ILLINOIS NCSA | National Center for Supercomputing Applications

NCSA DELTA

The Delta system is a balanced mixture between next-generation CPU architectures and graphics processors that is set to launch in 2021. The <u>National Science Foundation's Innovative</u> <u>High-Performance Computing program</u> awarded NCSA \$10 million to deploy Delta, which will be the most performant GPU computing resource in NSF's portfolio upon launch.

Delta's team is committed to adapting and optimizing scientific applications to run efficiently on GPUs, as well as actively identify applications and research projects that could benefit from the system's new computing methods. Prioritizing researcher productivity, NCSA will integrate Delta into the national cyberinfrastructure ecosystem through the Extreme Science and Engineering Discovery Environment and partner with the Science Gateways Community Institute to provide platform access that serves a broad range of needs.

Delta is going to make waves in terms of accessibility to advanced computing and data resources. Boasting a non-POSIX file system with a POSIX-like interface, allowing applications to reap the benefits of modern file systems without a rewrite. University of Illinois at Urbana-Champaign researchers will also spend two years evaluating the accessibility of interfaces deployed on Delta in order to create a system that is more accessible and usable by all.

Contact help+delta@ncsa.illinois.edu for more information on Delta.

