Grid Computing

Cluster Ohio Cluster

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Cluster Ohio Cluster Hardware

The computational cluster has eight nodes each consisting of:

- Four, 550 Megahertz Intel Pentium III Xeon processors, with
  - 512kB of secondary cache
  - Two Gigabytes of RAM
  - 18 Gigabytes, ultra-wide SCSI hard drives
  - Two Myrinet interfaces- only one of these is currently active
  - One 100Base-T Ethernet interface
- It also has a head node which is a 700MHz Celeron processor with 256MB of memory.

Cluster Ohio Software

- Fedora Core 3 Linux with 2.6.10-1.770_FC3 kernel
- IBM Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.2)
  - Classic VM (build 1.4.2, J2RE 1.4.2 IBM build cxia32142-20060421 (SR5) (JIT enabled: jitc))
- Apache Ant 1.6.5
- Globus 4.0.1
- Miscellaneous other software

Cluster Ohio Cluster

- The Cluster Ohio cluster is configured with a head node cohn.cs.kent.edu.
  - This is the only node that can be logged into directly (using ssh). It is a 700MHz Celeron processor with 256MB of memory. It should only be used to access the cluster, not to run computations.
- Internal nodes may be accessed over the 100Mbps Ethernet or the Myrinet network using rsh (without password)
  - Over the 100Mbps network, the computational nodes are addressed as node1, node2, node3, node4, node5, node6, node7 and node8.
  - Over the Myrinet network, the computational nodes are addressed as mnode1, mnode2, mnode3, mnode4, mnode5, mnode6, mnode7 and mnode8.
  - Note that these are on two private networks 192.168.1.0 and 192.168.2.0 respectively and thus may only be accessed through the head node cohn.cs.kent.edu.