

Resources

The CAMSA HPC cluster currently totals 3.6 PF in peak performance with 40.0 TB of high-performance storage. Consult the resource comparison page for hardware difference.

CAMSA

CAMSA is a Dell cluster with a rich accelerator testbed consisting of Intel MAX GPUs (Graphic Processing Units), Intel FPGAs (Field Programmable Gate Arrays), NVIDIA and Graphcore IPU. The CAMSA cluster consists of compute nodes using a mix of the following processors.

- Power Edge R650 Head Node x2: Intel Xeon Gold 6330 512 RDIMM 2TB
- Power Edge R650 Login Node x2: Intel Xeon Gold 5118 256 RDIMM 2TB
- Power Edge R420 Compute Node x5: Intel Xeon Gold 622XR 512 RDIMM 2TB
- Power Edge R750 GPU Node: Intel Xeon Gold 6330 512 RDIMM 2TB
- Power Edge R650 NFS Storage Node x5: Intel Xeon Gold 6330 512 RDIMM 2TB
- Power Edge C6420 x10: Intel Xeon Gold 6226R 2.9G, 16C/32T, 10.4GT/s, 22 M Cache, Turbo, HT (150W) DDR4-2933

System Information

Cluster Name: CAMSA

Cluster Manger: Bright View 9.2

Provisioning Nodes: 30 total, 2 Head Nodes

Operating System: Red Hat Enterprise Linux for HPC Head Node, Premium

Scheduler: SLURM

Software: Python3, Jupyter

Software Image List: GPU-compute, Default-image, compute-singularity

MPI Network Type: Mellanox InfiniBand

OFED version: Latest Mellanox OFED

Datacenter Rack Model: Chatsworth NF0J-113C-C40-0

PDU Make and Model: AP8865

Disk: 1.92TB SSD SATA Mix Use 6Gbps 512 2.5in Hot-plug AG Drive, 3 DWPD,

CPUs: x49

Cores: 968

3200MT/s RDIMMs 256 & 512

InfiniBand (which edition?) Latest Mellanox OFED

Ethernet (what bandwidth?) Dell Networking S3048-ON, 48x 1GbE, 4x SFP+ 10GbE ports, Stacking, IO to PSU air, 1x AC PSU, DNOS 9

Dell Networking, Transceiver, SFP+, 10GbE, SR, 850nm Wavelength, 300m Reach

Dell Networking, Jumper Cord, 250V, 12A, 2 Meters, C13/C14, US

40-port Mellanox Quantum QM8700 - Switch - smart - 40 x HDR InfiniBand QSFP28 - desktop, rack-mountable