# Wikiprint Book

Title: Public/User\_Guide/PaS

Subject: DEEP - Public/User\_Guide/PaS

Version: 71

Date: 20.04.2025 04:14:16

# **Table of Contents**

| Login node                  | 3 |
|-----------------------------|---|
| Detected HW and node issues | 3 |
| Cooling issues              | 3 |
| CM nodes                    | 3 |
| DAM nodes                   | 3 |
| ESB nodes                   | 3 |
| SDV nodes                   | 3 |
| Software issues             | 3 |
| Cuda and Rocky 8.6          | 3 |
| nvidia driver mismatch      | 3 |
| nvidia profiling tools      | 4 |

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: 2023-10-11

# Please, use the support mailing list sup(at)deep-sea-project.eu to report any issues

Please refer to the <u>Project News Page</u>. 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 <u>?JSC status</u> as well.

#### Login node

• Time limit for user processes enforced on deepy login: Processes will be killed after 24 hours In case of problems, please contact niessen@?

#### **Detected HW and node issues**

#### Cooling issues

- pump in JSC cooling loop is running in manual mode: frequently running HPL jobs (with low priority) to create some load (waste heat)
  - HPL jobs can be killed on demand: in case of problems (your jobs being blocked by HPL runs), please contact j.kreutz@? or niessen@?

### **CM** nodes

```
    dp-cn03: #2374 - Kernel update
    dp-cn25: #2769 - SEL Problems
    dp-cn50: #2769 - Testbed for beegfs
```

#### **DAM nodes**

```
dp-dam02: <u>#2874</u> - Reserved for FPGA tests
dp-dam16: <u>#3231</u> - ECC Memory
```

# ESB nodes

```
    dp-esb[07]: #2881 - Wrong BIOS settings
    dp-esb[17]: #3196 - Energy meter not working
```

#### 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 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

# 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

- $\bullet \quad \text{workaround is to unload the unload the driver module:} \ \verb"nvidia-driver"/.default"$
- for furhter information, please also see <a href="mailto:?here">?here</a>

# 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 profling tool (e.g. nsight-sys) should start up