Imaging system manual

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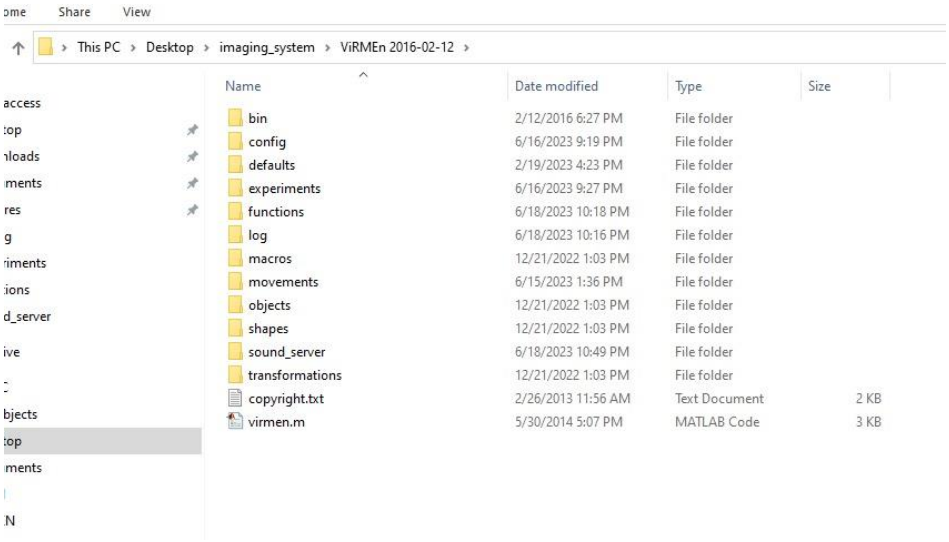
Requirements

For a new computer – in the sound_server folder, run in the cmd “npm i” this will download all the necessary libraries.

Create a folder called “log” inside the virmen folder.
(C:\Users\user\Desktop\imaging_system\ViRMEn 2016-02-12\log)

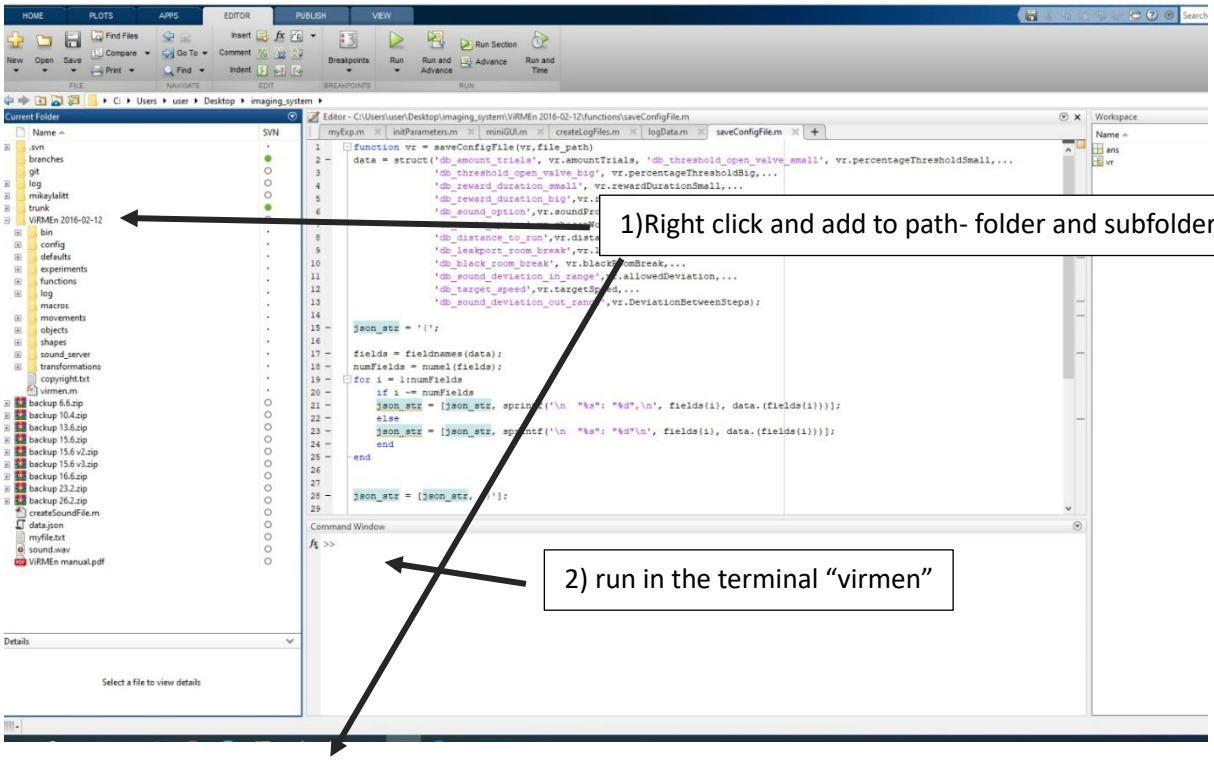
Create a folder called “config” inside the virmen folder.
(C:\Users\user\Desktop\imaging_system\ViRMEn 2016-02-12\log)

