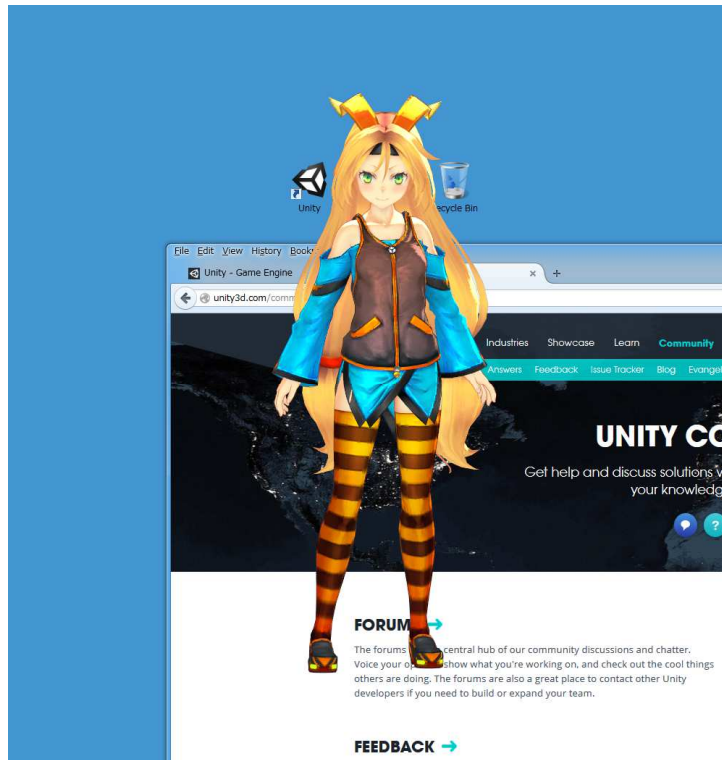


# Desktop Mascot Maker for Unity4.6

## Reference Manual

Ver1.6.1 2015/03/05 by PanzerSoft



Desktop Mascot Maker is a tool for creating your mascot character with Unity.

You can make 3D/2D mascot with extremely easy steps!

## Limitations

Before you use this asset, please read the followings.

- **The target platform of this asset is Windows only.**
- **In Unity4.6, this asset can be used with Unity (with MascotMakerFree), but I recommend to use Unity Pro (with MacotMakerPro) if you want to get more performance.**
- **In Unity5, the both personal and profession editions can work with all features of Desktop Mascot Maker, so I recommend to use Unity5's Desktop Mascot Maker.**

## Contacts

<http://panzersoft.web.fc2.com/assetstore.html>

# Table of Contents

Quick Start with MascotMakerFree.....	4
Quick Start with MascotMakerPro.....	7
Chroma Key Compositing.....	10
MascotMakerFree Class Reference.....	11
MascotMakerFree FAQ.....	14
MascotMakerPro Class Reference.....	15
MascotMakerPro FAQ.....	17
General FAQ.....	18
Usage of uGUI.....	19
Build Settings.....	20

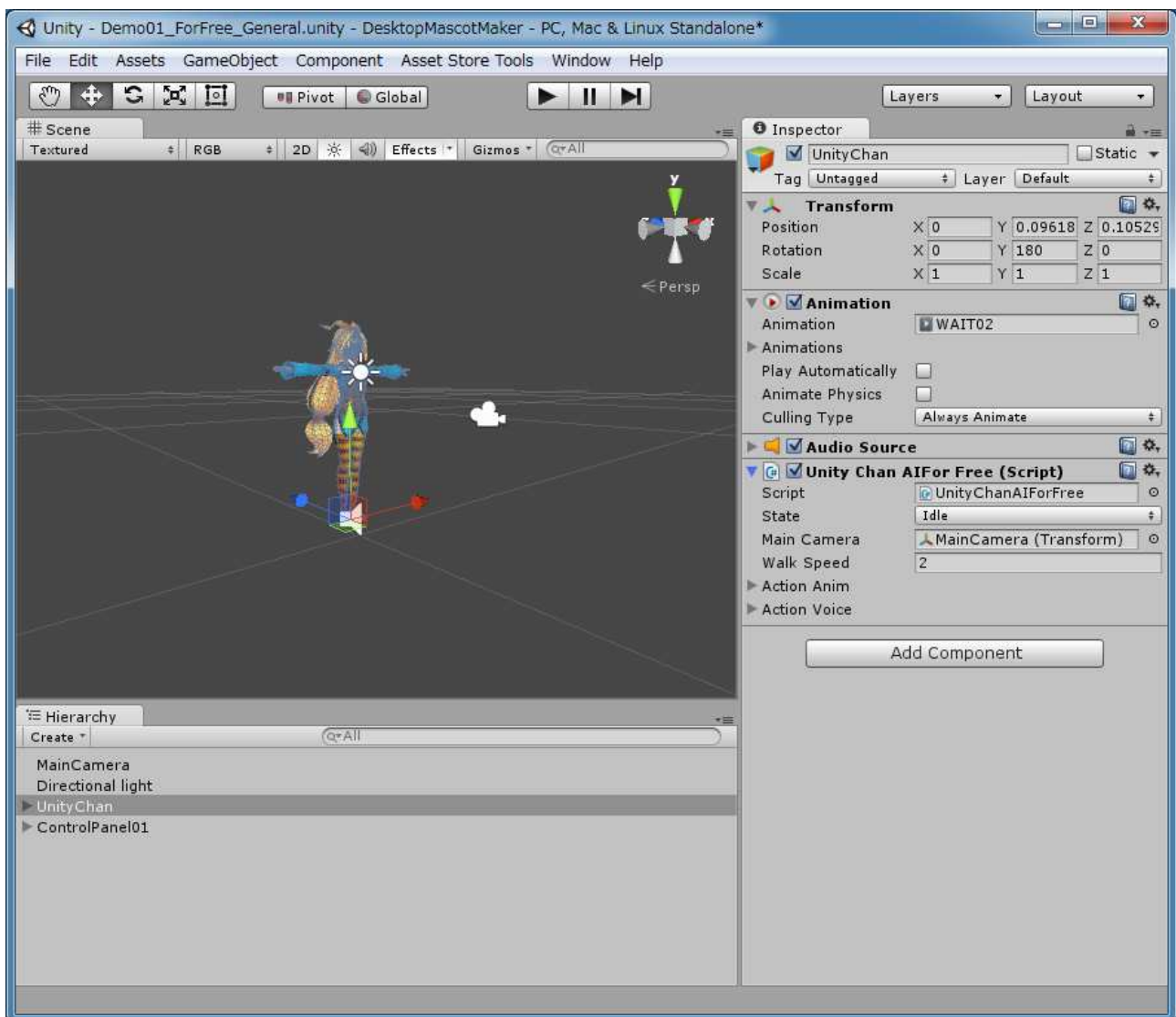
# Quick Start with MascotMakerFree

If you use free version Unity, please use MascotMakerFree component.

The MascotMakerPro component can not be used with free version Unity.

