

Introduction to HPC and RIS

RIS Storage and Compute Services
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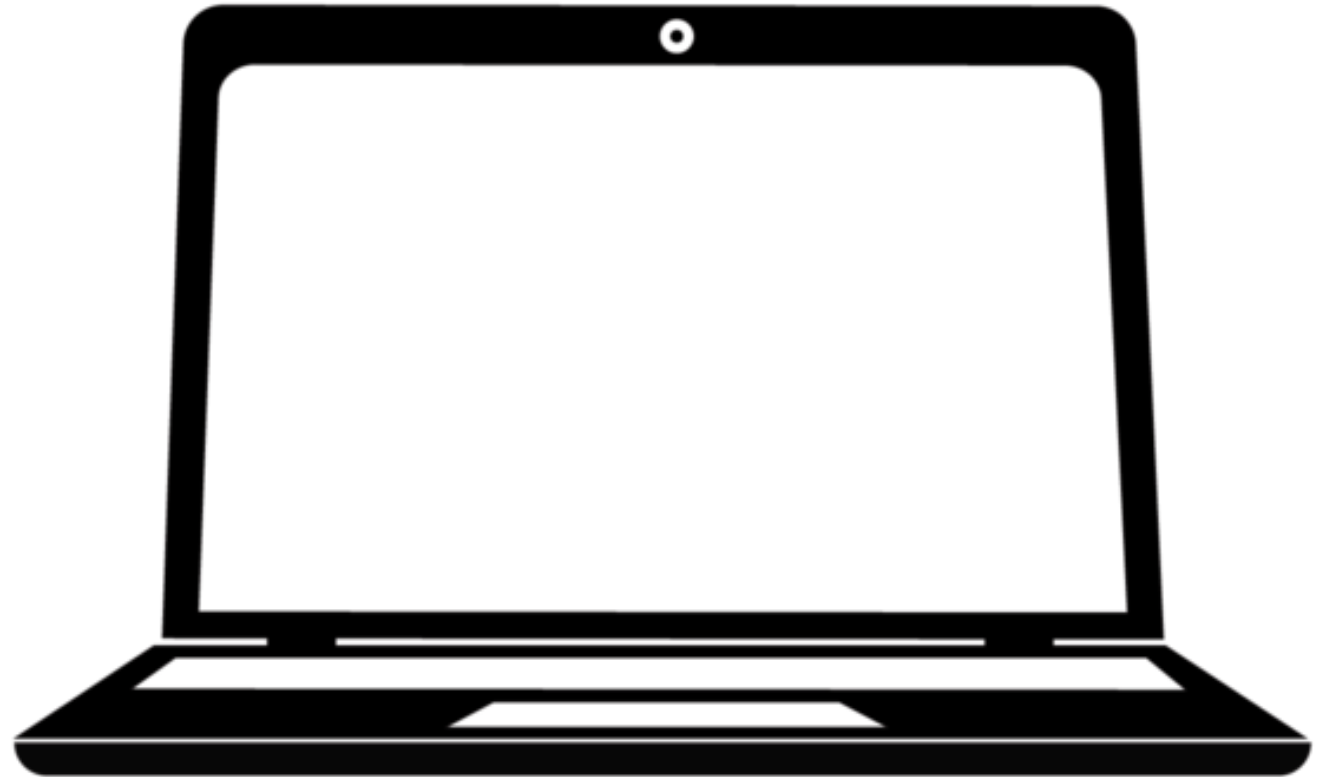
<https://ris.wustl.edu/>

What is HPC?

- Computing that uses supercomputers and computer clusters to solve advanced computation problems.
- A supercomputer is a computer with more resources than what your average desktop or laptop computer has, often by orders of magnitude.
- Computer clusters are large amounts of computers networked together to be able to compute on tasks.

What is HPC?

- Average Computer Specs
 - 1 TB storage space
 - 1 CPU
 - 8-16 GB RAM/memory
 - 1 GPU

