Introduction to OpenOnDemand
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TAMU HPRC
What is OpenOnDemand

- An open source software developed at the Ohio Supercomputing Center
- Enables HPC centers to deploy advanced web and graphical interface for their users
- Provides an integrated single access point for all HPC resources and services
- Extensible design for easy deployment of new services (applications)
How to Access TAMU OnDemand

- You need a valid account on Ada
- Open https://portal.hprc.tamu.edu in a browser
- Login with your NetID and password
- VPN is needed if accessing the URL from off campus
- Logout and close the browser when you are done, especially if you use a public computer.
TAMU OnDemand Dashboard

OnDemand provides an integrated, single access point for all of your HPC resources.

Message of the Day

| Texas A&M University High Performance Research Computing |
| Website: http://hprc.tamu.edu |
| Consulting: help@hprc.tamu.edu or (979) 845-0219 |
| Ada Documentation: https://hprc.tamu.edu/wiki/index.php/Ada |

--- IMPORTANT POLICY INFORMATION ---
Current Applications

- Files
- Jobs
- Clusters
- Interactive applications
  - Jupyter
  - Rstudio
  - Matlab
  - Abaqus
  - Ansys
  - ...

Files

- CMakeFiles
- Desktop
- Jupyter-Notebook
- OpenFOAM
- SASAppData
- bak
- globus
- igv
- intel
- sasuser.v94
- wrf
- wxpython
- yellowstone
- 1_10KTC.fastq
- 2_10KTC.fastq
Job Composer

Jobs

Show 25 entries

<table>
<thead>
<tr>
<th>Created</th>
<th>Name</th>
<th>ID</th>
<th>Cluster</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 15, 2017 4:31pm</td>
<td>(default) Simple Sequential Job</td>
<td>6754832</td>
<td></td>
<td>Completed</td>
</tr>
<tr>
<td>September 15, 2017 4:31pm</td>
<td>(default) Simple Sequential Job</td>
<td></td>
<td></td>
<td>Not Submitted</td>
</tr>
<tr>
<td>September 15, 2017 4:30pm</td>
<td>(default) Simple Sequential Job</td>
<td></td>
<td></td>
<td>Not Submitted</td>
</tr>
<tr>
<td>September 15, 2017 11:05am</td>
<td>(default) Simple Sequential Job</td>
<td></td>
<td></td>
<td>Not Submitted</td>
</tr>
</tbody>
</table>

Showing 1 to 4 of 4 entries

Job Details

Job Name: (default) Simple Sequential Job

Submit to:

Cluster is not valid! Edit Job Options to select a valid cluster.

Account:
Not specified

Script location:

/scratch/user/pingluo/ondemand/data/sys/myjobs/pr

Script name:
# Active Jobs

## Jobs Table

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>User</th>
<th>Account</th>
<th>Time Used</th>
<th>Queue</th>
<th>Status</th>
<th>Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>7166285</td>
<td>tsi4</td>
<td>jiv</td>
<td>082806458...</td>
<td>214:46:27</td>
<td>special</td>
<td>Running</td>
<td>Ada</td>
</tr>
<tr>
<td>7166316</td>
<td>22-1</td>
<td>vulpeca17</td>
<td>082793017...</td>
<td>214:09:35</td>
<td>special</td>
<td>Running</td>
<td>Ada</td>
</tr>
<tr>
<td>7166351</td>
<td>22-2</td>
<td>vulpeca17</td>
<td>082793017...</td>
<td>213:50:02</td>
<td>special</td>
<td>Running</td>
<td>Ada</td>
</tr>
<tr>
<td>7166374</td>
<td>22-3</td>
<td>vulpeca17</td>
<td>082793017...</td>
<td>213:34:11</td>
<td>special</td>
<td>Running</td>
<td>Ada</td>
</tr>
<tr>
<td>7166383</td>
<td>scs-37</td>
<td>vamshij</td>
<td>082789660...</td>
<td>213:26:52</td>
<td>special</td>
<td>Running</td>
<td>Ada</td>
</tr>
<tr>
<td>7175048</td>
<td>CO2_50_4nm_3500_p</td>
<td>kanw9ace</td>
<td>082788030...</td>
<td>21:15:19</td>
<td>sn_long</td>
<td>Running</td>
<td>Ada</td>
</tr>
<tr>
<td>7177521</td>
<td>Viridiplantae</td>
<td>dbrowne</td>
<td>082790642...</td>
<td>01:28:32</td>
<td>sn_regular</td>
<td>Running</td>
<td>Ada</td>
</tr>
<tr>
<td>7166391</td>
<td>scs-38</td>
<td>vamshij</td>
<td>082789660...</td>
<td>213:23:04</td>
<td>special</td>
<td>Running</td>
<td>Ada</td>
</tr>
<tr>
<td>7177550</td>
<td>Viridiplantae</td>
<td>dbrowne</td>
<td>082790642...</td>
<td>00:40:27</td>
<td>sn_regular</td>
<td>Running</td>
<td>Ada</td>
</tr>
</tbody>
</table>
NOTICE: This computer system and data herein are available only for authorized purposes by authorized users. Use for any other purpose may result in administrative/disciplinary actions or criminal prosecution against the user. Usage may be subject to security testing and monitoring. Applicable privacy laws establish the expectations of privacy.

pingluo@ada.tamu.edu's password:  

Launching Jupyter Notebook

This app will launch a Jupyter Notebook server on the Ada cluster.

Account

This field is optional.

Number of hours

1

Number of cores:

1

Specify the number of cores [1-20], allocated on a node from the Ada cluster.

I would like to receive an email when the session starts

Launch

* All Jupyter Notebook (Ada) session data is generated and stored under the user's home directory in the corresponding data root directory.
Running Jupyter Notebook

Variables

A variable \( x \) is an object in memory: integer, string, etc.

- A variable \( x \) has a name, e.g., \( x \).
- A variable \( x \) is a reference to a memory location where an object is stored.
- A variable \( x \) has a value, i.e., the object stored in the memory location referred by \( x \).
- A variable \( x \) has a type: integer, string (object type)

Example: variable balance

- Variable Name: balance
- Memory/Location Reference: the box (memory) where the money (object) is stored