Janus System Overview

Overview

The University of Colorado's "Janus" supercomputer system consists of 1368 nodes, each containing two six-core Intel Xeon Westmere-EP chips at 2.8 GHz, for a total of 2736 processors and 16416 cores. The theoretical peak performance is 184 GFLOP/s. Each core has 2 GB of RAM for a total of 24 GB per node and 32 TB of memory in the entire system. The system (with just 15648/16416 cores operational) was #31 on the Top500 back in June, now it's #45 (see the Janus Top500 Page).

The Janus system is connected to the campus by a 10Gbps network link, and additional 10Gbps links are planned to other research groups (e.g., LASP, NCAR, etc.) as well.

Computational System Composition

Compute Node: Dell c6100 (12 cores)

Clock Speed: (GHz)	2.8
(FLOPS/cycle) /core)	4
cores/socket	6
sockets/node	2
(GFLOP/s)/node	134.4

Total Computational System

Nodes	1368
Cores	16416
Performance	184 TFLOP Peak

Memory

RAM /core	2 GB
RAM /node	24 GB
Total RAM	32 TB

Reference Slides

MRI Janus System Reference Slides