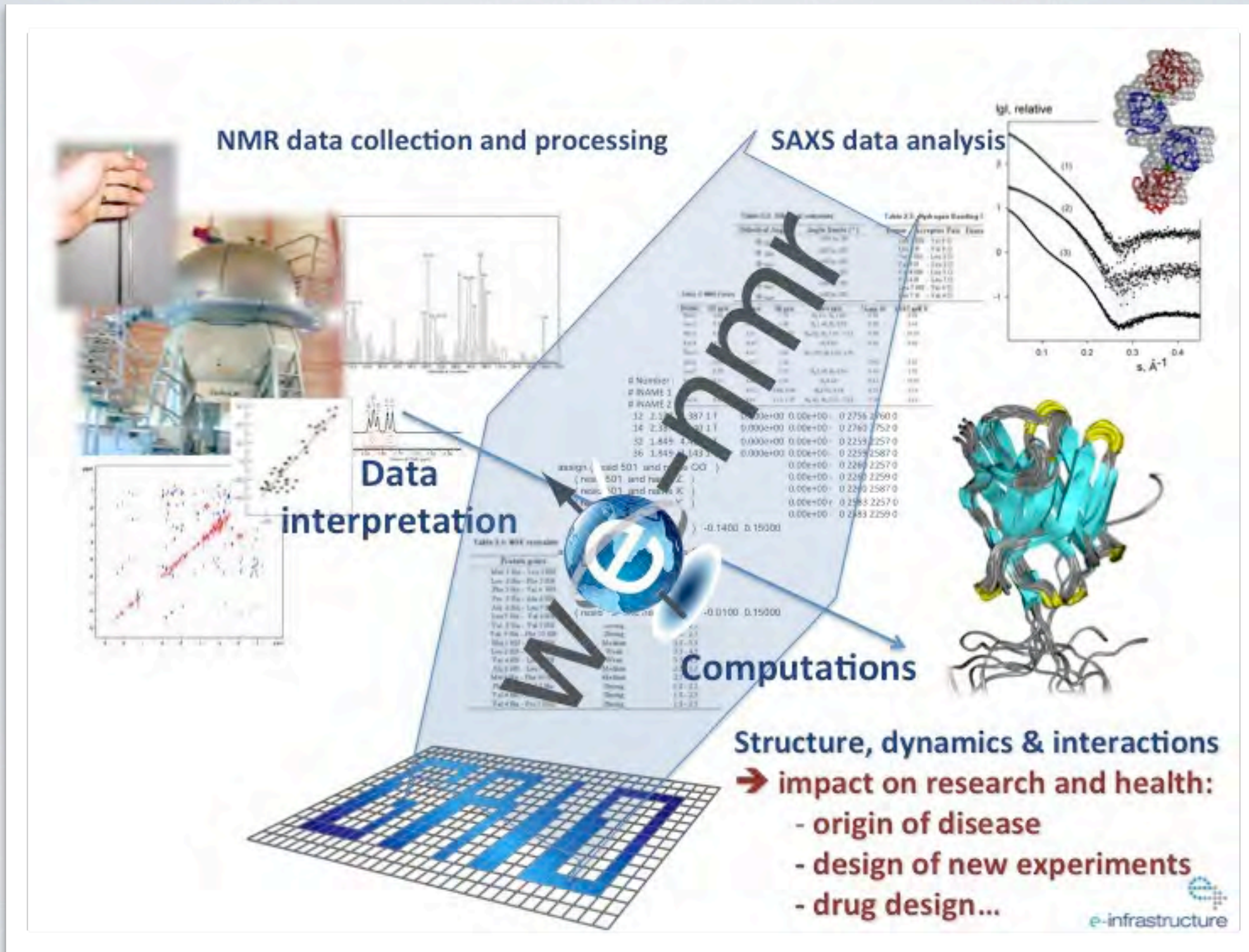


Centralized user management and Single Sign On for the WeNMR gateway through the WeNMR Virtual Research Community



