

McCleary OnDemand

A way to use RStudio (mainly for plots) on the Yale HPC - a web browser and command line/ terminal are used in tandem

Step 1: Log into McCleary and use the terminal to make a conda environment with R essentials, for OnDemand to use

```
# give yourself some memory to do this task

srun --pty --mem=10g --time=06:00:00 -p devel bash

# load miniconda

ml miniconda

# make the environment - you can name it whatever you want. see also
https://docs.ycrc.yale.edu/clusters-at-yale/guides/r/#conda-based-r-environments
conda create --name r_env_ood r-base=4.2 r-essentials

# install rstudio-desktop into the environment, say 'y' to any 'proceed?' questions

conda install -n r_env_ood -c conda-forge rstudio-desktop

# note - this took ~20 min to complete using 30g memory in devel so dont worry if it
takes a while

# unload miniconda

module unload miniconda

# update (to tell OnDemand where this environment is/ that it exists now)

ycrc_conda_env.sh update
```

Step 2. Web browser part: open a web browser & go to <https://ood-mccleary.ycrc.yale.edu/pun/sys/dashboard/>
(requires netID login, and I think VPN)

select RStudio Desktop

select your conda environment you just made from the drop-down menu

set any memory requirements you want

hit LAUNCH

you can observe your job in the queue on McCleary

```
squeue -u netID
```

(and see if it is running/ is stuck on pending because you have too much memory use from other jobs in the devel queue) example:

PARTITION	NAME	USER	ACCOUNT	ST	SUBMIT_TIME	TIME	TIME_LIMIT	NODES	CPUS	MIN_MEMORY	TRES_PER_N	FEATURES	PRIORITY	NODELIST(REASON)
devel	ondemand	kj28	huckins	R	2023-07-28T11:08	15:22	6:00:00	1	1	5G	N/A	(null)	0.00001400	r206u22n01

once the job is successfully running, the browser should look like

Welcome to OnDemand on McCleary. Please report any issues or suggestions to hpc@yale.edu

Session was successfully created.

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<https://r206u22n12.mccleary.ycrc.yale.edu>

RStudio Desktop (5269461) 1 node | 1 core | Running

Host: >`r206u22n12.mccleary.ycrc.yale.edu` Delete

Created at: 2023-07-28 11:26:51 EDT

Time Remaining: 5 hours and 59 minutes

Session ID: `71f1dbb4-891a-4c4d-8ba5-360f4315a4a0`

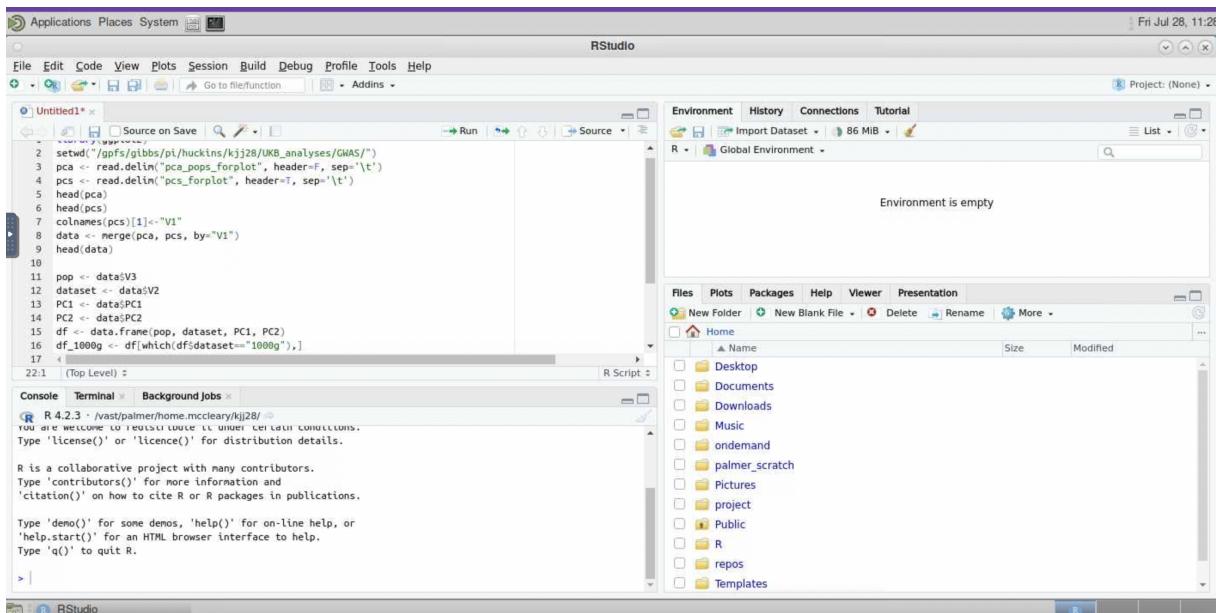
noVNC Connection Native Instructions

Compression Image Quality

0 (low) to 9 (high) 0 (low) to 9 (high)

Launch RStudio Desktop View Only (Share-able Link)

and you can hit 'Launch RStudio Desktop' which opens a new window, should look like this



you should have access to all your files that are on McCleary

note that closing this browser window won't end the RStudio session, and if you click the 'Launch RStudio Desktop' blue button again you'll be back at the same session - to end properly you can cancel the job on McCleary (i.e., on the command line terminal)

```
scancel onDemandJobID
```