

GCP Biomoby Infrastructure

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What this is NOT...

- This is not about individual services
 - Well, at least mostly not
- Also, this is not a real presentation...
 - It is rather a walk through the rose garden (which means: sit comfortable, relax, and ask questions whenever you wish – perhaps somebody will answer them)
- Finally, this is not only about my work
 - IRRI colleagues have their fingerprints all over it

What is important...

- To have services
 - Yes – but...
- They must be (at least most of the time)
 - Up and running,
 - Robust, reliable,
 - Reporting correctly errors,
 - Documented,
 - Maintainable...
- This is about how to achieve it

Big picture



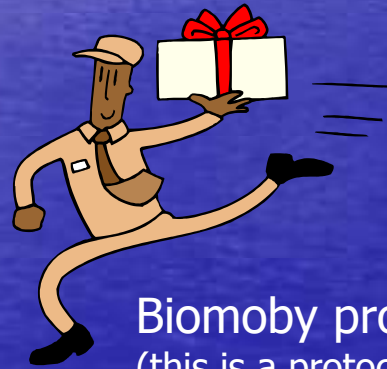
A Biomoby repository



Biomoby services



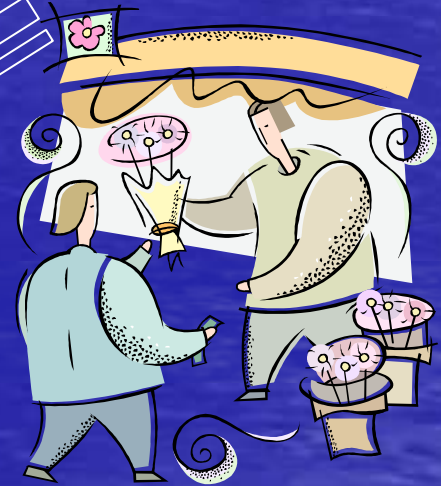
Register services



Biomoby protocol
(this is a protocol,
not Mark Wilkinson)



Find services



Bimoby clients



Call (use) services

Bottom line

- *Biomoby services* are **your** responsibility
 - you are a service provider, you implement your service (but Biomoby project has tools to help you - **Moses** for Java, **Perl libraries**, ...)
- *Biomoby data types* are **community** responsibility
 - otherwise it would limit how they can be shared and re-used
 - you are part of the community: register your data types

Biomoby registries

- The central one (in Canada), default
 - Put there entities (data types, services...) when they are *reasonably* ready
 - Deregistration problems are coming...
- The IRRI Biomoby registry
 - Use it for testing and development
 - Sometimes problems with network (CIMMYT?, GCP?)
 - It is regularly mirrored:
 - Canada → Philippines, not vice-versa
 - Code available on CropForge
 - How to find it:
 - URL: ...
 - Namespace: ...

Documented...

- <http://moby.generationcp.org>
 - Static page(s)
 - But often a front-end to web applications
 - Maintained by Mylah (IRRI) and me
 - Tell us what you want there
 - Think first whether wiki is not a better place
- CropForge project: GCP BioMOBY
 - <https://cropforge.org/projects/qcpmoby/>
 - Subscribe to a mailing list
 - <http://lists.cropforge.org/mailman/listinfo/qcpmoby-users>

Robust...

- Forget the word “prototype”
 - 2005 was for prototyping
 - 2006+ is for productions
- Which means (for example)
 - Solve error conditions NOW
 - Write test units NOW
 - Let other people test your services NOW
 - Document the code NOW
 - Keep list of changes and TODOs
 - S&S (“Show And Share” your code)

Up and running

- GCP Biomoby Environment
 - <http://moby.generationcp.org/mobyenv/index.html>
 - The Service Checker
 - <http://moby.generationcp.org/mobyenv/checkservices>
 - Can be installed just for your services
 - Services do not need to be registered
 - So you may use it in the development stage when services are usually on <http://localhost:8080/....>
 - Give me your services
 - “Easy” input
 - Optionally an expected result

AEAP ("As Easy As Possible")

- jMoby
 - http://biomoby.open-bio.org/CVS_CONTENT/moby-live/Java/docs/
 - Moses ("Moby Services Support")
 - Dashboard

For the reporter...

- Done

- Moses
- Dashboard
- IRRI Registry
- Mirroring
- Service checking
- Registry viewer
- Central Moby page

- Future

- Generated Moby data types from Demeter
- Moses in Perl
- BioCASE → BioMoby
- More panels/functions in Dashboard
- Maintenance
- Support for service providers