## Place Your Mascot

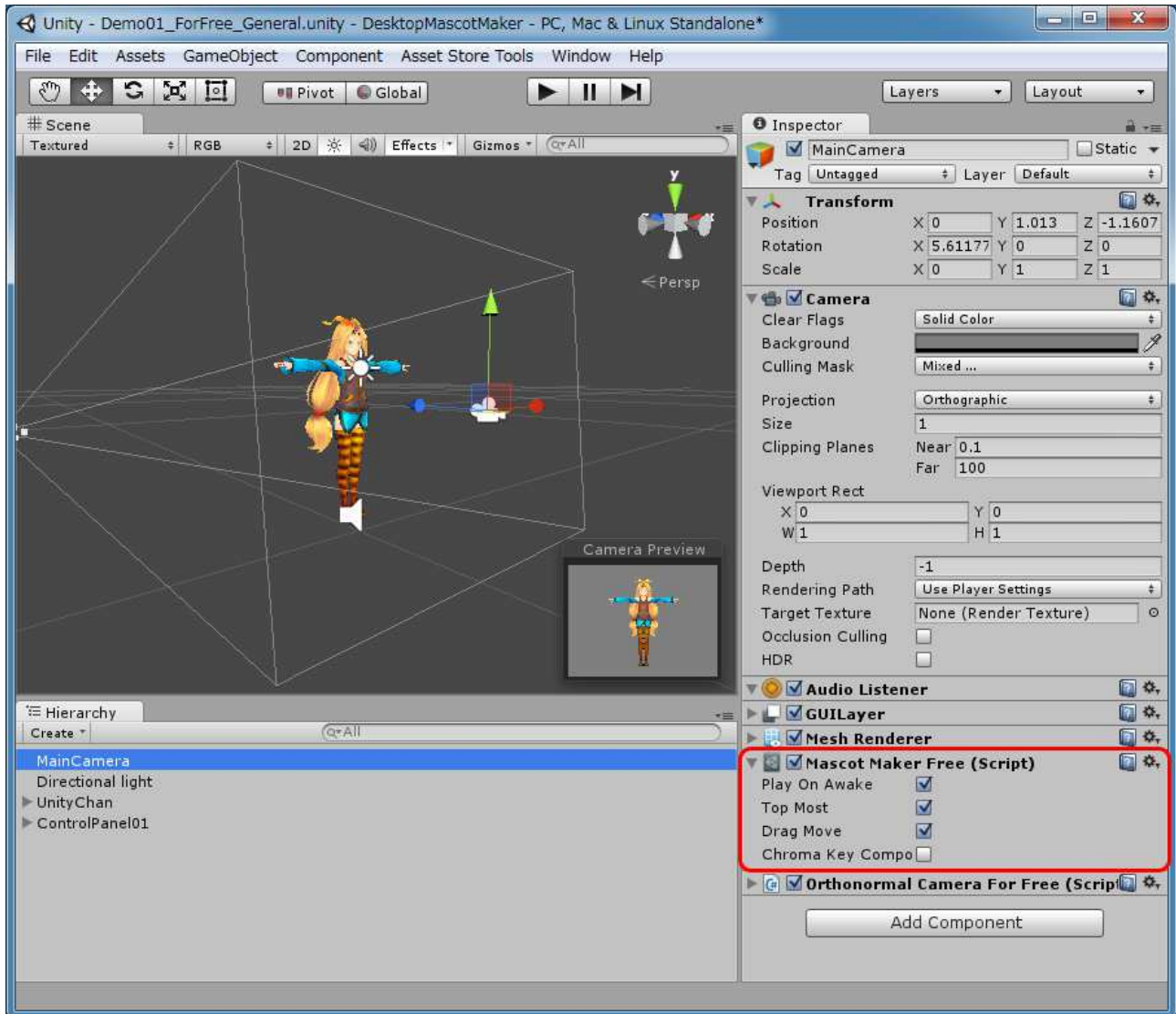
Place your mascot in the scene.



## Attach MascotMakerFree Component to Camera

You can add MascotMakerFree component through

**Menu > Component > DesktopMascotMaker > MascotMakerFree**



Settings :

Play On Awake : If set to true, the mascot will automatically show on awake.

Top Most : If set to true, the mascot will be displayed as a topmost form.

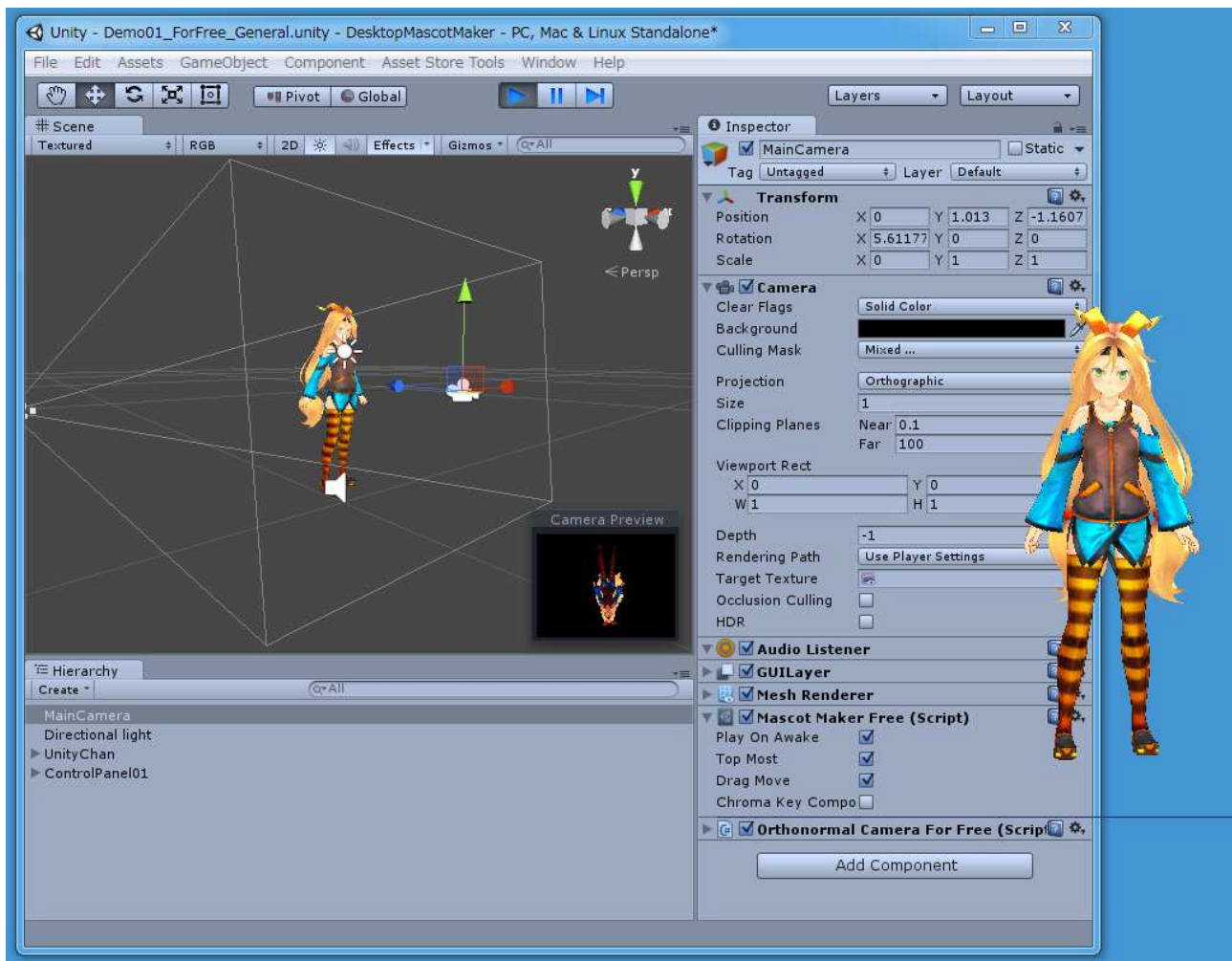
Drag Move : If set to true, the mascot can be moved by left mouse button dragging.

Chroma Key Compositing : If set to true, Chroma Key Compositing mode will be ON.

You can also access these setting variables through `MascotMakerFree.Instance.xxx`

**That's all!**

Press play button and check your mascot.



