

## **Wikiprint Book**

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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 [Filesystems page](#) 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