

WSU HPC details: Central cluster maintained by IT

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### **IBM idataplex cluster, running RedHat Linux**

#### Cluster configuration:

##### Compute nodes:

164 compute nodes, 2 hexa-cores per node , 24 GB RAM/node (or 2 GB/core on avg.)  
= 1,968 cores (Westmere-EP processors: X5650 running at 2.66 GHz with 12MB of cache)  
= Total aggregate distributed memory = 3.9 TB

Network interconnect: Infiniband, 40 Gbps

##### Large memory nodes:

3 nodes, 512 GB RAM/node  
32 cores/node (Nehalem-EX processors: X7550 running at 2.0 GHz with 18MB of L3 cache)  
= 16 GB /node on average

##### Storage:

NO physical local disk at compute nodes!

Scratch space for use while running jobs : 31 TB (4 dedicated storage nodes running GPFS)  
Home directory persistent storage: 38 TB (slower SATA, also GPFS)

Front end nodes: 2 nodes (specs TBD)

##### Software:

MPI (MPICH2, OpenMPI)

Other parallel suites can be installed upon request

Users so far:

Bioinformatics from Ag school