

# MarkerBased AR Example 1.2.0

**WebGL(beta) support(Unity5.3 or later)**

**iOS & Android support**

**WindowsStoreApps8.1 & WindowsPhone8.1 & Windows10 UWP(beta) support**

**Win & Mac & Linux Standalone support**

**Support for preview in the Editor**

**Work with Unity Free & Pro**

## System Requirements

**Build Win Standalone & Preview Editor : Windows7 or later**

**Build Mac Standalone & Preview Editor : OSX 10.8 or later**

**The execution of this asset is required “[OpenCV for Unity](#)”.**

This asset is the Augmented Reality Example that detect and recognize NxN block markers and display 3d model in WebCamTexture in real-time.

Code is the rewrite of [https://github.com/MasteringOpenCV/code/tree/master/Chapter2\\_iPhoneAR](https://github.com/MasteringOpenCV/code/tree/master/Chapter2_iPhoneAR) using the "OpenCV for Unity".

- Texture2DMakerBasedARExample - By detecting the marker from Texture2D, display AR model.
- WebCamTextureMakerBasedARExample - By detecting a marker from WebCamTexture, display AR model in real-time.

[Official Site](#) | [ExampleCode](#) | [Android Demo](#) [WebGL Demo](#) | [Demo Video](#)

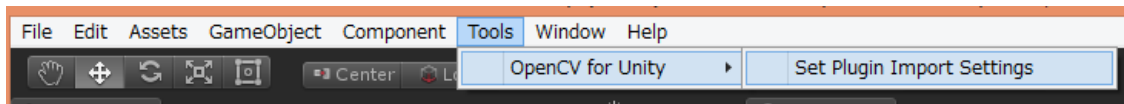
[Cardboard With OpenCV for Unity Sample](#) is available.

