What is the Blueshark Cluster?

The Blueshark Cluster is comprised of IBM iDataplex Systems with

- 50 nodes
- 1 head node

totalling 600 cores (1200 with hyper threading) and 1,200 GB of RAM. It was funded by the National Science Foundation (NSF) through the Major Research Instrumentation Grant.

The configuration of each of the 50 compute nodes is:

- IBM System x iDataPlex dx360 M3
- 2 x Hexa-Core Intel Xeon X5650 @ 2.67GHz CPUs
- 24GB of RAM
- 250GB SATA HDD
- 1 GbE Ethernet Interconnect

The head node configuration is:

- IBM System x iDataPlex dx360 M3
- 2 x 4 Core Intel Xeon X5550 @ 2.67GHz
- 24GB of RAM
- LSI MegaRAID SAS Controller
- Storage Expansion Unit
- 8 x 1 TB 7200RPM SAS Hot-Swap HDD
- 10 GbE link to compute nodes via Chelsio T310 10GbE Adapter
- Redundant Hot-swap Power Supplies

Other hardware resources:

- 2 x BNT 48port 1GbE switches with dual 10GbE

Unique solution ID: #1351
Author: Wei-Hao Huang
Last update: 2015-05-28 16:19