The PESO Project @ SC24

PESO: Partnering for Scientific-Software Ecosystem Opportunities

Stewarding and advancing the current and future ecosystem of scientific computing software

Be sure to mark your calendars to attend this introduction to the PESO project

Location: The U.S. Department of Energy (DOE) booth (#3401)
Demo Station #1

Monday, 11/18 8:00 P.M.
Tuesday, 11/19 10:00 A.M.

Topic: **PESO: Partnering for Scientific-Software Ecosystem Opportunities**

This "booth chat" will introduce the newly established PESO project (https://pesoproject.org), which supports software-ecosystem stewardship and advancement, collaborating through CASS and HPSF. The session will introduce these three complementary groups: PESO, CASS, and HPSF.

- **CASS:** Consortium for the Advancement of Scientific Software (CASS)
- **HPSF:** High Performance Software Foundation (HPSF)

- **PESO** is a community-driven effort. Through collaborations with CASS teams, PESO delivers software stacks and infrastructure that provide scientific software teams with testing, hardening, integration, distribution, and intermediate user support of their products. Specific support includes:
    - **E4S:** Support for product integration and distribution in the Extreme-scale Scientific Software Stack (E4S) as needed depending on a product team's distribution strategy.
    - **Spack:** Assistance in creating and expanding Spack capabilities for product build, testing, integration, and distribution.
    - **CI:** Continuous integration testing on a variety of commodity and emerging target vendor hardware/software stacks.
    - **Software quality improvement:** Assistance to improve product compatibility with E4S community policies.
  - PESO is collaborating with the community toward a **cohesive software stack for AI and simulation for science**.

Speakers: Lois Curfman McInnes, Mike Heroux, David Bernholdt, Todd Gamblin, Sameer Shende, Jim Willenbring, the PESO team