**For More Advanced Usage...**

Please see [Assets/DesktopMascotMaker/Demo/ForUnityFree](#)

Demo01\_ForFree\_General.unity demonstrates how to move and interact with the mascot.

Demo02\_ForFree\_Event.unity demonstrates how to use MascotMakerFree's events.

Demo03\_ForFree\_Physics.unity demonstrates how to apply Unity's physics to the mascot.

Demo04\_ForFree\_uGUI.unity demonstrates how to use uGUI with DesktopMascotMaker.

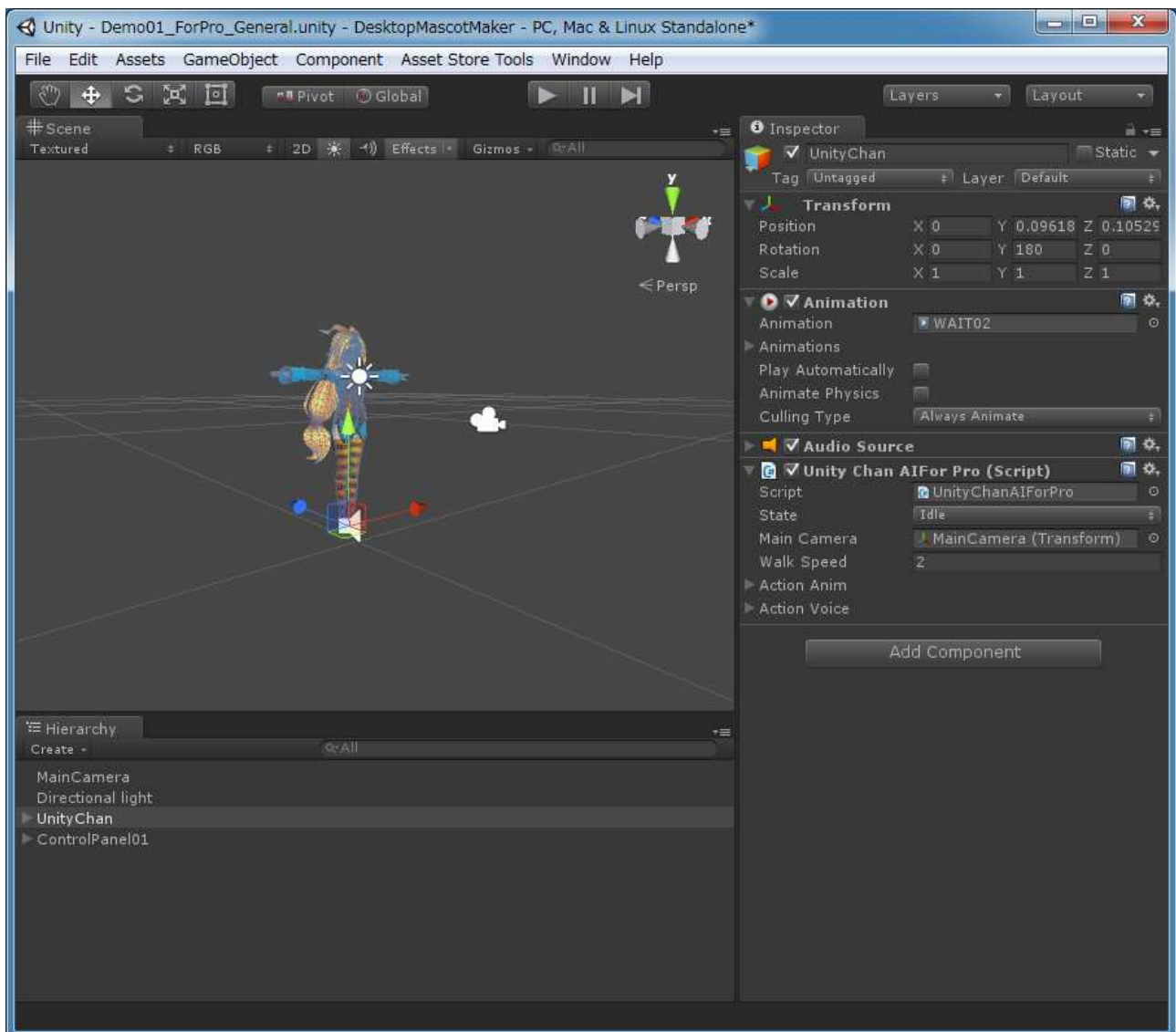
# Quick Start with MascotMakerPro

If you have Unity Pro Version, you should use MascotMakerPro component.

The performance of MascotMakerPro is much better than that of MascotMakerFree.

## Place Your Mascot

Place your mascot in the scene.

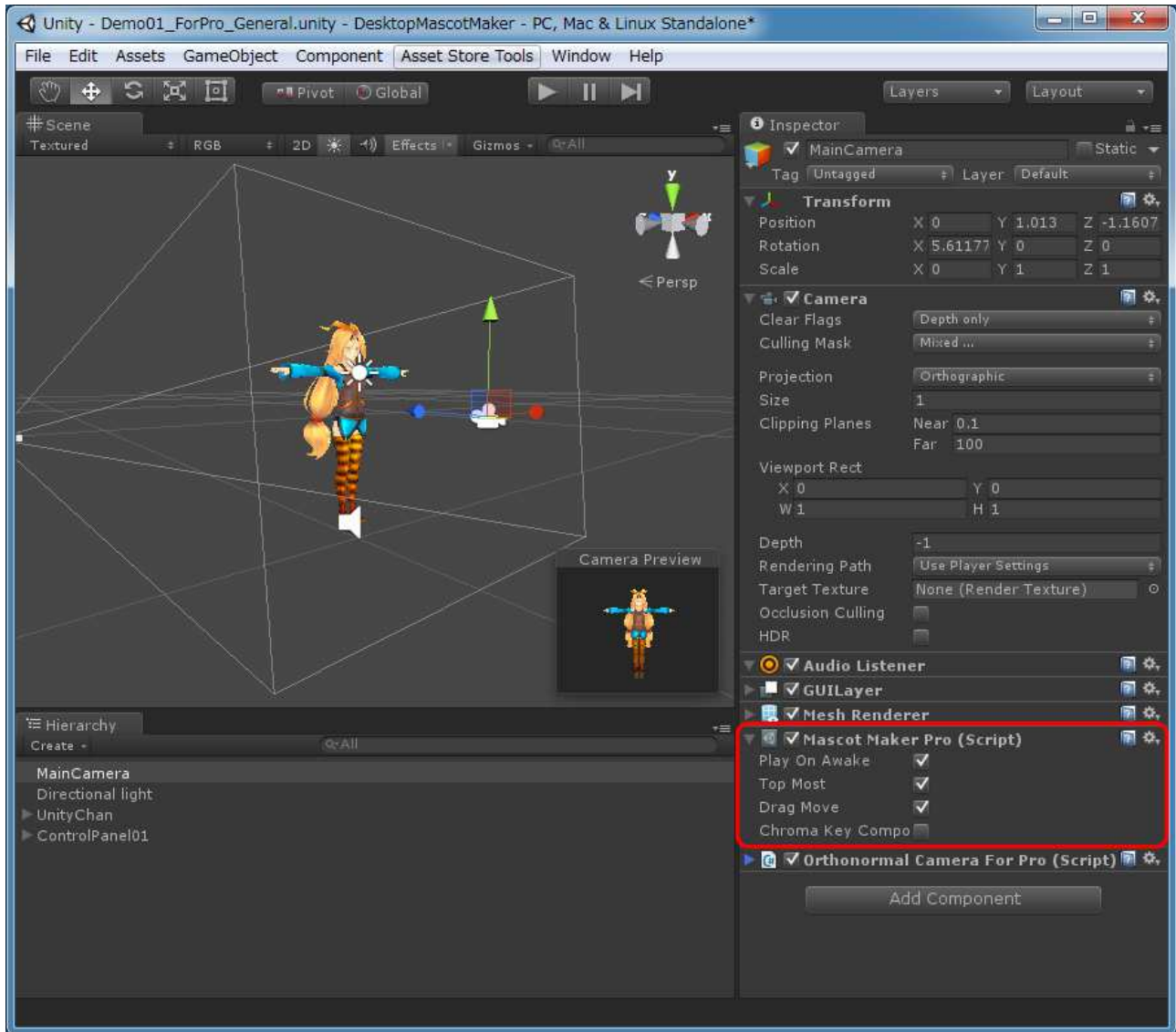




## Attach MascotMakerPro Component to Camera

You can add MascotMakerPro component through

**Menu>Component>DesktopMascotMaker>MascotMakerPro (Pro Only)**



Settings :

Play On Awake : If set to true, the mascot will automatically show on awake.

