NSC Site Update

Jens Larsson

2024-09-26, Ljubljana

WLCG @ NSC - dCache/Serenity

Disk

- 2800TB¹, 7xDell PowerEdge R760xd2 with 24x20TB.
- 1372TB¹, 7xHP ProLiant DL385 Gen10 Plus, 16x14TB.

Tape

• 2xDell PowerEdge R7515, 8x1.8TB SSD.

The remaining tape pools and the system server upgraded with Rocky 9.

¹) usable space

WLCG @ NSC - ARC/Bluegrass

- New hardware procured during spring. 3xPowerEdge R660 with 10x2TB SSD each for ARC cache and one PowerEdge R660 with 2x2TB SSD as system servers with Ganeti. Mostly configured but not deployed yet.
- Compute nodes now run Rocky 9. Surprisingly few issues during the deployment.
- New hardware have Rocky 9.
- Old hardware (system server, cache), VM:s for Alice, Atlas and node management and slurm are still running CentOS 7. Work ongoing.

Networking

No news.

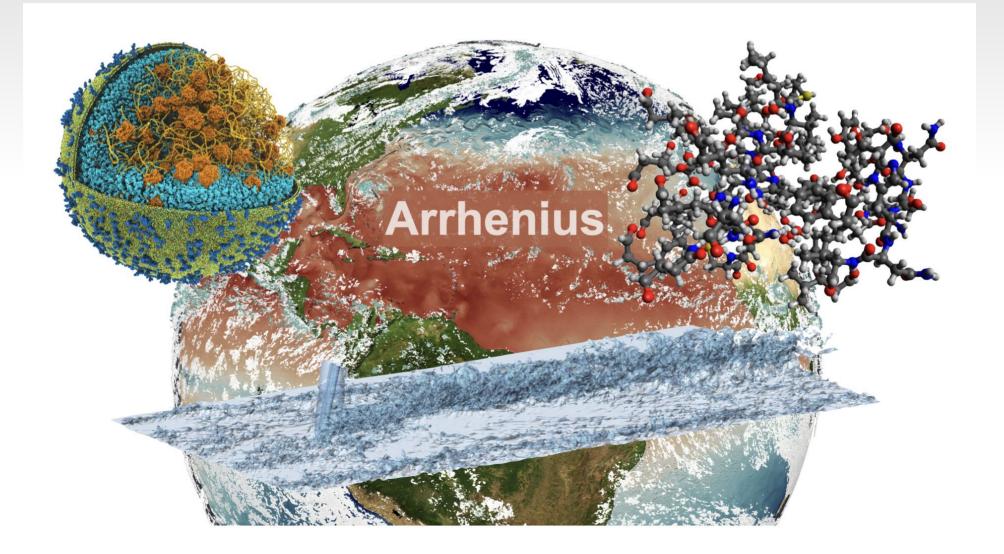
Status:

- Linköping university: 2x400Gpbs.
- NSC: 6x100Gps.
- Serenity+Bluegrass: 3x40Gpbs.



• Still working on CentOS 7 to Rocky 9 migration, but clear progress. Everything related to WLCG will soon be complete. Other systems still lagging a bit due to issues with related services (LDAP anyone?).

Arrhenius a EuroHPC Midrange System



Arrhenius a EuroHPC Midrange System

The grand SNIC NAISS all-in-one solution for all Swedish academic computing. Will solve everything. Will probably come with a kitchen sink.

Plenty of secret negotiations ongoing. Tenders will probably be sent out very soon.

Plan is still to order the system during the winter, build computer room during spring, install next summer and operations next fall. I think.

Plans for computer room are finalizing. Second cell in the big computer building will be used. Two floors with computers on the top floor and water cooling and electricity on ground floor. Heavy duty elevator.

Still no fun pictures.

Arrhenius a EuroHPC Midrange System

ExaScale

- Jupiter, Jülich, Germany
- Jules Verne (GENCI+SURF), CEA, France

Pre-Exascale

- LUMI, Kajani, Finland
- Leonardo, Bologna, Italy
- MareNostrum5, Barcelona, Spain

Mid-Range

- Daedalus, GRNET, Greece
- Levente, KIFU, Hungary
- CASPIr, Univ of Galway, Ireland
- EHPCPL, Cyfronet, Poland
- Arrhenius, Linköping, Sweden

PetaScale

- Vega, Maribor, Slovenia
- Meluxina, Bissen, Luxenbourg
- Karolina, Ostrava, Czech Republic
- Discoverer, Sofia, Bulgaria
- Deucalion, Guimarães, Portugal