

# SiGNET report

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Andrej Filipcic

# Status

- 8k-cores, very old ones to be decommissioned (~1500)
  - Some new nodes to be purchased this year (epyc, 64-core, 10Gb NIC, SSD)
- Disk storage: 4.1PB
  - All pools were upgraded to 25Gb/s NICs, works well
  - After upgrading NICs all instabilities were resolved
  - One recent crash, Infortrend box needed a reboot
- External connectivity: the main bottleneck
  - 20Gb/s right now
  - Internal LAN prepared for 100Gb/s
  - Main router: did not work, BGP issues, not working properly
  - Plan: get a new 100Gb/s router (eg till summer)
- To consider the future due to Vega:
  - Maybe less resources to reduce maintenance cost (power)
  - Sharing new resources with JSI

# Additional resources

- NSC
  - ~2k cores, not much change recently
- ARNES:
  - Upgraded to 10k cores, cpu + gpu, ~100 new machines
  - General purpose
- HPC.RIVR Maister:
  - Off right now, issues with ipv6 connectivity
  - Future not yet clear
- Vega: 125k machine
  - Just put in production
  - More info later

# WAN & Storage

- ARNES: 100Gb/s WAN
- Clusters:
  - SiGNET, NSC: 20Gb/s, 100Gb/s few months
  - Vega: 2x100Gb/s, future 5x100Gb/s
  - HPC Arnes: 30Gb/s
  - Maister: 100Gb/s but through firewall, not on LHCONE
- Consolidate part of storage on Vega - dCache on Ceph (20PB total)
- Plans for further data centers for SLING - Slovenian Supercomputing Consortium
  - Dual location
  - Tape archive