

Working on an ubuntu server

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WHY?

- A lot faster than the average laptop
- A large shared storage
 - Means better collaboration
 - But also pay attention to your usage
- Accessible from anywhere
 - As long as you are on the Radboud network
 - Or use a vpn



A server room at google

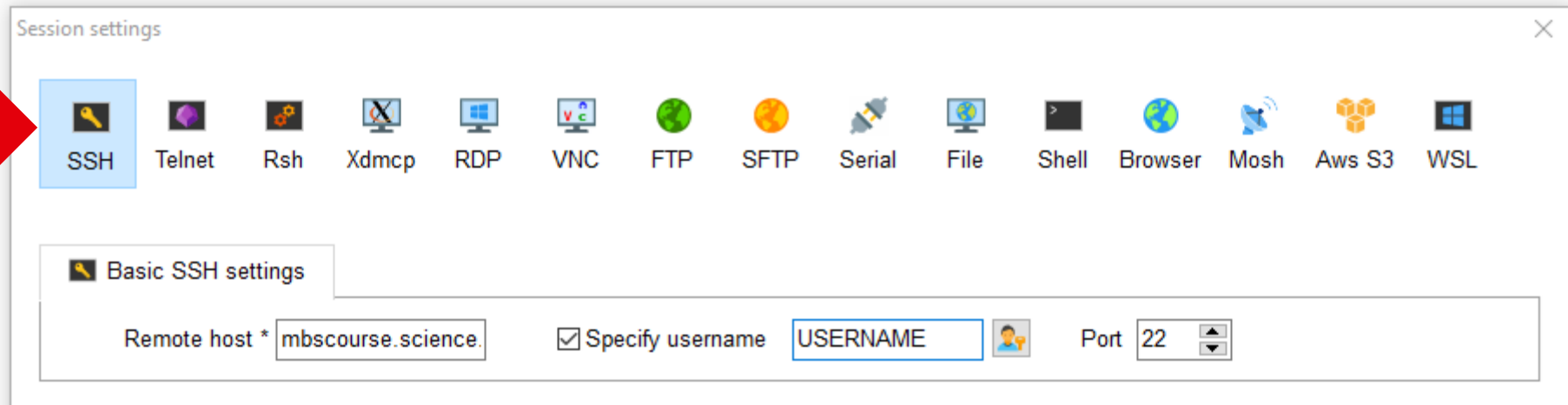
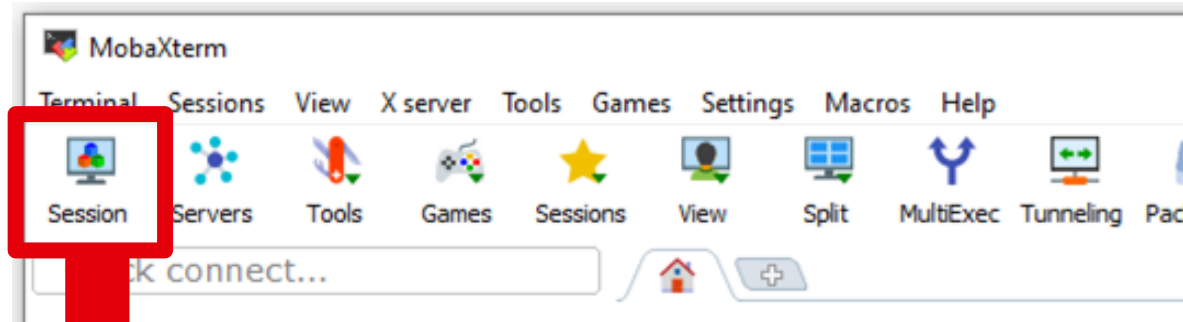


Our server somewhere in Huygens

CONNECTING TO OUR SERVER

- Connection is done via a protocol called **SSH**
- Can only be reached through the Radboud network
 - Eduvpn can be used to access the Radboud network
- Windows computer can use an ssh-client called **mobaxterm**
 - <https://mobaxterm.mobatek.net/download.html>
- It uses a 'web' address: **mbcourse.science.ru.nl**
- And your **science account**

CONNECTING TO OUR SERVER



BASIC COMMANDS & SERVER STRUCTURE

- Once you've logged in you are in your home folder, should be kept clean!
 - /mbshome/<USERNAME>
- Use basic ubuntu commands to navigate

- Some basic commands:

Command	Explanation
ls	List directory contents, use ls -l flag for a more detailed view
pwd	Print working directory, shows the path to your current folder
cd <PATH>	Change working directory, use this to navigate. Use the path .. to go up one directory

MOVING AROUND ON THE SERVER

- Try and move to the root of the server structure and print the contents!
- Afterwards try moving to the following path:
/scratch/ghe_2022

Command	Explanation
ls	List directory contents, use ls -l flag for a more detailed view
pwd	Print working directory, shows the path to your current folder
cd <PATH>	Change working directory, use this to navigate. Use the path .. to go up one directory

/SCRATCH/GHE_2022

- Course material is stored in this directory
- Here you will make a group directory to work in!
- Try making a group directory (only one of you) at the following location:
- /scratch/ghe_2022/groups/<YOUR GROUP>
- Here's a new command!

Command	Explanation
mkdir <PATH>	Make an new directory at the specified path

VARIABLES

- Variables are way to easily reference data.
This data can be a path, text or a number
- Variables are assigned like this:
`MY_GROUP="/scratch/ghe_2022/groups/mygroup"`
- Once assigned they are referenced as follows: `$MY_GROUP`

Command	Explanation
<code>echo <VARIABLE></code>	Print the value of a variable. Assigned variables are referenced by appending a \$
<code>cat <FILE PATH></code>	Concatenate and print the contents of a file

ALL COMMANDS

Command	Explanation
ls	List directory contents, use <code>ls -l</code> flag for a more detailed view
pwd	Print working directory, shows the path to your current folder
cd <PATH>	Change working directory, use this to navigate. Use the path <code>..</code> to go up one directory
mkdir <PATH>	Make an new directory at the specified path
echo <VARIABLE>	Print the value of a variable. Assigned variables are referenced by appending a <code>\$</code>
cat <FILE PATH>	Concatenate and print the contents of a file
cp <ORIGIN> <DESTINATION>	Copy the item at the path <ORIGIN> to the path <DESTINATION> You'll need this one later!