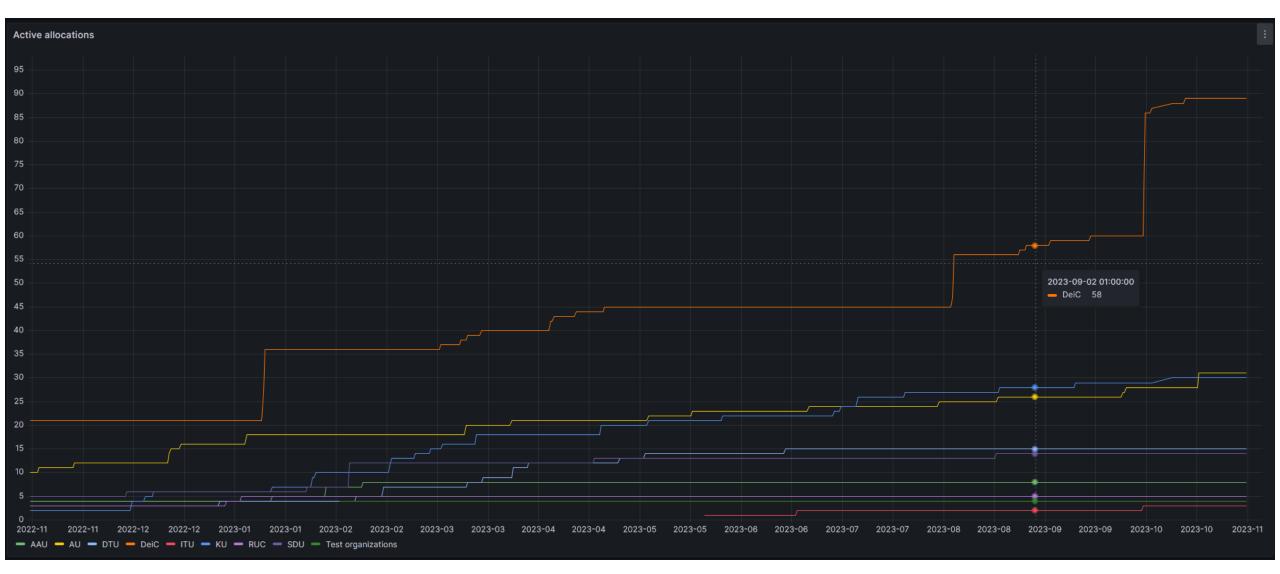


# LUMI STATUS

DeiC 2023 Conference.







## LUMI-C and LUMI-G

- LUMI-C
  - Now 2048 nodes.
  - 2x AMD EPYC 7763 64 cores each
  - One slingshot interconnect pr node.
- LUMI-G
  - 2928 GPU nodes
  - 4 AMD MI250x GPUs pr node (aka 8 GPUs)
    - Each with a slingshot interconnect
- Use LUMI-G for scale and LUMI-C for supplement!
  - LUMI-C queue is hugely oversubscribed.



## Other LUMI news

- LUMI-O
  - Object store less TBH cost. Use it for large data set in an S3 like way
- LUMI on demand
  - Will be online from 13.11.
  - Type 1 like interactive HPC
  - Still early and needs some improvement.
- Al improvement
  - Effort on making it easier to do AI/ML workload.
- Soon federated SSH
  - No more public SSH keys.
  - DeiC WAYF part of the solution use your university/wayf login (even two factor)
  - This could also be used by national HPC centers and EuroHPC centers.(if they want)



#### More LUMI news

- Containers
  - DeiC take leadership in developing it.
  - Focus: must be easy to use.
- DeiC taking ownership of the Danish part of LUMI (from DK uni)
  - More hands on by DeiC to make sure information goes to universities front offices.
- For up-to-date description on system use: https://docs.lumisupercomputer.eu/
- LUMI will continue to run until end of 2027.



#### COTAINR

- New release
  - Better warning and error messages
  - Small bugfixes to improve the user experience.
- Use it for your python workload on LUMI
  - We want to extent it to R, spark and other framework used but time is limit so help is needed.
- Soon support for more EuroHPC facilities. But also work in progress for local AAU HPC facility.
  - But also want it to work on all the other Danish national sites.
- Working closely with AMD and HPE on creating highly optimized containers for LUMI.
- Open source <u>https://github.com/DeiC-HPC/cotainr</u>
- Documentation on https://cotainr.readthedocs.io/en/stable/