



EXI, Logistics and ISPyB DESY/P11

Status report

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HELMHOLTZ



A new member since September 2023

About me

- ~15 years in the field
- Software engineer
- Software product owner
- ex-CEO of a software consulting company
- Have passion in information architecture
- Open-source enthusiast
- Speaker at multiple IT conferences



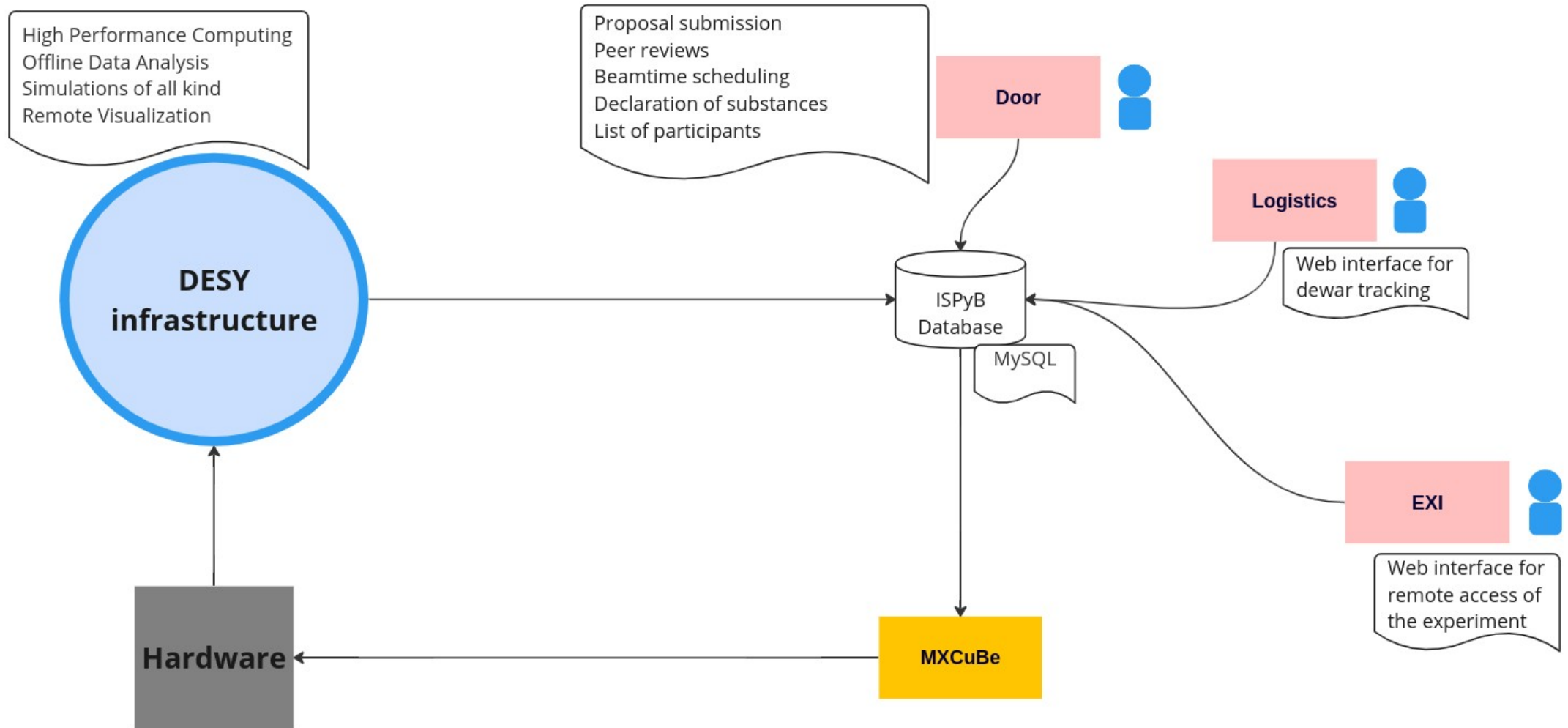
SCaLE conference
with Ken Thompson



Ubuntu Summit
with Mark Shuttleworth

ISPyB infrastructure map in DESY/P11

High-level overview



What was done.