## Version changes

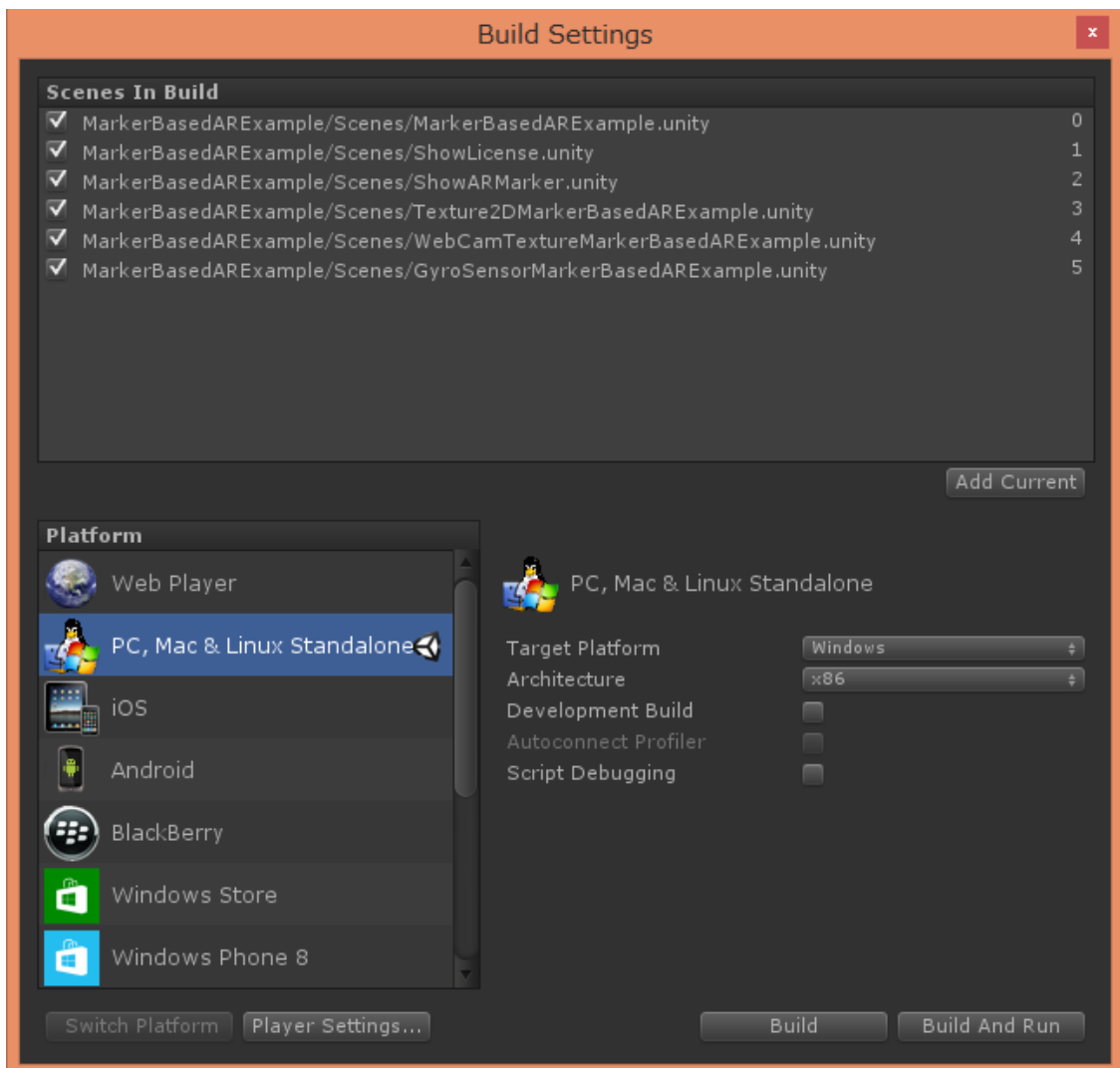
- 1.0.1 [Common] Changed the name of asset project. ("Sample" to "Example")
- 1.1.9 [Common] Fixed WebCamTextureToMatHelper.cs. (flipVertical and flipHorizontal flag)
- 1.1.8 [WebGL] Added WebGL(beta) support. (Unity5.3 or later)
- 1.1.7 [Common] Changed namespace to OpenCVMarkerBasedAR. (To avoid namespace and classname conflict.) [Common] Fixed CS0618 warnings: 'UnityEngine.Application.LoadLevel(string)' is obsolete: 'Use SceneManager.LoadScene'.
- 1.1.6 [Common] Added namespace. [Common] Added flipVertical flag, flipHorizontal flag and GetWebCamDevice() method to WebCamTextureToMatHelper.cs.
- 1.1.5 [Common] Changed to methods of moving the AR object.
- 1.1.4 [Common] Support for "OpenCV for Unity 2.0.0".
- 1.1.3 [Common] Fixed WebCamTextureToMatHelper.cs. (Add didUpdateThisFrame () method)
- 1.1.2 [Common] Renewed the samples using WebCamTextureToMatHelper. (Supports all screen orientation.)
- 1.1.1 [Common] Added Marker Design Inspector. (Improved procedures to change the marker image)
- 1.1.0 [Common] Change to use uGUI in SampleScene.
- 1.0.9 [iOS] Fix WebCamTexture bug of SampleScene in Unity5.2.
- 1.0.8 [Common] Rewrite SampleScene.
- 1.0.7 [Common] Add the code to support Beta Version of "OpenCV for Unity" based on "OpenCV3.0.0".
- 1.0.6 [Common] Fix SampleScene.
- 1.0.5 [Common] Fix SampleScene. [Common] Change Property of Platform Dependent Compilation from UNITY\_IPHONE to UNITY\_IOS.
- 1.0.4 [Common] Fix the direction of rotation of the mat that is converted from WebCamTexture.
- 1.0.3 [Common] Fix direction of WebCamTexture.
- 1.0.2 [Common] Divide asset for Unity4 and Unity5.
- 1.0.1 [Common] Support for "OpenCV for Unity 1.0.9"
- 1.0.0 Initial version

