

How to use the container file to create a reproduceable ubuntu worker environment on snowy

User Guide

VERY IMPORTANT FOR CONNECTING FROM OUTSIDE THE CAMPUS: DON'T TRY TO CONNECT TO THE SERVER FROM OUTSIDE THE CAMPUS BEFORE YOU ENABLE 2FA, FOLLOW STEP 2 IN CAMPUS BEFORE YOU TRY IT, OTHERWISE UPPMAX WILL LOCK YOU OUT PERMANENTLY AND YOU WILL NEED TO CONTACT SUPPORT FOR YOUR FIRST 2FA CODE!

- 1) You need a working username and password on uppmix that is already associated with a project on uppmix. We already have usernames and a project, and you can request a password for that here: <https://suprintegration.uppmix.uu.se/getpasswd/>
- 2) If you are connecting from outside the campus, you need a 2FA code, i.e a code that you get from an authenticator application like Google Authenticator([Google Authenticator - Apps on Google Play](#)) or any other authenticator application. Install it on your phone and use these steps to enable it, [2-factor - Uppsala University \(uu.se\)](#) .
- 3) When you have your username and password (and 2fa code if you are outside of campus) for uppmix, use this line to connect to the rackham login node,
`ssh username@rackham.uppmix.uu.se`
- 4) Now you are connected to a login node in rackham. Don't try to run any jobs on the login node.
- 5) To create a worker node that has the gpu compute in snowy, use this in the login node,

```
interactive -A uppmix2024-2-18 -t 1:00:00 -M snowy
```

This will create an interactive node for one hour on snowy, change -t modifier to change the time.

- 6) Check your node name to make sure you are on **Snowy**, You can understand that by looking at the username and server name that is before every line on ubuntu, for example snowy in my case says:

```
ogersoy@s1 ogersoy
```

s1 here means snowy. If it was a rackham worker node it would be rX i.e. r1.

Login nodes have the names rackhamX i.e. rackham1.

```
[ogersoy@s1 ogersoy]$ |
```

Image 1: This is a snowy worker node.

```
[ogersoy@rackham3 ogersoy]$ interactive -A uppmax2024-2-18 -t 1:00:00 -M snowy
```

Image 2: This is a rackham login node.

- 7) After you make sure you are on a snowy worker node, clone your github repo using the code below. In this example I am using the chatbot branch:

```
git clone -b centralized-chatbot https://github.com/ogersoy/Project-CS-2024
```

To update the branch from github for any reason after you clone it use fetch in the **project folder**,

```
git fetch origin
```

```
git pull origin centralized-chatbot
```

- 8) To install the requirements from a requirements.txt file, first cd into project folder like so,

```
cd Project-CS-2024
```

Then first use these 3 lines to install python, git and git-lfs

```
module load python3
```

```
module load git
```

```
module load git-lfs
```

Check if pip is installed:

```
pip3 --version
```

If not use,

```
module load python3-pip
```

After you make sure pip is running use the command below to install all the requirements:

```
cat requirements.txt | xargs -n 1 pip3 install --no-cache-dir || true
```

Use pip3 freeze to check if they are installed correctly.