360 VR Camera Capture Rig
Version 0.8 | January 7th, 2016
Unity 5.3.0f1

This plugin has been made to help developer capture and promote VR games and experiences created in Unity. With this plugin you can capture 360 stills (including stereoscopic) and 360 video (image sequence only, video encoding will be included in our next version).

Currently this plugin requires Unity 5.x and a system that can use compute shaders. On a PC the compute shaders require DirectX 11. Also you will need a GPU capable of Shader Model 5.0.

The plugin will ONLY WORK in editor on the Standalone platform at this time. It will not capture if platform is set to anything else.

Capturing 360 Gameplay

Important Note: For the best experience we recommend capturing 360 gameplay without VR enabled (**DISABLE BOTH** the OVR Rig game object and Uncheck VR Support in publishing settings). It would be best to have alternative controls for both gameplay and UI that would allow you to simulate gameplay outside of the VR environment. IF this is not possible or if your game uses OVR tools that cannot be turned off, use the OVR dependent prefab. This prefab will TURN OFF VR support before capturing the image or video sequence. It will also attempt to turn it back on after capturing is complete but this may not work everytime.

1. Add either one of the ***LS360VRCameraRig*** to your game scene. Use the OVR Dependant version if you cannot disable OVR completely and still run your game.

2. Run your game or application. Default capture keys are as follows. Capture Still 3D (Stereoscopic): P, Capture Still: O, Capture Video (Image Sequence): I. In the case of Video capture you will need to hit “I” again to end the sequence or set the Max Frame value to automatically stop capture after X frames (This is useful if you automate gameplay and want to capture a long play sequence at a high resolution).

3. All output will be saved into your project directory in the sub-folder labeled “LSCaptureFiles”.

4. To view your content on a Gear VR you may need to append the filename, see examples below.

Oculus Video: No file name change needed

Oculus 360 Photo 3D: add _360_TB to the file name
(Ex. TestImage.png -> TestImage_360_TB.png)

Oculus 360 Photo: add _360 to the file name
(Ex. TestImage.png -> TestImage_360.png)

5. To convert your image sequence into a video you can import the sequence into a video editor and encode it from there. (**NOTE:** This will be included as a feature in our next version)

Another option is to use ffmpeg. Here is a sample line of code that can be used to encode an image sequence. Replace all values in **BOLD** with the correct filename, ext and frame capture rate.
“ ffmpeg -framerate 60 -i **YourFileName_**%06d.**png** -an -c:v libx264 -r **30** -pix_fmt yuv420p -preset ultrafast -crf 18 OutputVideo.mp4 ”

To create a 360 Youtube Video follow the instructions here:
https://support.google.com/youtube/answer/6178631?hl=en

If you would like us to compile your images into a video for you feel free to send us a Dropbox link with a zipped copy of all the images in the sequence. We will encode a mp4 and email it back to you. As mentioned above, future version of our plugin will have a automated encoding option.

Send any question, bugs, issues or comments to support@lucidsight.com.