

ML-Agents Configuration UI Documentation

Introduction

This project is a user interface for [Unity ML-Agents](#). It helps the users, that they can create/modify a yaml file inside Unity Editor.

Moreover, the users can run the mlagents-learn command without command line.

Please check the LICENSE in Xardas/ML-Agents Configuration folder.

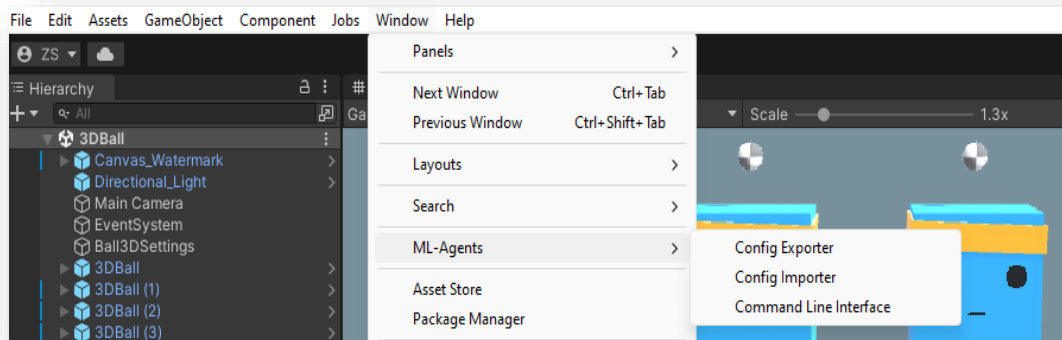
Furthermore, you can find the source code on [Github](#).

Test Environment

It was tested with Unity ML-Agents Release 20 only.