Lessons learned

01 Managed to deploy locally

- JBoss
- Scripts for DB
- EXI
- Java versions

01.1 EXI

- Production and development environments
- ExtJS library in the project tree (~24K files)

01.2 Jboss

- Standalone.xml (need to know modules)
- Maven dependencies (not all in maven central)

01.3 Scripts for DB

- Need to find in different places

02 DESY infrastructure analysis

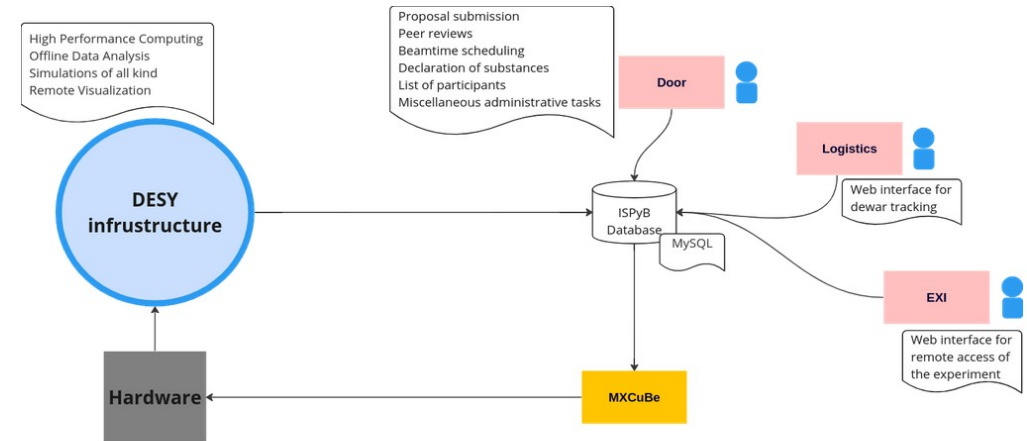
- A lot of stakeholders

03 mxhub

- Dedicated repo of P11 MX related components

mxhub

Meta repo for MX related projects



Components

Name	Platform	Repository
ISPyB	Java	GitHub
EXI	JavaScript	GitHub
Logistics	Python	GitHub
MXCuBe	Python, Tango Controls	GitHub

Future plans

Adoption for P11 specific needs

→ Implementation of P11 requests

→ Write documentation for P11

- Deployment documentation
- User documentation
- Developers documentation

→ Java version - refactoring

- Migrate to JDK 21
- Remove J2EE

→ Deployment

- Enable user access
- Integration with the new DESY authentication system
- Observability

Name	Platform	Repository
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→ mxhub-ispyb

- Remove internal GUI from ISPyB
- Create docker image for DB bootstrap

→ mxhub-mxcube

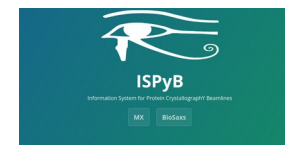
- Andrey Gruzinov is in charge

→ mxhub-exi

- Remove extJS from the project tree
- Webpack

→ mxhub-logistic

- Thorben Melson is in charge



Welcome to ISPyB

ISPyB is a Laboratory Information Management System (LIMS) combining sample tracking and experiment reporting at synchrotron beamlines. It has been in production for many years, and is structured so as to make development and maintenance easy for software teams.

It was initially developed through a joint ESRF+HPS initiative in 2005.

In 2017, a collaboration agreement has been signed for the development of ISPyB between the major synchrotron facilities in Europe.

Today ISPyB is actively supported by the following partners: ESRF, DESY, SLS, MAX IV, NORD, EMBL, Global Phasing Ltd, DESY, ALBA.

Select the technique you are interested in:

ISPyB_logistics

Adaption of the system by Diamond

- Dewar Management
- Basics like the Diamond version
- Working without SynchWeb for Dewar tracking
- Hopefully working with 2 ISPyB databases (DESY and EMBL Hamburg)
- Planned addition
 - automated control of a Dewar Hotel (Hänel Lean-Lift) in Dec 23

Thank you

Contact

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