

DIGITAL RESEARCH SUPPORT

IT Support Options for Researchers at
Vanderbilt University

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VANDERBILT
UNIVERSITY

6 AREAS OF DIGITAL RESEARCH SUPPORT

Data Storage

Security

Training & Education

Custom Programming Solutions

Desktop & Server Support

Networking



DATA STORAGE

Paid Storage Options

- ACCRE and DORS
- GPFS (Cluster & Desktop)
- [Tape Backups](#) (SciLo/BlackPearl)
- Auristor
- [AWS \(VUIT\)](#)

Free Storage Options

- [Box](#)
- [OneDrive](#)
- [SharePoint Collection Site](#)
- [Microsoft Teams](#)



SECURITY

Data Use Agreements

- Contract Process starts with SPA
 - [REDCAP intake form](#)
- Information security requirements
- [IT Security Awareness & Training](#)

VPN and MFA

- [Remote connections](#)
- [Installing the VPN](#)
- [DUO Multi Factor Authentication](#)
- [Applications that require DUO](#)

Additional Security

- [Data Destruction Services](#)
- [IT Compliance Assessment](#)
- [IT General Risk Assessment](#)
- [Firewall Consulting and Services](#)



RESEARCH-SOFTWARE-ENGINEER FOR HIRE & CONSULTATION

Overview

- A core service providing faculty & staff with research consultation & technical resources via various “liquid workforce” models

Rationale

- Faculty often have research accounts or grant funds, but often not able to hire full-time staff
- Faculty would benefit from access to shared technology experts

RESEARCH-SOFTWARE-ENGINEER FOR HIRE & CONSULTATION EXAMPLES



Current & Prior Projects with Arts & Sciences, Peabody, School of Medicine, & Engineering

- Custom GIS Analysis
- Web development
- Mturk implementations with Psychology
- Custom software development for ECG experiment with Kennedy Center
- Virtual Reality apps with History
- DSyM, MathNet, & Adaptive eBooks w/Peabody
- Hydrologic analysis software w/Civil Engineering
- Long-term software evolution w/Comp Sci

TRAINING & EDUCATION

ACCRE

- Intro to the Cluster
- Intro to Slurm (Job Scheduler for ACCRE)
- Research Computing Seminar Series
- Immersion Workshops

Data Science Institute

- [Data Science Methods & Workshops](#)
- Data Science Consultation: datascience@vanderbilt.edu

RITS

- [Resources Portal](#)
- [Software Carpentries](#)
- Bootcamp style workshops & training
- [Consultation](#) on additional training efforts across campus

Security

- [Security Awareness Training](#)

