

Ghost Recorder

V 1.0

This system will allow you to create simple ghost mode for your game easily. You can easily create your game and attach this system to your object (ex. Car) and make simple and nice replay mode for your game. Just enjoy it.

There you have all scripts to work:

- Recorder
- RecorderSettings
- Shadow
- DataNode
- DataNodes
- ShadowController
- RealTimeShadowController
- AfterCompleteFollowerManager
- RecorderSettingsEditor
- MovementMode
- PlayerState
- RecorderSettingsType
- RecorderState
- Controller

All what you need to do to use them – just assign “Recorder” script to your object and play. System will handle everything.

Basic scripts and their parameters

Recorder

It's the main script and allow you to create ghost system. You can record your movement manually or automatically (by using triggers).



Recorder State	You can record movements manually by changing this parameter. Changing idle mode to recording will do this
Recorder Settings	Settings for replying node(s)

For using system in automatic mode, triggers will help you. Create collider box and toggle it as trigger. Change the game object name to make effect.

- **Replay_Trigger_Start:** Movements will record after your object reaches this trigger
- **Replay_Trigger_Finish:** Recording will stop after your object reaches this trigger
- **Replay_Trigger:** Trigger automatically change recording behavior, (for loop racing tracks)

this script using some helpful functions that can be used in programming:

Save()	Save the best record of each level
Load()	Load the best record of each level
Play()	Play the best record of each level
StartRecording()	Ghost will be recorded when this function calls
StopRecording()	Ghost will be ended when this function calls
Clear()	Clear the class and reconfigure the settings

RecorderSettings

This script manages ghost options.

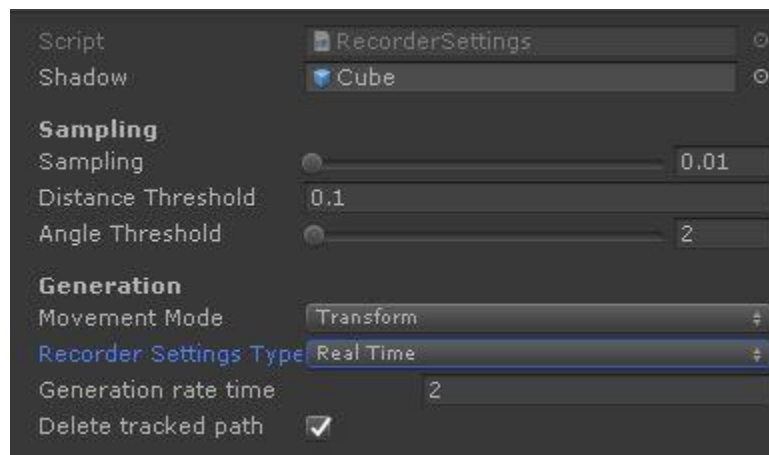
We have some general options:

Shadow	The game object in shadow mode(ghost)Ex. The car object prefab
Sampling	the time of sample rate. Smaller numbers have more accuracy in sample function but cause to use higher RAM size.
Distance Threshold	The distance between two path node position. Lower numbers make more accuracy in sample function but cause to use higher RAM size.
Angle Threshold	The angle between two path node rotation. Lower angles make more accuracy in sample function but cause to use higher RAM size.
Generation Movement Mode	We have two types of movement. "Transform" and "RigidBody". In transform movement physics will ignore but in RigidBody mode all physics process.
Recorder setting type	The type of recording
Generation rate time	The rate of ghost generation. Higher values make higher delay.

We have two different ghost mode in this system.

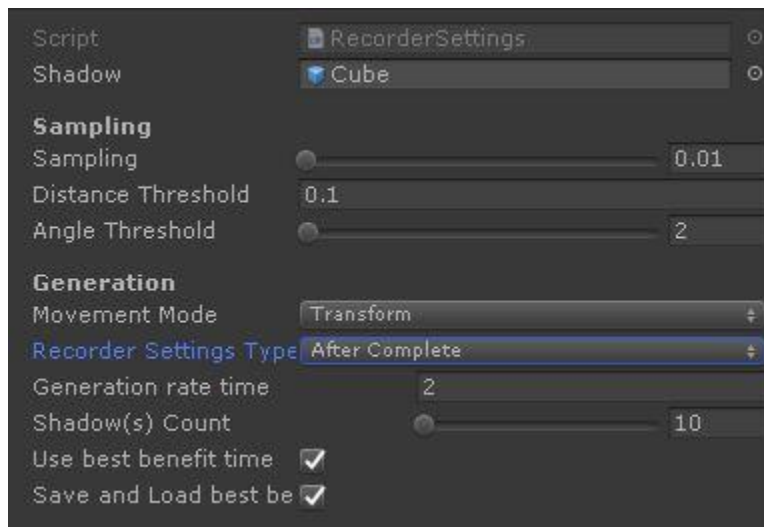
- Real-time ghost
- Completed ghost

In real time mode the ghost will create when recording is started.



Delete tracked path This option allow to use RAM size in optimize mode

In completed ghost mode the reply is creating after recording is completed.



Ghost(s) count	The number of ghost nodes
Use best time	This option allows you in multi recording, choose best and fastest time. Ex. Can be used for best record in loop road.
Save and Load Best time	This option allows you to save best record and will replay ghost next time you play the game

Ghost

It's an Interface script for basic path nodes. You can use your own data for this system but inside this interface framework.

DataNode

The basic class for store node paths. In this system we use position as vector3 and rotation.

DataNodes

The class for managing list of “DataNode”s.

ShadowController

The parent class for handling reply objet for trace reply path.

RealTimeShadowController

The class for handling real time reply objet for trace reply path.

AfterCompleteFollowerManager

The class for managing multi reply nodes in after complete replying mode.

RecordingSettingsEditor

The class for editing “RecordingSettings “class

MovementMode

An Enumerable. Using inside of some classes.

PlayerState

An Enumerable. Using inside of some classes.

RecorderSettingsType

An Enumerable. Using inside of some classes.

RecorderState

An Enumerable. Using inside of some classes.

Controller

A simple class for controlling car for testing this system.