PAUL SCHERRER INSTITUT

WIR SCHAFFEN WISSEN – HEUTE FÜR MORGEN

Derek Feichtinger ::

Updates from the HPCE Group

SCD/AWI Department Meeting, 30. April 2024

PAUL SCHERRER INSTITUT

Outline

PAUL SCHERRER INSTITUT

Current HPC services

- Merlin 6
  - planned to run until end of 2024. GPU Resources may run longer (in discussion)
  - warranty of Storage valid until end of 2024
  - warranty for compute nodes partially running out, will not be extended. Calculated risk, could lose an enclosure.
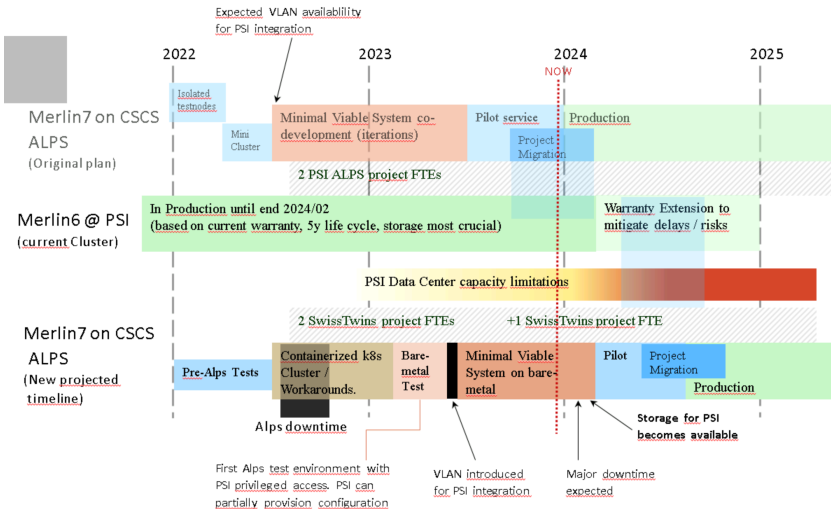- Tier-3
  - to be moved to CSCS as another vCluster (but in CSCS network), profiting from the Tier-2 cluster that CHIPP has been running at CSCS since 2006
  - move date still unclear, delayed through TransAlps Merlin7 priority. But CSCS has now put in place initial pieces of the supporting services infrastructure.
- project large scale HPC Ressources at CSCS PizDaint
  - ca 15 projects per year, allocations based on requests from a yearly survey
  - reduction of funding this year: 130kCHF -> 100 kCHF
  - CSCS shutting Piz Daint down this year around Summer with minimal overlap with Alps. Reason: Limits regarding electricity and costs (Alps consuming massive amounts of electricity)
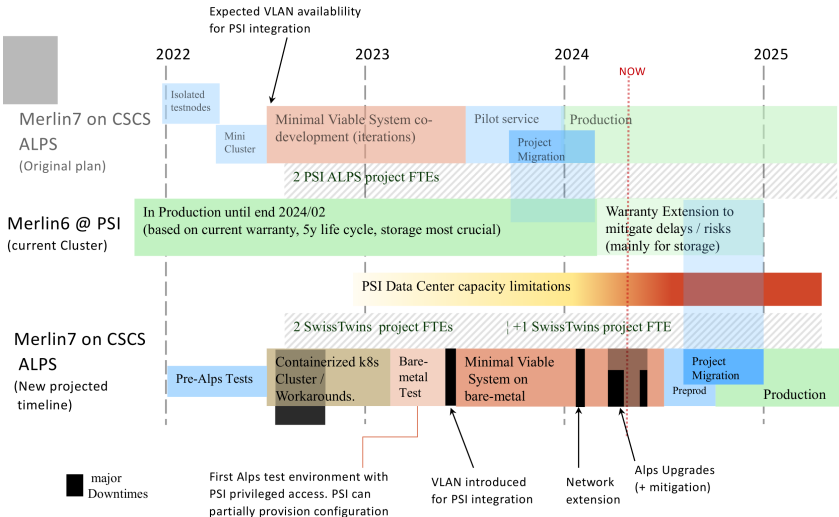 - projects need to get migrated from Piz Daint to new userlab resources on *Alps Eiger*.

PAUL SCHERRER INSTITUT

TransAlps Expected Timeline from December 2023

TransAlps New Timeline

PAUL SCHERRER INSTITUT

TransAlps Update

Shifting of Milestones by 3 months

- 2024-07-01: PSI Preproduction
- 2024-10-01: PSI Production

- Reasons
  - major Architectural change decided in Nov 23 due to limitations of CSCS supporting services platform: PSI must build own supporting service platform (VM/k8s) at PSI
  - 7 week Alps upgrades downtime March 18th - May 10th announced by CSCS on March 11.
    - mitigated by 2 nodes on another system, but still disruptive
  - Alps base platform not yet stable. Changes in underlying CSCS layers frequently affecting PSI development
- Availability of GraceHopper nodes
  - CSCS is currently installing Grace Hopper nodes in Alps. Scheduled to become available in May on some parts of Alps
  - PSI probably getting Grace Hopper nodes in Summer (but we may negotiate for getting access to some nodes for testing). Until then, we have some x86/A100 GPU nodes.

Merlin7 architecture