

Some Remarks on BELLE(2) Computing @ DESY

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DESY Grid Center: Grid + NAF

- Grid and NAF are two completely **seperated** systems
- The DESY Grid system is part of a **global** infrastructure
 - concept of Virtual Organizaion (VO)
 - access is remote-like even within DESY
- The NAF is a **local** system in DESY
 - AFS, large distributed scratch space (SONAS)
- Grid & NAF access the DESY mass **storage** system
 - as a tier-2 DESY hosts analysis data
 - DESY is well connected to the world



Belle(2): BELLE @ NAF

> Data files are supposed to be store in dCache:

- /pnfs/desy.de/belle
- /pnfs/desy.de/belle/belle1
- /pnfs/desy.de/belle/belle2
- /pnfs/desy.de/belle/belle2/DESY

> Scratch space on the NAF is big but limited

- /nfs/dust/belle1
- /nfs/dust/belle2
- ~ 1TB per user

> AFS space is not suitable for data

- /afs/desy.de/user/g/gellrich
- Code, configs



Belle(2): BELLE Storage Status

> Data files are supposed to be store in dCache:

- Total available: 500TB
- 470 TB /pnfs/desy.de/belle
- 258 TB /pnfs/desy.de/belle/belle1
- 212 TB /pnfs/desy.de/belle/belle2

> BELLE1:

- 136 TB /pnfs/desy.de/belle/belle1/mc
- 122 TB /pnfs/desy.de/belle/belle1/b*
- 3.7TB /pnfs/desy.de/belle/belle1/DESY/belle2 ?

> BELLE2:

- 171 TB /pnfs/desy.de/belle/belle2/TMP
- 35 TB /pnfs/desy.de/belle/belle2/users



Belle(2): Technical aspects

> Grid:

- Hundreds of CPUs in Grid cluster (not *bird*!)
- `voms-proxy-init -voms belle:/belle`
- `arcsub -c grid-arc4.desy.de <job.xrsl>`
- `srm://dcache-se-desy.desy.de/pnfs/desy.de/belle/belle2/DESY/x`
- **clients:** `gfal_copy`, `srmcp`, `lcg-cp`, `dccp`

> NAF:

- NAF Wiki: <http://naf.desy.de>
- *bird* cluster (not Grid!)
- `nafhh-belle01: ls -l /pnfs/desy.de/belle/belle2/`

> Data Management:

- How to get data (MC) from KEK? (→ BELLE2 Computing)
- Where to store local data?