Marc van Dijk, Andrea Giachetti, Marco Verlato,
Antonio Rosato, Alexandre Bonvin

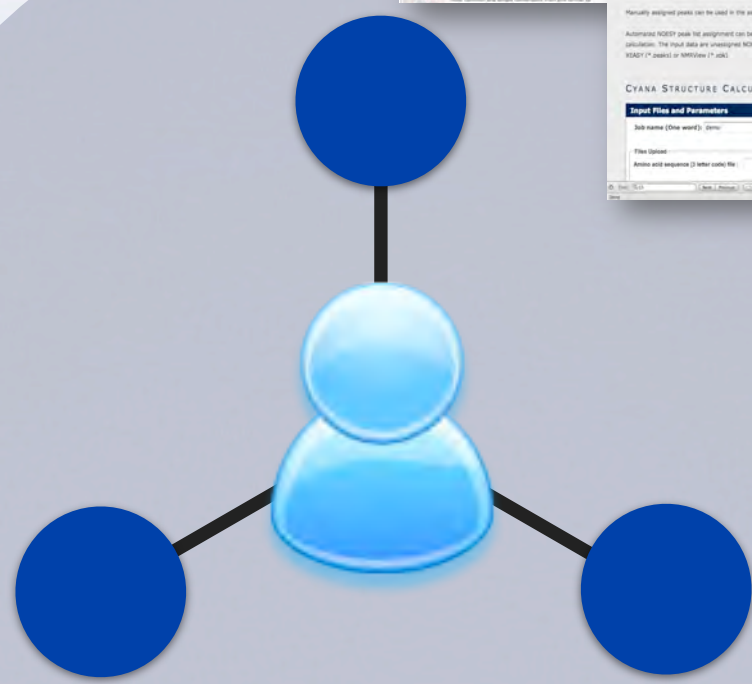
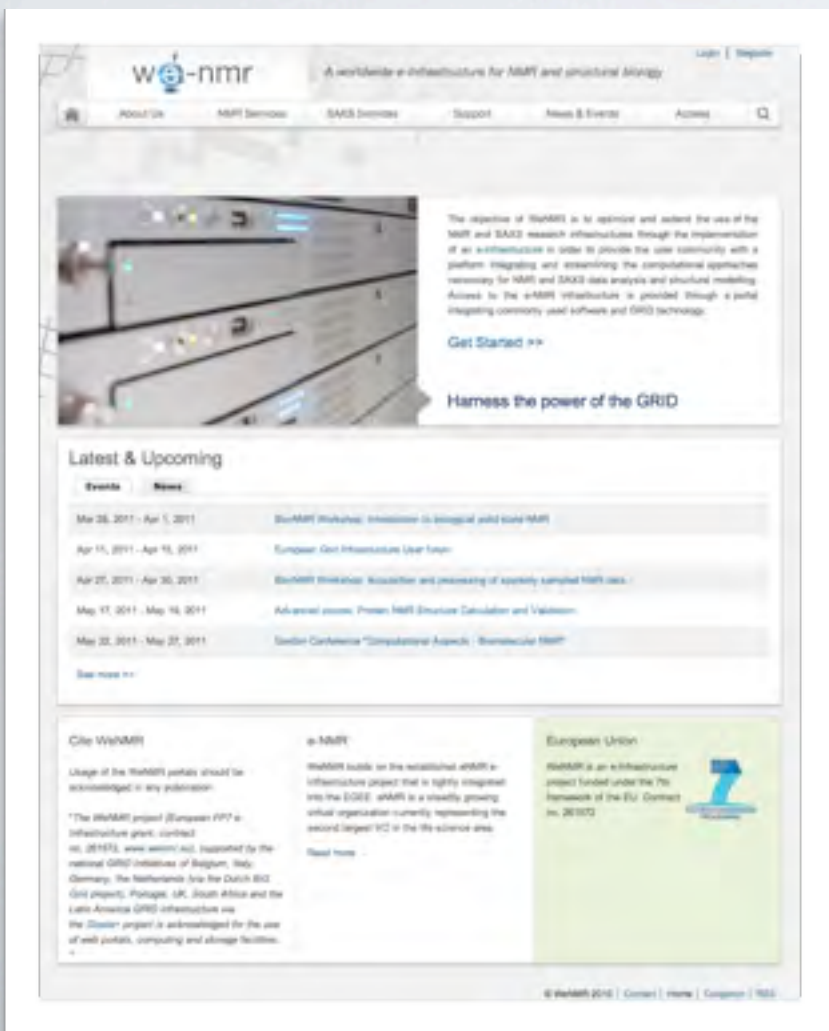
EGI Technical Forum 2012



Portals



Scientific Expertise



User Community

www.wenmr.eu

The challenge

- Flexible authentication from a user perspective
- Flexible user management from a portal perspective
- Powerful accounting functionality from a project perspective

The solution

Centralized user management and Single Sign On module for
the Drupal based WeNMR VRC