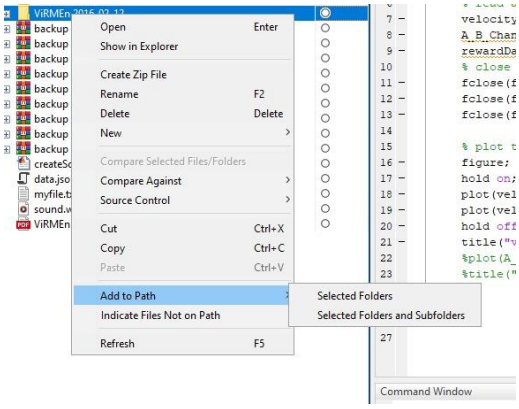


For running the program:

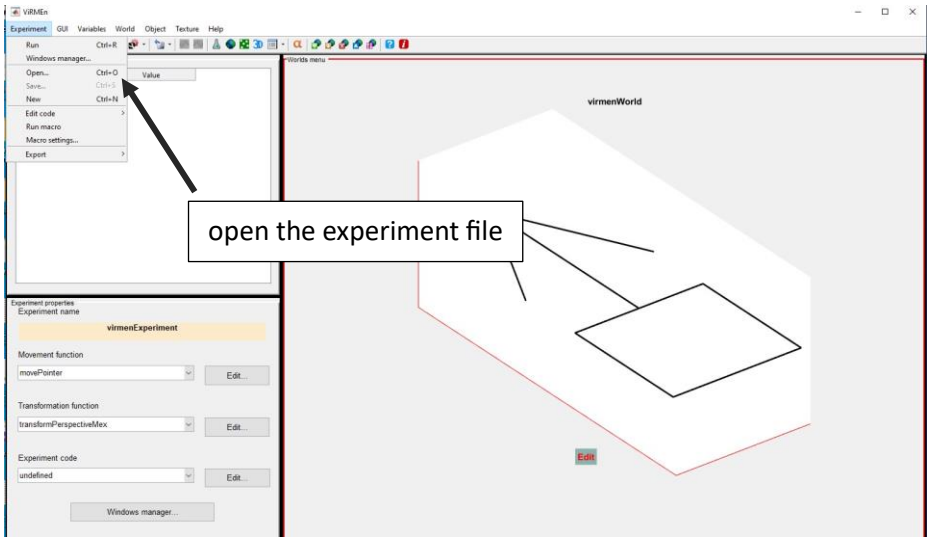
Open Matlab 2018b

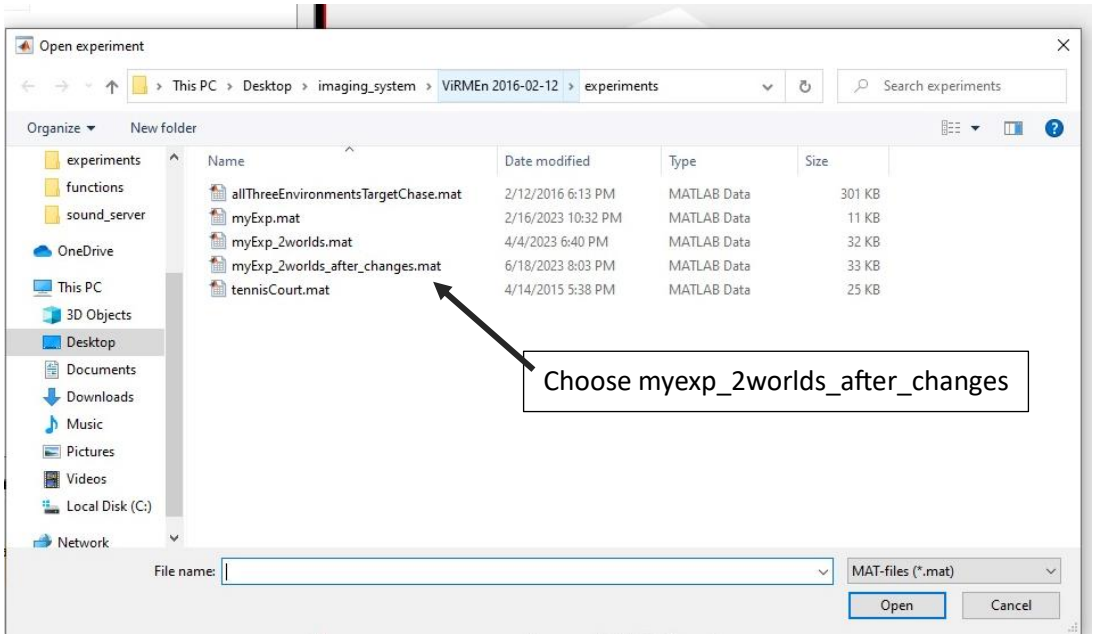
Go to the “C:\Users\user\Desktop\imaging_system\ViRMEn 2016-02-12” folder in the virmen file explorer.