AWS

- www.aws.training



DESKTOP & SERVER SUPPORT

Workstations

- [VUIT](#)
- Local Support

Server Co-location

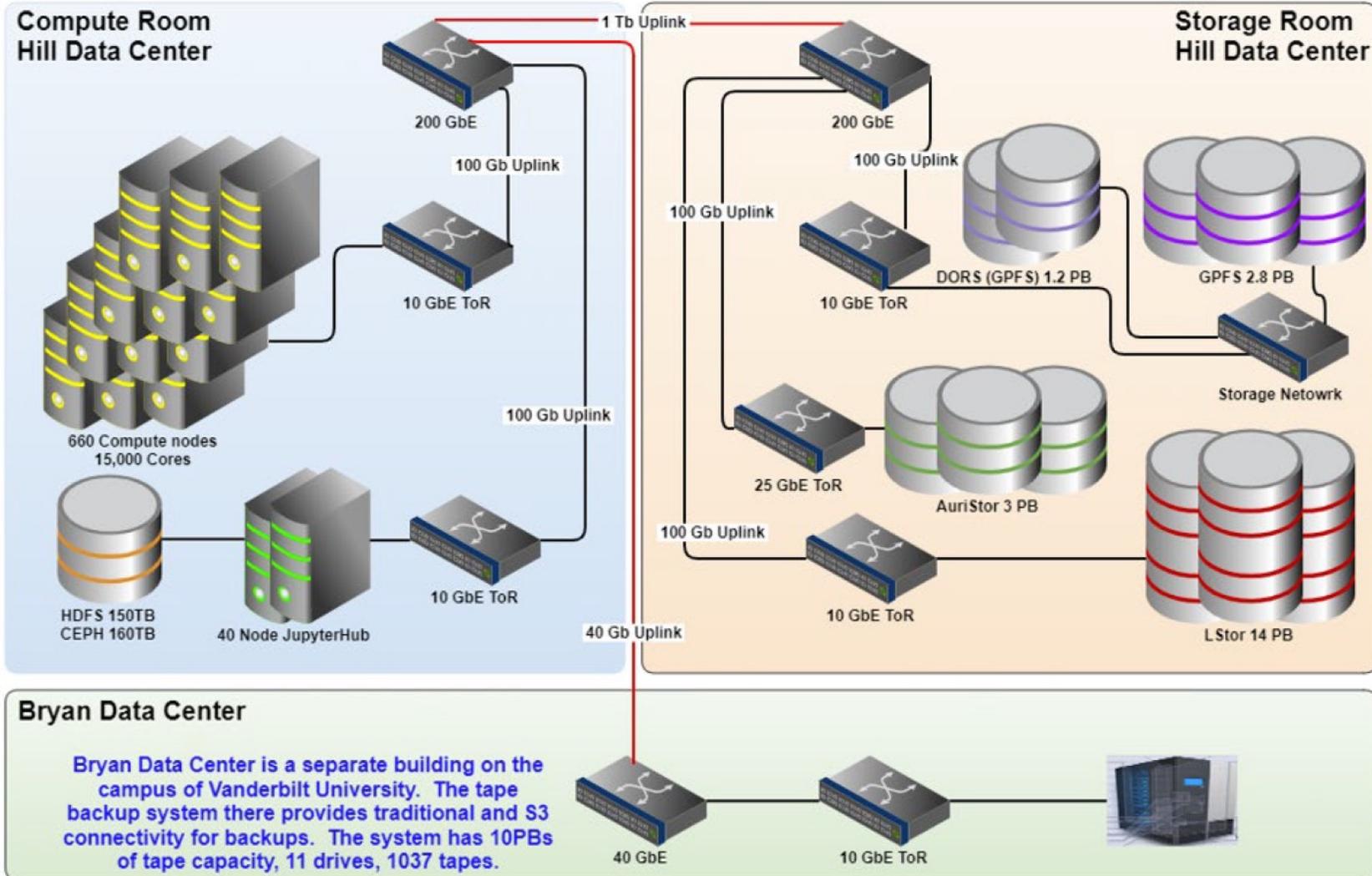
- [VUIT – Hill Data Center](#)

High Performance Computation

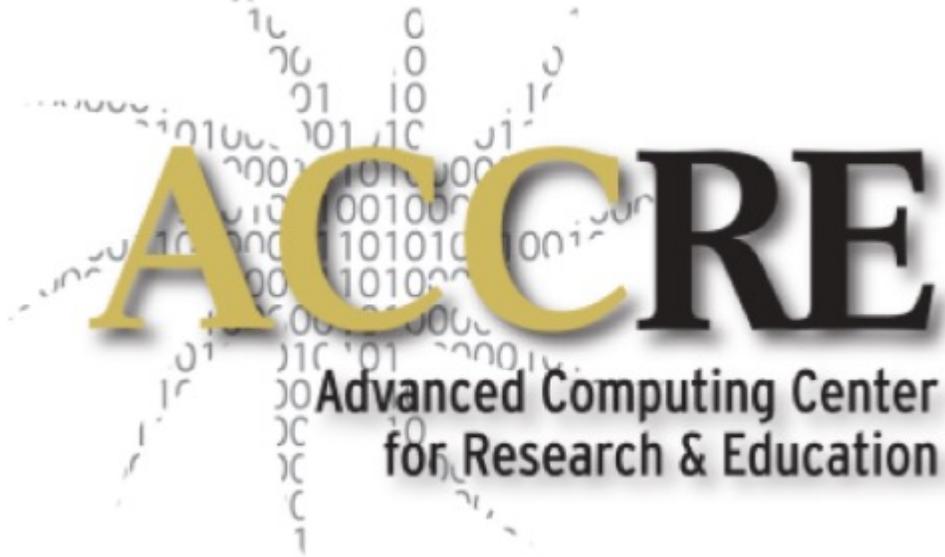
- [AWS \(VUIT\)](#)
- [ACCURE](#)



