Supercomputer "Flow" system overview

Supercomputer "Flow" consists of four computing subsystems and two storage systems. Total theoretical peak performance is 15.88 PFLOPS. Users can use all subsystems by one account. Computing service has begun on July 1st, 2020.

Type I subsystem

The world's first regular service of "Fugaku" type system. Useful for programs developed on "K", FX10, and FX100.

FUJITSU Supercomputer PRIMEHPC FX1000

- A64FX CPU * 1, 2,304 nodes
- 3.3792 TFLOPS * 2,304 nodes = **7.782 PFLOPS**

Type II subsystem

Our first large scale GPU system. Suitable for data science, machine learning, and AI researches.

FUJITSU Server PRIMERGY CX2570 M5

- Intel Xeon CPU * 2 + NVIDIA V100 GPU * 4, 221 nodes
- 33.888 TFLOPS * 221 nodes = **7.489 PFLOPS**
- 6.4TB/node SSD available, also providing local shared storage (BeeGFS/BeeOND/NVMesh)

Type III subsystem

Huge size memory system. Suitable for large scale pre-/post-processing and visualization.

HPE Superdome Flex

- Intel Xeon CPU * 16 + NVIDIA Quadro RTX6000 * 4, 2 nodes
- **24TiB** huge size memory / node
- connected to visualization systems

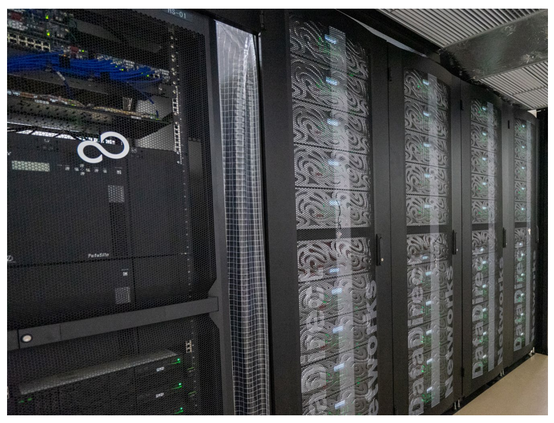
Cloud system

Supporting both traditional batch job and time appointing batch/interactive job.

HPE ProLiant DL560

- Intel Xeon CPU * 4, 100 nodes
- 5.376 TFLOPS * 100 nodes = 537.6 TFLOPS

Storage system



Consists of 30 PB HDD RAID storage (Hot storage) and optical disk archive system for long-term data archival (Cold storage).

Hot storage: FUJITSU PRIMERGY RX2540 M5 / ETERNUS AF250 S2 + DDN SFA18KE / SS9012

- **30PB,** RAID6, FEFS

Cold storage: Sony PetaSite scalable library

- **6 PB/Max 10.89 PB**

Information Technology Center, Nagoya University
http://www.icts.nagoya-u.ac.jp/en/center/