Cheetah Cluster Server

Specifications

- 14 nodes
- 160 computing cores
- 32 CPUs
- · 264GB system memory
- 7 nodes equipped with NVIDIA GTX 285, 480, or Tesla C2075 graphics processing units for CUDA development
- 6TB disk storage space
- · InfiniteBand interconnects
- CentOS v6.x (with latest update) operating system
- Oracle Grid Engine (previously known as Sun Grid Engine) batch-queuing system

Compilers and Libraries

- Intel Cluster Studio XE
- · Intel TBB (Threading Building Blocks)
- · GNU compiler
- CUDA compiler
- Java SDK v6 (64-bit)
- MVAPCH & MVAPICH2 (latest version compiled with all available compilers)
- Open MPI (latest version, compiled with all available compilers and interconnects)

Software Packages

- MATLAB R2012
- · Apache Hadoop cloud computing framework
- GRASS
- NS2 network simulator

Management Tools

- ACT Cloner and ACT Utils cluster management software
- · Ganglia monitoring system

Nodes with NVIDIA GPU Cards

adm01 GeForce GTX 480
admquad01 GeForce GTX 285
intel01 Tesla C2075
gpu01 GeForce GTX 285
gpu02 Tesla C2075
gpu03 GeForce GTX 480
gpu04 GeForce GTX 285

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