

# Research Computing

The Center for Research Computing (CRC) manages shared computational clusters for a wide range of research projects affiliated with Rice University and the Texas Medical Center.

The CRC administers and maintains infrastructure in four core service areas: Shared Computing Clusters, the Research Data Facility, the High-Speed Data Transfer infrastructure, High-Performance Visualization, and Virtual Machines. While these services often fit together, each provides unique capabilities designed to accommodate specific research tasks.

This page gives an overview of these services, with links to more detailed information on each of them. If you have any questions or find that the services below do not meet your research computing needs, contact our CRC facilitators via [ticket](#).

## High-performance computing

*High-powered computing resources for big datasets.*

- Our Resources
  - [Details about our resources](#)
  - [Apply for Account\(s\)](#)
  - [Which System Should I Request?](#)
  - [How Much Does It Cost?](#)
  - [CRC Policies](#)
  - [CRC Tutorials](#)
  - Software Documentation
    - [Mathworks MATLAB](#)
  - [General Cluster Documentation](#)
    - [DAVinCI Getting Started](#)
      - Pending decommission: August 30th, 2019
    - [NOTS Getting Started](#)
    - [PowerOmics Getting Started](#)
    - Decommissioned Clusters
      - [ADA July 15th, 2011](#)
      - [RTC March 15th, 2009](#)
      - [SUGAR July 1st, 2014](#)
      - [Blue Gene/P June 3rd, 2015](#)
      - [STIC January 29th, 2016](#)
      - [Blue BioU August 21st, 2018](#)
      - [Blue Gene/Q December 31st, 2018](#)
  - [Condos \(what are they?\)](#)
- National Resources
  - Part of the mission of the CRC is to serve as an onramp for our researchers to scale their problems up to the minimum size requirements at big national supercomputing resources. One such national resource is the Extreme Science and Engineering Discovery Environment or [XSEDE](#)
  - [Common Questions About TeraGrid/XSEDE](#)

## Research Data Facility (RDF)

*When your project won't fit on, or shouldn't be on, an external hard disk.*

- [Research Data Facility](#)
- [Google Drive](#)
- [Box](#)
  - [General OIT Information](#)

## High-speed data transfer

*When your project is too big for a regular FTP transfer. Specialized, NSF-funded infrastructure for moving large-scale data sets*

- **DTN/DTN2/DTN HA (Globus Data transfer nodes)** [Getting Started](#)
- **Science DMZ** (documentation coming soon)

## Visualization

*Help with Visualization of data.*

- [Visualization help](#)

## Virtual Machines

*Help when your project needs virtual machines.*

- Commercial options currently available through Amazon AWS and Google Cloud Computing. The CRC can help you to get a quote and even to get started. Google currently offers \$300 in credits to new users.
- Owl Research Infrastructure Open Nebula (ORION) VM Pool on Rice Campus. [Getting started](#)
- Decommissioned Resources
  - Shared Pool of Integrated Computing Environments (SPICE) Decommissioned: March 27th, 2018

## Help

- [File a help request ticket](#)