ACCURE



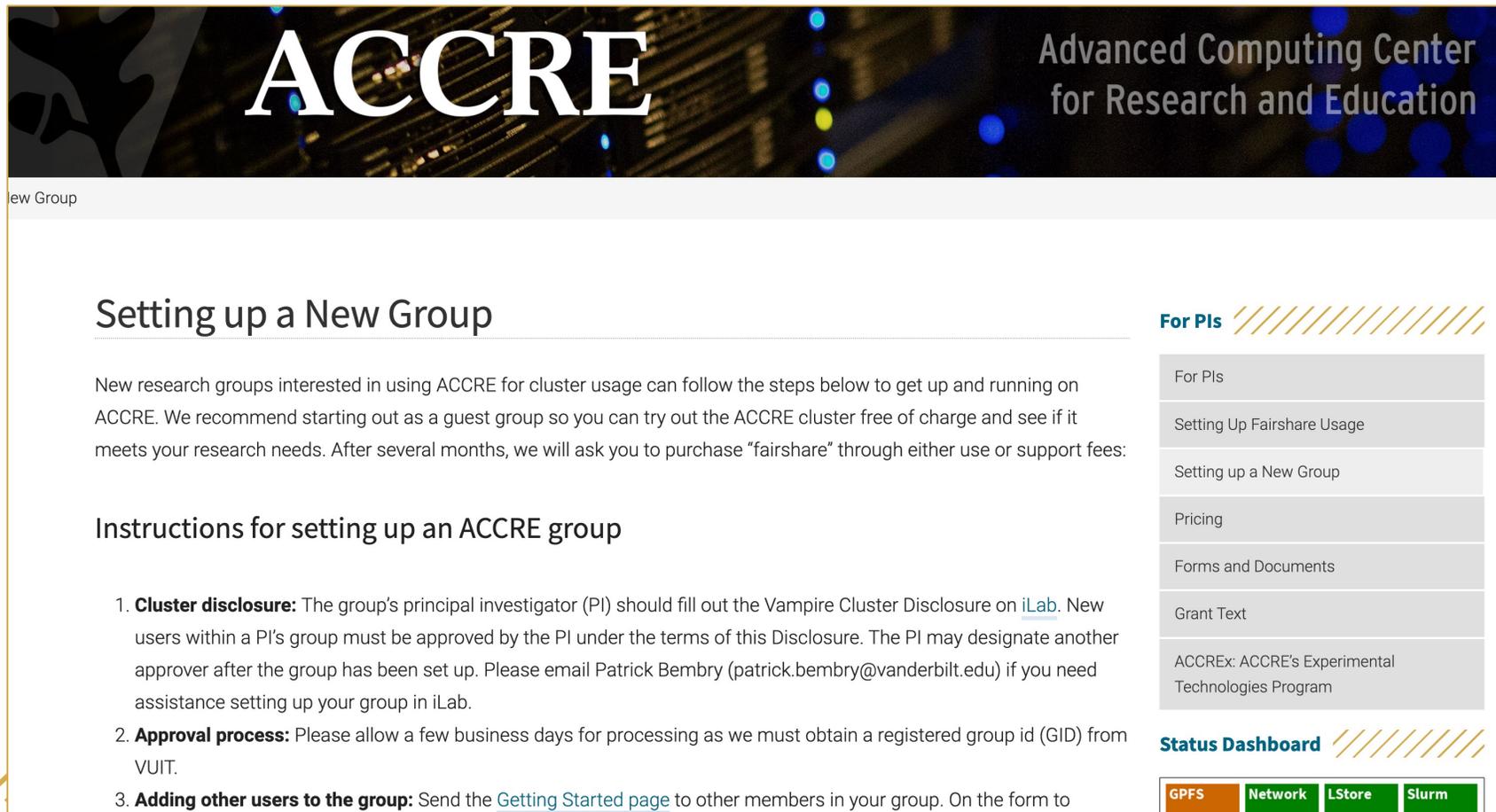
ACCURE CLUSTER ACCOUNT



- <https://www.vanderbilt.edu/accre/>
- [Setting up a new group](#)
- [Forms & Documents](#)
- [Software Installation Inquiries](#)
- [Visualization Portal](#)
- [ACCURE Cheat Sheet](#)
- ACCURE Security

GETTING STARTED AT ACCRE

- [Getting Started](#)
- [General Inquiries](#)



The screenshot shows the ACCRE website header with the logo and the text 'Advanced Computing Center for Research and Education'. Below the header, the page title is 'Setting up a New Group'. The main content area contains a paragraph about new research groups and a list of instructions for setting up an ACCRE group. On the right side, there is a 'For PIs' sidebar with a list of links and a 'Status Dashboard' section with buttons for GPFS, Network, LStore, and Slurm.

Setting up a New Group

New research groups interested in using ACCRE for cluster usage can follow the steps below to get up and running on ACCRE. We recommend starting out as a guest group so you can try out the ACCRE cluster free of charge and see if it meets your research needs. After several months, we will ask you to purchase "fairshare" through either use or support fees:

Instructions for setting up an ACCRE group

1. **Cluster disclosure:** The group's principal investigator (PI) should fill out the Vampire Cluster Disclosure on [iLab](#). New users within a PI's group must be approved by the PI under the terms of this Disclosure. The PI may designate another approver after the group has been set up. Please email Patrick Bemby (patrick.bemby@vanderbilt.edu) if you need assistance setting up your group in iLab.