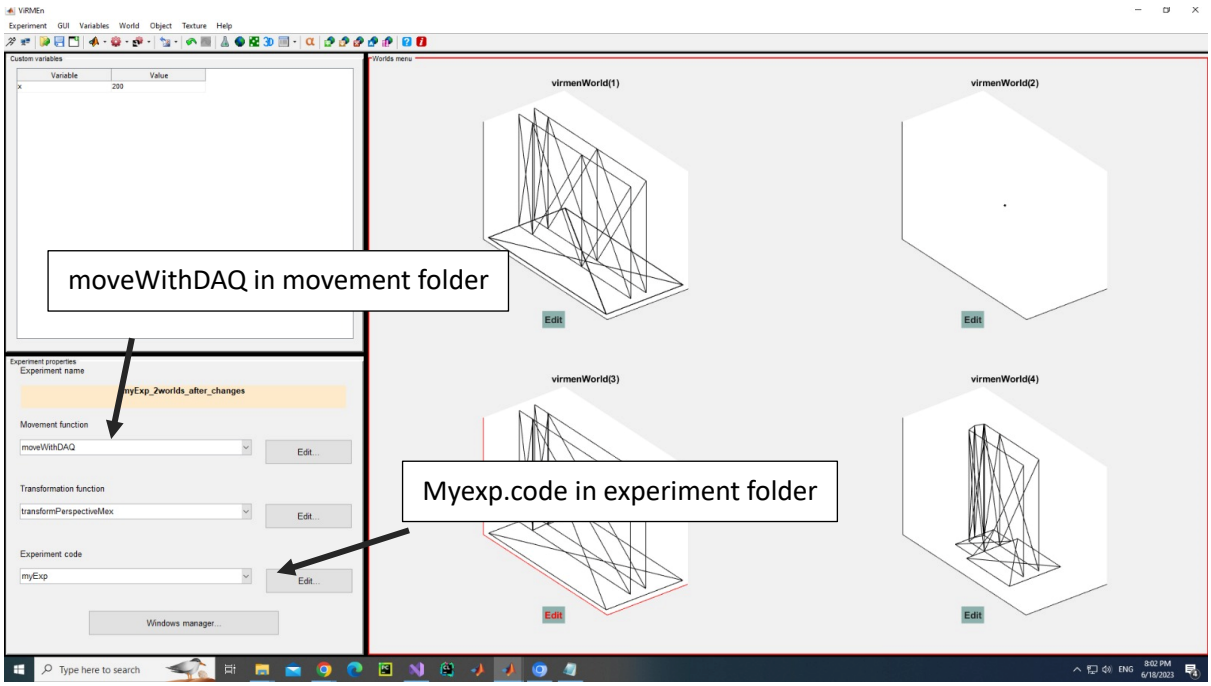




You will get this window

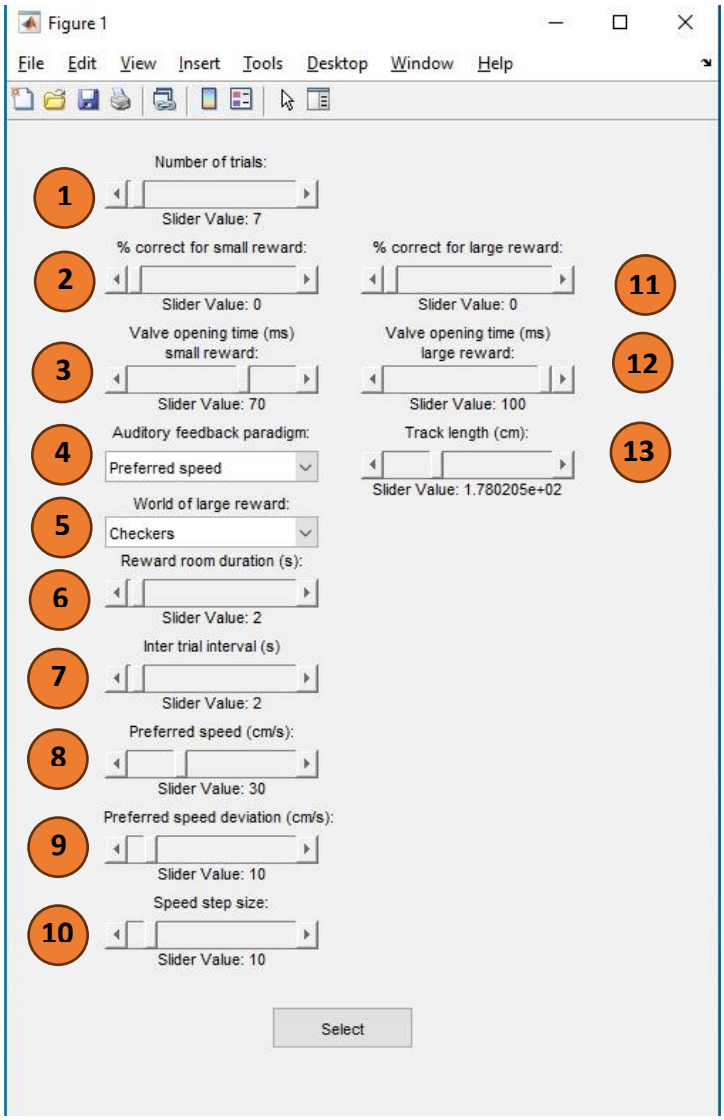






after setting everything, run the session

you will enter the configuration of the session. After pressing “select” It will be saved in the log folder. The default configuration file is the last configuration used.



1) Number of trials for the session
2) Percentage of time running in the goal range in the small reward room
3) Reward size- how much time to open the valve for the small reward.
4) Which type of sound policy to activate.
5) Choose the hallway that will represent the big reward hallway.
6) How much time (in sec) to be in the reward room.
7) How much time (in sec) to be in the black room.
8) Target speed
9) How much deviation from the target speed we allowed.
