Maxwell

The Maxwell-Cluster is a resource dedicated to parallel and multi-threaded application, which can use at least some of the specific characteristics. In addition to serving as a medium scale High-Performance-Cluster, Maxwell incorporates resources for Photon Science data analysis, resources of CFEL, CSSB, Petra4, the European XFEL...

The Maxwell-Cluster is composed of a core partition (maxwell) and group specific partitions. All compute nodes are however available for everyone!

The Maxwell-Cluster is primarily intended for parallel computation making best use of the multi-core architectures, the infiniband low-latency network, fast storage and available memory. The cluster is hence not suited for single-core computations or embarrassingly parallel jobs like Monte-Carlo productions. Use BIRD, Grid or your groups workgroup server (WGS) for this kind of tasks.

The entire cluster is managed by SLURM scheduler (with some notable exceptions). The SLURM scheduler essentially works on a "who comes first" basis. The group specific partitions however have slightly different rules: though everyone can run jobs on group specific nodes, members of the group will have a higher priority and will compete non-group jobs off the partition. See Groups and Partitions on Maxwell for details.

- To get started, please have a look at the **Getting Started** page!
- The Maxwell Hardware page provides a list of currently available nodes & configurations.
- The Maxwell Partitions page provides a quick overview of the nodes, capacities, features and limits of the individual partitions.

- **Read the documentation!** It should cover at least the essentials. If you come across incorrect or outdated information: please let us know!

Search the compute space

Blog Posts

- Blog: RESOLVED: Infiniband trouble on Maxwell - no login possible created by Sven Sternberger Computing Oct 08, 2019 14:05
- Blog: New Jupyterhub extensions created by Sven Sternberger Computing Sep 23, 2019 20:34
- Blog: Jupyterhub interruption created by Sven Sternberger Computing Sep 23, 2019 20:33
- Blog: Solved: home filesystem partly not available created by Sven Sternberger Computing Sep 19, 2019 09:44
- Blog: Python3 update created by Sven Sternberger Computing Sep 13, 2019 16:12
- Blog: Changes in sbatch command file created by Sven Sternberger Computing Sep 13, 2019 15:45
- Blog: Updated GIT created by Sven Sternberger Computing Sep 12, 2019 15:32
- Blog: Solved: Scheduling issues in the all and allgpu partition created by Sven Sternberger Computing Sep 12, 2019 13:54

Acknowledgments and References

If you find the resource useful for your work, we would greatly appreciate to learn about publications, which have been substantially benefiting from the Maxwell-Cluster. Drop us a mail at maxwell.service@desy.de. Acknowledgement of the maxwell-resource would also be greatly appreciated. It'll help to foster the cluster, for example: *"This research was supported in part through the Maxwell computational resources operated at Deutsches Elektronen-Synchrotron (DESY), Hamburg, Germany"*

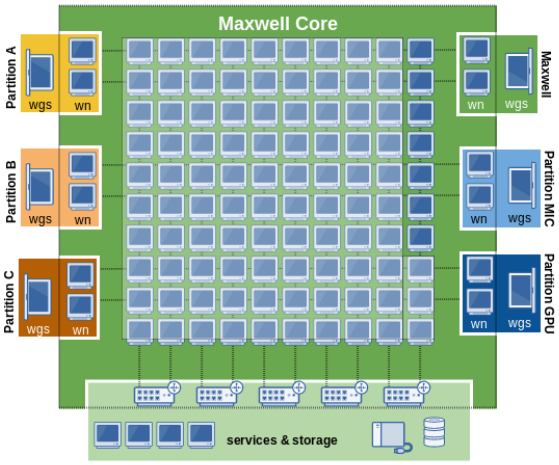
Contact

For any questions, problems, suggestions please contact our ticket system: maxwell.service@desy.de

All Announcements will be sent via maxwell-user@desy.de. Users with the maxwell-resource are automatically subscribed.

We strongly recommend that all maxwell-users without maxwell-resource self-subscribe even if you are using exclusively group-specific resources.

Subscribe: https://lists.desy.de/sympa/info/maxwell-user


Maxwell Core
Partition A
wgs
wn
Partition B
wgs
wn
Partition C
wgs
wn
wn
wgs
Maxwell
wn
wgs
Partition MIC
wn
wgs
Partition GPU
services & storage