

## **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: 2022-09-15*

### System hardware

#### CM nodes

- the cluster nodes have direct EBR IB access to the SSSM storage nodes now (without using the IB ↔ 40 GbE gateway)

#### ESB nodes

- all ESB nodes (`dp-esb[01-75]`) are using EDR Infiniband interconnect (no Extoll anymore)
- SSSM and AFSM file servers can be directly accessed through IB

#### DAM nodes

- DAM nodes are using EDR Infiniband (instead of using 40 GbE and Extoll) now
- SSSM and AFSM file servers can be directly accessed through IB

#### Network Federation Gateways

- with the all IB solution NFGWs are not needed anymore ! this also affects heterogenous jobs
- `dp-nfgw[01,04]` (IB EDR ↔ 40GbE) still present, but not in use anymore
- remaining NFGWs are being used for BXI testing now: `dp-nfgw[02,03,05,06]`

#### SDV

- 4 node BXI test setup has been installed using the former GW nodes
- FPGA test nodes available for using FPGAs with oneAPI, OpenCL:
  - Arria10: `deeper-sdv[09,10]`
  - Stratix10: `dp-sdv-esb[01,02]`

### File Systems

please also refer to the [Filesystems overview](#)

- quota has been added to `/tmp` on `deepv` to avoid congestion
- the All Flash Storage Module (AFSM) provides a fast work file system mounted to `/afsm` (symbolic link to `/work`) on all compute nodes (CM, DAM, ESB) and the login node (`deepv`)
- the older System Services and Storage Module (SSSM) work file system is obsolete, but still available at `(/work_old)` for data migration
- SSSM still serves the `/usr/local/software` file system, but
  - starting from Rocky 8 image `/usr/local` will be a local file system
  - `/usr/local/software` will be shared and provided by the SSSM storage
  - in addition to the !Easybuild software stack the shared `/usr/local/software` filesystem will contain manually installed software in a `legacy` subfolder

### System software

- [ParaStation?](#) update (psmgmt) to 5.1.49-4 has been performed

### OS

- the decision was taken to use one Rocky linux image for all compute nodes
- transition from CentOS to Rocky Linux 8.5 has been finished on compute nodes
- login node `deepv` has moved to Rocky linux 8 as well
- file servers and master nodes to follow

## EasyBuild

- 2022 EasyBuild stage is being set up
  - new stage can be loaded as `Stages/2022`