Top Most : If set to true, the mascot will be displayed as a topmost form.

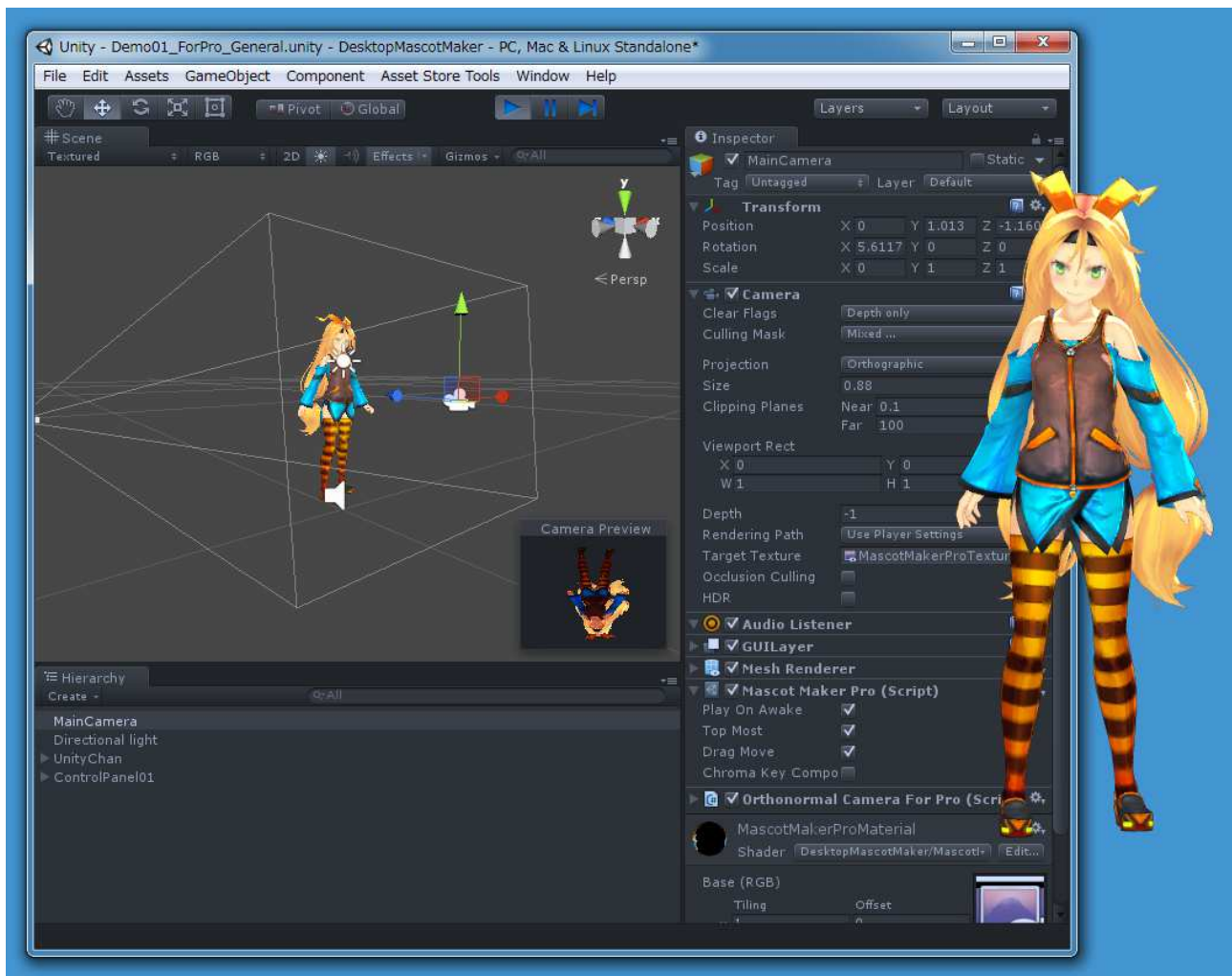
Drag Move : If set to true, the mascot can be moved by left mouse button dragging.

Chroma Key Compositing : If set to true, Chroma Key Compositing mode will be ON.

You can also access these setting variables through `MascotMakerPro.Instance.xxx`

**That's all!**

Press play button and check your mascot.



## For More Advanced Usage...

Please see Assets/DesktopMascotMaker/Demo/ForUnityPro

Demo01\_ForPro\_General.unity demonstrates how to move and interact with the mascot.

Demo02\_ForPro\_Event.unity demonstrates how to use MascotMakerPro's events.

Demo03\_ForPro\_Physics.unity demonstrates how to apply Unity's physics to the mascot.

Demo04\_ForPro\_uGUI.unity demonstrates how to use uGUI with DesktopMascotMaker.



# Chroma Key Compositing

When you use Transparent Shader, rendering problems sometimes happen.

In such a case, please use Chroma Key Compositing mode.

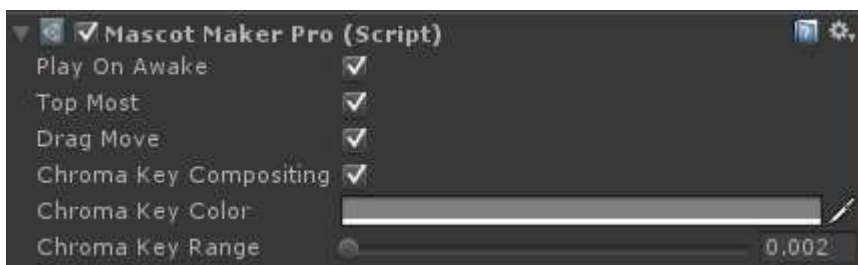
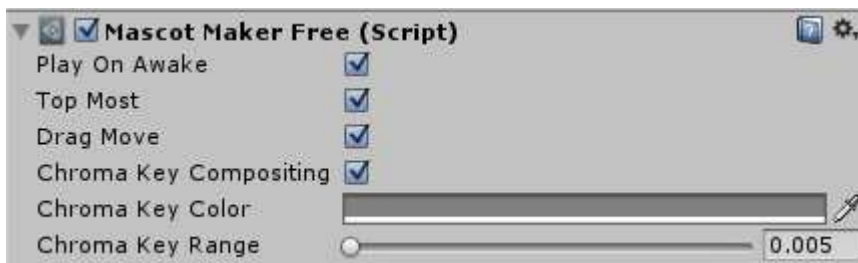
If you don't use Transparent Shader, I recommend to check off Chroma Key Compositing mode.



Chroma Key Compositing Off



Chroma Key Compositing On



Chroma Key Compositing : If set to true, Chroma Key Compositing mode will be ON.

Chroma Key Color : Chroma key background color. This color will be transparent.

Chroma Key Range : Chroma key compositing intensity. [0.005 - 0.5]

# MascotMakerFree Class Reference

## Access Through Singleton Instance

MascotMakerFree is implemented by singleton design pattern.

