Wikiprint Book

Title: Latest news on the DEEP-EST prototype system

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Latest news on the DEEP-EST prototype system

This is a summary of the latest news concerning the system. For a list of known problems related to the system, please refer to this page.

Last update: 2020-10-06

System hardware

CM nodes

• EnergyMeter? kernel module has been updated

ESB nodes

- remaining two ESB racks have been installed: now 75 ESB nodes present
- · currently connected via IB EDR, to be changed to Extoll network later this year

DAM nodes

- all nodes still run in app-direct mode for the DCPMM (see #2366)
- · BIOS update has been rolled out to all DAM nodes

Network Federation Gateways

- two gateway nodes for IB ↔ Extoll bridging between CM/ESB and DAM are available for the users
- · for an example on how to use the gateway nodes and for further information, please refer to the batchsystem wiki page.

Global resources

NAM

• a NAM SW implementation has been done, a test environment on the DAM is being prepared

File Systems

- DEEP-EST storage has been rebuilt for performance reasons
 - BeeGFS servers and clients have been updated
 - the SDV is de-coupled now meaning that the SDV nodes only mount /sdv-work (not /work) and the DEEP-EST nodes only mount /work (not /sdv-work)
- BeeGFS (/work) will get user quotas (see section "User management")
- It is possible to access the \$ARCHIVE file system from the deepv login node under /arch. For more information about \$ARCHIVE, please refer to
 the <u>Filesystems page</u> and see also the hint in the MOTD for efficient usage of the archive filesystem

DCPMM usage within BeeGFS currently being tested on dp-dam03

• more tests (with CentOS 8) to follow

System software

SW updates

- new SLURM features are being integrated and will be rolled out in near future:
 - extended logging and improved resource management for jobs within a workflow
 - burst buffer pluggin
- 2020a Easybuild stage is currently being set up
- ParaStationMPI version (5.4.6-1) has been installed and is used as default now
- Intel oneAPI Beta 9 version has been installed to /usr/local/intel/oneapi/inteloneapi

User management

BeeGFS Quotas

- a quota for the BeeGFS file system (mounted to /work) has been implemented
 - thresholds to be defined