RESOURCES

High Performance Computing
- NOTS: Rice's unified HPC cluster (MPI and non-MPI jobs)
- Research Condos: Compute partitions within NOTS which can be prioritized/reserved for private research groups.

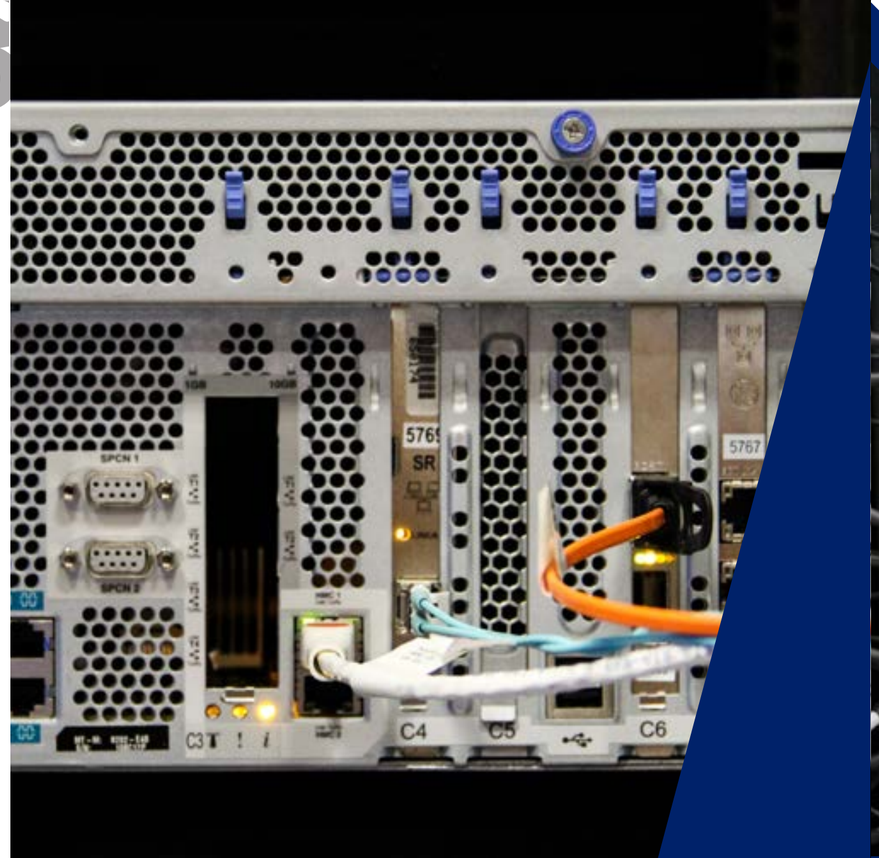
Virtual Machines and Cloud
- ORION: Rice's private virtual research cloud

Research Data Facility
- Dell EMC Isilon: Networked storage, 500GB free subsidy for research faculty
- Cloud storage:
  - Unlimited free archiving with Google and Box
  - Offsite archival and disaster recovery via AWS Glacier

High-Speed Data Transfer
- Globus FTP: Accounts with Rice NetID and custom automated solutions
- Data Transfer Nodes: Direct Internet 2 connection and custom automated solutions

REDCap
- Secure web application for building and managing online surveys and databases.
- Widely used in support of clinical studies, demographic surveys, and other research instruments

XSEDE and other National Resources
- The CRC has relationships with and experience winning allocations for Rice researchers on national computing resource pools.



RICE UNIVERSITY

Center for Research Computing

www.crc.rice.edu
101 Ryon Lab
9am to 5pm
Mon - Fri

Workshops
In partnership with the Ken Kennedy Institute and the Fondren Library, the CRC offers regularly scheduled workshops for your department, lab, class, research assistants, and graduate students. Topics include:

- Workflow automation with Globus
- Data management
- Virtual machines
- Supercomputing basics
- Custom workshops for your research group

Application Consulting
Assistance in building and optimizing your software stack within CRC's high performance clusters.

- Application integration and code profiling
- Enablement, optimization, porting, and debugging

SERVICES

Data Management Planning
The CRC can consult with your research group to help you obtain access to secure data, make the most of published structured data, or develop a public or secured data management plan.

- Where and how to store and back up your data
- Data publishing
- Workflows, triggers, and automation
- Research data compliance

Class Support
Add research computing to your syllabus

- Group accounts for HPC use in your class
- How-to presentations/lectures on using HPC/HTC, VM's, and storage
- Grad or undergrad, sciences or humanities

Grant consulting for national resources
Our XSEDE Campus Champions can help you develop proposals for computing allocations on many of the nation's leading supercomputing and cloud computing centers.

- Guidance on how to navigate cloud resources, including commercial cloud, Rice private cloud, and non-commercial cloud offerings.
  - Amazon: Certified AWS cloud practitioners
  - Google: Experience obtaining research allocations
  - Microsoft: Relationships with Azure
  - Jetstream: National Science Foundation VM allocations

RESEARCHERS

Our research computing facilitators can connect you with the best solutions to meet your research needs. The CRC has a long track record of facilitating:

Data-Driven Web Applications

- We consult with researchers interested in:
  - Archiving their data (e.g., archival photographs).
  - Computationally analyzing their data (e.g., text extraction and processing).
  - Publishing their data online.
  - Applying for grants that involve computational resources or services.
- Where possible, we:
  - Build custom workflows to accelerate humanistic archiving, categorization, and analysis of resources.
  - Help researchers to make these resources available on proof-of-concept, internal web applications.

Secure Research Platforms

- We work with researchers from across the university to create secure environments for working with sensitive datasets with internal and external collaborators.
- VRDE: Virtual Research Desktop Environment.
- REDCap: Cloud Linux deployment for secure collaboration.

Scalability

- Supercomputing experts at the CRC can help you to scale and optimize your code on Rice infrastructure or national resources.
- Cloud specialists at the CRC can help you to build custom, scalable solutions using the latest cloud technology both internal and external to Rice.
- Data archiving and publishing experts at the CRC and Fondren Library can help you to securely archive and share your data at scale on networked resources.