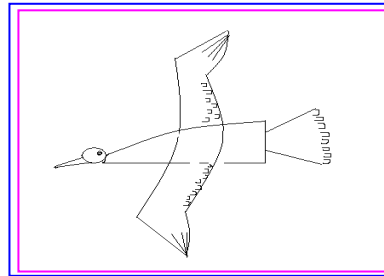




GLYDE



GLYcan Data Exchange

Glyde¹ is an XML (eXtensible Markup Language) standard format to represent glycan information.

1. Satya S. Sahoo, Christopher J. Thomas, Amit P. Sheth, Cory Henson, William S. York, GLYDE - An expressive XML standard for the representation of glycan structure, *Carbohydrate Res.* 2005 Dec 30; 340(18):2802-7. Epub 2005 Oct 20. PMID: 16242678.



GLYDE

We are developing an XML format called GLYcan Data Exchange (GLYDE). One of our primary reasons for developing GLYDE is to provide a robust interface between the various representations that exist and representations within the GlycO ontology. GlycO is a very expressive ontology that we are developing. It includes specific knowledge about glycan structures and the relationships between structural features of the glycans and their biosynthesis, biological properties, etc. We hope that development and extension of GLYDE may lead to a "standard" XML representation of glycan structures.



GLYDE Application Programming Interface (API)

