SuperMUC-NG

System Overview

SuperMUC-NG consists of

- 6,336 Thin compute nodes, dual socket, 48 cores and 96 GB memory per node
- 144 Fat compute node, dual socket, 48 cores and 768 GB memory per node

In total there are 311,040 compute cores with a main memory of 719 TB and a peak performance of 26.9 PetaFlop/s. All compute node are equipped with Intel Xeon ‘Skylake’ processors. The internal interconnect is a fast OmniPath network with 100 Gbit/s.

The compute nodes are bundled into 8 domains (islands). Within one island, the OmniPath network topology is a ‘fat tree’ for highly efficient communication. The OmniPath connection between the islands is pruned (pruning factor 1:4).

In addition to the compute nodes there are 64 Cloud Nodes (half of them equipped with 2 GPUs each).

For more details, see Hardware of SuperMUC-NG

Detailed Documentation on Using the System

- Access and Login to SuperMUC-NG
- Acknowledgement of SuperMUC-NG
- Application for a project on SuperMUC-NG
- Building and Running applications on SuperMUC-NG
- Compute Cloud of SuperMUC-NG
- Data Migration from SuperMUC to SuperMUC-NG
- Data Transfer Options on SuperMUC-NG
- File Systems of SuperMUC-NG
- Gauss Centre for Supercomputing
- Hardware of SuperMUC-NG
- Job Processing with SLURM on SuperMUC-NG
- Operational Concept
- Reporting obligations on SuperMUC-NG
- SuperMUC-NG Status
- Usage Statistics for SuperMUC

- HPC Software and Programming Support (see also: lrztools and lrzlib on SuperMUC-NG, or command: sw-info, or command module av.
- Compute Cloud of SuperMUC-NG
- Servicedesk for SuperMUC-NG

More Links

- HPC Calls for projects, allocations, support, or funding
- Courses, Training and Events for HPC
- Public Relations for HPC (including the scientific results obtained)