

Development of stable Grid service at the next generation system of KEKCC

G. Iwai, H. Matsunaga, K. Murakami, Tomoaki Nakamura, T. Sasaki, S. Suzuki, W. Takase
Computing Research Center, HIGH ENERGY ACCELERATOR RESEARCH ORGANIZATION, KEK

Grid service at KEK

- ✓ Start of the official operation in 2006
- ✓ Supporting VOs: Belle/Belle II, ILC, Geant4, T2K, KAGRA and some local VOs

Towards the full scale Grid operation (available since Sep. 2016)

- ✓ Start of physics data taking of Belle II experiment
- ✓ Resource enhancement by the upgrade of KEK Central Computer System
- ✓ Deployment of the new central service
CVMFS Stratum0/1, AMGA, FTS3 for Belle II Grid
- ✓ Building robust Grid service
 - Redundant configuration
CREAM, CVMFS Stratum0/1, BDII-top, GridFTP servers behind StoRM
 - High availability configuration by LifeKeeper
VOMS, AMGA, LFC
 - Uninterruptible operation against the scheduled power outage
VOMS, AMGA, LFC, FTS3, ARGUS, BDII-site
- ✓ Improvement of the network connectivity
 - Fully migrated to LHCONe, 20G + 10G for EU, 100G for US sites provided by SINET
 - Two GridFTP servers with 4x10G bandwidth dedicated to the Belle II raw data transfer
 - Three GridFTP servers with 2x10G bandwidth for Belle II analysis and the other VOs

