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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: 2021-02-18

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

- first 8 DAM nodes (dp-dam[01-08]) are currently being integrated into Extoll Fabri3 network
- 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:
- 2x NF-GW EDR/Extoll (1 x Fabri3, 1 x Tourmalet)
- 2x NF-GW 40GbE/Extoll (1 x Fabri3, 1 x Tourmalet)
- 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 on 24./25. February**
- 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 `/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 has successfully been tested on dp-dam03 using a 4.19 kernel

System software

SW updates

- BeeOND integration into SLURM currently being prepared
- 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
- latest Intel oneAPI version is available in `/usr/local/intel/oneapi`

User management

BeeGFS Quotas

- a quota for the BeeGFS file system (mounted to /work) has been implemented
 - no need to activate thresholds yet