Further development of Open Source products: EPICS in the Max Planck Society

Patrick Oppermann
Motivation

- Scientists need digital data acquisition and data output
- Standard solutions are based on PCs which are used for multiple tasks and are then equipped with data acquisition cards
- Manufacturers of data acquisition cards provide software/drivers for common data processing software (LabView)
- For these systems there is normally no possibility of scaling
Project Goals

• Establish EPICS in the Max Planck Society
• Increase the visibility of EPICS within the MPG
• Reduce the hurdle to using open source software and hardware
• Improve the documentation of EPICS and create training documents
• Set up of Demo hardware
Software and Hardware

• EPICS based data acquisition and storage
  • Cloud based storage
• Time and Frequency readout
• Stand-alone systems
• Open Source Hardware
• Adapting the system for the user
• (Possibility to enable fast data processing)
Documentation and Demo system

• Instructions in German and English language
• Simple user examples and modules for basic tasks

• Finished system for table top experiments
• Transportable "experiment" with simple stabilization (for example laser power)