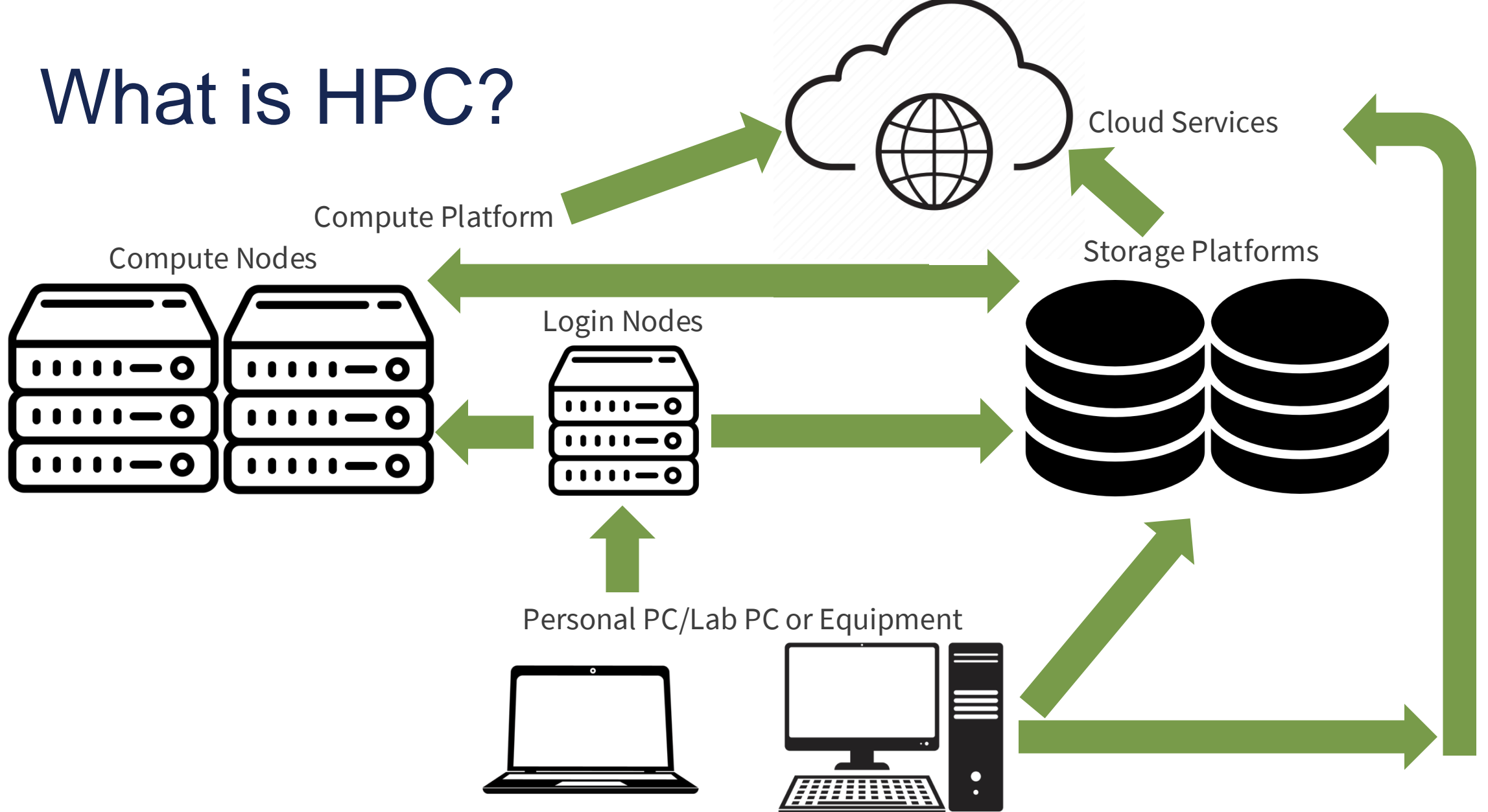


What is HPC?

- RIS Storage Platform
 - 23 PB of storage
- RIS Compute Platform
 - 10,000+ CPUs
 - 120+ GPUs
 - Up to 1TB RAM/memory

