



# **UNICORE access to the gLite file catalogue and SRM enabled storage**

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**JRA1 - UNICORE**

# A Little UNICORE Introduction

- Uniform Interface to Computing Resources

**UNICORE**

- A ready-to-run Grid system including client and server software.
- Makes distributed computing and data resources available in a seamless and secure way
- Maintained by Jülich Supercomputing Centre

<http://www.unicore.eu/>

# A Little UNICORE Introduction

## – Objectives:

- Open Source
- Standards-based
- Open and extensible
- Interoperable
- Seamless, secure and intuitive
- Mature security mechanisms
- Workflow support
- Application integration
- Different clients
- Quick and simple to install and to configure
- Various operating and batch systems
- Implemented in Java

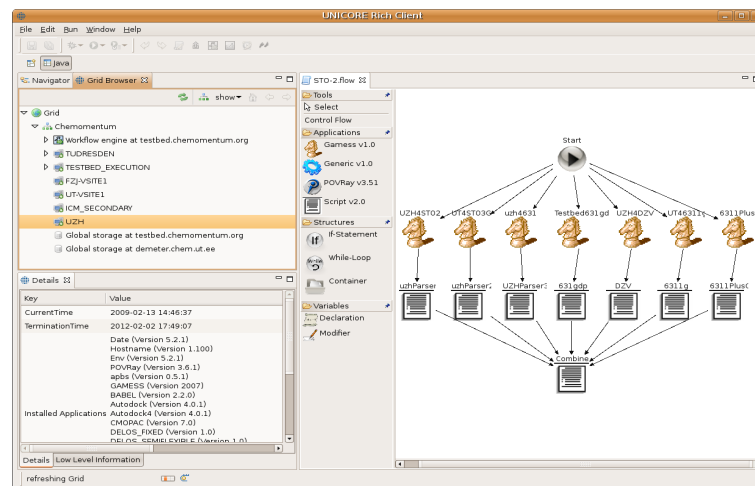
# A Little UNICORE Introduction

## – Core server components

- Gateway
- WS(RF)
- Complete set of Grid services
- Pluggable filetransfer mechanisms
- Flexible execution backed (XNJS)
- Target system interface
- XUADB

## – Clients

- Eclipse based graphical client
- Commandline client
- HiLA client API
- Web-based access



(taken from [www.unicore.eu](http://www.unicore.eu))

# A Little UNICORE Introduction

## – Security

- Based on open standards
- Many authorization options
- GSI proxy certificates

## – Workflow

- Powerful workflow features
- Two-layer architecture
- Service orchestrator

## – Add-ons

- Common information service
- UVOS

## – [www.unicore.eu](http://www.unicore.eu):

- Testgrid
- Manuals/Documentation
- Client Video Tutorials
- FAQ, Wiki, Papers
- ...

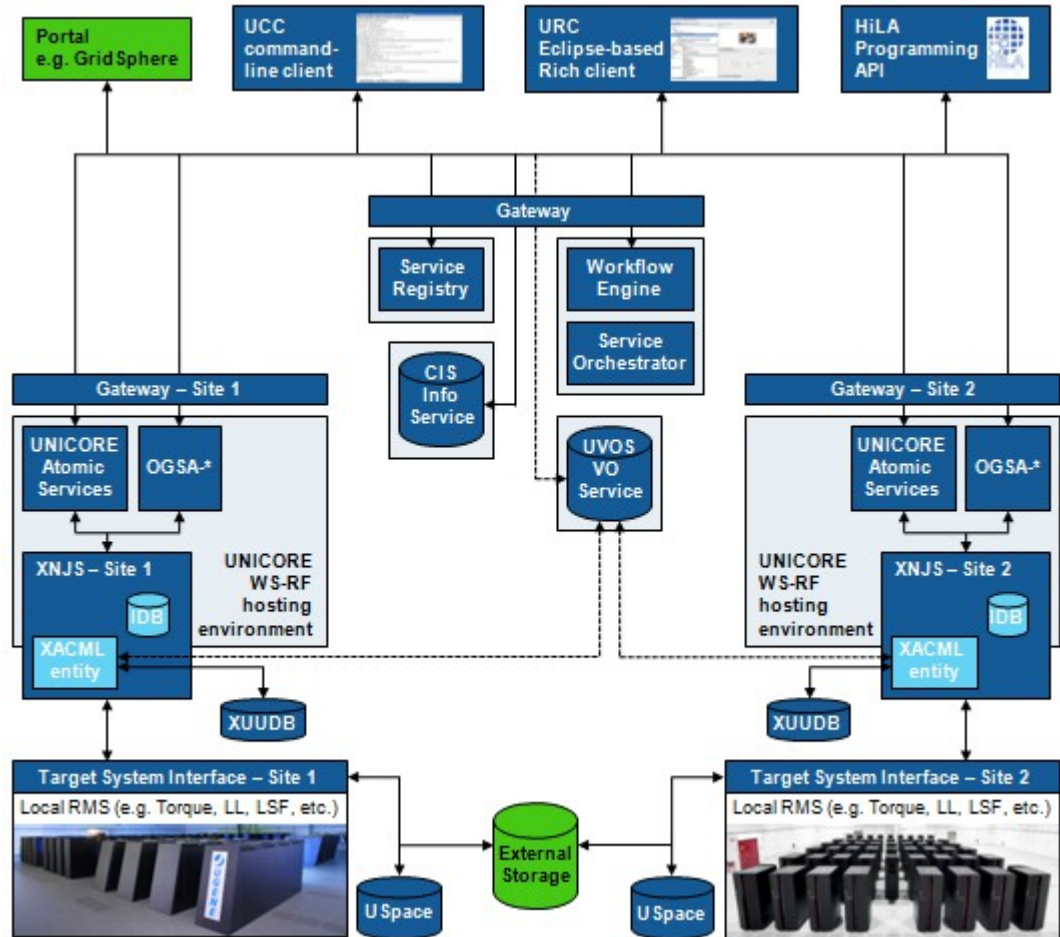
# A Little UNICORE Introduction

## – Architecture

Client layer

Service layer

System layer



(taken from [www.unicore.eu](http://www.unicore.eu))

# What EMI wants

- File catalogue access for UNICORE
  - For further integration of UNICORE and the other middle-wares, UNICORE needs to get access to data in gLite/ARC storage elements.
  
- SRM integration into UNICORE
  - SRM plus 4.3.3 (POSIX data access) enables UNICORE to seamlessly interoperate with EMI storage elements.

# UNICORE LFC Client Integration

- found nice Java LFC Client API at <https://grid.ct.infn.it/twiki/bin/view/PI2S2/GSAF>  
(Grid Storage Access Framework)
- currently developing a Java client based on GSAF API
- next:
  - talk to the UNICORE guys how to integrate the LFC client functionality into UNICORE
  - integration



# UNICORE SRM Client Integration

- still looking for a Java based Client API:
  - BeSTMan?
  - dCache?
  - StoRM?
  - ...?



# Thank you

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