Spack and E4S: Build Issues, Continuous Integration, GPU runtimes

Working Group Outbrief, 7/8/25, Granlibakken Resort Scalable Tools Workshop 2025

Spack and E4S: Issues discussed

- Lack of debugging information for all packages in E4S.
- Installing local Spack in home directory and chaining with Spack in read only directory (container, cloud, bare-metal installations) using <u>e4s-chain-spack.sh</u>.
- Installing local copy of package with spack <package>+debug to generate debug information.
- Splicing the tool with debug information in workflow by substituting one package with another.
- Storing debug information on a remote site with links to remote site for debugging. Issues with debugging and querying this information at scale (TotalView makes one request, other tools make n requests). Scalable launch of debugger.

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