PaNdata WP3 F2F Meeting

TOC

Umbrella as answer to facility IT requests I

❑ *Concept*
  - ❖ Unique user identification on EU (trans-facility) scale
  - ❖ Only one (1) identity provider
  - ❖ Hybrid information storage:
    - o Authentication (minimal info): central Umbrella
    - o Authorization (complete info): WUOs (local user offices)
      - ▪ (Lufthansa <-> Swiss)
  - ❖ No way for sub-surface cross-facility information exchange
  - ❖ Waterproof but slim data protection system

❑ *Base system on professional authentication standard*
  - ❖ Shibboleth, federated Single-Sign-On System (SAML), widely used
  - ❖ Specific photon / neutron user federation
  - ❖ Supervising by local User Offices
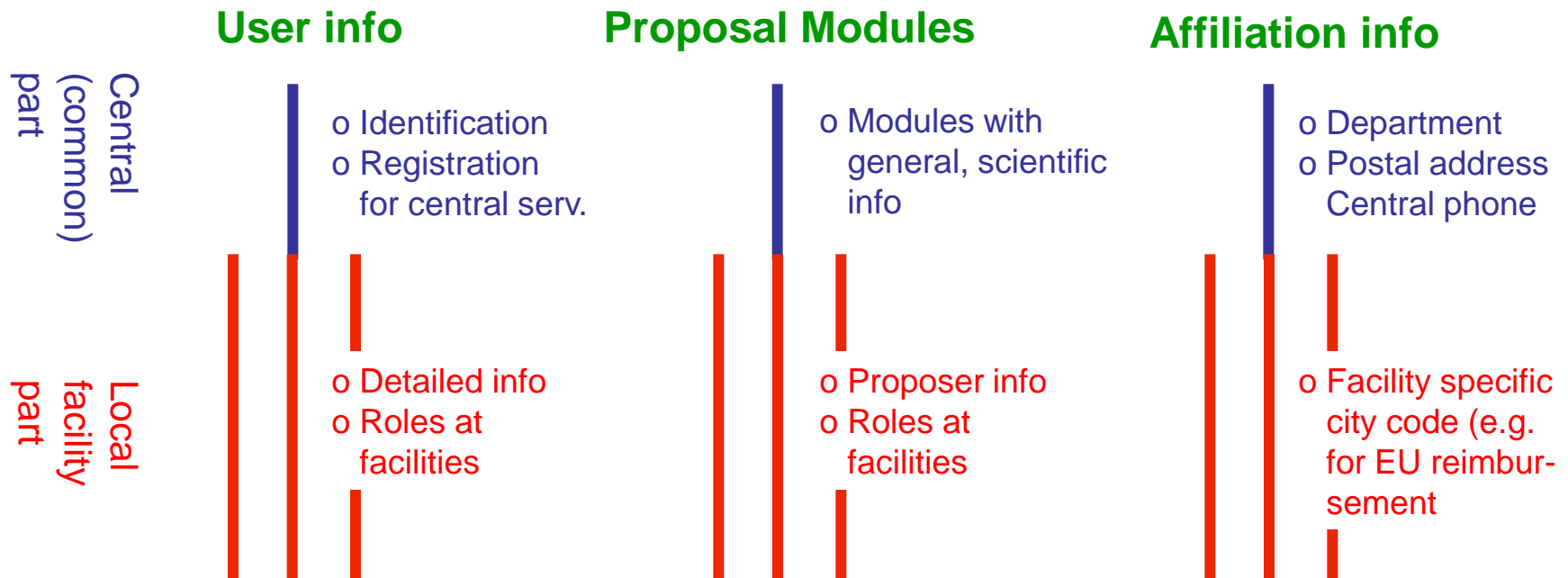
Umbrella as answer to facility IT requests II

❑ ***Incorporate confidentiality aspects***
  ❖ High competition, especially in structural biology
  ❖ Allow for time-window structured access to experiments and data

❑ ***Rely on existing local user office structure***
  ❖ Great experience
  ❖ DIY (Do It Yourself) operation
    o Users: manage their personal entries
    o User offices: supervising; manage authorizations
    o Possibility for verification feedback

Hybrid concept (central and federated)

Answer to conflicting requests:

- ➤ Efficient technology
- ➤ Confidentiality
- ➤ Consequent distinction of authentication and authorisation:
  - ➤ Authentication: Umbrella
  - ➤ Authorization: WUOs (local user offices)

User info — Central (common) part:
- o Identification
- o Registration for central serv.

