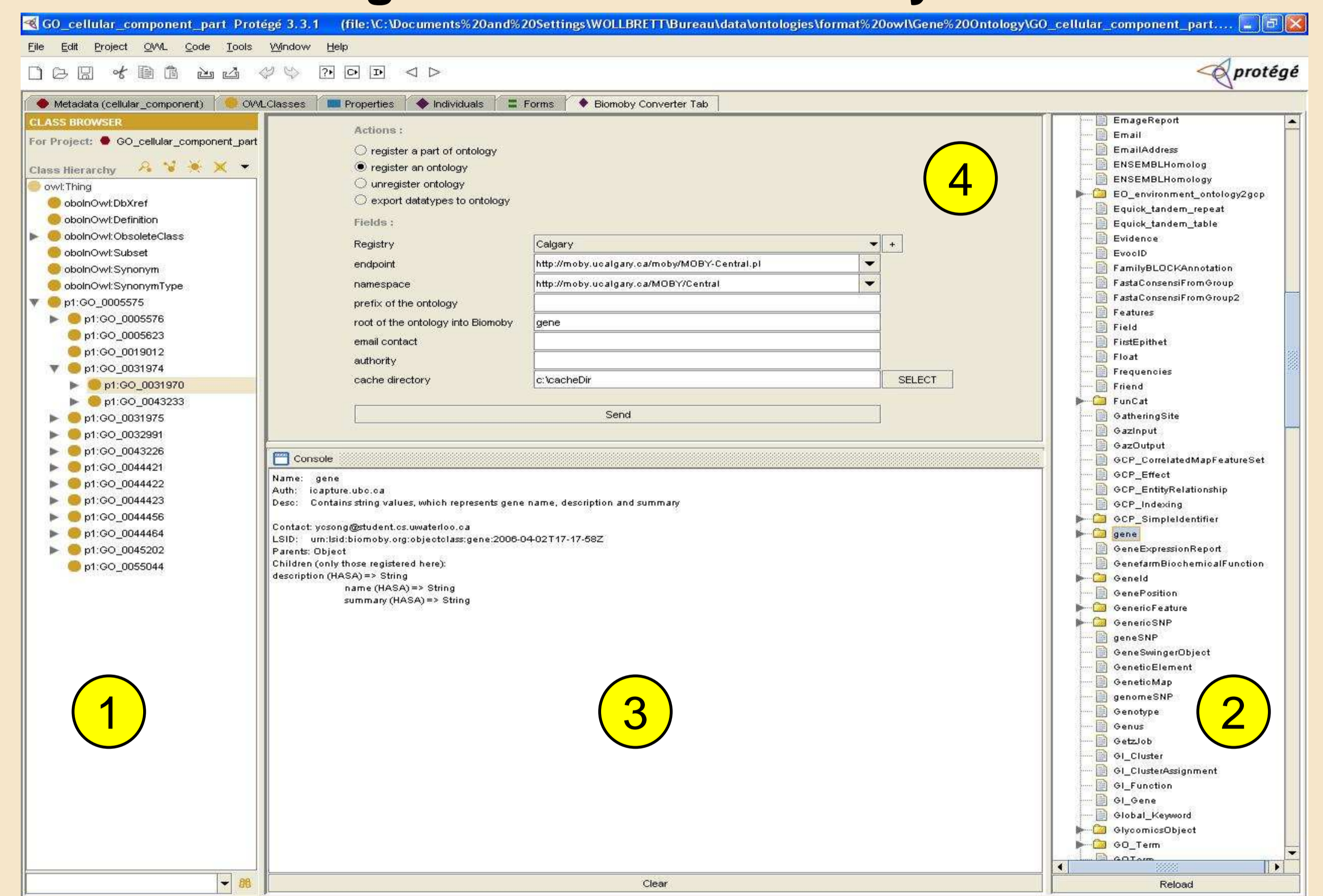
Crop data management systems deal with data integration problems. The interoperability of these systems could be increased by sharing plant ontologies through BioMoby web services. However, speed-up datatype and service registration is lacking. We developed a plug-in for Protégé named BioMoby Converter in order to register an OWL ontology into a BioMoby registry.

Manual registration with BioMoby Dashboard



www.biomoby.org

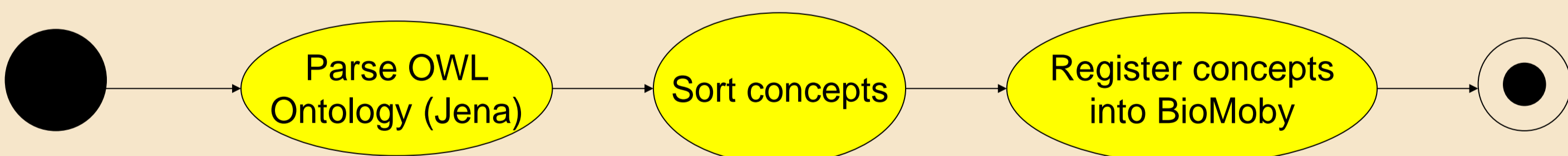
Automatic registration with BioMoby Converter



- 1 OWL ontology arborescence
- 2 BioMoby concept arborescence
- 3 Console
- 4 User information (action and fields to inform)

Four functionalities:

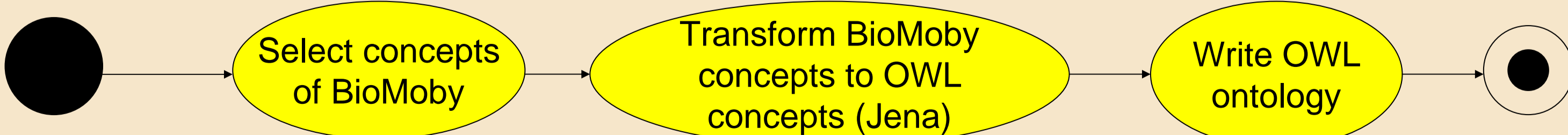
1. Register a full ontology
2. Register part of an ontology



3. Delete concepts into a BioMoby central registry



4. Export BioMoby concepts into an OWL ontology



Time Saving

Ontology name and concept number	Time needed for manual registration (seconds)	Time needed for automatic registration (seconds)	Ratio (manual/automatic)
Sequence Ontology (1408 concepts)	63360	2310	27
GCP Domain Model (236 concepts)	10620	195	54
Amino acids (48 concepts)	2160	88	24
Pizza (96 concepts)	4320	120	36

Technical information

- Use of a cache folder to reload BioMoby concepts quickly
- Input ontology formats:
 - OWL 1.0
 - OBO converted into OWL 1.0
- Compatible with Protégé 3.3.1 and 3.4
- Implemented with Java 1.6

<http://southgreen.cirad.fr>

