



Status Umbrella AAI Photon / Neutron community

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Umbrella is part of several FP7 projects:

- EuroFEL- ESFRI project Free Electron Lasers of Europe
- PaNData-Europe, PaNData ODI- FP7 projects
- CRISP – Cluster project of different ESFRI projects
- CALIPSO – I3 synchrotron community
- NMI3 - I3 neutron community
- BioStruct-X – renewal of I3 ELISA FP7
- Instruct – ESFRI project

What are the present and upcoming user needs?

- a. 40% of the users (40% of >30.000) do experiments at different facilities, transfacility access for users.
- b. Access to and management of experimental data (also within the collaboration).
- c. Online entry mode: remote experiment access
- d. Access to efficient data analysis tools.
- e. Minimal administration load for users.
- f. Remote file access.

At the end all this needs a unique persistent user identification to have unified access to these tools.

Concept

- Unique persistent Identifier on EU scale
- independent of home institution
- life time account
- account owned by the user
- single sign-on
- no possibility for cross-facility information pull
- waterproof but slim data protection system

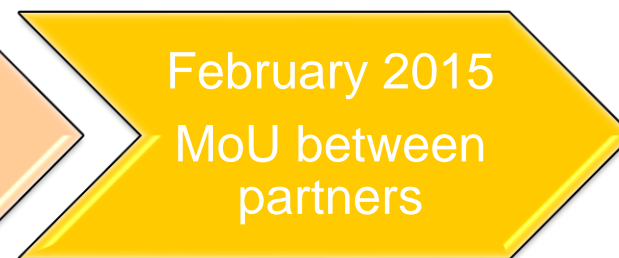
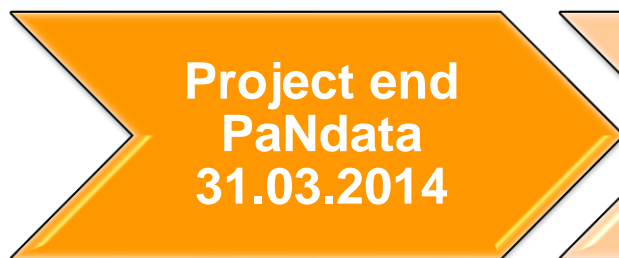
Rely on existing local user office structure

- Great experience
- Do It Yourself operation by the user
- Users: manage their personal entries
- User offices: supervising; manage authorizations
- Principal investigators: have responsibility for their teams and can handle authorization within their group

Authorisation is delegated to the systems participating in Umbrella

- for highest grade of independence
- in heterogeneous environments
- no complicated trust relationships

Status of Umbrella deployment



The different partners (nearly all European Photon and Neutron facilities with >30000 users) of the Umbrella collaboration work together in :



- Decide on development and operational issues
- Define strategy

Facility	Status	SP installed	WUO adapted	Production
ESRF	OK	OK	OK	OK
ILL	OK	OK	OK	OK
PSI	OK	OK	OK	OK
Elettra	OK	OK	OK	OK
ISIS	OK	OK	OK	OK
Diamond		OK	OK	Waiting for management
DESY	OK	OK	OK	OK
Soleil		OK	OK	Waiting for management
KIT		OK	OK	Waiting for management
MAXIV		OK	OK	Waiting for management

Operation of the Umbrella platform after finishing the PaNData and CRISP projects 30.09.2014

- ILL is in charge of operating the Umbrella platform, since 01.10.2014 .
- “GNU Lesser General Public License” LGPL inserted in the MoU
- MoU should be signed this month (11 partners ok).
- Operators handbook Umbrella ready at: umbrellaid.org
- Umbrella was foreseen as a basis for new services in future Horizon 2020 project PaNDaaS, on waiting list EU

Facility	Status Umbrella implementation	CRISP	PaN Data	NMI3	CALYPSO	Signature of MoU	Responsible
ESRF	implemented	x	x		x	x	Rudolf Dimper
ILL	implemented	x	x	x		x	Jean-Francois Perrin
DESY	implemented	x	x		x	x	Frank Schluenzen
ISIS	implemented		x	x		x	Tom Griffin
Elettra	implemented		x		x	x	Cecilia Blasetti
HZB	ASAP		x	x	x	x	Thomas Gutberlet
Soleil	Technically prepared		x		x	x	Idrissou Chado
Alba	End 2014		x		x	x	Daniel Salvat
EUXFEL	at start of user operation	x	x			x	Frederic Le Pimpec
PSI	implemented	x	x	x	x	x	Mirjam van Daalen
KIT	technically prepared				x	x	Michael Hagelstein

In operation

1. Basic Umbrella <https://umbrellaid.org/euu/>
2. Geo DNS (server Umbrella distributed between different facilities)
3. Access to iCAT metadata catalogue via Umbrella (PaNdata ODI development)

Ready to put into operation

- Access to Umbrella via EduGain (Geant 3+, Switch)
 - Login with account home institution (Universities etc.)
- Link of Umbrella to Moonshot (Geant 3+, Switch, non web based access)
 - Remote experiment access, access to machine consoles
- EU affiliation database (PaNdata ODI WP3)
 - Too much resources to merge with existing databases
 - Start with new facility, e.g, EU XFEL

Access to Umbrella via eduGain

- Allows linking of multiple university accounts with your Umbrella account via the eduGain federation
- Access photon and neutron facilities with your university account
- Allow scientists to access their data with a unique and persistent personal account which will endure job changes, e.g. new affiliation.
- Data is usually owned by the scientist and not the institution
- Ready for production ?
 - As SP: miss SLO in eduGain
 - As IdP: not meeting attributes.requirement

Link of Umbrella to Moonshot

- Allows scientist to login to a machine console (e. g. beam lines, analysis computers....) using their Umbrella credentials
- Enables scientists to use one account to fulfill the whole lifecycle of submitting proposals, capture data, retrieve and analyze data
- Part of the ja.net trust router
- Ready for production but needs deployment on the IdP and SPs

Umbrella collaborators

ALBA: Daniel Salvat

DESY: Frank Schluenzen, Rolf Treusch, Jan-Peter Kurz, Ulrike Lindemann

Fermi/Elettra: Cecilia Blasetti, Ornella Degiacomo, Giorgio Paolucci, Roberto Pugliese

ESRF: Rudolf Dimper, Dominique Porte, Julien Savoyet, Stefan Schulze

European XFEL: Krzysztof Wrona, Frederic Le Pimpec

GSI: Peter Malzacher, Almudena Montiel Gonzalez, Kilian Schwarz

HZB: Thomas Gutberlet, Dietmar Herrendoerfer

ILL: Jean-Francois Perrin

ISIS: Tom Griffin

MaxLAB: Krister Larsson, Ulf Johansson

PSI: Bjoern Abt, Stephan Egli, Stefan Janssen, Markus Knecht, Mirjam van Daalen, Heinz Weyer

Soleil: Idrissou Chado, Frederique Fraissard,

Diamond Light Source: Bill Pulford

Thank you for your attention!