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Building the Key4hep Software Stack with Spack

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The Key4hep software stack enables studies for future collider projects. It provides a full software suite for doing event generation, detector simulation as well as reconstruction and analysis. In the Key4hep stack, over 500 packages are built using the spack package manager and deployed via the cvmfs software distribution system. In this contribution, we explain the current setup for building nightly builds and stable releases that are made every few months or as needed. These builds are made available to users, who have access to a full and consistent software stack via a simple setup script. Different operating systems and compilers are supported and some utilities are provided to make development on top of the Key4hep builds easier. Both the benefits of the community-driven approach followed in spack and the issues found along the way are discussed.

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