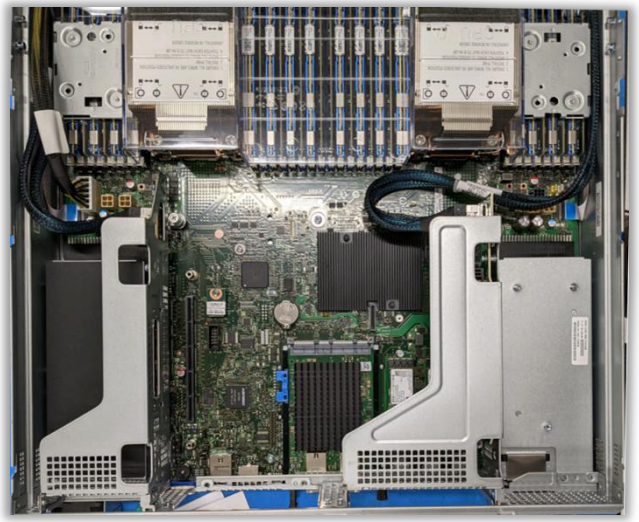

# ALCF Update

**May 21, 2026**

**Kevin Harms – Argonne Leadership Computing Facility**
**vDUG‘26**

# ALCF Systems

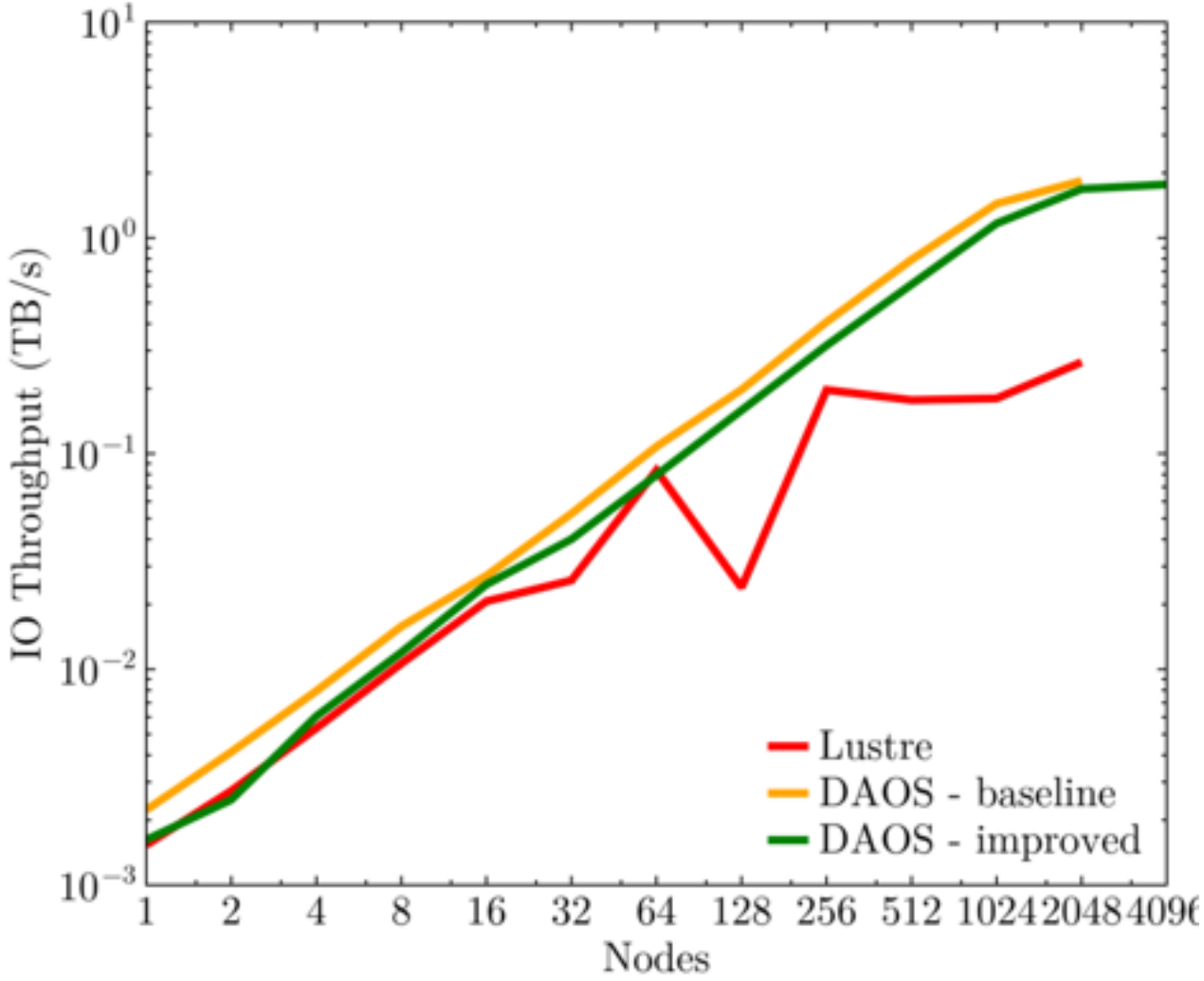
- Aurora
  - Current
    - daos_user – 377 nodes
      - Primary production system available to users
      - Running v2.6.4[.aurora-p4]
  - Future
    - daos_user – 800 nodes
      - Primary production system available to users
      - v2.6.5
    - daos_next – 200 nodes
      - Shared by ANL and HPE for scale testing
    - Remaining nodes for hot spares, other tasks/testing
- Sunspot
  - 20 server nodes
  - Running 2.6.5rc2
  - Used by staff for testing of initial software deployments and experiments



•1024 DAOS server nodes, each with:
- 16 x 512GB persistent memory
- 16 x 15.3TB NVMe drives
- 2 x HPE Slingshot NICs
- Dual CPU with 512 GB RAM

# Selected Result

- The ALCF Hack-a-thon was an in-person event held at Argonne during the week of April 27th.
- The “Entity-Dev” team was able to run their code using the ADIOS2 with the POSIX backend using the pil4dfs intercept library
  - EC_16P3GX
  - Default for other parameters
  - m_io.SetEngine("BPFile");
  - m_io.SetParameter("AggregationType", "TwoLevelShm");
  - m_io.SetParameter("NumAggregators", "0");
  - m_io.SetParameter("NumSubFiles", "0");
  - m_io.SetParameter("BufferChunkSize", "16777216");
  - m_io.SetParameter("MaxShmSize", "4294967296");
  - m_io.SetParameter("AsyncOpen", "true");
  - m_io.SetParameter("AsyncWrite", "true");
  - m_io.SetParameter("OpenTimeoutSecs", "600");
- 1.7 TB/s at 4k nodes




*Courtesy Ludwig Boess*

# Acknowledgements

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