Grid Services and Nodes

Branimir Acković

acko@scl.rs

Scientific Computing Laboratory

Institute of Physics Belgrade, Serbia

Oct. 07, 2009

www.eu-egee.org

- User Interface (UI)
- Worker Nodes (WN)
- Computing Element (CE)
- Storage Element
- Site Berkely Database Information Index (sBDII)
- Berkely Database Information Index (BDII)
- Workload Management System (WMS)
- Logging and Bookkeeping Service
- Virtual Organization Membership Service (VOMS)
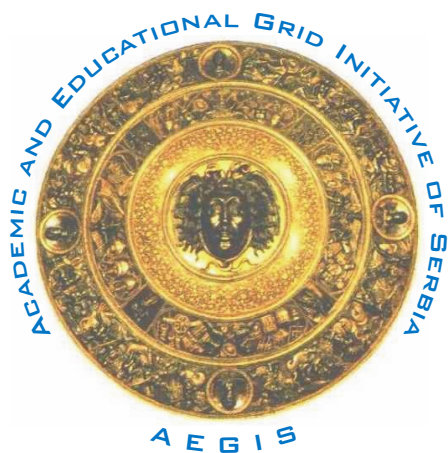- MyProxy service (PX)
- Logical File Catalog (LFC)

Enabling Grids for E-sciencE
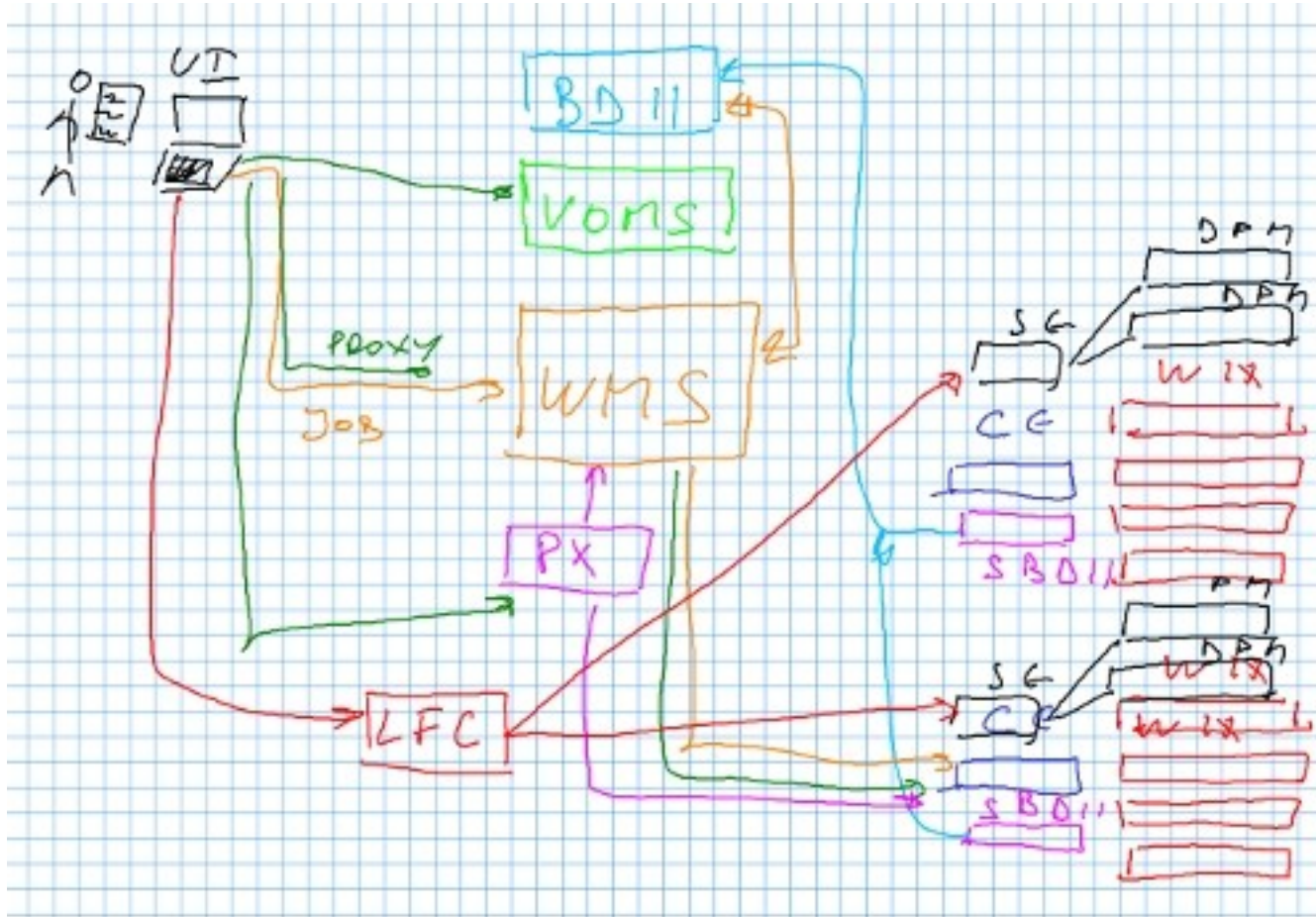
- Any Linux desktop/laptop
- Best suite for RedHat based distributions
- Small CPU load

- CPU performance
- RAM
- Interconnection for Parallel computing
- Best suite for RedHat based distributions

Enabling Grids for E-sciencE

- Head node for WN-s (BATCH server)
- Huge CPU load

SCIENTIFIC
COMPUTING
LABORATORY

- SE server node
  mysql (or oracle) database
  small CPU load

- SE client (disk server)
  huge disk space
  small CPU load

- Local Information system
- ldap based
- Small CPU load

- Top level BDII
- ldap based
- Huge CPU load
- Huge network load

- Workload Management System
- Logging and Bookkeeping Service

- Manage jobs

- Huge CPU load
- Huge disk load
- Huge network load

- Virtual Organization Membership Service
- Mysql based

- Small CPU load
- Small disk load

SCIENTIFIC
COMPUTING
LABORATORY

- Extended proxy

- Small CPU load
- Small Disk load

- Logical File Catalog
- Mysql based

- Small CPU load
- Small disk load
- Small network load