The portal perspective

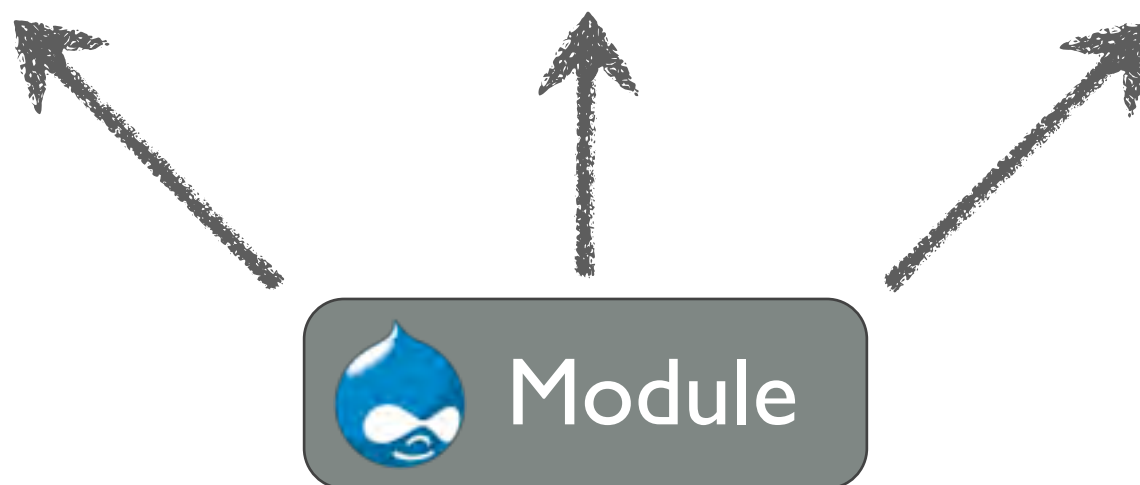
- Register portals
- Manage users

The user perspective

- Easy subscription to portals
- Manage job submissions

The project perspective

- Detailed portal accounting



The portal perspective

- Secure authentication and accounting

- Written as true Drupal module; PHP + JavaScript + CSS
- Makes use of Drupal 'hooks' to extend Drupal Core functions;
 - authentication, permissions, user accounts
- Stores data in a backup enabled, secure MySQL DB, local or remote
- Makes use of BlowFish encrypted, XML-RPC function calls for communication between portals and VRC



Flexible authentication

- Social media credentials: Facebook, LinkedIn, Google, Twitter ...
- SAML and Shibboleth authentication
- phpCAS SSO authentication
- Robot certificates no problem!



Flexible Framework

- Allot of functionality for free in Drupal
- XML-RPC enables a flexible API to expose functionality to the portals

Subscribe to portals and manage submissions all from one page

The screenshot displays a user interface for managing subscriptions to various portals. At the top, there is a table with columns for 'Subscribed since', 'Total jobs', and 'Active jobs'. Below this, there are three portal entries: HADDOCK, UNIO, and AMBER. Each entry has a 'SUBSCRIBE' button. The AMBER entry is currently selected, and a modal window is open showing a 'Grid certificate' validation step. The modal contains a green checkmark and the text: 'Step 1 This portal requires you to have a valid Grid certificate. Congratulations, you have a valid GRID certificate still valid for 114 days'. Below the modal, there are three steps in a vertical sequence: 'Grid certificate' (1), 'License agreement' (2), and 'Submit request' (3). At the bottom, there is another portal entry for GROMACS with a 'SUBSCRIBE' button and a table showing 'Subscribed since: 06-Sep-2012', 'Total jobs: 3', and 'Active jobs: 0'.

| | Subscribed since | Total jobs | Active jobs |
|---|------------------|------------|-------------|
| <input checked="" type="checkbox"/> HADDOCK | 17-Aug-2012 | 0 | 0 |
| <input type="checkbox"/> UNIO | | | |
| <input checked="" type="checkbox"/> AMBER | | | |
| <input checked="" type="checkbox"/> GROMACS | 06-Sep-2012 | 3 | 0 |

- Access Control List
- Portal specific Step-by-Step signup
- Grid certificate validation
- Portal submission management

Easy registration and management of portals and there users

WeNMR SSO

This page provides an overview of all WeNMR portals registered to make use of the WeNMR Single Sign On and accounting facility. Please use the *Add portal* to register a new portal. The *Operations* icons provide links to various administration pages of each portal allow to edit, manage registered users, view portal statistics and delete the portal respectively.

