hTC

△ VIVE WAVE

[Unity] Set Up MRTK3 For VIVE WAVE

Oct, 2023

Revision History

Revision	Date	Description
0.1	Oct 2023	Alpha release

Contents

1. Introduction

VIVE Wave Unity plugin supports the **MRTK Support** feature. By following this guide you can build an application with MRTK and run on VIVE mobile devices.
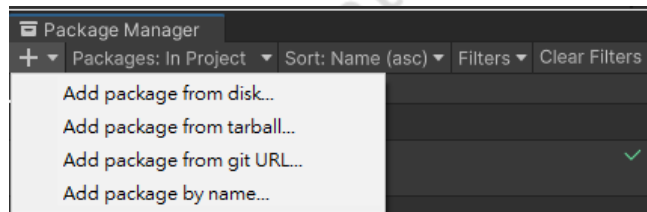
The feature of **MRTK Support** :

- Controller
- Hand Tracking
- Eye Tracking

2. Development Environment

2.1. Download Packages

1. Download Source code (zip) for MRTK 3.0.0 GA from MRTK [GitHub](#).
2. Unzip and open MRTK\UnityProjects\MRTKDevTemplate.
3. Import WAVE SDK into your project from menu **Window > Package manager > Add package from tarball**.

4. Import **MRTK 3.0.0 Support** feature from menu **Edit > Project Settings > Wave XR > XRSDK**.
5. Import MRTK3.0.0_VIVE package from Assets/Wave/XR/MRTKSupport/.
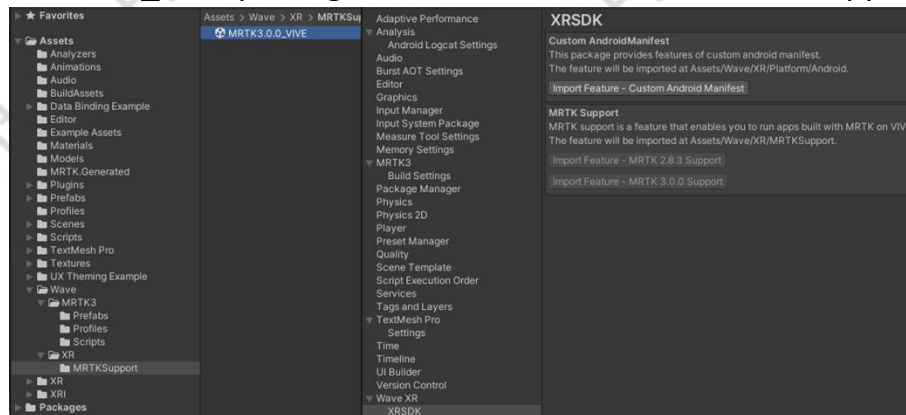
6. Check MRTK3 folder is added to Assets/ Wave/.
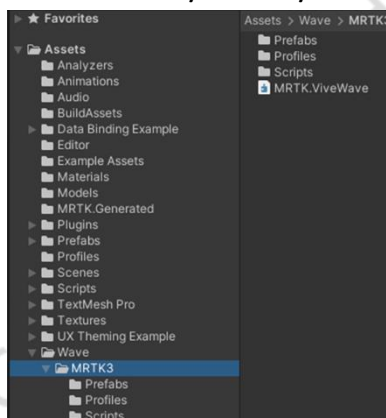
7. Import Custom AndroidManifest feature from menu **Edit > Project Settings > Wave XR > XRSDK**.

