Appendix 1

Interactive Apps

Desktops

🖥️ Palmetto Desktop

GUIs

🧊 Abaqus/CAE

🔶 Matlab

🌐 UGUI

Servers

🔵 Code Server (VSCode)

🔁 Containerized Jupyter Notebook

🔁 Jupyter + Spark

🔁 Jupyter Notebook

🔵 RShiny App

🔵 RStudio Server

🔵 RStudio Server + Spark

🔥 Workshop Pytorch Notebook

Jupyter Notebook

This app will launch a Jupyter Notebook server on one or more nodes with more advanced PBS resource request options. Users can also specify virtual/conda environments to launch custom notebooks for Tensorflow and other advanced libraries.

Anaconda Version

[anaconda3/2022.05-gcc/9.5.0 ▾]

List of modules to be loaded, separate by an empty space

[cuda/11.1.1-gcc/9.5.0 cudnn/8.0.5.39-11.1-gcc/9.5.0-cu11]

Provide a space-separated list of modules to be loaded.
- For example: **openjdk/11.0.2-gcc/8.3.1 jags/4.3.0-gcc/8.3.1**

Path to Python virtual/conda environment

[source activate aue8930]

Provide an activation command to load the corresponding Python virtual (venv) or conda environment. You can replace NAME_OF_ENVIRONMENT
with a corresponding conda environment, or PATH_TO_VIRTUAL_ENVIRONMENT
with a specific path to your venv environment directory.
- Example conda: **conda activate NAME_OF_ENVIRONMENT**
- Example venv: **source PATH_TO_VIRTUAL_ENVIRONMENT/bin/activate**

Notebook Workflow

[Standard Jupyter Notebook ▾]

Number of resource chunks (select)

[1]

CPU cores per chunk (ncpus)

[16]

- Typical Palmetto compute nodes have **8, 12, 16, 20, 24, 28, 40, and 56** cores.
- DGX nodes have **128** cores.
- Bigmem nodes have **24, 32, 40, and 80** cores. - **Users can request any number of cores that is smaller than the number of available cores.**

Amount of memory per chunk (mem)

[32gb]

- Typical Palmetto compute nodes have **15gb, 30gb, 46gb, 62gb, 125gb, 372gb, 748gb, and 990gb** of memory.
- DGX nodes have **990gb** of memory.
- Bigmem nodes have **500gb and 750gb** and **1tb and 1.5tb** of memory.

Number of GPUs per chunk (ngpus)

[1 ▾]

GPU Model (gpu_model)

[V100 ▾]

Interconnect

[100g - Ethernet phase 18 and above ▾]

Extra PBS resource allocation request

[ ]

- Enter the additional resource request just like how you would in a command line environment.
- Each request should start with a colon **:** sign.
- For example: **:chip_type=e5-2665**

Walltime

[08:00:00]

- Walltime format is **hh:mm:ss**.
- Phase 1 through 6 nodes can be reserved up to 336 hours.
- Phase 7 through 27 nodes can be reserved up to 72 hours.

Queue

work1

Queue to submit the job to

Absolute path to working directory

Select your project directory; defaults to $HOME

☐ I would like to receive an email when the session starts

Launch

* The Jupyter Notebook session data for this session can be accessed under the data root directory.

work1

Queue to submit the job to

Absolute path to working directory

Select your project directory; defaults to $HOME

☐ I would like to receive an email when the session starts