[\[more help...\]](#)

| ID | URL | Status | Registration date | Administrator | Users | Operations |
|----|---------|--------|-------------------|------------------|-------|---|
| 1 | HADDOCK | active | 19 Jul 2012 | Marc van Dijk | 2 |     |
| 2 | UNIO | active | 20 Jul 2012 | Marc van Dijk | 3 |     |
| 3 | 3D-DART | active | 14 Jun 2010 | weAdmin | - |    |
| 4 | FANDAS | active | 01 Jan 2012 | weAdmin | - |    |
| 11 | AMBER | active | 21 Aug 2012 | Andrea Giachetti | 3 |     |
| 12 | GROMACS | active | 06 Sep 2012 | Marc van Dijk | 3 |     |

Easy registration and management of portals and there users

WeNMR SSO

This page provides an overview of all WeNMR portals registered to make use of the WeNMR Single Sign On and accounting facility. Please use

the Ad
regist

GROMACS

Edit user subscriptions

Batch edit the subscriptions of all users for which the *Edit* checkbox is selected.

Change subscription status to:

Active

Group the user belongs to (group):

Default

User permission level (permission):

Easy

Submit

| Edit | ID | Name | Subscription | Total jobs | Active jobs | group | permission |
|--------------------------|----|--------------------------------|--------------|------------|-------------|-------|------------|
| <input type="checkbox"/> | 3 | amjbonvin | active | 0 | 0 | DEF | EASY |
| <input type="checkbox"/> | 9 | Marc van Dijk | active | 3 | 0 | ADM | EXPERT |
| <input type="checkbox"/> | 14 | Antonio Rosato | active | 0 | 0 | DEF | EASY |

Drupal WeNMR SSO module; the portal perspective

Basic portal information

Define the name and URL of your portal and provide a basic description of its purpose for display on the user page

Portal name: *

Specify the portal name (machine name = gromacs)

Portal URL: *

Specify the URL of the portal.

Portal IP address: *

Drupal will allow this IP address to make XML-RPC calls to the server

The public status of the server:

Active

Public status of the portal as: active, paused, stopped

Portal description:

Provide a short description of the portals purpose

▼ Roles

Choose which roles may use this portal. An *anonymous user* will open the portal to everybody and thus requires no authentication but you can still use the accounting functionality. A *authenticated user* will allow all VRC registered users to signup for the portal

anonymous user

authenticated user

project partners

site managers

▶ Signup requirements

▶ Variable data fields

Portal registration. Define:

- How to reach the portal
- Who may use the portal
- Signup requirements
- Any custom user account variables?

The modules accounting functionality enables powerful statistics

GROMACS accounting

List of all jobs accounted for by the portal. The results can be filtered by date and/or user name. Please note that the job ID often links to the job results page but it might no longer exist. [\[more help...\]](#)

Filter jobs

Filter the portals jobs by date range or user name

Start:

1970 : Jan : 1 :

End:

2012 : Sep : 16 :

User:

Filter on user name

Submit

5 records:

| Job ID | User | Status | Start date | Finish date | Message |
|------------------------|-------------------------------|-----------|-----------------------|-----------------------|---|
| 645326 | Anonymous | done | Thu, 1970-01-01 02:00 | Sat, 2012-09-15 09:47 | |
| 344188 | Marc van Dijk | submitted | Sat, 2012-09-15 17:44 | | |
| 275630 | Marc van Dijk | done | Thu, 2012-09-06 13:58 | Thu, 2012-09-06 14:23 |  |
| 135837 | Anonymous | done | Thu, 1970-01-01 02:00 | Sat, 2012-09-15 09:47 | |
| 68265 | Marc van Dijk | failed | Thu, 1970-01-01 02:00 | Sat, 2012-09-15 09:47 | |

The mod

statistics

GROMACS

List of all jobs accounted
results page but it might n

Filter jobs

Filter the portals jobs by

Start:

1970 : Jan :

End:

2012 : Sep :

User:

Filter on user name

Submit

5 records:

| Job ID | User |
|--------|---------|
| 645326 | Anonym |
| 344188 | Marc va |
| 275630 | Marc va |
| 135837 | Anonym |
| 68265 | Marc va |

3D-DART

Machine name: 3d_dart
Admin: wsAdmin

Operation status: **active**
Operational for: **825 days**
Statistics for period: **Jan-'12 till Sep-'12**
Jobs last month: **6 ↓ -92.21 %**

SETTINGS
Start date: Jan 2012 End date: Jan 2012 Submit

JOB ACCOUNTING

Job count: 390
Success rate: 100%
Average job length: -40:-24:-32:-25

TIMELINE

| Month | Job Count |
|-------|-----------|
| Jan | 15 |
| Feb | 10 |
| Mar | 12 |
| Apr | 8 |
| May | 10 |
| Jun | 5 |
| Jul | 8 |
| Aug | 15 |
| Sep | 10 |

DEMOGRAPHICS

Country count: 17
1st Country: NL-98
2th Country: IN-65
3th Country: FR-64

COUNTRY DISTRIBUTION

1 98

