

Nibiru XR SDK and Vuforia Developer Guide

V1.0.1



Nanjing Ruiyue (Nibiru) Technology Co., Ltd.

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Any suggestions are welcomed.

Notes: We recommend Unity of 2017.4.5f1 and higher versions or 2018.x series, and Vuforia of V8.X.

Please update the AR headset to the latest system before integration. (Polaroid AR device with 1.11.010 or higher version system supports this function. Please join the developer group if you have any questions)

Please refer to Vuforia Developer Guide in:

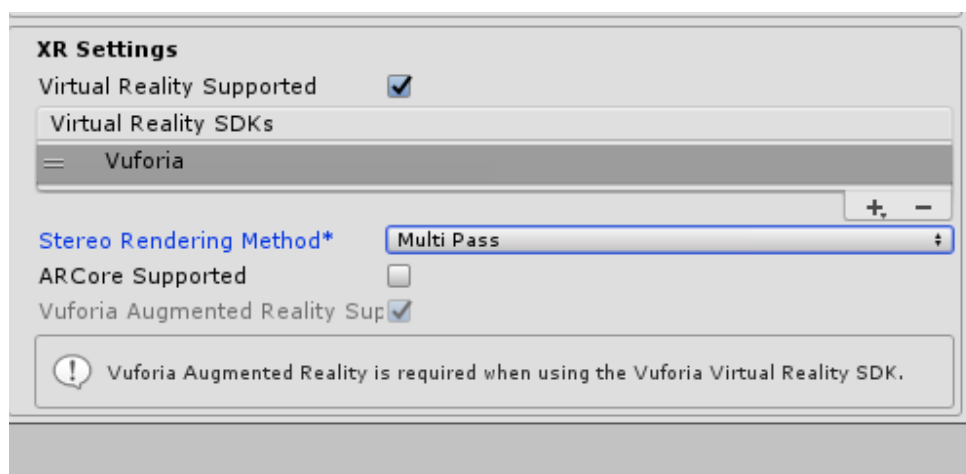
<https://library.vuforia.com/articles/Training/getting-started-with-vuforia-in-unity.html>

This document introduces how to integrate projects developed on Vuforia with NibiruXR SDK, and run the functions of Vuforia on Nibiru AR headsets.

1. Check Vuforia Configurations

Open Build Settings -> Player Settings

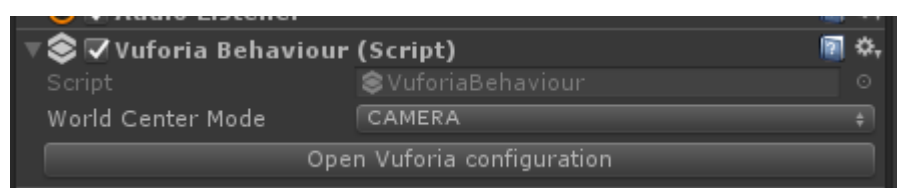
Confirm that the relevant configurations of Vuforia are right:



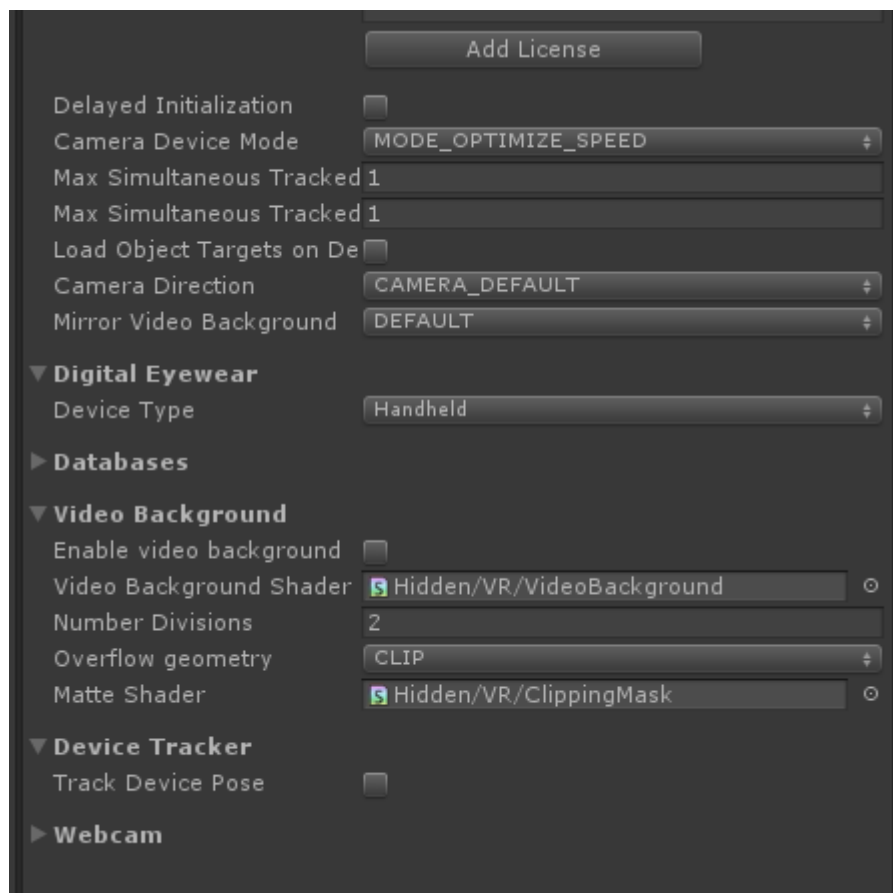
AR Camera -> World Center Mode: choose DEVICE