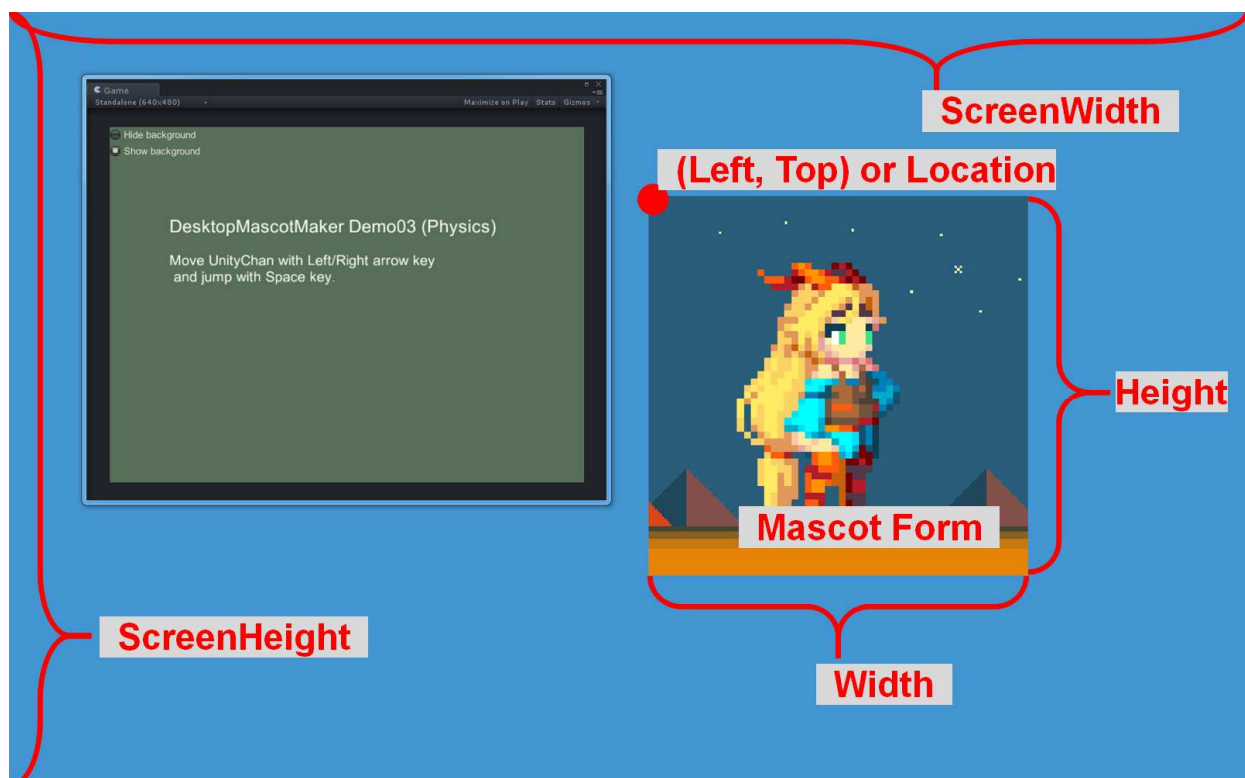
So you can access MascotMakerFree's variables through `MascotMakerFree.Instance` .

```
using DesktopMascotMaker; // use this namespace
...
MascotMakerFree.Instance.xxx = ... // like this
```

## Mascot Form Variables

You can move Mascot Form with Left, Top (or Location) variables.

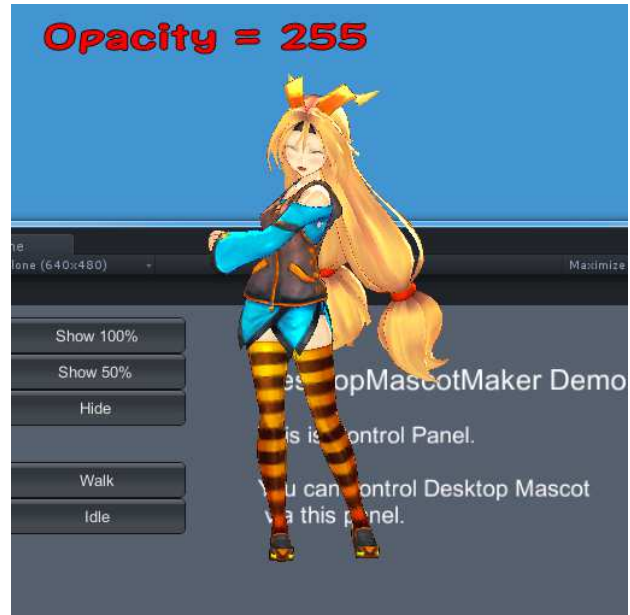
```
int MascotMakerFree.Instance.Left
int MascotMakerFree.Instance.Top
System.Drawing.Point MascotMakerFree.Instance.Location
int MascotMakerFree.Instance.Width // read only
int MascotMakerFree.Instance.Height // read only
int MascotMakerFree.Instance.ScreenWidth // read only
int MascotMakerFree.Instance.ScreenHeight // read only
```



## Mascot Opacity

Change mascot's opacity as follows.

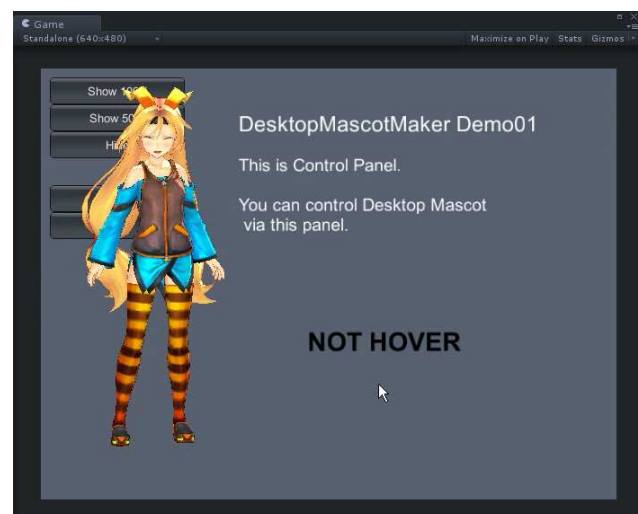
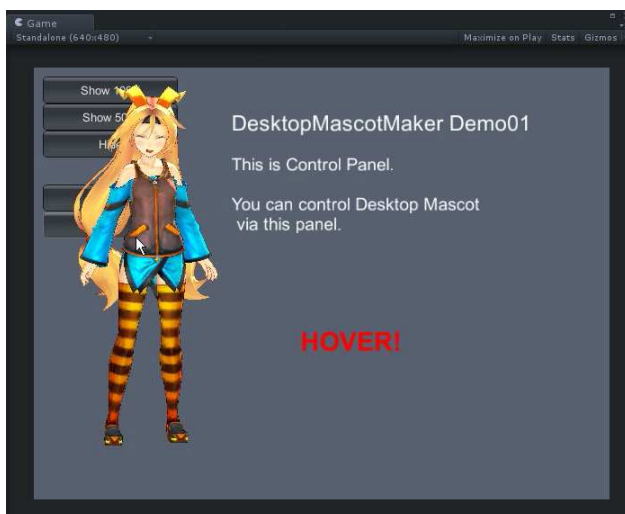
```
MascotMakerFree.Instance.Opacity = 128; // [0-255]
MascotMakerFree.Instance.Hide(); // Hide mascot
MascotMakerFree.Instance.Show(); // Show again
```



## Is Mouse Hovering?

Check whether the cursor is hovering over the mascot.

```
bool mouseOver = MascotMakerFree.Instance.IsMouseOver; // read only
```



## Event Settings

You can use MouseEvents, Activated/DeactivateEvents, KeyEvents, DragDropEvents, MoveEvents.

