# Power9 server (hal000)

## System Description

Host name: hal000.ncsa.illinois.edu

Hardware

- IBM 8335-GTG AC922 server
  - 2x 20-core IBM POWER9 CPU @ 2.00 GHz
  - 512 GB DDR4
- 4x NVIDIA V100 GPUs
  - 5120 cores
  - 16 GB HBM 2
- 2x 3.84 TB SSDs
- Nallatech 250S+ CAPI 2.0 FPGA card
- ~~1.6 TB SSD NVMe Adapter~~
- 2-Port EDR 100 GB IB ConnectX-5 Adapter
- 4-port (10 Gb + 1 GbE) SR+RJ45 Adapter

Software

- RHEL 7.6
- CUDA 9.2
  - cuDNN 71
  - NCCL 2.2.13
- IBM XLC 13.1 beta
- IBM XLFORTRAN 15.1 beta
- Advance toolchain for Linux on Power
- CAPI 2.0 - SNAP



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