AR Camera -> Camera -> Target Eye: choose "None(Main Display)"

Notes: If Vuforia is of V7.x version, choose CAMERA Mode.



AR Camera -> Open Vuforia configuration



(Notes: Camera Direction may need adjustments in different devices. If there is no picture or it fails to recognize, select “CAMERA_FRONT” or “CAMERA_BACK”)

1. Add prefab of NibiruXRSDK and delete “MainCamera”.
2. Change “ARCamera” as main camera, select “Device” in “World Center Mode”.

The camera preview background can be hidden by the script CloseVideoBackground. cs. The script is mounted under ARCamera:

```
using UnityEngine;
using Vuforia;

public class CloseVideoBackground : MonoBehaviour {

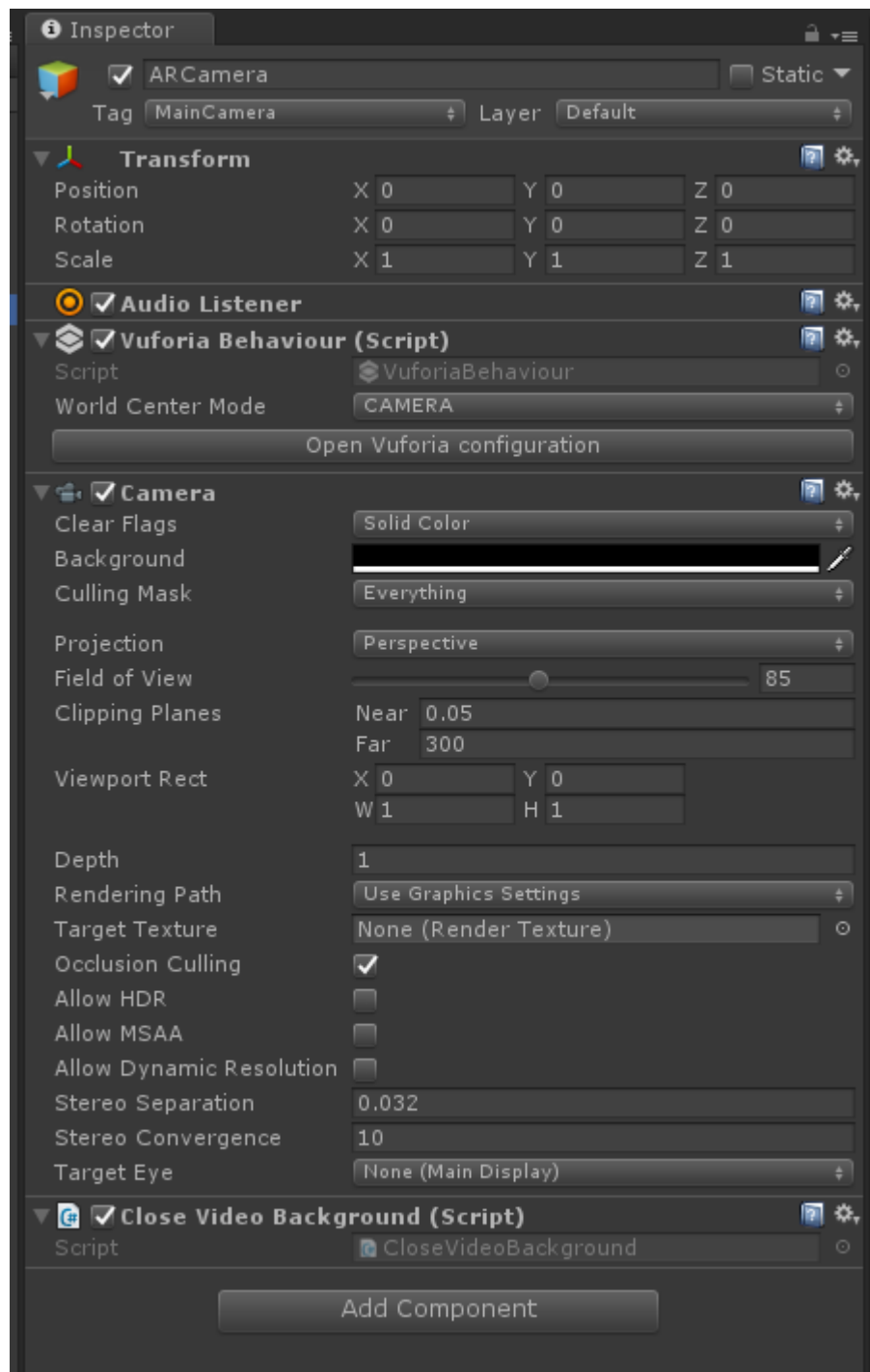
    // Use this for initialization
    void Start () {

        Nxr.Internal.NxrViewer.Instance.GazeApi(Nxr.Internal.GazeTag.Hide);
    }

    private bool mBackgroundWasSwitchedOff = false;

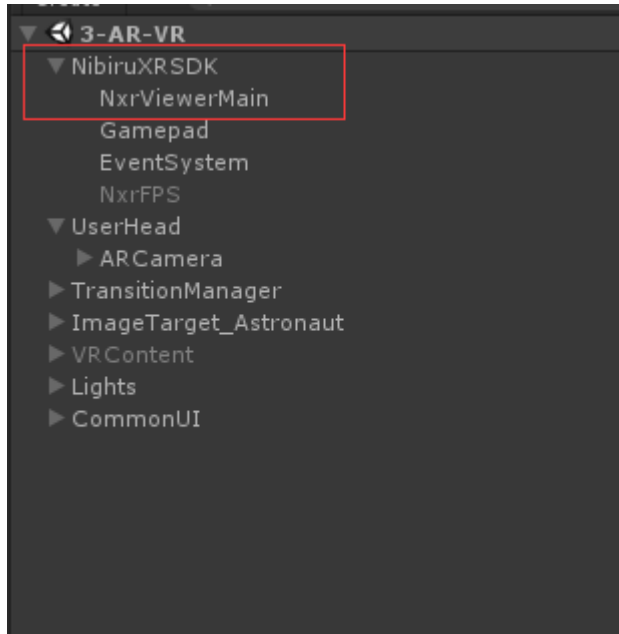
    Transform parentTransform;
    // Update is called once per frame
    void Update()
    {
        if (!mBackgroundWasSwitchedOff)
        {
            BackgroundPlaneBehaviour bgPlane =
            GetComponentInChildren<BackgroundPlaneBehaviour>();
            if (bgPlane != null && bgPlane.enabled)
            {
                // switch it off
                bgPlane.enabled = false;
                parentTransform = bgPlane.gameObject.transform;
                Debug.Log("BackgroundPlaneBehaviour Disabled!!!" +
                bgPlane.gameObject.name);
            }
            mBackgroundWasSwitchedOff = true;
        }

        if(parentTransform != null) parentTransform.localScale = new
        Vector3(0.001f, 0.001f, 1);
    }
}
```



2. Import Nibiru XR SDK

Find NibiruXRSDK_PRO_V1.x.x_x_x_x.rel.unitypackage in the downloaded SDK package, and import it to the project.



Drag NibiruXRSDK prefab into the scene and then delete MainCamera. Refer to related documents of XR SDK for the other configurations.