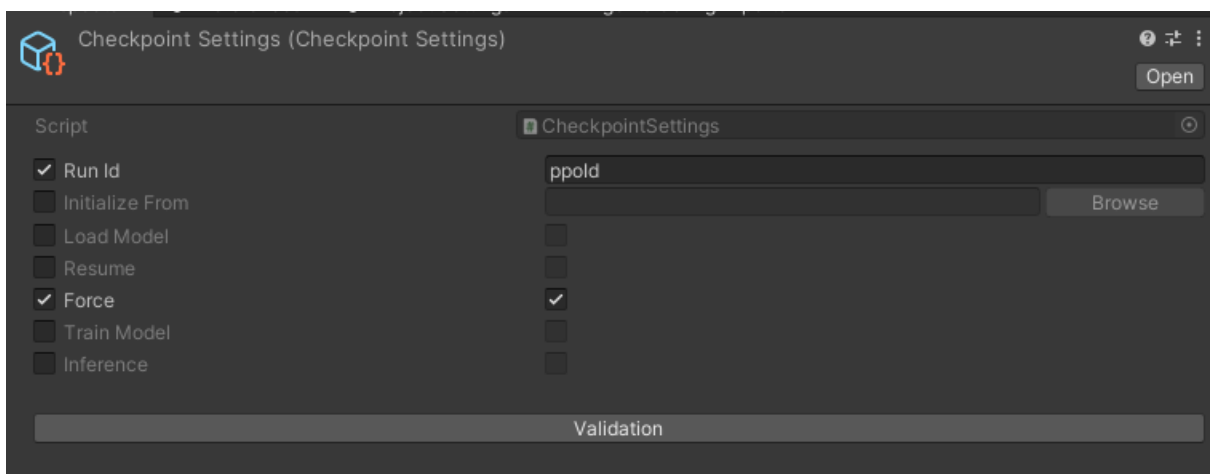
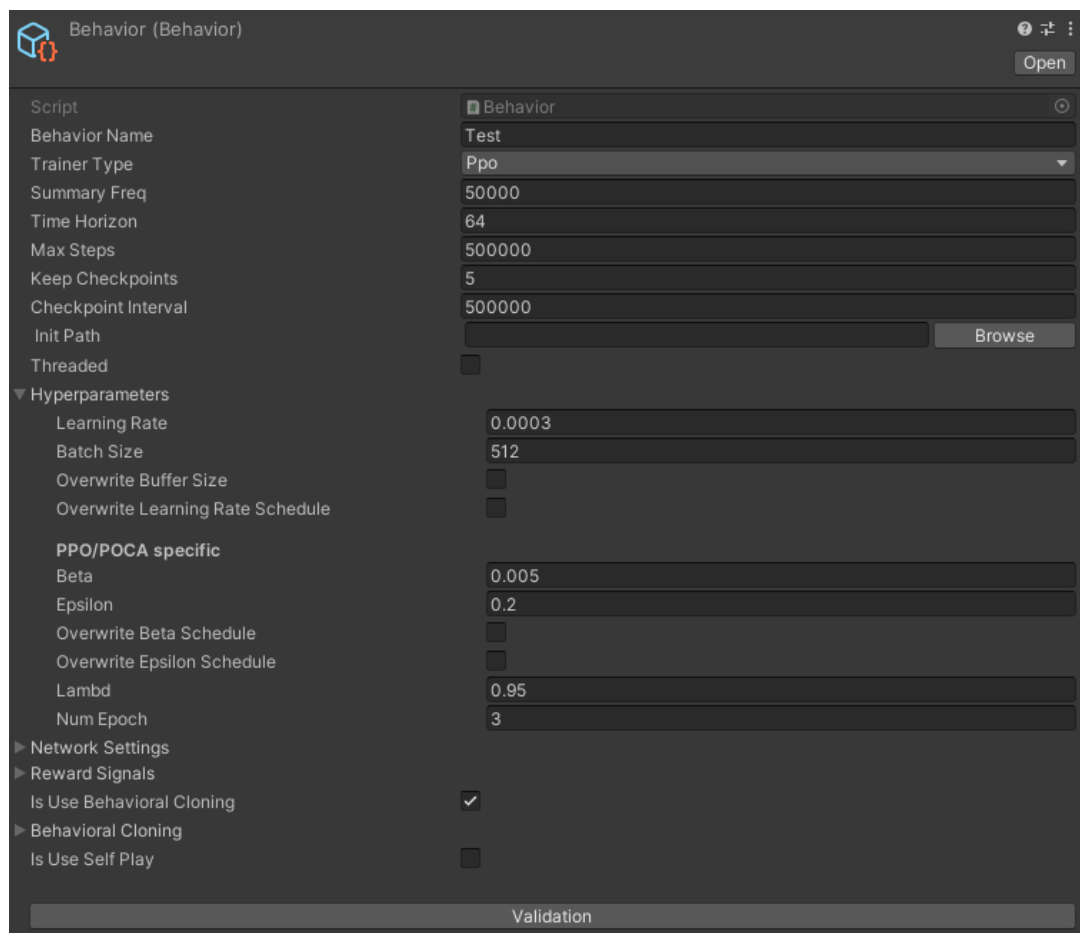
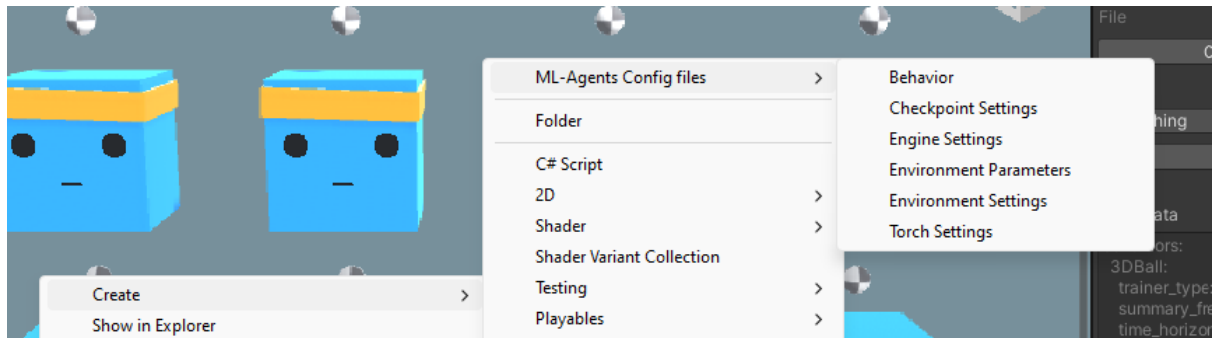
- OS
 - Windows 11
 - Ubuntu 20.04
 - MacOS Ventura 13.4.1
- Unity
 - 2021.3.29f1
 - 2022.3.7f1
 - 2023.1.9f1

Features



1. Creation

The users can create parts of the ML-Agents config yaml file as ScriptableObject. They contains tooltips, validation. Furthermore, the users can see only the actual fields. For example: If PPO Trainer Type is selected, the specific variables of SAC type is not visible.



2. Import

The users can import any ML-Agents config yaml file from samples or their own custom project. The files will be created in Assets/Xardas/ML-Agents Configuration/Files folder. (If the folder doesn't exist, it will be created.)

Limit: If the yaml file has default_settings, it will be part of the Behaviors. After that, if the users want to modify the same variable in the Behaviors, they have to update them one by one.



3. Export

The users can export ML-Agents Config ScriptableObject into a yaml file.

Clear

Settings

Environment Settings

None (Environment Settings)

Engine Settings

EngineSettings (Engine Settings)

Checkpoint Settings

CheckpointSettings (Checkpoint Settings)

Torch Settings

None (Torch Settings)

▼ Behaviors

5

1.

Behavior (Behavior)

2.

None (Behavior)

3.

None (Behavior)

4.

None (Behavior)

5.

