

## **Wikiprint Book**

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This page is intended to give a short overview on known issues and to provide potential solutions and workarounds to the issues seen.

*Last update: 2022-12-02*

## Liquid cooling issues, CM and ESB nodes still not available !

**Please, use the support mailing list [sup\(at\)deep-sea-project.eu](mailto:sup@deep-sea-project.eu) to report any issues**

To stay informed, please refer to the [News page](#). Also, please pay attention to the information contained in the "Message of the day" displayed when logging onto the system. The system status is reported on [?JSC status](#) as well.

### Detected HW and node issues

#### Cooling issues

- pump failures for JSC cooling loop have been detected
- root cause still to be identified
- considering manual mode to allow for operation of CM and ESB nodes in the meantime

#### CM nodes

- dp-cn25: SEL ProblemsFW issues ([#2769](#))

#### DAM nodes

- dp-dam02: reserved for FPGA tests
- dp-dam16: testbed

#### ESB nodes

- dp-esb[11]: memory issues ([#2857](#))
- dp-esb[31]: GPU issues ([#2949](#))

#### SDV nodes

- deeper-sdv cluster nodes (Haswell) have been taken offline: deeper-sdv[01-16]
  - not included in SLURM anymore
  - deeper-sdv[09-10] used for testing (please contact [j.kreutz\(at\)fz-juelich.de](mailto:j.kreutz(at)fz-juelich.de) if you would like to get access)
- knl01: serves as golden client for imaging only
- dp-sdv-esb[01,02]: will only be powered on demand

### Software issues

#### MODULEPATH

- MODULEPATH variable seems to get overwritten though being set correctly in `/etc/profile.d/modules.sh`
- leads to various modules not being detected / found correctly
- re-setting the MODULEPATH manually might solve the issue, please try:

```
export MODULEPATH=/usr/local/software/skylake/Stages/2022/modules/all/Compiler/sidecompiler/GCCcore/11.2.0:/usr/local/s
```

#### Cuda and Rocky 8.6

New CUDA drivers on the compute nodes. In case of problems, please manually prepend your `LD_LIBRARY_PATH` (first for `libcuda`, second for `libcublas`, `fft`, etc.):

```
ln -s /usr/lib64/libcuda.so.1 .
ln -s /usr/lib64/libnvidia-ml.so.1 .
```

```
LD_LIBRARY_PATH=./usr/local/cuda/lib64:$LD_LIBRARY_PATH srun <srun_args> <exe> <exe_args>
```

### nvidia driver mismatch

- loading CUDA module and trying to run `nvidia-smi` (or any application trying to use the GPU) leads to

```
Failed to initialize NVML: Driver/library version mismatch
```

- workaround is to unload the driver module: `ml -nvidia-driver/.default`
- for further information, please also see [?here](#)

### nvidia profiling tools

- to launch the tools on a compute node using X-Forwarding another SSH session is needed:

```
srun --forward-x -p dp-esb -N 1 -n 1 --pty /bin/bash -i
ssh -X -J <your account>@deep.zam.kfa-juelich.de <your account>@<the node you received>
```

- you will still see a warning "OpenGL Version check failed. Falling back to Mesa software rendering.", but the profiling tool (e.g. `nsight-sys`) should start up