8. Check AndroidManifest.xml is added to Assets/Wave/XR/Platform/Android/ and copy to Assets/Plugins/Android/

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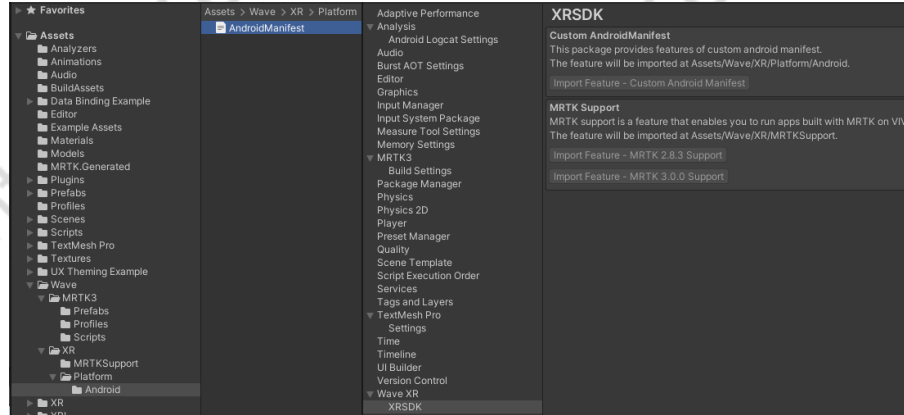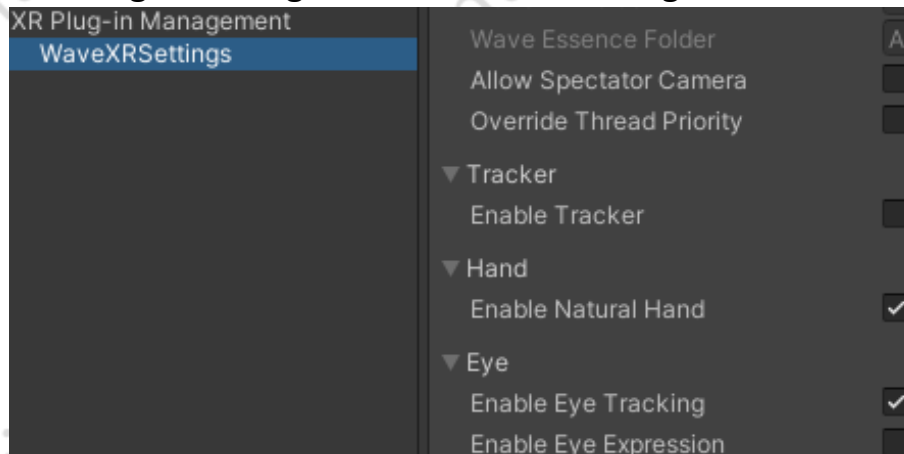
2.2. Project Settings

1. Switch to Android platform.
2. Set MRTK3 Profile from menu **Edit > Project Settings > MRTK3** and select the profile from Assets/Wave/MRTK3/Profiles/.
3. Ensure MRTK Hands Aggregator Subsystem and Subsystem for Vive Wave Hands API are enabled in profile.
4. Click MRTK Hands Aggregator Subsystem and set Pinch Open Threshold to 0.6 and Pinch Close Threshold to 0.4.
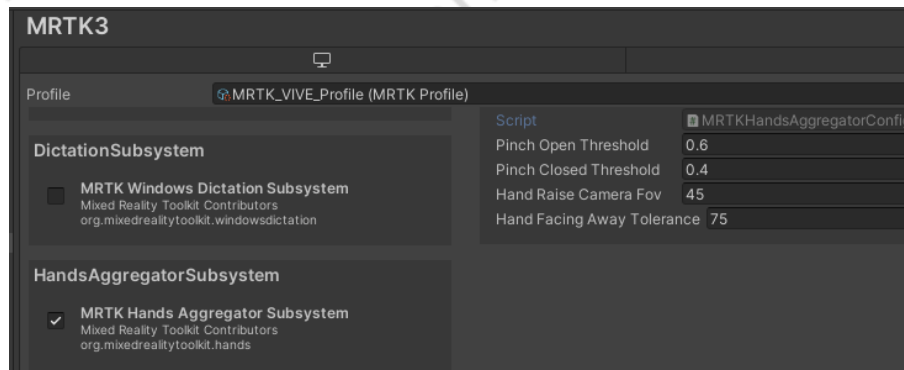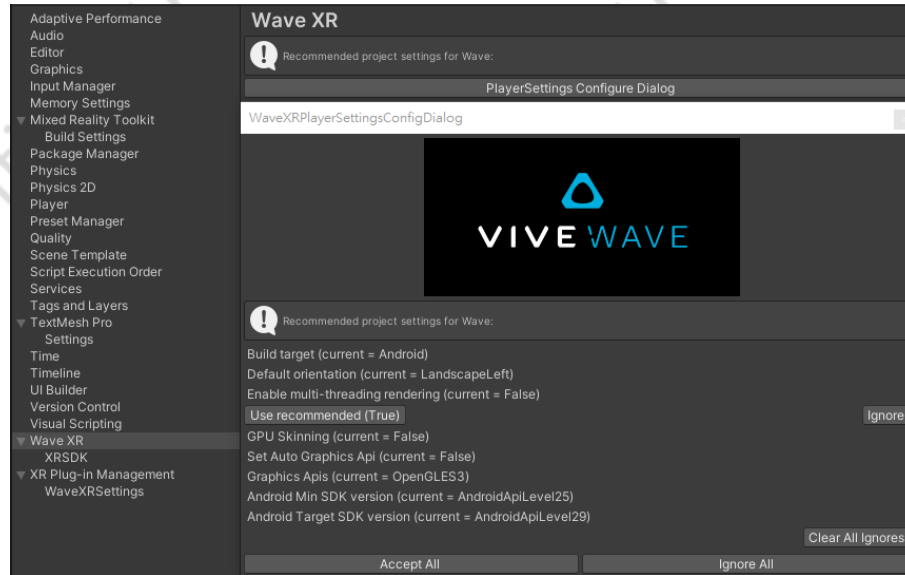

