IT RESEARCH COMPUTING

UMass Boston
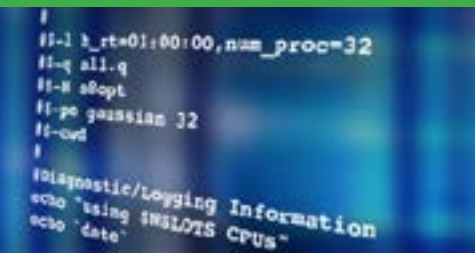
High Performance Computing

Applications

Other Services

There are several high performance compute clusters available to UMass Boston researchers. These include two local clusters ('chimera', and 'gibbs') as well as resources housed at the Massachusetts Green High Performance Computing Center (MGHPCC).

• Unity is a large shared system housed at the MGHPCC.

• Chimera is a distributed memory compute cluster.

• Gibbs is a GPU-based compute cluster.

We support a wide variety of applications on our resources, including but not limited to **genomics bioinformatics, proteomics, molecular dynamics, engineering, optimization, and analysis tools.**

Sample applications include:
• R, Python, SAS, SPSS, Stata
• NVIVO, ATLAS.ti, MAXQDA
• MATLAB
• RStudio, Shiny
• Schrodinger, PyMOL
• AnsysEm, Lumerical
• and many others

Need something not on the list? Please contact us at it-rc@umb.edu.

Linux Support: The Research Computing group provides Linux support, for both workstations and servers, running Rocky Linux, Debian, Ubuntu or derivatives.

Training: We offer regular training workshops in Linux and Bash scripting, Python scripting, and orientation workshops for our HPC resources.

UMass Boston offers online training via Sage Campus and LinkedIn Learning.

Consulting: Our staff members are available to help research faculty, staff, and students get the best use out of our services and reduce time to results.

Remote Access: access to Research Computing resources from off campus is available via the University Virtual Private Network (VPN) offering.

Storage: We have a number of storage options available to our HPC users, and can assist in determining what storage solutions best meet your needs for other uses.

Data Security: IT Research Computing and the IT Security Group in collaboration are able to provide consultation, advice, and auditing to help users meet data security requirements. This includes review and negotiation of data use agreements as well as protecting proprietary data.