

# PROGRESS:DMS

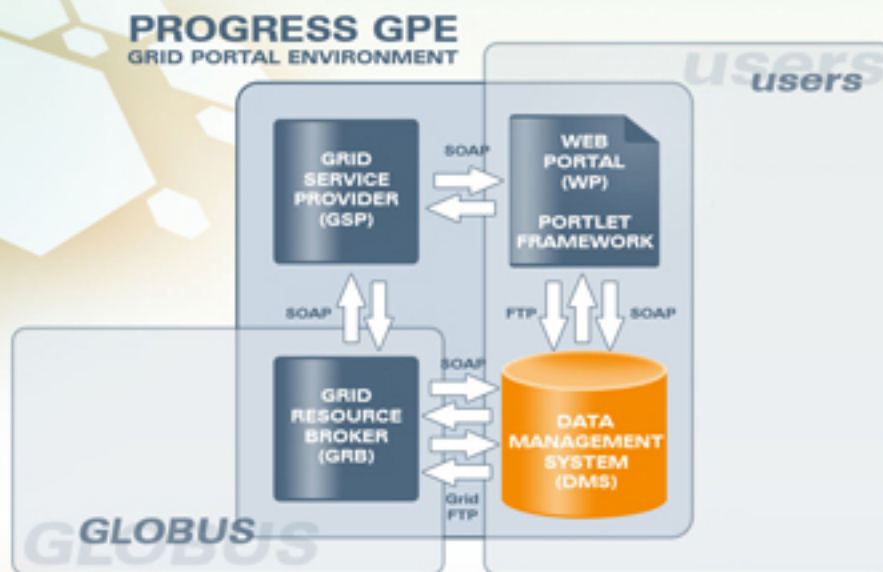
## PROGRESS Data Management System

about:

**Assumptions:**

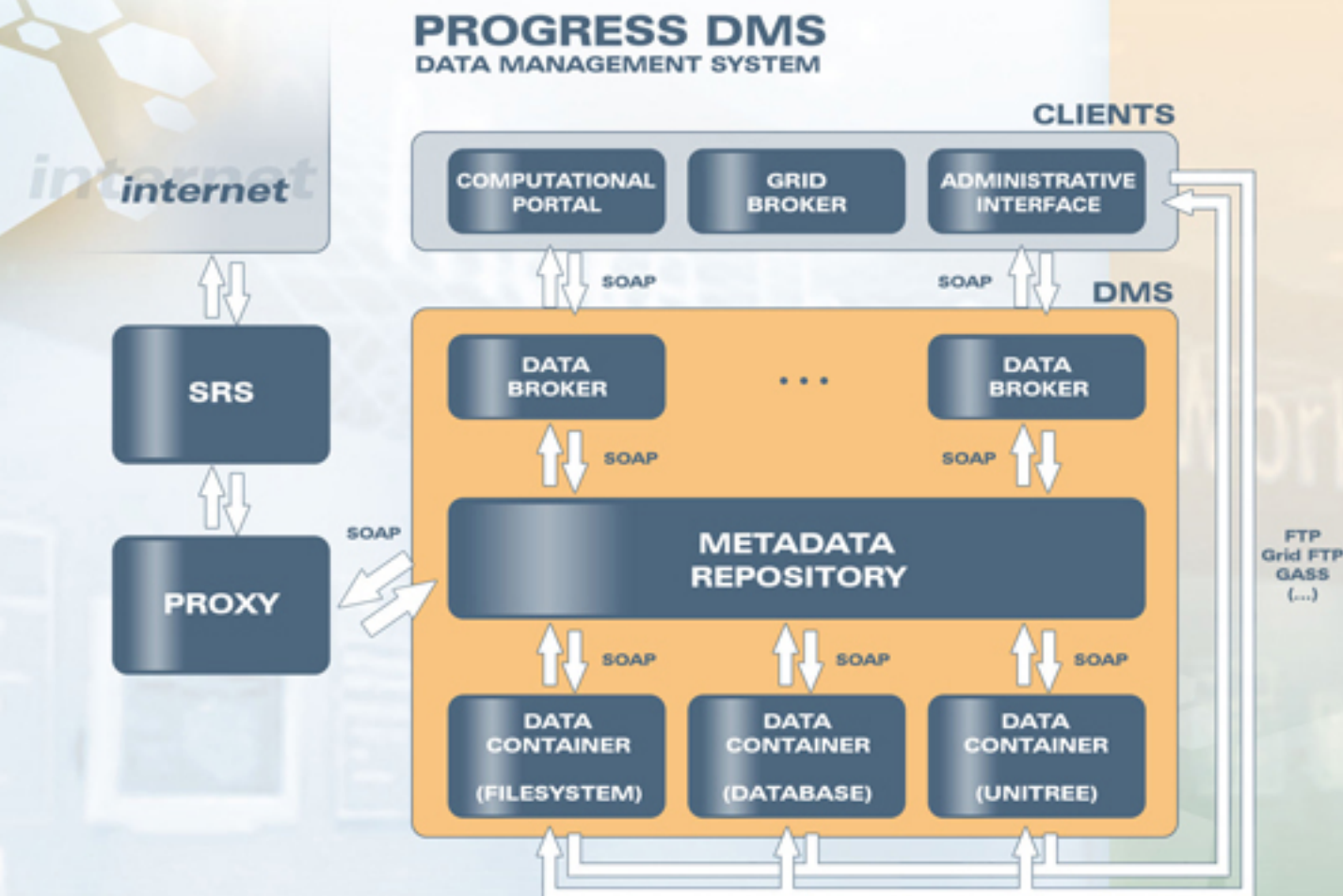
- hiding the data management complexity from the end user
- creating an easy and intuitive method of data access
- adapting to new standards defined by grid organizations
- cooperation with different kinds of applications
- providing seamless access to data and information for grid computing
- enabling intuitive and efficient method for resource exploration
- facilitating interface to data management for administrators and scientists

