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General Info

This is the repository for the software required by for the Microbiome workshop. Please note that what is installed in /gpfs/group/dml129/default/microbiome_workshop2020 may differ from this repository as the actual setup version of this repository will contain conda environments.

To view this documentation in a different format then please see the doc directory of this repository.

Software

The repository contains the following software:

- RStudio
- Qiime2
- Megan
- MALT

How-to-use

- RStudio
- Qiime2
- Megan
- MALT

RStudio

Simply use the following commands to load the rstudio module:

\$ module use /gpfs/group/dml129/default/microbiome_workshop2020/sw/modules
\$ module load rstudio

Now that you have the module loaded, here are the various ways that you can interact with it.

To launch rstudio:

\$ rstudio

To use R:

\$ R

To use Rscript:

\$ Rscript

To use Rscript quietly:

Qiime2

To setup access to Qiime2, you will first need to create a symlink to the environment in your home directory using the scripts module:

- \$ module use /gpfs/group/dml129/default/microbiome_workshop2020/sw/modules
 \$ module load scripts
- \$ link_qiime2

This will then create a symlink to the qiime2 environment in your home directory. You can use the following commands to activate the environment:

- \$ module load python/3.6.3-anaconda5.0.1
- \$ cd ~
- \$ source activate qiime2

To then verify that Qiime2 is working simply use the following command:

\$ qiime --help

Megan

To setup access to Megan, you will first need to create a symlink to the environment in your home directory using the scripts module:

- \$ module use /gpfs/group/dml129/default/microbiome_workshop2020/sw/modules
 \$ module load scripts
- \$ link_megan

This will then create a symlink to the megan environment in your home directory. You can use the following commands to activate the environment:

- \$ module load python/3.6.3-anaconda5.0.1
- \$ cd ~
- \$ source activate megan

To then launch Megan's GUI (need to be in an Interactive Desktop session) use the following command:

\$ MEGAN

MALT

To access MALT, all you need to do is activate the Megan environment:

- \$ module load python/3.6.3-anaconda5.0.1
- \$ cd ~
- \$ source activate megan

Then, to test that you have access to MALT simply use the following command: malt-build -h

Troubleshooting

If you run into any issues regarding the use of this repository then please contact either Jason or Justin at iask@ics.psu.edu.