ICS-ACI Reference Guide

Connecting to ICS-ACI:

- Using Putty
  - Host Name: aci-b.aci.ics.psu.edu or aci-i.aci.ics.psu.edu
  - Port: 22
  - Enable X11 Forwarding: Click SSH > X11 > Check “Enable X11 forwarding”
  - Set User Name: Click Connection > Data > Enter username in “Auto-login username”
- Using SSH
  - ssh -Y <username>@aci-b.aci.ics.psu.edu
  - ssh aci-i.aci.ics.psu.edu
- Using Exceed onDemand (aci-I only)
  - Host name: aci-i.aci.ics.psu.edu
  - Xconfig: Desktop_Mode_1400x1050.cfg
  - Xstart: Gnome/Desktop.xs

Copying files:

- WinSCP
  - Host Name: fsgw01.aci.ics.psu.edu
  - File Protocol: SCP
- scp
  - scp -P 1022 <username>@aci-i.aci.ics.psu.edu:<full path/filename> <target>

Submitting a job to your allocation:

- Either: qsub -A <allocName> OR #PBS -A <allocName>
- Job start within 1 hour of submission in core allocation (nodes, cores, memory available)
- Bursting is allowed up to 4x of the core allocation
- Multiple burst jobs may be submitted

Open Allocation Notes:

- Use: qsub -A open OR #PBS -A open
- No guarantees and lower priority
- Limits: 20 cores running per user, 100 queued jobs, 24 hour runtime with no extensions

Storage:

<table>
<thead>
<tr>
<th>Directory</th>
<th>Capacity</th>
<th>Backup</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>10Gb</td>
<td>Private NFS with Backup/Recovery</td>
<td>/storage/home/&lt;userI_D&gt;</td>
</tr>
<tr>
<td>Work</td>
<td>128Gb</td>
<td>Shared NFS with Backup/Recovery</td>
<td>/storage/work/&lt;userI_D&gt;</td>
</tr>
<tr>
<td>Scratch</td>
<td>1 million files*</td>
<td>GPFS with no Backup*</td>
<td>/gpfs/scratch/&lt;userI_D&gt;</td>
</tr>
<tr>
<td>Group</td>
<td>5 Tb blocks</td>
<td>NFS w/ Backup/Recovery &amp; Dual Mount option</td>
<td>/storage/group/&lt;allocName&gt;</td>
</tr>
</tbody>
</table>

Using the Modules:

- module av <keyword> (to search available software by any specific keyword)
- module load <moduleName> (to load specific software)
- module show <moduleName> (to show paths for executable bins and library files)

Checking your Allocation and Usage (ACI-B):

- glsfund –h (For rolling 90 day allocation and balance)
- showq –w acct=<allocName>
- glsusage –u <userID>
- glsusage –g <allocName>

i-ASK Center Support: [https://iask.aci.ics.psu.edu](https://iask.aci.ics.psu.edu) or (814) 865-4275
Duo Support: [http://itservicedesk.psu.edu](http://itservicedesk.psu.edu) email:itservicedesk@psu.edu or call (814) 865-4357