5. Enable Natural Hand and Eye Tracking(optional) from menu **Edit > Project Settings > XR Plug-in Management > WaveXRSettings**.
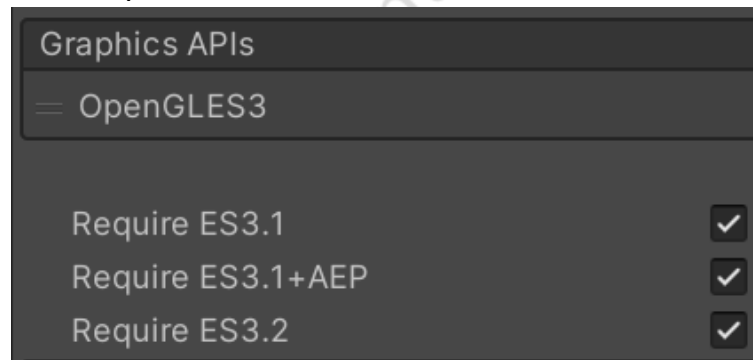

6. Only enable WaveXR in XR Plug-in Management from **Edit > Project Settings > XR Plug-in Management**.

7. Check WaveXRPlayerSettingsConfigDialog from menu **Edit > Project Settings > Wave XR**.

8. Click Accept All.

9. Check Graphics APIs from menu **Edit > Project Settings > Player > Other Settings** only select OpenGLES3.

2.3. Hand Interaction Example

You can build an example to verify your environment.

1. Open demo scene HandInteractionExamples.unity from Assets/Scenes/.
2. Disable MRTK XR Rig and Add VIVE Wave Rig from Assets/Wave/MRTK3/Prefabs/.
3. Build and Run from menu **File > Build Settings**.
4. In the example, you can test the functionality of the controller, hand tracking, and eye tracking and also interact with UGUI and objects using hand ray or controller ray.
   Controller : Trigger Press(Select)
   Hand Tracking : Pinch(Select)
   Eye Tracking : If you enable eye tracking, the HMD gaze pointer would follow your eye gaze.

3. Enable Passthrough

1. Import WAVE Native into your project from menu **Window > Package manager > Add package from tarball**.
2. Add script to call passthrough APIs, here listed the passthrough APIs:
   public static WVR_Result WVR_ShowPassthroughUnderlay(bool show)
3. Ensure the clear color of Opaque and Transparent in Camera Settings Manager from VIVE Wave Rig > Main Camera should be set to Color or Solid Color and the background color should be set to (0, 0, 0, 0).