



Derek Feichtinger ::

HPCE Group (7905) Update

AWI department meeting, 27. May 2024



## 1 HPC Services

## 2 TransAlps



## 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 (decision by director). Calculated risk, could lose an enclosure.

### ■ Large scale HPC project 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*.

### ■ 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.
- **Price update** (67% increase in regard to Tier-2 storage) regarding mass storage may endander establishing of Tier-3 at CSCS. Starting discussions.



## Shifting of Milestones by 3 months

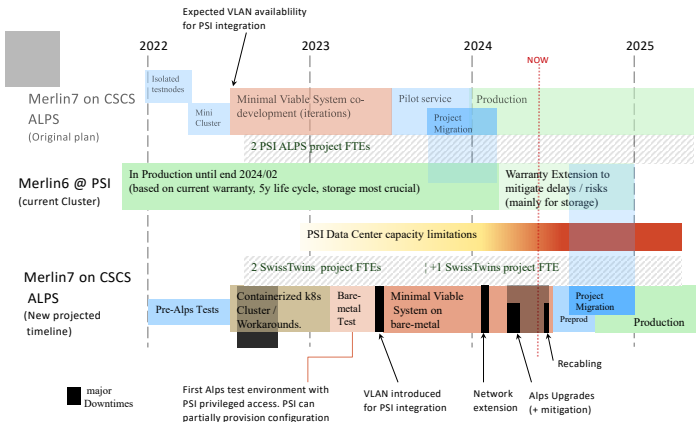
- 2024-07-01: PSI Preproduction
- 2024-10-01: PSI Production
  
- Reasons for shifting milestones
  - major Architectural change decided in Nov. PSI building own supporting service platform (VM/k8s) at PSI
  - Alps base platform not yet fully stable. Changes in underlying CSCS layers frequently affecting PSI development
  - March 11th: CSCS announced Alps upgrade downtime 18.03.-10.05.2024. Several revisions of schedule. Final upgrade step announced last week for 10.-14.06.
    - mitigated by 2 nodes on another system, but still disruptive
- **PSI production system and availability of GraceHopper nodes**
  - CSCS deployed Grace Hopper nodes in May, now finishing recabling
  - PSI projected to have some **initial Grace Hopper from June 17th!**
- Current high priority issue to resolve
  - Some communication problems between PSI VM services and Alps Lustre storage, possibly due to network MTU differences and path discovery failures



# TransAlps Timeline



## TransAlps Project Timeline



## Merlin7 architecture