Add your custom event function to MascotMakerFree's event handler like this:

```
// Add function to MascotMaker's EventHandler
MascotMakerFree.Instance.OnLeftMouseDown += MouseDown;

...

void MouseDown(object sender, MouseEventArgs e)
{
    // Some code here
}
```

This is MascotMakerFree's event list.

Event	Event Handler Type	
OnLeftMouseDown	MouseEventHandler	Occurs when the Left mouse button is pressed.
OnLeftMouseUp	MouseEventHandler	Occurs when the Left mouse button is released.
OnLeftDoubleClick	MouseEventHandler	Occurs when the Left mouse is double clicked.
OnRightMouseDown	MouseEventHandler	Occurs when the right mouse button is pressed.
OnRightMouseUp	MouseEventHandler	Occurs when the right mouse button is released.
OnRightDoubleClick	MouseEventHandler	Occurs when the right mouse button is double clicked.
OnMiddleMouseDown	MouseEventHandler	Occurs when the middle mouse button is pressed.
OnMiddleMouseUp	MouseEventHandler	Occurs when the middle mouse button is released.
OnMiddleDoubleClick	MouseEventHandler	Occurs when the middle mouse button is double clicked.
OnMouseWheel	MouseEventHandler	Occurs when the mouse is wheeled.
OnActivated	EventHandler	Occurs when the Mascot Form is activated.
OnDeactivate	EventHandler	Occurs when the Mascot Form is deactivated.
OnKeyDown	KeyEventHandler	Occurs when a key is pressed while Mascot Form has focus.
OnKeyUp	KeyEventHandler	Occurs when a key is released while Mascot Form has focus.
OnDragDrop	DragEventHandler	Occurs when a drag-and-drop operation is completed.
OnDragEnter	DragEventHandler	Occurs when an object is dragged into Mascot Form's bounds.
OnDragLeave	EventHandler	Occurs when an object is dragged out of Mascot Form's bounds.
OnDragOver	DragEventHandler	Occurs when an object is dragged over Mascot Form's bounds.
OnMove	EventHandler	Occurs when the Mascot Form is moved.

Please see the demo(*Demo02\_ForFree\_Event.unity*) for the details.

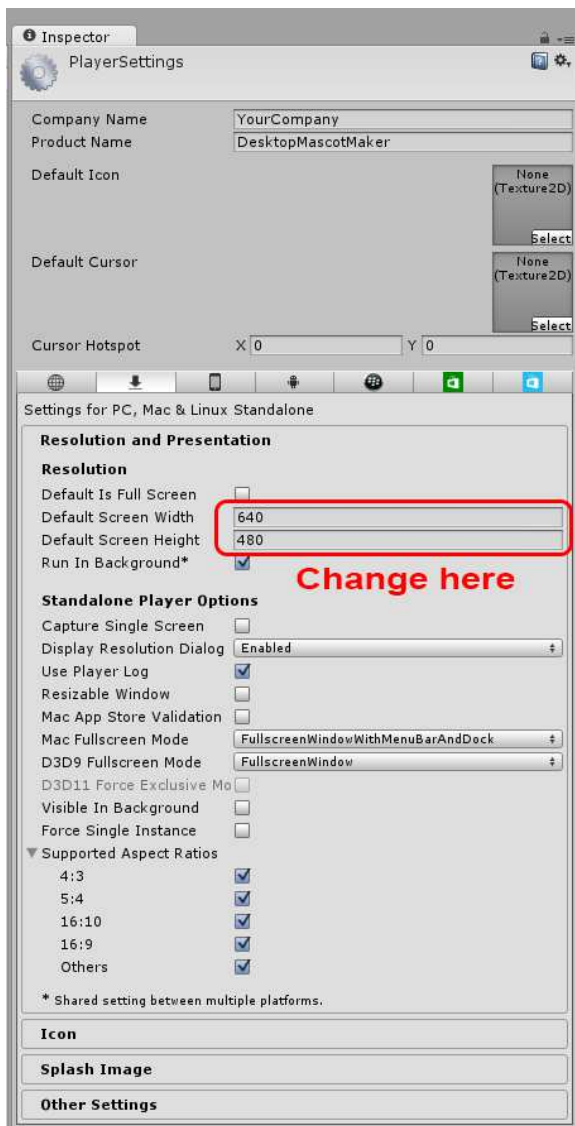
# MascotMakerFree FAQ

**Q : How to change Mascot's resolution with MascotMakerFree?**

**A : Change Default Screen Width/Height**

When you use MascotMakerFree, Mascot's resolution is defined by Screen Width/Height.

So you should change Default Screen Width/Height value in the PlayerSettings.



# MascotMakerPro Class Reference

## Access Through Singleton Instance

MascotMakerPro is implemented by singleton design pattern.

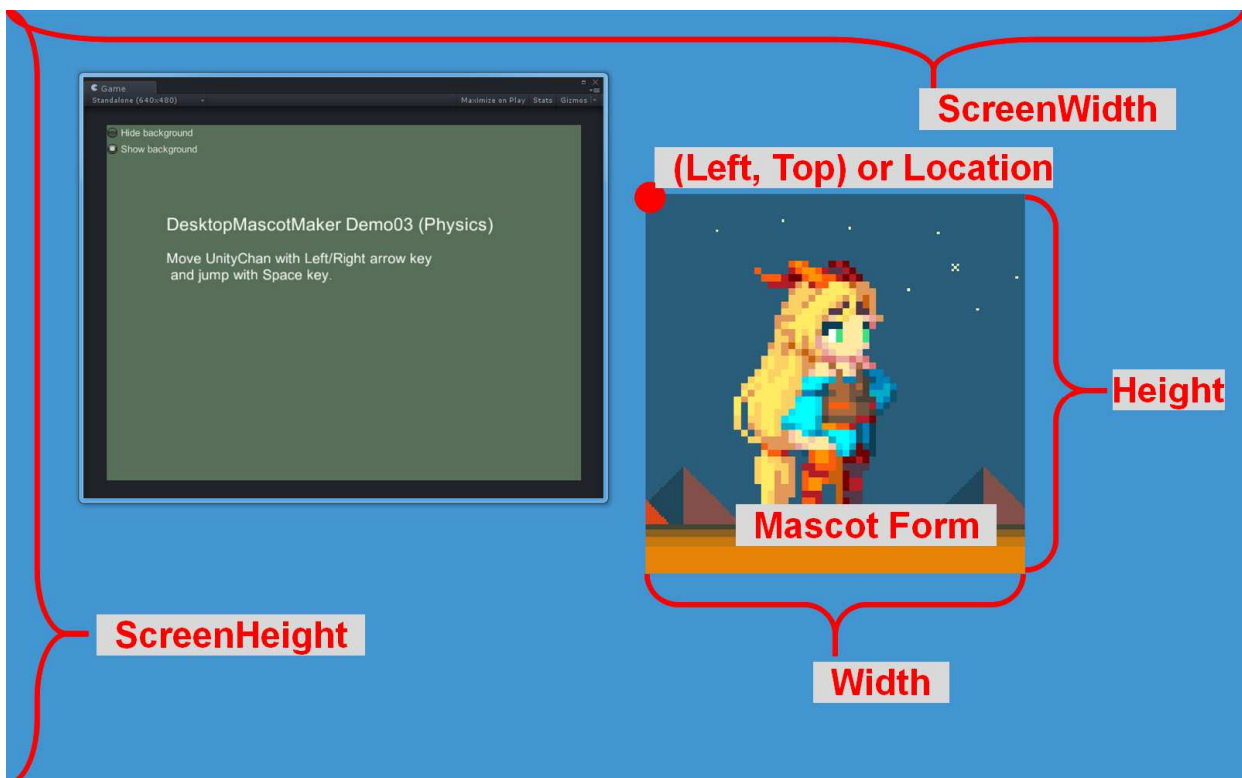
So you can access MascotMakerPro's variables through `MascotMakerPro.Instance` .

```
using DesktopMascotMaker; // use this namespace
...
MascotMakerPro.Instance.xxx = ... // like this
```

## Mascot Form Variables

You can move Mascot Form with Left, Top (or Location) variables.

```
int MascotMakerPro.Instance.Left
int MascotMakerPro.Instance.Top
System.Drawing.Point MascotMakerPro.Instance.Location
int MascotMakerPro.Instance.Width // read only
int MascotMakerPro.Instance.Height // read only
int MascotMakerPro.Instance.ScreenWidth // read only
int MascotMakerPro.Instance.ScreenHeight // read only
```





## Mascot Opacity

Change mascot's opacity as follows.