10) When out of range, how much deviation between each step
11) Percentage of time running in the goal range in the big reward room
12) Reward size- how much time to open the valve for the big reward.
13) The length of the trace (in cm, not precise)

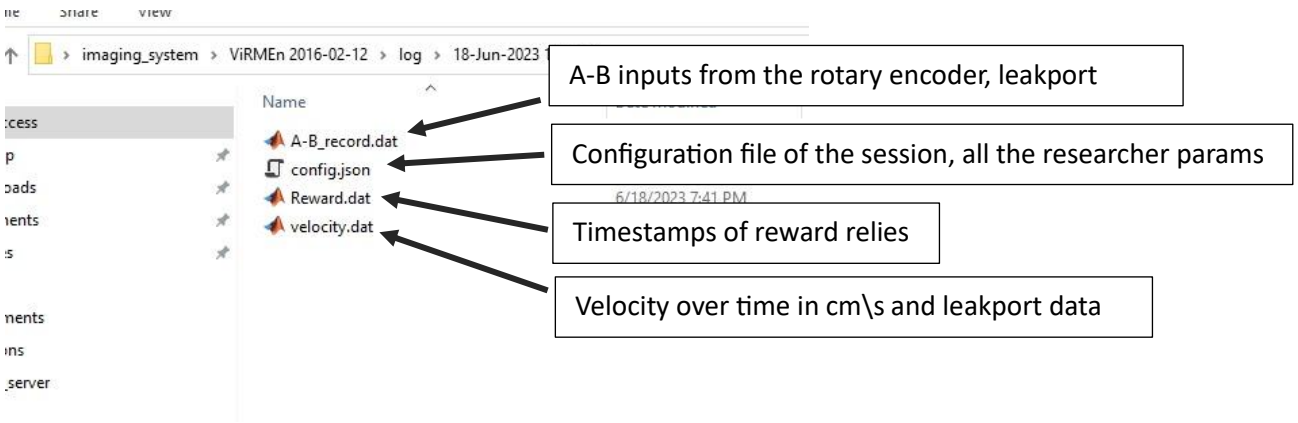
Changing configuration files

For using a config file from other session, copy its content and paste it in the default config file in config\config.json

results

after running the session, all the data will be saved in the log folder, under the session's date and time

There are 4 files in the folder:



How the data is structured

A-B_Leakport_record (4Xn)

timestamp	…
A state(0-4 Volt)	…
B state(0-4 Volt)	…
Lickport state	…

Reward(2Xn)

Timestamps	…
Reward gaved	…

Velocity (3Xn)

timestamp	…
Velocity (cm\s)	…
Current leakport status	…