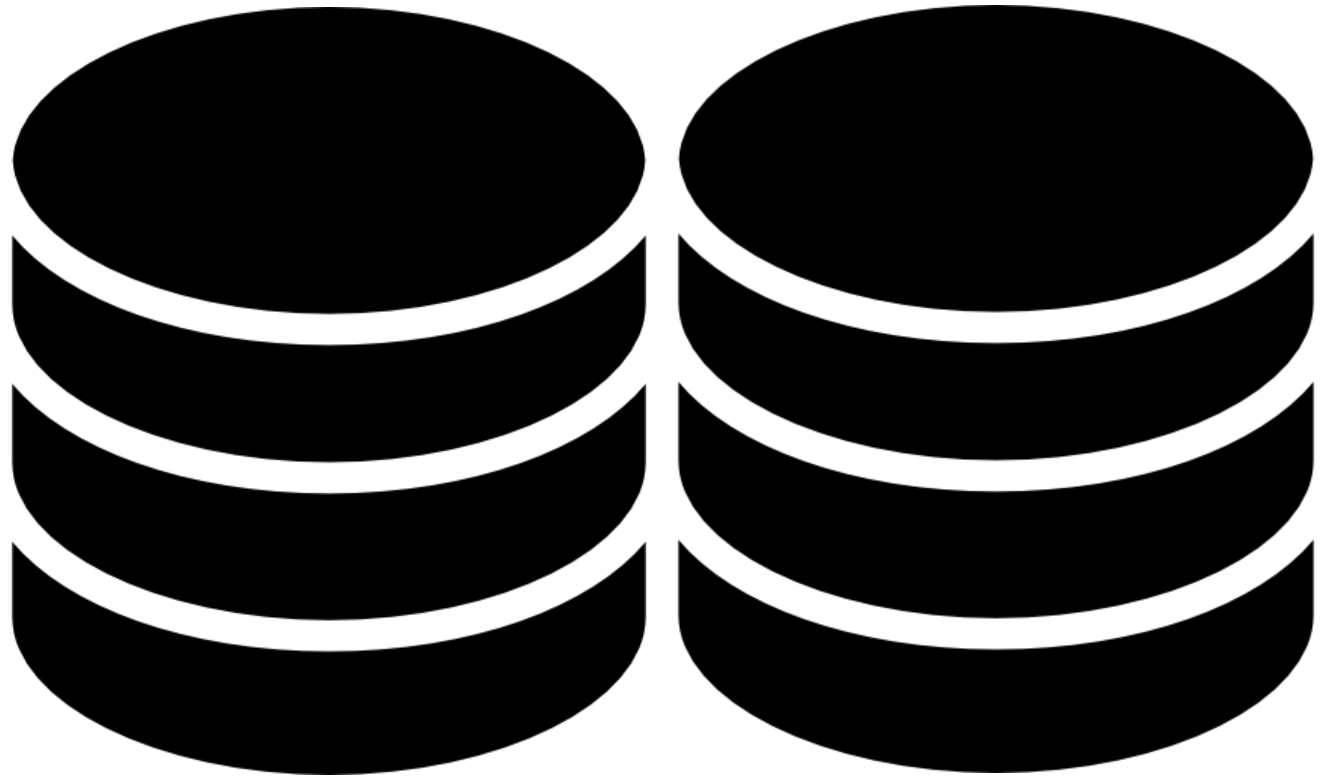


What is HPC?



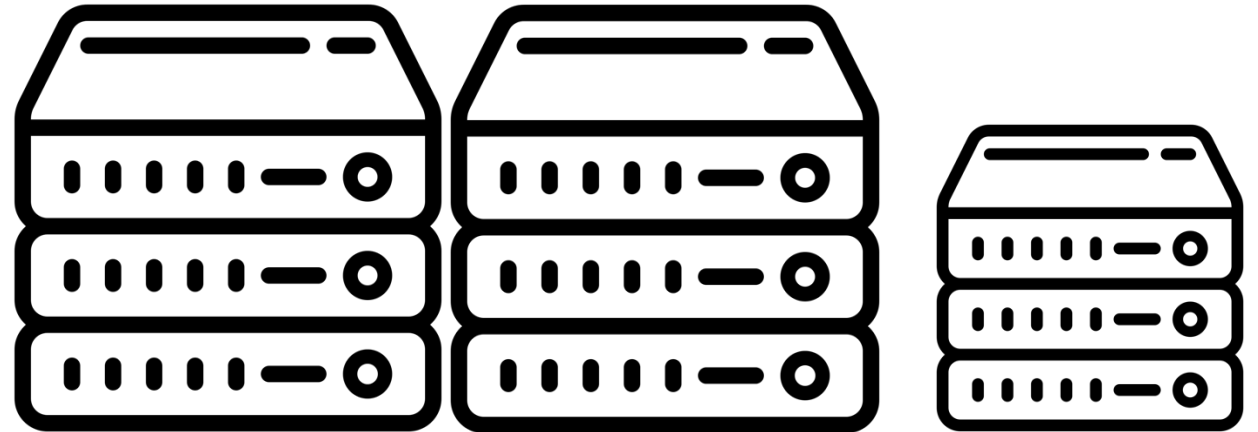
Storage Platform

- Connections
 - SMB
 - Globus
 - Compute Platform
- HIPAA Compliant
- Free Faculty 5TB
- Demonstration



Compute Platform

- Command Line Interface (CLI)
- LSF Scheduler
- Docker
- Open On Demand (OOD)
- Demonstrations



Storage and Compute Info

- Storage Allocation: /storage1/fs1/workshops/Active/BIO5075
- Compute Allocation
 - Compute Group: compute-workshop
 - Compute Queues: workshop, workshop-interactive

Further Information

- <http://ris.wustl.edu>
- <http://docs.ris.wustl.edu>
- <https://hub.docker.com/>
- <https://becker.wustl.edu/services/research-computing/>