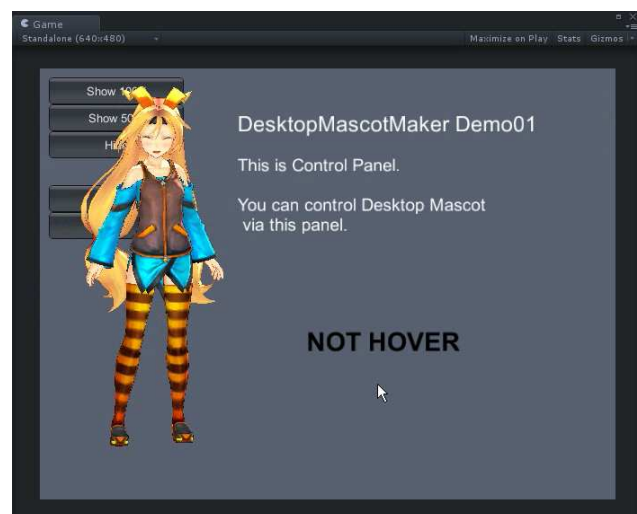
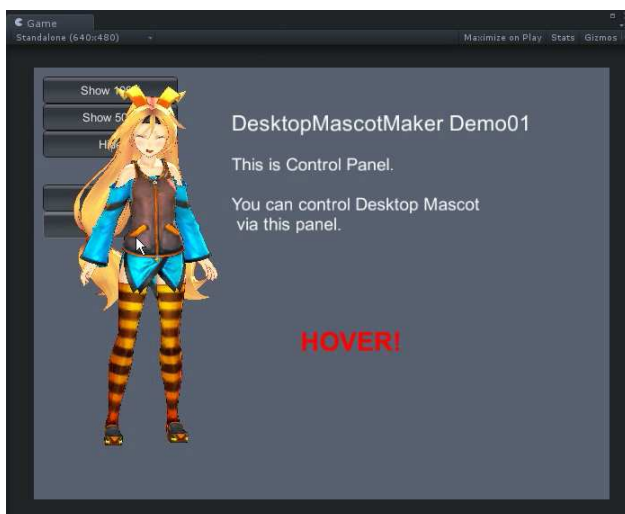
```
MascotMakerPro.Instance.Opacity = 128; // [0-255]
MascotMakerPro.Instance.Hide(); // Hide mascot
MascotMakerPro.Instance.Show(); // Show again
```



## Is Mouse Hovering?

Check whether the cursor is hovering over the mascot.

```
bool mouseOver = MascotMakerPro.Instance.IsMouseOver; // read only
```



## Event Settings

You can use MouseEvents, Activated/DeactivateEvents, KeyEvents, DragDropEvents, MoveEvents.

Add your custom event function to MascotMakerPro's event handler like this:

```
// Add function to MascotMaker's EventHandler
MascotMakerPro.Instance.OnLeftMouseDown += MouseDown;

...

void MouseDown(object sender, MouseEventArgs e)
{
    // Some code here
}
```

This is MascotMakerPro's event list.

Event	Event Handler Type	
OnLeftMouseDown	MouseEventHandler	Occurs when the Left mouse button is pressed.
OnLeftMouseUp	MouseEventHandler	Occurs when the Left mouse button is released.
OnLeftDoubleClick	MouseEventHandler	Occurs when the Left mouse is double clicked.
OnRightMouseDown	MouseEventHandler	Occurs when the right mouse button is pressed.
OnRightMouseUp	MouseEventHandler	Occurs when the right mouse button is released.
OnRightDoubleClick	MouseEventHandler	Occurs when the right mouse button is double clicked.
OnMiddleMouseDown	MouseEventHandler	Occurs when the middle mouse button is pressed.
OnMiddleMouseUp	MouseEventHandler	Occurs when the middle mouse button is released.
OnMiddleDoubleClick	MouseEventHandler	Occurs when the middle mouse button is double clicked.
OnMouseWheel	MouseEventHandler	Occurs when the mouse is wheeled.
OnActivated	EventHandler	Occurs when the Mascot Form is activated.
OnDeactivate	EventHandler	Occurs when the Mascot Form is deactivated.
OnKeyDown	KeyEventHandler	Occurs when a key is pressed while Mascot Form has focus.
OnKeyUp	KeyEventHandler	Occurs when a key is released while Mascot Form has focus.
OnDragDrop	DragEventHandler	Occurs when a drag-and-drop operation is completed.
OnDragEnter	DragEventHandler	Occurs when an object is dragged into Mascot Form's bounds.
OnDragLeave	EventHandler	Occurs when an object is dragged out of Mascot Form's bounds.
OnDragOver	DragEventHandler	Occurs when an object is dragged over Mascot Form's bounds.
OnMove	EventHandler	Occurs when the Mascot Form is moved.

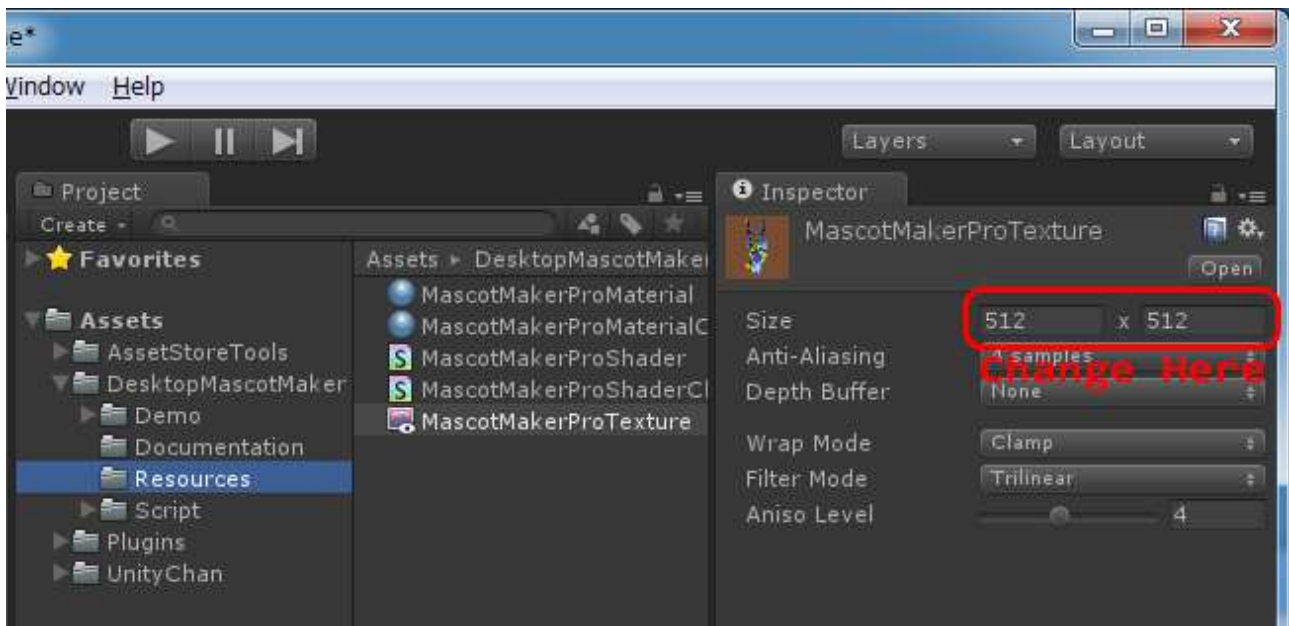
Please see the demo(*Demo02\_ForPro\_Event.unity*) for the details.

