Recent highlights from SDCC/SCDF technical advisory board (TAB)

Johannes Elmsheuser (BNL) on behalf of the SDCC/SCDF TAB
18 Sep 2025, BNL SDCF Stakeholders & Users Technical monthly meeting

Introduction - SDCC/SCDF technical advisory board

- Formed in February 2024
- Members:
    - Johannes Elmsheuser (ATLAS, co-chair), Frank Geurts (STAR), Alexei Klimentov (SDCC/SCDF), Jerome Lauret (STAR former SDCC), Sara Mason (CFN), Chris Pinkenburg (sPHENIX/PHENIX), Cedric Serfon (Belle II), Stuart Wilkins (NSLS2, co-chair), new: Michael Kirby (DUNE)
- TAB members represent major stakeholders in SDCC/SCDF
- Mostly bi-weekly meetings on Zoom
- Indico: https://indico.bnl.gov/category/537/
- Charge: see "Appendix A" in GoogleDoc link
    - *"To ensure the strategic and technical guidance of the Scientific Data and Computing Center (SDCC) at Brookhaven National Laboratory (BNL), a Technical Advisory Board (TAB) has been established. This board will play a pivotal role in steering the SDCC's evolution, setting priorities, and identifying optimal technical solutions and strategic directions."* ....

- Released TAB report in April 2025: (GoogleDoc) - editor: Jerome Lauret
- Executive Summary:
  - *This document consolidates feedback from **major stakeholders** of the Scientific Data and Computing Center (SDCC), encompassing their **experiences, needs, and recommendations**. The **diverse needs and priorities** of the stakeholders contribute to a wide range of perspectives on both satisfaction and the strategic direction of SDCC. Stakeholders generally expressed satisfaction with SDCC's core service reliability, staff expertise, and emerging collaboration. However, some stakeholders **identified several areas for improvement**, including communication and transparency, proactive support and adaptability, expertise and knowledge continuity, addressing specific service issues and reliability, streamlining user experience, and scalability concerns. Stakeholders also provided valuable insights into their future needs and desired enhancements to SDCC's technical capabilities and tools. This feedback will inform SDCC's strategic planning and efforts to better support the evolving needs of its stakeholders.*

- Propose several technical focustopics in future TAB meetings with SDCF expert presentation(s):
  - How is user authentication currently done at the moment ? Plans for the future, user management, integration into tools like indico, sympa etc. - *larger meeting/workshop under discussion*
  - Storage: disk, tape - are there new solutions ? Is there interesting feedback from latest related conferences ?
  - Interactive Computing, virtual machines, container management
  - Plans and news on Networking ?
  - Plans for next institutional cluster ?
- A 'lightweight' review/feedback on topic from TAB with some comments/actions item(s) to SCDF for future improvements/developments
- A 'pain point' mentioned in several past TAB meetings is a coherent lab wide user authentication/authorization/management (see next presentation)

A RECENT USER STORY

- A BNL NPPS group member sent a message 10 days ago: *"We have a user who would like to try EIC-Opticks that needs GPU and he has access to BNL cluster. Do you know what is the process to be able to use GPUs on BNL cluster?"* - code developments are done on a local machine with GPU
- Asked BNL SDCF experts for advice, mentioned https://www.sdcc.bnl.gov/services
- Partioning of resources at SCDF due to respective funding (and there are no EIC GPUs to SDCF ?), but isn't there an option for a "common" pool or "backfilling" possible ?
- Btw. request is a non-issue at CERN with *lxplus-gpu.cern.ch* (https://clouddocs.web.cern.ch/gpu_overview.html) and htcondor+CPU (https://batchdocs.web.cern.ch/gpu/index.html) or other workflows

Summary and Conclusions

- Planning to have more technical presentations from SCDF experts to provide input to future improvements/developments
- Please contact any of the TAB members if there are questions or comments