



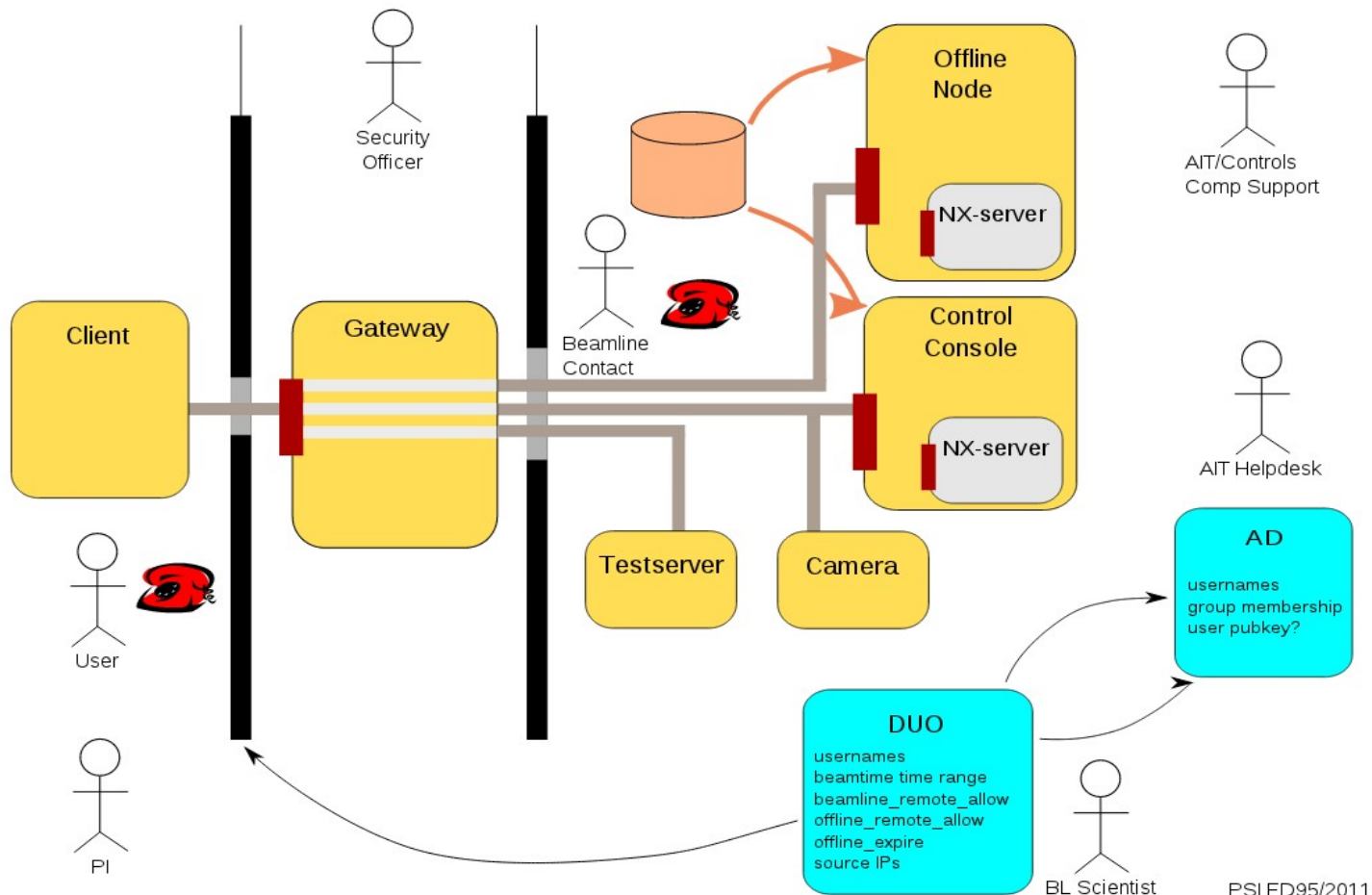
Wir schaffen Wissen – heute für morgen

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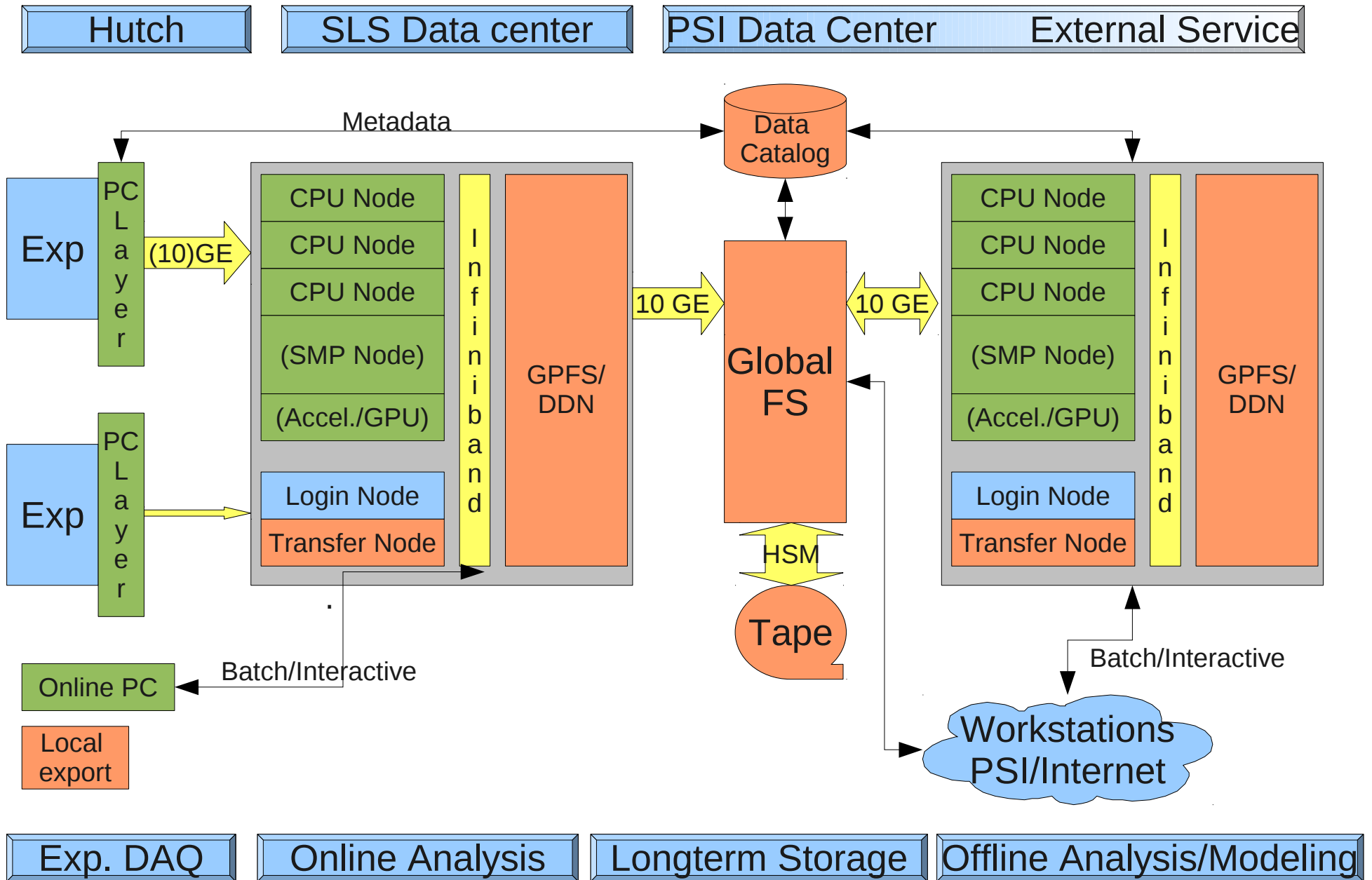
**PaN-Data & CRISP Harmonization Meeting,
ZRH Airport June 27th 2011**

- Remote Access to experiments: work in progress...
 - Balance between ease of user and security/safety aspects
 - Group based access regulations,
 - Maintenance coupled to WUO/DUO software



- Currently concentrated on solving the immediate needs of the **online storage** and **online processing**
 - Very high data rates expected from new Eiger Detector (a single 4M detector needs 16 10-GBit connections in parallel, expected for 2012)
- Many things still open
 - (Automatic) meta data handling, ICAT type of solutions ?
 - Long term storage (currently ad-hoc user driven copies to tape archive)
 - offline analysis center functionality (HW, Storage, Cluster, Software) required at what level ?
 - Hosting of this infrastructure on site or externally ?
 - Global data exchange (e.g. what exchange protocols) and access regulations
- Data policy has been discussed at PSI within an ICT governance board, further feedback from all departments are currently collected
- Can we mitigate the data deluge problem ?
 - By technical means by adjusting compression techniques to the data type taken at our labs ?
 - By help from the scientists: they need to define criteria, which part of the data should be kept and at which abstraction level (raw or reconstructed data)

Proposed Future HPC Architecture



- Authentication and Umbrella concept: see Bjoern Ab'ts talk
 - Authorization
 - Disabling accounts
 - Different strenghts of Authentication (strong, normal)
- In Swiss academic community an Shibboleth based AAI system is in use since several years
- Publication database: ISI Integration with DUO Software, but no PSI wide publication database nor PSI publication server.
- Bibliometry mainly used for yearly reports
- Do we need a publication DB for the photon + neutron science community ?

- From 2016/2017 data will also come from SwissFEL.
- Time resolved measurements, but fewer beamlines
- Current estimates indicate a similar (i.e. not much larger) data deluge than for SLS, but large uncertainties for the moment
- Experience from LCLS indicates that scientific data handling problem has to be taken care of from the very beginning.