- Development of domain-specific, customized API



Standard API



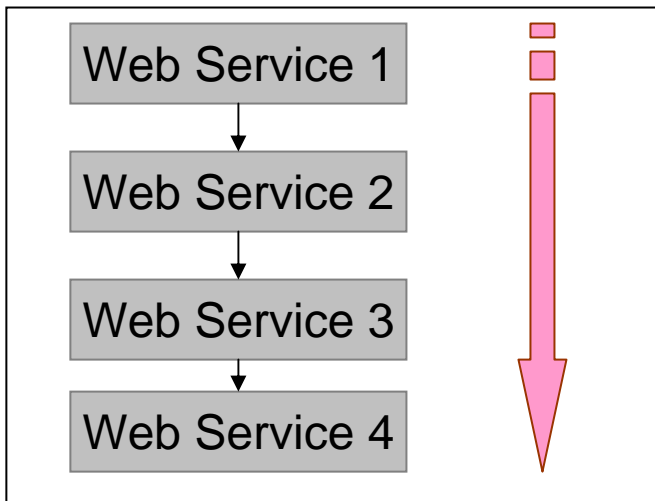
TOOL DEVELOPMENT



WEB SERVICES



Biological Web Services Registry

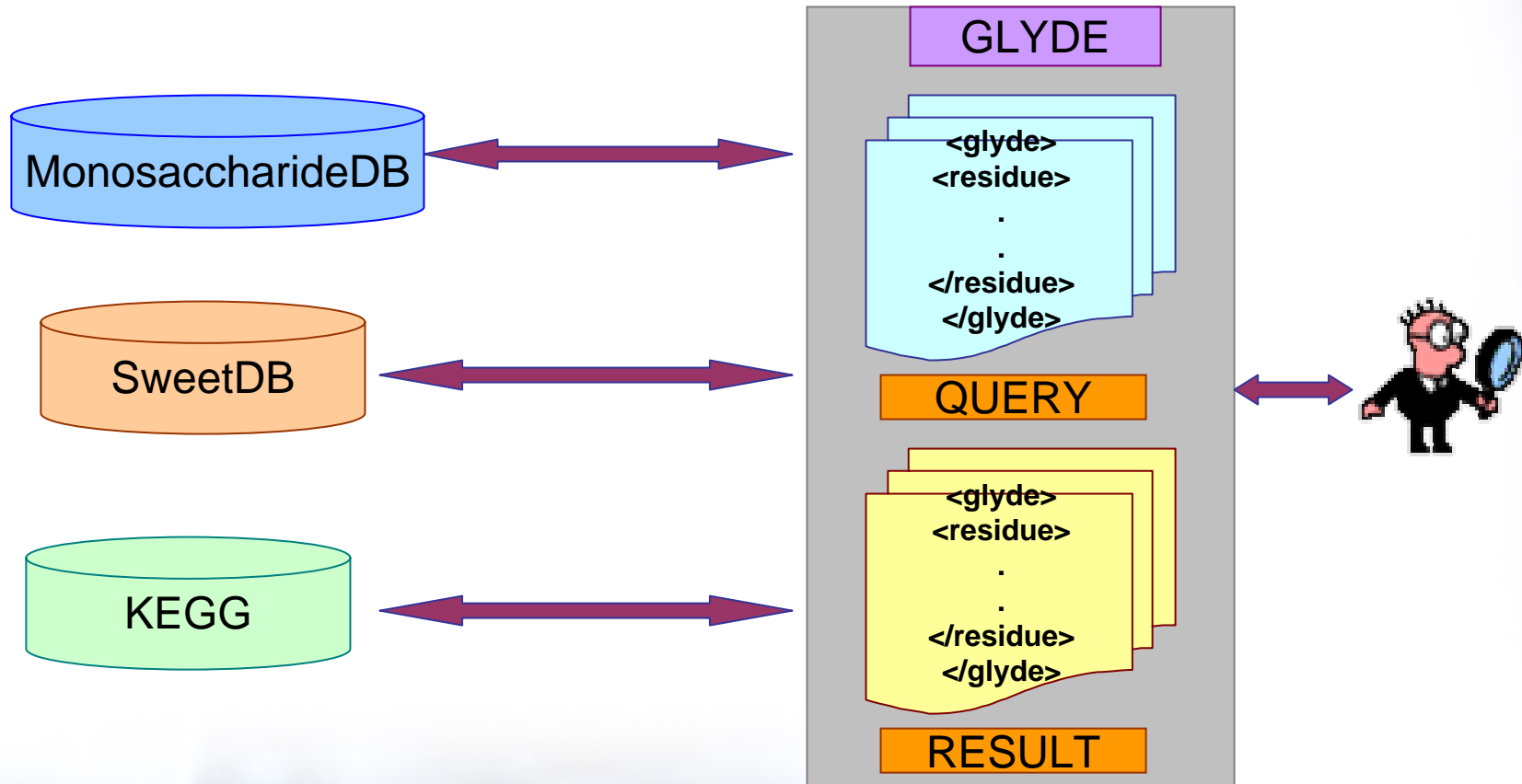


Web Service based Workflow



Integration of GLYDE with SweetDB, MonosaccharideDB, KEGG

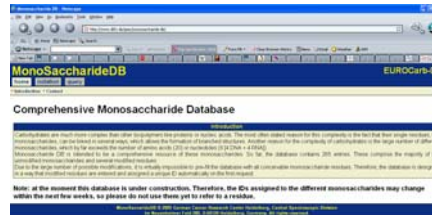
- Enable querying and export of query results in GLYDE format
- Using GLYDE representation for disambiguation, mapping and matching





GLYDE Semantic Portal

- Development of GLYDE semantic web portal
- Integration with www.glycosciences.de
 - Visualization aspect integrated with LiGraph
- Semantic Annotation of publications in GlycoProteomics domain



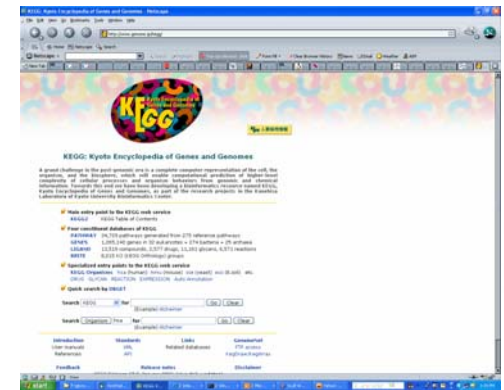
MonosaccharideDB



www.glycosciences.de



GLYDE Semantic Portal



KEGG