# MascotMakerPro FAQ

**Q : How to change Mascot's resolution in MascotMakerPro?**

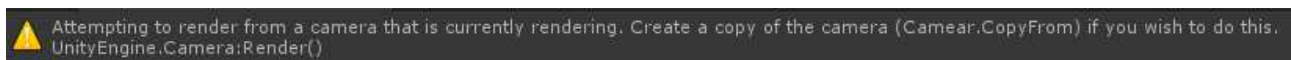
**A : Change RenderTexture's resolution**

Change the resolution of Assets/DesktopMascotMaker/Resources/MascotMakerProTexture.



**CAUTION:** You should not rename the RenderTexture's name.

**Q : I got the warning message as follows:**



**A : Sorry, This warning message does not go away for now.**

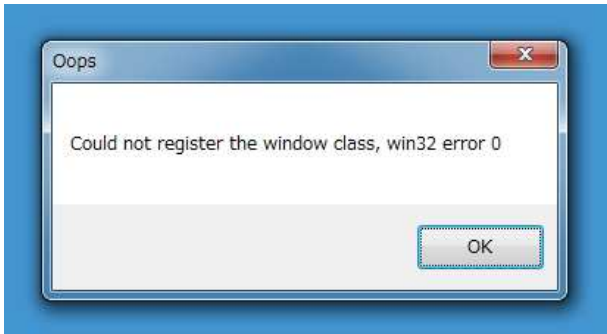
This asset uses special rendering technique to display uGUI properly. I have researched how to render uGUI with desktop mascot for many hours and evaluated current rendering method is the best. So could you ignore this warning message? Sorry for the inconvenience.

**Q: I played demo but I couldn't find Unity-Chan, where is Unity-Chan!?**

**A: Please restart project.**

# General FAQ

## Q:What's this MessageBox?



**A:Sorry its mono's internal message. But this does not affect your application, ignore it.**

This error message occurs in mono's dll inside unity.

(...¥Unity¥Editor¥Data¥Mono¥lib¥mono¥2.0¥System.Windows.Forms.dll)

Please check this code line 894.

<https://github.com/mono/mono/blob/master/mcs/class/Managed.Windows.Forms/System.Windows.Forms/XplatUIWin32.cs>

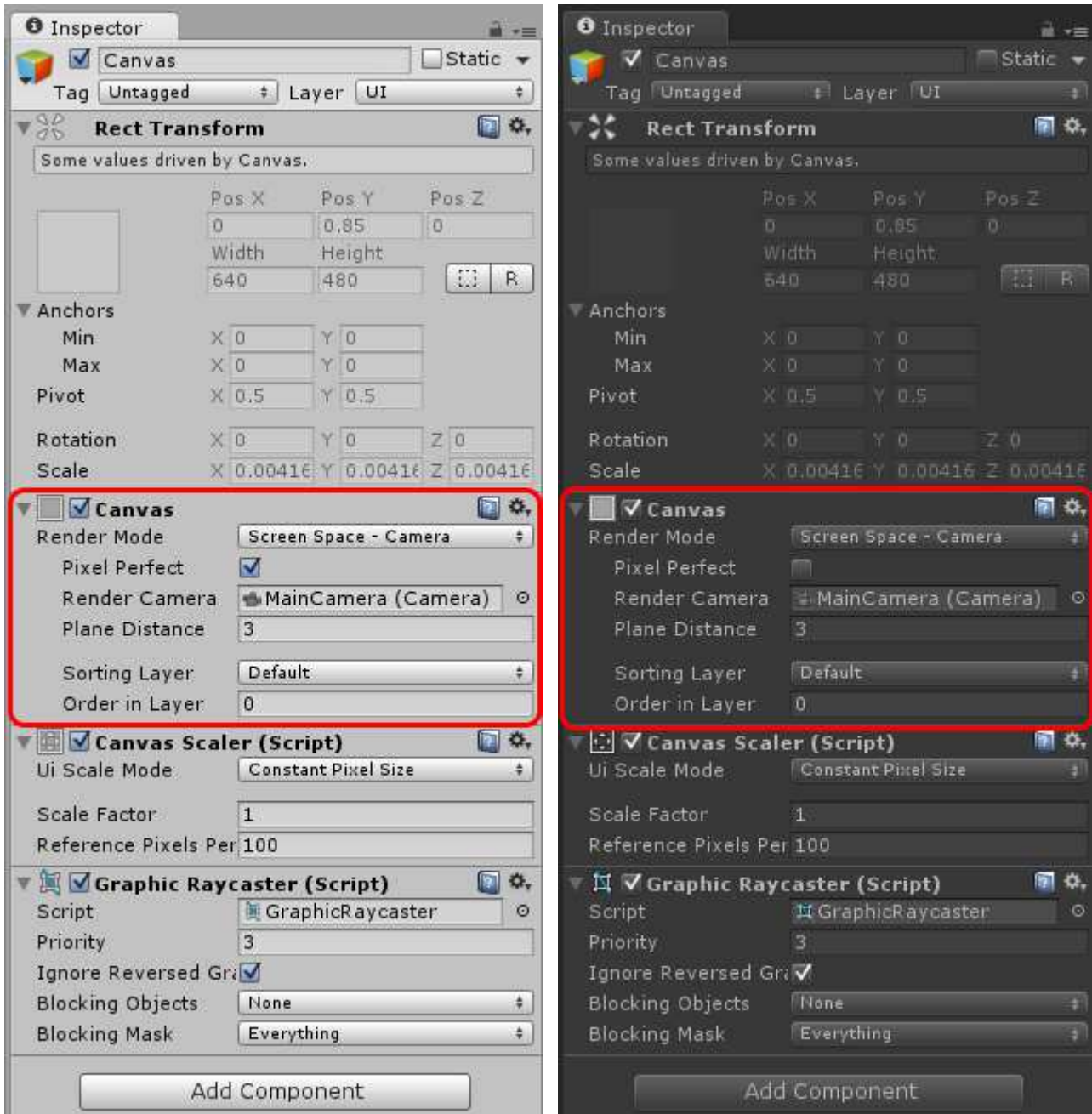
This message occurs because the function Win32RegisterClass returns false in unity editor environment.

I can't modify this mono code inside unity because it may affect all unity projects.

This error message occurs only in unity editor environment and **it does not affect your final compiled (released) .exe programs**. So could you ignore this message? Sorry for the inconvenience.

# Usage of uGUI

In order to use uGUI with DesktopMascotMaker, set Canvas's Render Mode "Screen Space - Camera" and set Render Camera like following:



Please see the demos([Demo04\\_ForFree\\_uGUI.unity](#), [Demo04\\_ForPro\\_uGUI.unity](#)) for the details.

# Build Settings

In Unity4.6, Desktop Mascot Maker should be built as 32bit software.

Please set build settings as follows:

## build settings for Unity4.6