project:



The PROGRESS project was co-financed by the State Committee for Scientific Research and Sun Microsystems Poland and lasted since December 2001 until the end of 2003. It aimed to deliver an access environment to grid computing resources and services. The project resulted in a set of grid-portal environment tools, which are subject to continuous research and development, and have been deployed to form the PROGRESS HPC Portal.

architecture:



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# PROGRESS:DMS

## PROGRESS Data Management System

### Open architecture

- Enables the creation of a distributed environment capable of storing and enabling access to a large amount of data
- Serves as the source of input data and the destination for the results of computing experiments
- Exposes data services to the other middleware applications and grid portals
- Stores data on different types of storage resources, including disk systems, robotic tape systems, mass storage systems and databases
- Provides a SOAP interface to external scientific databases

### Exploring resources

- Includes features known from digital libraries - makes it possible to describe computational resources by metadata which enables processing, searching and browsing files in a form of digital documents.
- Ensures appropriate scalability in enterprise environment approved by load and stress tests
- Delivers an administrative portal providing access to full functionality of Data Management System

### Security solutions

- Assures appropriate security of stored data provided by the external authorization/authentication system constituting a comprehensive suite of security features to protect enterprise environments
- Ready to accommodate Single Sign-On model

functionality:

The screenshots show the following interface elements:

- File Management:** A table with columns for Name, Creation Date, State, and Size. It lists files like 'top\_howan.txt' and 'topan'. Below the table are buttons for 'Remove', 'Move', 'Rename', and 'Metadata'. There are also 'New elements' and 'New elements' sections for adding files and directories.
- Metadata Management:** A 'Meta data' section with a 'Dublin Core Metadata Element Set' dropdown and an 'Assign' button. A 'Description' field is visible with the text 'small screen for book description'.
- Search and Schema:** A search interface with fields for Name, Date, Size, and Path. It includes a 'Described by schemas' section with a 'Dublin Core Metadata Element Set' and an 'Add Schema' button. There is also a 'Described by attributes' section with 'Description' and 'CORBA' options.

Navigating over the hierarchy of the metadirectories and metafiles  
Managing physical and logical information on each of the metaelements

Access to an intuitive interface to manage the metadata schemas

Search for data, using all sorts of parameters

URL: <http://portaldms.progress.psnc.pl/>

screenshots:

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