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WeNMR: Demonstrating a Virtual Research Community site in NMR and structural biology.

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Overview

The WeNMR Virtual Research Community (VRC) is one of the largest Virtual Research Organizations (VO) in life sciences, accounting for about 20% of the CPU on the GRID within the life science area.

The WeNMR VRC aims to bring together researchers in biological Nuclear Magnetic Resonance (NMR) and Small Angle Xray Scattering (SAXS) in a worldwide network, to share knowledge and expertise and to provide GRID services for computationally intensive applications to its users.

Continuing from the VRC that was established in the previous EC-funded eNMR project, it has now become a lively and growing community, with access to an increasing number of web application portals, services and communication channels.

We will illustrate our approach to VRC building by demonstrating the general features of the VRC website, its main application portals, access to services and online support, and a project management system for owners of the site.

Impact

The WeNMR VRC, its web portals and GRID and support services, will provide an example to VRC's in other disciplines that are still in early stages of planning and development.

The expertise that is available will be offered in various forms such as for example online consultations, training, and full technical implementations. As such, WeNMR will help other scientific communities to efficiently implement, develop and use e-Science technologies, social networking or GRID services in their fields of research.

Description of the work

The main objective of WeNMR is to establish an e-Infrastructure-based global virtual research community for structural biology in the life sciences.

A large part of the work involves the deployment of a VRC website, with GRID application portals, services, support and user communication channels. An important prerequisite for the success of the VRC is that its website and portals should be interactive and easily accessible for different types of users, ranging from general public to GRID experts. Members of the VRC should be able to readily find information, services and support, and be able to contribute to the content. To achieve this we are developing a modern website that uses concepts from social networking websites, information repositories and interactive media such as wiki, blogs, forums, chat and video conferencing. Thus, experts and regular users alike can access and share their knowledge at different levels by e.g. providing standard protocols for widely used applications, write articles, provide support, initiate discussions, video conferences, etcetera.

Next to all the VRC and collaborative aspects of the web site, it is also the main entry point to access the WeNMR services providing access to GRID-enabled applications via user-friendly web portals hiding the complexity of the GRID to the end user.

URL

www.wenmr.eu

Conclusions

An initial version of the WeNMR VRC web portal is already available and actively used by partners and users in the NMR and SAXS communities.

Further developments and implementation of new technologies and application portals are planned and are expected to result in a mature VRC web portal in 2011.

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