None (Behavior)

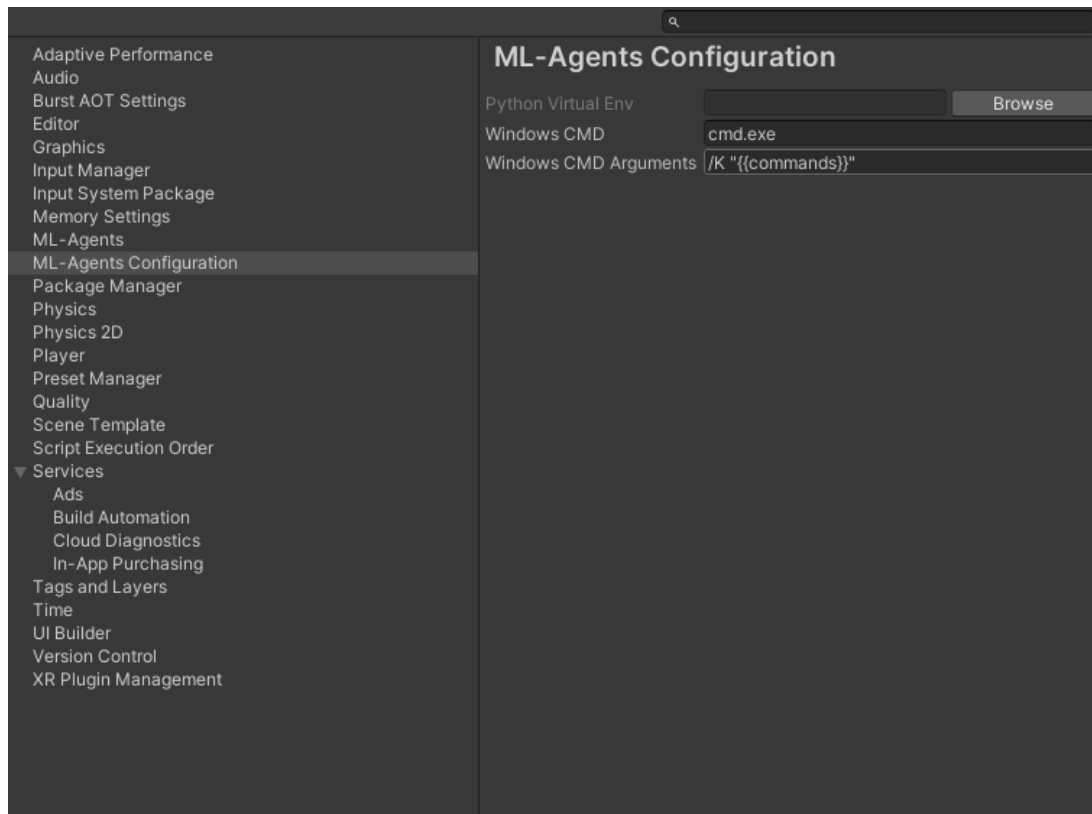
Environment Parameters

None (Environment Parameters)

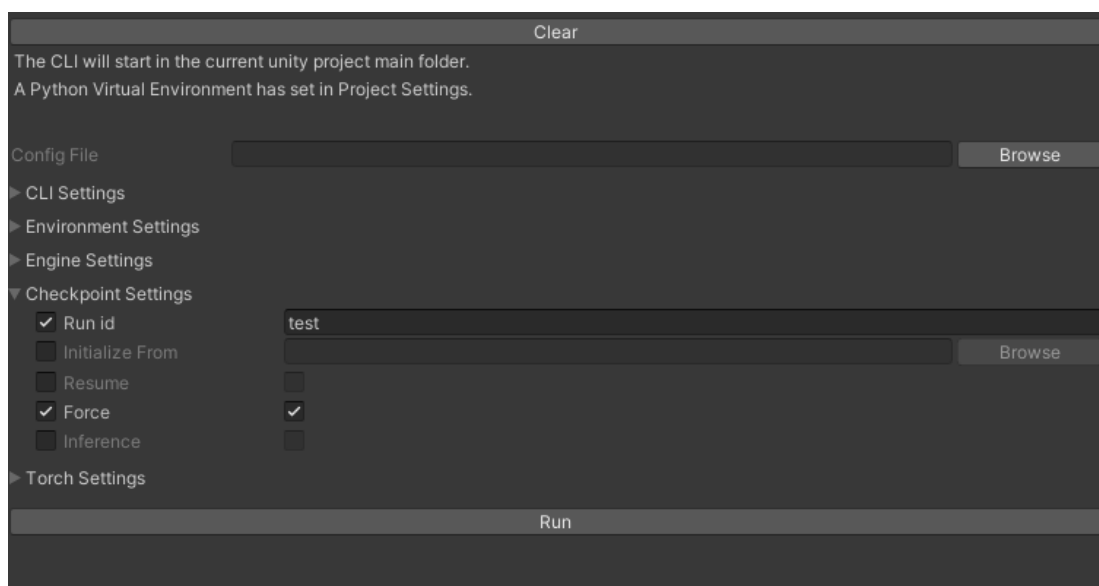
Create Yaml file

4. Run Command Line

Firstly, it has to be configured. It is in Project Settings/ML-Agents Configuration. If the users use Python Virtual Environment, they have to add the activate file.



When the users want to run the `mlagents-learn` command, they have to select a yaml file and they can add the parameters of command.



Note: By default, the Windows uses CMD, the MacOS uses Terminal and the Linux uses `gnome-terminal`. On MacOS and on Linux, a `mlAgentsCommand.sh` file is always generated in the project folder. If the users use Git (or any source control system), they should add this sh file to `.gitignore`.