

# Engineering Research Resources



WUSTL  
SERVICES

## Research Data Center

An advanced data center intended for research use on the Medical School campus. Completely power redundant, efficient cooling, large available space. Startup costs are about \$4,000 per rack; then \$80/month/rack afterwards, includes 24 1GB, 2 10GB network connections.

*Available now.*

## WU Research Network

A high speed research network, separate from WUSTL's standard network, for research data access and transfer - 40GB transfer to the Medical School/RDC, 10GB shared connection to I2. Each individual device can directly connect at 10GB, or options may become available for sharing connections.

A Data transfer node in Brauer will allow researchers to temporarily store & transfer data over the WURN to and from WUSTL or I2 targets. No cost for DTN use; connection costs to be determined.

*Available now for early adopters.*

## Research Storage

A large scale (4 PB) storage service for research data, with several tiers of capability.

- Flash Cache: Fast flash storage for heavy HPC activity. Billed daily in 100GB increments (costs to be determined)
- Active Storage: **5TB free to all PIs**. Billed \$25/TB/mo afterward, bulk rate costing to be determined
- Active Archive: Slower tape-based archival – billing \$10/TB/mo
- Cold Archive: Offline archiving to tape for configurable amount of time (costs to be determined)

Data access is over common protocols in the first stage (CIFS, NFS); more options may become available as the service develops. Supported by WUIT/MGI storage engineers and Engineering IT.

*Pilot offerings in Fall 2017*

## File Storage & Collaboration

Washington University in St. Louis has partnered with Internet2 to provide WUSTL Box. It allows you to easily share and collaborate across the campus and the world. It provides unlimited data storage (HIPAA/FERPA compliant) and video streaming for all current faculty, staff and students. Login at <https://box.wustl.edu>

## Desktop Backup

WUSTL has chosen CrashPlan, available through Software Licensing, for desktop backups. An annual license of \$100 provides unlimited storage for up to 4 individual devices – Windows, OS X, or Linux. Data is encrypted, and WUSTL holds the encryption keys. Users can restore their own data.

## Cloud Computing

WUSTL has negotiated enterprise agreements with Azure, Amazon, and Google to provide discounted access to computing resources in those services. WUIT provides account management and billing; Engineering IT can provide support and consulting services – contact [support@seas.wustl.edu](mailto:support@seas.wustl.edu)



SEAS  
SERVICES

## CHPC

Managed externally, a large high-performance cluster with ~2500 cores, 74 Tesla GPUs, and Infiniband & WURN connectivity – free to all SEAS researchers

<http://chpc.wustl.edu> – General information and account requests

<http://chpc2.wustl.edu> – Detailed usage information

## Engineering Cloud

Managed by Engineering IT - ~175 heterogeneous CPUs. Freely accessible to all SEAS researchers. Individual PIs are able to grant nodes into the cluster and reserve them exclusively for time-sensitive projects.

<http://clusters.engineering.wustl.edu>

## Project Consulting and Support

Engineering IT is ready with consultation and support services for your research software, hardware, or other projects.

**CONTACT ENGINEERING IT**

[support@seas.wustl.edu](mailto:support@seas.wustl.edu)

314-935-5097

<http://engineering.wustl.edu/eit>