

CERN openlab openlab-III Planning 2009-2011

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Proposed organizational model

- Maintain **openlab II** model:
 - two-level membership
 - level of contributions
 - cash/kind mix
- Remains **flexible**
 - propose adjustments when appropriate



Communication Officer

One proposed openlab-III adjustment:

- Hiring of a **communication officer dedicated to CERN openlab**
 - funded in part by CERN, in part by partners/contributors
 - to carry out openlab general tasks as well as partner-specific tasks
- To be implemented this year in openlab-II
 - funding for this year agreed with **Intel** and **Oracle**



The scientific goals of openlab-III

2009-2011

The 1st exploitation period of the LHC

- The key **computing challenge** ahead of us
 - Constant pressure on overall **computing infrastructure**
 - Tremendous amounts of **real data** (15 PB/yr)
 - High demands on **reliability** of computing services (both locally and in the Grid)
 - Projected **30%** annual growth rate
 - Rapid increase in demand for **complex data analysis**



Some possible openlab R&D themes

Translating **goals** into R&D **themes**

- **Thermal** and **energy** optimization
- Optimized **Grid services** and **monitoring**
- **Many-core** CPU servers w/improved software
- **Data server** optimization (Oracle & Castor)
- **Complexity / throughput** of backbone network
- ...



The proposed principles for activities

Selecting activities with partners

- **Not** revive openlab-I model
 - When every activity had to be a component of a grand unifying construction - like the opencluster
- Use the **successful openlab-II approach**
 - Pragmatic selection of activities matching partner and CERN interests
 - With suitable manpower investment
- Additionally -based on openlab-II success- propose **opportunities of collaboration** between partners



The clustering of projects in classes

- Use openlab-II clustering in classes of projects/activities if relevant
- Keep **flexible, adapt**