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Facilities > Systems

Accelerator angel.sharcnet.ca

Links	System documentation in the SHARCNET Help Wiki Web shell
Manufacturer	HP
Operating System	CentOS 6.x
Interconnect	InfiniBand
Total processors/cores	192
	8 cores 2 sockets x 4 cores per socket Intel Xeon @ 3.0 GHz
angel: 1-22	Type: Compute Notes: Two(2) DL160G5s are connected to one(1) NVIDIA Tesla S1070 GPU server (11 total). Memory: 8.0 GB Local storage: 1000.0 GB
Nodes	8 cores 2 sockets x 4 cores per socket Intel Xeon @ 3.0 GHz
	Type: Login Notes: Login/Admin node. Memory: 8.0 GB Local storage: GB
angel: 23-24	
Total attached	0 Bytes

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storage

Suitable use

Parallel computing, rendering.

Notes

The GPU cluster is composed of 11 NVIDIA Tesla S1070 GPU servers, each containing 4 GPUs and 16GB of global memory, with peak single precision performance of 4.14 TFlops per server and peak double precision performance of 345 GFlops per server. Each of the S1070 servers are connected to 2 HP DL160G5 CPU servers. The DL160G5's contain 2 quad core Intel E5430 Xeon chips, 8GB of FBD PC 5300 RAM and 4x250GB SATA disks. As such, there will be 1 GPU per quad core CPU, and a 1:1 memory ratio between the GPUs and CPUs. All of the DL160G5 servers are connected via 4X DDR Infiniband. There is also a login node and a management node with the same specs, but not attached to GPU servers, with a 10Gb uplink to the SHARCNET WAN.

Software available

[CUDA](#), [CMAKE](#), [ECLIPSE](#), [GIT](#), [JDK](#), [JASPER](#), [UTIL](#), [NETCDF](#), [GCC](#), [BLAST](#), [ORCA](#), [HDF](#), [ACTIVEPERL](#), [R](#), [INTEL](#), [IMAGEMAGICK](#), [OPENCV](#), [ACML](#), [PYTHON](#), [SUBVERSION](#), [BIOSAMTOOLS](#), [GNU](#), [PARI/GP](#), [NAMD](#), [OPENMPI](#), [VMD](#), [MERCURIAL](#), [CDF](#), [FPC](#), [GEANT4](#), [PARPACK](#), [MKL](#), [FREEFEM++](#), [FFTW](#), [MPFUN](#), [PETSC](#), [SLEPC](#), [OPEN64](#), [CLN](#), [TINKER](#), [WRE](#), [PNETCDF](#), [QD](#), [GSL](#), [VIM](#), [BOOST](#), [SPRNG](#), [BIOPERL](#), [GMP](#), [OPENCL](#), [BINUTILS](#), [SQ](#), [MPFR](#), [VALGRIND](#), [TEXLIVE](#), [YORICK](#), [RLWRAP](#), [IPM](#), [YT](#), [GNUPLOT](#), [MPC](#), [CHARM++](#), [COREUTILS](#), [HARMINV](#)

Current system state details

[Graphs](#)

Recent System Notices

Status	Status	Notes
Jul 23 2013, 03:17PM (4 months	Online	Cluster is back online.

ago)		
Jul 23 2013, 11:49AM (4 months ago)	Offline	Angel remains offline after the power outage while we diagnose a booting issue with the cluster's admin node. We hope to have it online asap.
Jul 19 2013, 11:41PM (4 months ago)	Conditions	These clusters are each at least partially offline and/or behaving poorly, due to storm-related power problems.
Jul 19 2013, 07:38PM (4 months ago)	Offline	Angel, Brown and Hound seem to be down, probably due to power issues related to the recent storm front.
Apr 11 2013, 12:36PM (7 months ago)	Online	Angel is operating normally. Please report and problems to help@sharcnet.ca
Sign-in to get full status history		