Cloud Computing with BioHPC
BioHPC Computing

Option #1. Pay by hours

**Tier 1:** 0.5 to 1 TB RAM, 64 to 96 core

**Tier 2:** 128 GB RAM, 24 core

**Tier 3:** 16 GB RAM, 8 core
BioHPC Computing

Option #1. Pay by hours

**Tier 1:** 0.5 to 1 TB RAM, 64 to 96 core

**Unified computing credits for all three tiers**
BioHPC Computing

Option #2. You buy the machine
We host it.

Full services
• Hardware configuration;
• Purchasing;
• Setup;
• Maintenance;
Option #3. BioHPC Membership

- $500/year, with “unlimited” access to general and medium machines;

- What is the restriction?
  - Reserve up to 1 week/general machine or 1 day/medium RAM machine;
  - Reservation can be extended if the machine is still available.
BioHPC memberships can be shared by your lab members
BioHPC Software

• 347 Software titles including 3 with commercial software licenses;

• New software can be installed at request;
# BioHPC Data Storage

<table>
<thead>
<tr>
<th>unit</th>
<th>unit cost (Cornell)</th>
<th>unit cost (external)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 TB-year</td>
<td>$91.35</td>
<td>$109.62</td>
</tr>
<tr>
<td>1 TB-year backup</td>
<td>$120.00</td>
<td>$144.00</td>
</tr>
</tbody>
</table>
Data Sharing  
Option #1 Temporary Account

BioHPC Lab: Request Temporary User

You can request a temporary access to BioHPC Lab for an external or internal collaborator. You need to choose for how long and type the collaborator e-mail in the box below. Make sure the e-mail is valid, without it the collaborator will not be able to access temporary account. Temporary account allows user to log in to bioslogin or bioslogin2 and transfer data to and from BioHPC Lab. Temporary account cannot be used to purchase hours or storage, reserve machines or carry out other common tasks. It is designed for data transfer only.

Currently used temporary accounts
None

Request temporary account

Once you submit the request the collaborator will be notified by e-mail to set up password for the temporary account. You will be granted access to all files and directories on the temporary account. You will be able to go to the temporary account home directory and copy files from there to your destination, you will be able to copy your files to the home directory of the temporary account. You will be notified by e-mail that your request has been processed. Sometimes files created by temporary user will not have write or read access to the requestor use "reset file access" link to reclaim access to the files.

NOTE: Once you are done with the temporary account please delete all your files, otherwise the next user will gain full access to the files and directories you left over in the temporary account home directory.

You can terminate temporary account at any time, and so can the person you assigned it to. Once the temporary account is terminated the access password will be reset, your access to temporary account home directory will be removed and the account will be available for another user. Do not terminate temporary account before you copied and removed all your files.

Collaborator e-mail: mycollaborator@gmail.com
Account will be valid for: 7 days

Submit

Website credentials: user: orangs, pass:240430mail. [BioHPC Lab] 
Logout  
Web Accessibility Help
Data Sharing

Option #2 GLOBUS

Instruction for you:
setting up a sharing directory

Instruction for collaborators:
retrieving files

How to share BioHPC Lab files with collaborators?
Part 1. For BioHPC users
How to set up a directory to share files?
1. Create a new directory under your BioHPC home directory, put the files that you want to share in that directory. (You can do this by using the login node cbuslogin.tc.cornell.edu, which does not require a reservation)
2. Login to Globus.
   • Open the web site www.globus.org and click Login
   • Cornell users can use your existing Cornell NetID or google account to login. Selecting “Cornell University” or “Google” and then click “Continue”. Follow the instruction to login to your account.
3. Create a shared endpoint that points to your shared directory.
   • After you login to the Globus web site, click “Manage Data” -> “Endpoints”
   • Under “Manage Endpoints”, click “search all”, then type “Biohpc” in the search box.

Part 2. For your collaborators
How to download the files?
1. Click the link in the email that you received. You will be prompted to login with your email account (Globus supports most university emails and Google accounts)
2. After you login, you will be directed to the “Transfer Files” window. The left panel is the source endpoint. The right panel is the destination endpoint. You need both endpoints to transfer files. If you do not see the source endpoint, click “Start by select an endpoint” and select the endpoint that is shared with you.
Data Sharing  Option #3  Get your collaborators a BioHPC Account
BioHPC support email
cbsu@cornell.edu
Office Hours

Monday 1:00 – 3:00
Thursday 1:00 – 3:00

Online Reservation
Workshops

LINUX Training
(2-3 times per year)

- Intro to BioHPC Lab
- LINUX 1,2,3
- Practical Examples
- Docker

Bioinformatics Training
(March to June)

- RNA-Seq
- Transcriptome Assembly
- Variants Calling
- Genome Assembly
- ChIP-Seq
- Gene Annotation
Sign up for workshop mailing list

Workshops

Please join our mailing list if you would like to be notified about new workshops.

BioHPC Lab Open House March 23 2017 in G10 Biotech

Current Workshops
Introduction to BioHPC Lab (February 1, 2017)
Linux for Biologists (February 8, 15 and 22, 2017)
Practical Linux Examples in Bioinformatics (February 27, 2017)
RNA-Seq Data Analysis (March 1, 8, 20 2017)
Transcriptome assembly (March 22 and April 5, 2017)
Variant Calling (April 12, 19 2017)
Gene Function Annotation (April 26 and May 3 2017)
ChiP-Seq Data Analysis and Motif Calling (May 10, 17 2017)
Genome Assembly (May 24, 31 2017)

Past Workshops

2016
Introduction to BioHPC Lab (February 8, 2016)
Linux for Biologists (February 15, 22 and 29, 2016)
RNA-Seq Data Analysis (March 7, 14, 21 2016)
Transcriptome assembly (April 4, 11, 2016)
Variant Calling (April 18, 25 2016)

If you miss a workshop

• Self-guided exercises available on-line;

• Use the office hours;