NEWS RELEASE

For Immediate Release

For more information: info@pesoproject.org

New Update of the Extreme Scale Scientific Software Stack (E4S) Release 24.11 is Now Available

November 17, 2024, ATLANTA, GA. <u>The PESO Project</u>, a community-driven effort to promote the development and use of scientific software as an ecosystem, and the Extreme Scale Scientific Software (E4S) development and support team, today announced the release of E4S 24.11. Following is a partial list of highlights in this release:

- E4S includes 132+ HPC-AI packages on ARM, x86_64, and ppc64le platforms, 132K+ binaries in E4S build Cache
- E4S improves support for a cross-platform AI/ML software stack including packages like NVIDIA NeMoTM, Huggingface_hub, DeepHyper, Google.generativeai (Gemini API), OpenAI (API), TorchBraid, Pandas, Scikit-Learn, JAX, PyTorch, TensorFlow, Horovod, OpenCV, and LBANN with support for GPUs
- Support for new architecture: AMD MI300A/MI300X (gfx942)
- New language and runtime: Chapel
- New applications: NWChem, WRF, FFTX
- E4S DocPortal updated with AI/ML tools
- CUDA upgraded from to 12.6 (aarch64), ROCm upgraded to 6.2.1, oneAPI upgraded to 2024.2.0
- Adaptive Computing's HPC Cloud on demand data center (ODDC) web-based platform for multi-user, multi-node
- ParaTools Pro for E4STM images on AWS, Azure, and Google Cloud Marketplace with NVIDIA GPUs with VNC based remote desktop and Torque (qsub) and SLURM (sbatch) for multi-node execution:
 - https://adaptivecomputing.com/
 - <u>https://paratoolspro.com</u>

See <u>PesoProject.org</u> and <u>https://e4s.io</u> for additional details.

See <u>demos of E4S</u> at <u>SC24</u> November 17-24, Atlanta, GA.

The PESO project team will also be conducting <u>demos of PESO</u> at SC24.