

## Poster B-58

### Development of BioMOBY and its Associated Applications



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**Short Abstract:** Developed with the Generation Challenge Programme (GCP;<http://www.generationcp.org>) BioMoby is an integration tool helping to connect databases, analysis programs, and other resources into a unified distributed system, linking gene discovery with genetic resource characterization and crop evaluation data. This poster highlights BioMoby, its associated applications, and its integration with other tools.

#### Long Abstract:

The Generation Challenge Programme (GCP;<http://www.generationcp.org>) is an international agricultural research consortium, currently numbering 20 agricultural research institutes, working on the characterization of plant genetic resources and the application of comparative genomics toward crop improvement for the developing world.

Developed in association with the GCP, BioMoby is an integration tool helping to connect databases, analysis programs, and other resources into a unified distributed system, linking gene discovery with genetic resource characterization and crop evaluation data.

The number and world distribution of the participating institutes, and the amount and variety of involved data require modern tools for developers and user-friendly interfaces for the end users. Here is a list of some of them:

BioMoby Dashboard is a rich standalone Java application for BioMoby developers, assisting through the whole process of creating, deploying and using Biomoby services. It has a plug-in architecture allowing additional extensions.

BioMoby MoSeS ("Moby Service Support") is a set of code generators that transform information and ontology trees stored in a central service registry into Java source code, helping developers of new services to concentrate only on business logic and not on the protocol and messaging details. Such approach guarantees scalability of the developing process.

BioMoby Environment is an automated way to regularly check if the deployed services are running and producing correct results. In an environment with so many participants, such a quality control tool is essential.

As well, BioMoby can cooperate with other integrating tools. A separate project "BioCASE & BioMoby" shows how to use BioMoby to "wrap a wrapper". The BioCASE integrates access to many databases, and BioMoby spreads its data into existing clients and networks.

BioMoby software and its documentation are both freely available at the following site: [http://biomoby.open-bio.org/CVS\\_CONTENT/moby-live/Java/docs/](http://biomoby.open-bio.org/CVS_CONTENT/moby-live/Java/docs/) This poster will highlight the usefulness of BioMoby and its various components as well as its integration with other tools such as BioCASE.