User info — Local facility part:
- o Detailed info
- o Roles at facilities

Proposal Modules — Central (common) part:
- o Modules with general, scientific info

Proposal Modules — Local facility part:
- o Proposer info
- o Roles at facilities

Affiliation info — Central (common) part:
- o Department
- o Postal address Central phone

Affiliation info — Local facility part:
- o Facility specific city code (e.g. for EU reimbursement)

Umbrella as answer to facility IT requests III

❑ *Affiliation database*
   - ❖ Common tool for Umbrella partners
   - ❖ Advantage & support for facilities
   - ❖ Advantage & support for users
   - ❖ -> Presentation D.Porte, ESRF

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- *Umbrella as answer to facility IT requests*
  - Umbrella in a nutshell
- ***PaNdata and CRISP***
  - Modified DoW
- *Umbrella implementation / deployment*
  - Implementation teams
  - Affiliation database (ESRF)
- *Open issues*
- *Conclusions*

PaNdata/WP3 and CRISP/WP16

❑ *Initially highly overlapping DoWs for identity management*
   ❖ System immanent problem
   ❖ Raised again at the Brussels review (Dec. 2012)

❑ *Bottom-up approach*
   ❖ Harmonization meetings (Next one coming up: June 2013 @HZB)

❑ *Job subdivision*
   ❖ PaNdata/WP3: Basic Umbrella
      o Deployment of Basic Umbrella
      o Affiliation database
      o Umbrella and ICAT
   ❖ CRISP/WP16: Further developments:
      o Bridging
      o Moonshot
      o Fast data exchange (GRIDftp)

PaNdata/WP3 and CRISP/WP16
cont.

❑ *Modified DoW:*

❖ Methodology:

This task will deploy, operate and evaluate a protocol for introducing a pan-European user identification and Single-Sign-On (SSO) system and implement common processes for the joint operation of that system. This is a necessary baseline for enabling seamless cross-facility data and experiment access and integration by individual users. It will build on the user policy and user data exchange standards which are being developed by the consortium in the current PaNdata Support Action.

The need for common user identification at research facilities is identified also by several other projects (e.g. CRISP, NMI3, and CALIPSO); especially between WP3 and CRISP / WP16 there is strong overlap. As consequence, these projects meet since the beginning twice per year in order to harmonize their identity management activities. Specifically PaNdata / WP3 and CRISP / WP16 have agreed that WP3 concentrates on the deployment of the basic Umbrella system and WP16 on the development of further functionalities.

❑ *Deliverables and month of delivery*

❖ D3.1 : Specification of authentication infrastructure (M6)

❖ D3.2 : Pilot deployment of initial authentication service infrastructure (M12)

❖ D3.3 : Production deployment of authentication service infrastructure (M18)

❖ D3.4 : Evaluation of initial authentication service infrastructure (M24)

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Umbrella implementation / deployment

❑ *Highly delicate*
- ❖ Affecting management of 30'000+ visiting scientists
- ❖ Touching holy grails of facilities -> only one (1) chance
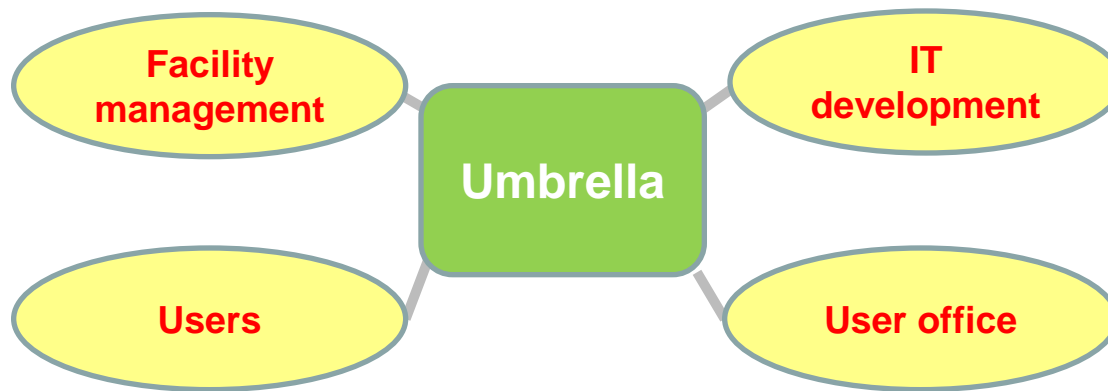
❑ *Good old salami tactics:*
- ❖ small, overseeable steps
- ❖ Keep everybody in the boat

❑ *4 Phases*
- ❖ Open the gate gradually
- ❖ Keep option to go back

Communication

❑ **Harmonization meetings**

  ❖ Bi-annual (2013:Jan15,Feb19,Mar6)

  ❖ PaNdata,CRISP, but also CALIPSO, NMI3, BiostructX, FMI…

❑ **ESUO**

  ❖ European photon science October 2012,Barcelona

    -> official endorsement of Umbrella by ESUO

❑ **IUCr**

  ❖ 27th European Crystallographic Meeting, August 2012, in Bergen

    -> Xtallographers = strongest photon user group

❑ **FIM4R**

  ❖ Wide range of communities

  ❖ Next meeting (Mar 20/21)at PSI

Umbrella Implementation / Deployment

❏ *Phase 0: implementation of Umbrella-ready versions*
- o Changes to existing WUO are
  - ▪ Trans facility Umbrella user ID, Umbrella -WUO handshakes
  - ▪ Harmonized local user db format
  - ▪ Umbrella username / password conventions

❏ *Phase I: Local experts*
- o IT people involved, local user office staff
  - ▪ Goal is to verify the new procedures.

