

# OMB:Switzerland-QR15

|             |                    |                      |              |                   |                    |                   |                           |                 |
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| Quarterly Report Number | NGI Name | Partner Name | Author     |
|-------------------------|----------|--------------|------------|
| QR 15                   | NG-CH    | Switzerland  | Sigve Haug |

## 1. MEETINGS AND DISSEMINATION

### 1.1. CONFERENCES/WORKSHOPS ORGANISED

| Date | Location | Title | Participants | Outcome (Short report & Indico URL) |
|------|----------|-------|--------------|-------------------------------------|
|------|----------|-------|--------------|-------------------------------------|

### 1.2. OTHER CONFERENCES/WORKSHOPS ATTENDED

| Date            | Location  | Title        | Participants | Outcome (Short report & Indico URL)   |
|-----------------|-----------|--------------|--------------|---|
| 2013-12-13      | Edinburgh | DPM workshop | 25           | Detailed updates on status of the DPM middleware, future developments, detailed technical information for an optimal deployment and operation of existing and new components. |
| 2013-12-04 - 06 | Amsterdam | EGI Workshop | 100          | H2020 discussions   |

### 1.3. PUBLICATIONS

| Publication title | Journal / Proceedings title | Journal references<br><i>Volume number</i><br><i>Issue</i><br><i>Pages from - to</i> | Authors<br><i>1.</i><br><i>2.</i><br><i>3.</i><br><i>Et al?''</i> |
|-------------------|-----------------------------|--|---|
|                   |                             |  |   |

## 2. ACTIVITY REPORT

### CSCS''

- 2.1. Progress Summary

- Testing removal of /expirment\_software mount on WN

- 2.2. Main Achievements

- Completed migration SLURM on all CREAMs, ARCs, and WN  
 - Completed migration to dcache 2.6  
 - Upgraded to postgres 9.3  
 - Moved NFS mounts to new NAS managed by CSCS storage team  
 - Allowed for file deletion over /pnfs mount

- 2.3 Issues and Mitigation

- Working on publishing accounting to new APEL server. Currently working on issues relating to cream/slurm accounting as well as jura
- Infiniband switch died, replaced switch no major issues apart from the failed jobs

## "PSI"

- 2.1 Progress Summary

- configuration management: (puppet) repositories migrated from subversion to GIT
- upgrade to Nagios 4.0.2
- UI upgraded to emi-ui-3.0.2-1.e15
- Upgraded CMS Frontier to 2.7.STABLE9-16.1
- Upgraded PostgreSQL to 9.3

- 2. Main Achievements

- Migrated from dCache 2.2 to 2.6
- SE management improvements:
  - \* Access permission improvements for SE. Users assigned to 10 groups, dcache directory tree allows only write access to appropriate user and group areas. Risk of Erroneous production of files in wrong locations or deletion of other users/groups files thereby limited
  - \* Dcache access permission rules are created by scripts that are integrated with user management.
  - \* To speed up per user and group space accounting, specific persistent ("materialized") views were created in the underlying Postgresql DB (materialized views became available with postgresql 9.3). Code implementing the views available under [https://bitbucket.org/fabio79ch/v\\_pnfs](https://bitbucket.org/fabio79ch/v_pnfs)
  - \* Xrootd service available

- 3. Issues and Mitigation

- Did not upgrade SL5 WNs to UMD3 because of the SL5 UMD3 tarball was not yet available and we want to keep to our shared file system deployment. Maintainer told us that the tarball will become available within January.
- dCache 2.6.19 still doesn't update the atime field of a file. We would like to use the atime information for locating files that were not accessed in a long time.

## UZH Nothing reported

## UNIBE-ID

## UNIGE-DPNC

- Progress Summary

- Major update of the DPM SE, ongoing migration to SLC6, virtualization of central services, maintenance and stable operation.

- Main Achievements

- Upgrade of the DPM SE
- 4 new disk servers (IBM x3630 M4, 43 TB for data) running SLC6 and added to the DPM
- 6 old Solaris disk servers drained from data and retired (2 reused for NFS)
- DPM software upgraded to 1.8.7

- WebDav and xrootd interfaces added
- Data access via xrootd tested and documented for users
- Reorganization of data in the SE for the new ATLAS DDM 'Rucio'
  - renaming process run by Cedric Serfon for DDM ops using WebDav
  - two failed attempts in Dec 2013 with 'Too many connections' errors; help from DPM experts not on target
  - success in Jan 2014, with local jobs not running
- Preparing a funding request
- Yearly review of accounts
- Change of nearly all IP numbers, making room for growth
- A new web server running SLC6
- Upgrade of Ganglia monitoring to the version 3.1.7 (the one in SLC6) compiled from sources on the SLC5.
  - Preparing virtual machines for more central services (ARC CE and the batch server)

### • 2.3. Issues and mitigation

- Federated Data Access using Xrootd (FAX) no working yet. We lack support.
- Ganglia 3.1.7 does not compile on Solaris 10. No solution yet.
- One hardware problem - overheating hardware raid.

### UNIBE-LHEP Progress summary

- New cluster with ~800 cores fully commissioned, fronted by an ARC CE with ARC 3.0.3-1.el6.x86\_64 (EMI-3)
  - Both production clusters commissioned for ATLAS analysis payloads and Multi-core ATHENA workloads
  - Started work to migrate to ARC native account reporting to APEL (Jura)
  - DPM SE re-configured for WEB\_DAV data access for ATLAS, required for for the new ATLAS DDM 'Rucio' (upgraded all head and pool nodes to the latest DPM versions on EMI-3: 1.8.7-3.el6.x86\_64)
  - Integrated VO t2k.org on both clusters and the SE
  - Installed national instances of VOMS and GIIS to replace current issues that will be retired by SWITCH. Commissioning in progress.
  - Gathering quotes for cluster expansion
    - Quite stable operation of the production cluster (ce.lhep).
- Preparation for migration from CentOS5 to SLC6 and expansion with nodes obtained from CERN/ATLAS
- A new cluster with ~1500 cores (ce01.lhep) has been commissioned and operation stabilised. Some outstanding issues (details below)

#### \* Main achievements

- Operation stability improved considerably

#### \* Issues and mitigations

- Network issues on UI's and one DPM pool node. Not easily understood. Eventually, after workarounds were in place, understood to be caused by stray ganglia processes, yet the exact mechanism causing the upset is unknown.
- One of two clusters not publishing to SGAS national instance: intervention on the SGAS server was required (permission problem)
- Both clusters (and also others in CH) not being accounted for in APEL since July 2013. Not detected until January 2014 (no GGUS ticket issued). Currently working with SWITCH in order to bring the APEL account repository up to date

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# Article Sources and Contributors

**OMB:Switzerland-QR15** *Source:* <https://wiki.egi.eu/w/index.php?oldid=64041> *Contributors:* Krakow, Shaug