**Quick setup procedure to run the example scene:**

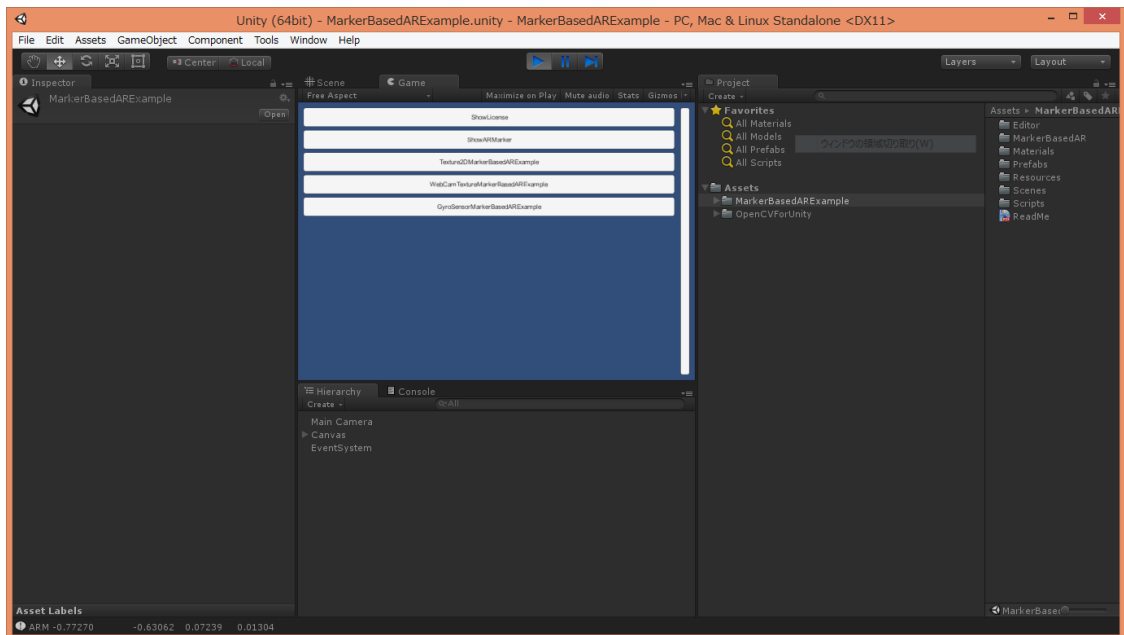
1. Import “[OpenCVForUnity](#)”.
2. Select MenuItem[Tools/OpenCV for Unity/Set Plugin Import Settings].



3. Add all of the “\*\*\*.unity” in the “MarkerBasedARExample” folder to [Build Settings] –[Scene In Build].

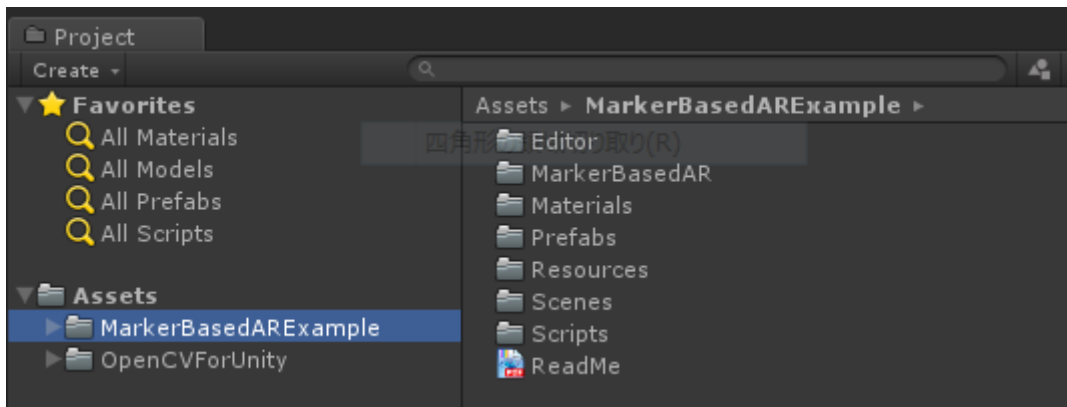


4. Run MarkerBasedARExample Scene.



5. Print the marker image(MarkerBasedARExample/Resources/maker.png).

**Screenshot after the setup**



## Q&A

Q.

I want to change the Marker Image.

A.

Marker design is changeable from the Inspector.