❏ *Phase II: Open to selected friendly users*
- o Tell them that this is the 2nd phase of deployment. Tell them about what is to come (should include also estimates for harmonized proposal handling and ICAT)
- o Ask them for their feedback
- o Incorporate feedback

❏ *Phase III: Open to all users*
- o Planned for spring / summer

Implementation teams

❑ *Project structure*

❖ Management team
  o Priorities, MoU, facility coordination

❖ Technical team
  o Specific technical questions

❑ *Holy document* *Legal / administrative issues*

o Umbrella physical topology
o Central user database
o Local user database
o Affiliation database
o Security issues
o User support
o Procedure for handling further developments
o Umbrella production version
o Implementation steps
o Operational issues
o MoU

Umbrella Implementation Teams

Facility	Project	Management	Technical
Alba	P	D. Salvat	D. Salvat
DESY	P+C	F. Schluenzen	J.P. Kurz, U. Lindemann
DIAMOND	P	B. Pulford	B. Pulford
Elettra	P	G. Paolucci, O. Degiacomo	F. Bille
EMBL HH& Biostruct X		J. Schmidt	J. Schmidt
ESRF	P+C	D. Porte	S. Schulze
European XFEL	C	K. Wrona	K. Wrona
FMI		D. Flanders	R. Schmidt
GSI	C	P. Malzacher, K. Schwarz	A. Montiel Gonzales
HZB	P	Th. Gutberlet	A. Tomiak
ILL	P	J.-F. Perrin	F. Festivi
ISIS & STFC	P	T. Griffin	A. Wilson
PSI	P+C	S. Janssen	M. Knecht
Umbrella team	P+C	B. Abt, M. Van Daalen H.J. Weyer (lead)	B. Abt (lead) M. Van Daalen H.J. Weyer

Next steps

- ***First wave***
  - ❖ ESRF
  - ❖ ILL
  - ❖ PSI
- ***Second wave***
  - ❖ HZB
  - ❖ DIAMOND
- ***Detailed roadmap***
  - ❖ Project file

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- ***Open issues***
- ***Conclusions***

Open issues

-> at the end

Umbrella collaborators

- **ALBA (P)**
  - Daniel Salvat
- **DESY (C+P)**
  - Frank Schluenzen, Rolf Treusch, Jan-Peter Kurz, Ulrike Lindemann
- **DIAMOND (P)**
  - Bill Pulford
- **Fermi/Elettra (P)**
  - Cecilia Blasetti, Ornela Degiacomo, Giorgio Paolucci
- **EMBL HH / Biostruct X**
  - Johannes Schmidt
- **ESRF (C+P)**
  - Rudolf Dimper, Dominique Porte, Stefan Schulze, Julien Savoyet
- **European XFEL (C)**
  - Krzysztof Wrona
- **Friedrich Miescher Institut**
  - Dean Flanders, Roger Schmidt
- **GSI (C)**
  - Peter Malzacher, Almudena Montiel, Kilian Schwarz

- **HZB (P)**
  - Thomas Gutberlet, Dietmar Herrendoerfer, Olaf Schwarzkopf
- **I LL (C+P)**
  - Jean-Francois Perrin, F. Festivi
- **ISIS (P)**
  - Tom Griffin
- **IPJ (Poland)**
  - Robert Nietubic
- **MAXlab** Ulf Johansson
- **PSI (C+P)**
  - Bjoern Abt, Stephan Egli, Stefan Janssen, Markus Knecht, Mirjam van Daalen, Heinz J Weyer
- **Soleil (P)**
  - Frederique Fraissard
- **STFC (P)**
  - Anthony Gleeson

Conclusion

- ❑ *Update of WP3 DoW*
- ❑ *Umbrella ready for implementation*

Open issues

!! Need to be decided before we leave !!

❖ Passing on (new account)
- o Username
- o Password

❖ Umbrella first registration
- o Google-type and link
- o Umbrellify
  - ▪ New/old username
  - ▪ New/old password

❖ Umbrella visibility
- o Central
- o Federal
- o Both

❖ Central server
- o Domain name
- o Ldap replication

❖ Mpp
- o Needed for work sync
- o Why slow response?

❖ MoU
- o Draft status
- o Superfluous items
- o Missing items
- o Who signs
- o One or two?
- o Editorial team
- o Road map

Thank you