Documentation for Fordham Linux Supercomputer (Homogenous Cluster)

Temporary Name:
Flux Supercomputer Cluster – name is derived from the fictional instrument named the Flux Capacitor in the movie "Back To The Future". The Flux Capacitor was developed with little more than creativity, ingenuity and force of will, which are qualities that reflect the development homogenous cluster.

Description:
A Microwulf cluster, which is a small form factor Linux supercomputer, based on the one constructed by Calvin Univeristy in Grand Rapids, Michigan:
http://www.calvin.edu/~adams/research/microwulf/

Nodes:
– 1 head node
– 4 compute nodes

Hardware Parts include:
- 5 motherboards: 2 Biostar and 3 MSI
– 5 Power supplies (220 Watt)
– 1 GB 10 port switch
– 5 Cat 6 cables
– DVD reader
– 6 – 120 mm LED fans
– 3 AMD processors
– 2 Intel Processors
– RAM:
  – Head Node: 2 GB
  – Each Compute Node: 1.5 GB
– Hard drive: SATA 250 GB, attached to Head node

Structural components:
– 3/8 inch threaded rods (4)
– 1/8 inch thick plexiglass (6)