

What is . . .



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myGrid is a project funded by a grant from the UK Engineering and Physical Sciences that produces a suite of tools to “help e-Scientists get on with science and get on with scientists”. For more information about the specs of this project, please visit its web page: <http://www.mygrid.org.uk>.

This suite of tools developed by myGrid has been used in domains as diverse as systems biology, social science, music, astronomy, multimedia and chemistry and has also been adopted by a large number of products and institutions.

An instance of myGrid’s tools compose part of the infrastructure of the PANACEA project , including Taverna, a management system that allows for the design, edition and execution of workflows, BioCatalogue, cataloging and annotation and discovery of services and Soaplab, a wrapper allowing for the creation and hosting of web services.

myGrid’s consortium has developed a myGrid Ontology used for its service annotations. The ontology is separated into two parts: the service ontology, describes the web services from a technical point of view and the domain ontology, describes the bioinformatics research and acts as an annotation closed vocabulary for bioinformatics data types. The scope of this ontology is limited to support service discovery. Each hierarchy contains abstract concepts to describe the bioinformatics domain at a high level of abstraction. By combining these terms from the ontology, descriptions of services are constructed to detail, describing what the service does, what data sources it accesses, what each of the inputs and outputs should be and which domain specific methods the analysis involves. This methodology thus allows users to find appropriate services for their experiments from a high level view of the biological process they wish to perform on their data.

This ontology can be downloaded in OWL and RDFS. MyGrid uses a special XML file, called Semantic Service Descriptor, to provide user with much richer details and information about each web service. Each web service is described by its WSDL and its Semantic Service Descriptor, using the ontologism. All these rich data can be afterwards used by the users for web services discover, to create work flows, etc.