Systems

ISL maintains and provides access to a number of experimental systems:

System Name	Description	Storage	Networking	Hostname	Status	Service dates	Access
Clusters							
HAL	Cluster of 16 IBM POWER9 nodes with 4 NVIDIA V100 GPUs per node	244 TB usable, NVME SSD-based storage by DDN Peak system bandwidth ~100GB/s	10GbE external Dedicated 10GbE for data transfer dual-channel EDR IB internal	hal	in service	2019	open
KNC	Xeon Phi 5-node co-processor cluster			knc	not in service		
KNL	Xeon Phi 4-node processor cluster (access via KNC)			knl*	not in service		
isl	various x86 resources under a single login and scheduler	TBD	TBD	isl	in deployment	2023-	open, but allocated
Clouds							
VLAD OpenStack cluster	OpenStack Cloud deployment				in service		
Servers							
DGX A100	NVIDIA DGX A100	14TB RAID0	1GbE	hal-dgx	in service	2021-	open
Ac33	TYAN server with Intel Westmere-EP CPUs and NVIDIA Tesla C2050 GPUs	Local 300GB + 1TB HDD		ac33	not in service	2014	open
Hybrid	SuperMicro server with Intel Haswell-EP CPUs and NVIDIA Tesla P100/V100 GPUs	Local 75GB SSD + one (3x 4TB) RAID 0 arrays	10GbE	hybrid	in service	2016	restricted
Vlad-hm	High memory server with 3TB of ECC RAM	Local 3TB SSD + two (6x 1TB) RAID 0 arrays CephFS 257TB (reported)	10GbE	vlad-hm	in service		open
	AMD ARM server				not in service		
Power9 AC922 server	IBM POWER9 4x NVIDIA Tesla V100 16GB	Local 2x 3.84 TB SSD Local 1.4TB NVME	1GbE	p9	in service		restricted to XPACC project
NVIDIA ARM HPC DevKit (overdrive)	1x Ampere Altra Q80-30 2x NVIDIA A100 GPU						restricted to NCSA users only
FPGA dev							
	Altera DE5 FPGA board						
pynq	XILINX PYNQ-Z1			pynq	offline	05/2017	restricted
XilinxDevKit	Xilinx Kintex UltraScale FPGA KCU1500 Acceleration Development Kit			iridium	in service		restricted
CAPI2.0 platform	Nallatech 250S+in Power9 server (hal000) 4x NVIDIA Tesla V100 16GB	Local 2x 3.84 TB SSD	10GbE	hal000	in service	2018	restricted to NSF MRI project

Contact us

Request access to ISL resources: see individual systems

Contact ISL staff: Email Address

Visit: NCSA, room 3050E

OpenCAPI platform (IBM P9 IC922)							
Xilinx u250	x86 server with Alveo U250 Data Center Accelerator Card and Vitis development environment			hal-fpga-x86	in service	2020	restricted to NSF MRI project
Misc							
	Ceph storage				offline		
	Raspberry Pi boards				offline		
Jetson	NVIDIA Jetson TK1 cluster				offline		restricted
Jetson TX2	NVIDIA Jetson TX2 cluster	1TB NFS-mounted /home	1GbE internal & external	jetson-tx2-*	offline		open