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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: 2021-01-12*

### System hardware

#### ESB nodes

- in CW51 the update of the first ESB rack started for using Extoll Fabri3 network (instead of IB)
  - work is still ongoing

#### DAM nodes

- Persistent memory for nodes dp-dam[03-16] has been extended to 3 TB with next maintenance (CW51)

#### Network Federation Gateways

- Gateway nodes have been completed in CW51 to the final layout:
- 2 NF-GW EDR/Fabri3
- 2x NF-GW 40GbE/Fabri3
- 2x NF-GW EDR/40GbE
- **due to the ongoing Fabri3 installation two of the NF-GWs (the ones equipped with Fabri3 PCIe cards) are not in operation yet**
- 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 has been set up on dp-dam[09-16].

#### File Systems

- **a new All Flash Storage Module (AFSM) is going to be added to the system in January 2020**
- 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 do not mount /work anymore and the DEEP-EST (CM,DAM,ESB) nodes only mount /work (not /sdv-work)
- BeeGFS (/work) user quotas is in place now (see section "User management")
- It is possible to access the \$ARCHIVE file system from the deepv login node under /a.r.ch. 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 different kernel versions) being done

### System software

#### SW updates

- new SLURM features are being integrated and will be rolled out soon:
  - extended logging and improved resource management for jobs within a workflow
  - burst buffer plugin
- 2020 Easybuild stage is being set up
- Intel oneAPI Beta 10 version has been installed to /usr/local/intel/oneapi

#### User management

##### BeeGFS Quotas

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