2. **Approval process:** Please allow a few business days for processing as we must obtain a registered group id (GID) from VUIT.
3. **Adding other users to the group:** Send the [Getting Started page](#) to other members in your group. On the form to

For PIs

- For PIs
- Setting Up Fairshare Usage
- Setting up a New Group
- Pricing
- Forms and Documents
- Grant Text
- ACCREx: ACCRE's Experimental Technologies Program

Status Dashboard

- GPFS
- Network
- LStore
- Slurm

CLOUD SERVICES



- **Start by contacting Research IT for initial [consultation](#)**
- **AWS Highlights**
 - You only pay for what you use
 - Take advantage of discounts at the master account level
 - Easily Scale in & Scale out
 - Environments for HIPAA & CUI

VUIT: NETWORKING

Network Infrastructure Consulting & Planning

- [Renovation network surveys](#)

Data Network Services

- [Wired Network Connectivity](#)
- [Wireless Network Connectivity](#)

IP Requests

- [NDE – Request an IP address](#)



OTHER RESOURCES

- Jean & Alexander Heard Library [DISC Group](#):
 - Geographic Information Systems
 - Data Curation
- [Center for Digital Humanities](#)
 - Introduction to Digital Humanities Course
 - [Special Working Groups](#) & boot camps
- [Center for Teaching](#)
- [Creative Data Solutions](#)
 - Informatics Support
- [Data Science Institute](#)
- VUIT Resources



FOR MORE INFORMATION

Research IT Service

- Contact: Lindsey Fox
research.it@vanderbilt.edu
- Provide [feedback on services](#)
- Schedule a [consultation](#)

VUIT Relationship Manager

- Contact: Adam Morgan
vuit.research@vanderbilt.edu

