

It's Not Just a Cluster. It's a Cray Cluster.

Cray® CS™ series cluster supercomputer

Understanding that time is critical and all HPC problems are not created equal, we developed the Cray® CS™ cluster supercomputer series. These systems are industry standards-based, highly customizable, easy to manage and designed to handle the broadest range of medium- to large-scale simulations and data-intensive workloads. This powerful, reliable high-performance compute environment can scale to over 11,000 compute nodes and 40 peak PF.



CS500 CLUSTER SUPERCOMPUTER

Designed for a broad range of workloads

This modular, highly scalable platform is based on the latest Intel® Xeon® Scalable processors, Intel® Xeon Phi™ processors, and accelerator technology from NVIDIA. Industry-standards-based server nodes and components have been optimized for HPC workloads and paired with a comprehensive HPC software stack, creating a unified system that excels at capacity- and data-intensive workloads.



CUSTOMIZABLE SOFTWARE STACK

Key productivity-boosting tools

Cray's HPC cluster software stack consists of validated and tested software tools including systems management, operating systems, middleware applications and HPC programming tools.



GET INTO PRODUCTION QUICKLY

See better results, faster

From design and manufacturing to installation and support, Cray's system approach brings confidence that your tailored configuration is optimized to deliver better, faster results. This modular system is built of components carefully selected, integrated and tested for a powerful computing environment, quick installation and efficient production entry.

A Look Inside the CS500 System

Architecture	Air cooled, up to 72 nodes per rack cabinet
Processors, Coprocessors & Accelerators	Support for 64-bit Intel® Xeon® Scalable processors Optional support for Intel® Xeon Phi™ processors and NVIDIA® Tesla® GPU computing accelerators
Memory	768 GB up to 1,536 GB depending on processor SKU
Interconnect & Networks	FDR or EDR InfiniBand with Connect-IB®, Intel® Omni-Path Host Fabric Interface
Compilers, Libraries & Tools	Cray Programming Environment on Cluster Systems: Cray Compiling Environment (CCE), Cray Scientific Libraries (LibSci and LibSci_ACC), Cray Debugging Support Tools (LGDB and CCDB), and Cray Performance Measurement Analysis and Porting Tools (CPMAT). Optional: PGI compiler, Intel Cluster Toolkit, NVIDIA CUDA®, CUSA C/C++, OpenCL™, Direct Compute Toolkits, OFED programming tools, Open MPI, MVAPICH2, Intel MPI and IBM® Platform MPI
System Management	Bright Cluster Manager for HPC (optional)
Power	Power supplies deliver up to 38 kW per cabinet, with actual consumption based upon configuration



Intel® Xeon® Scalable and Intel® Xeon Phi™ processors