Getting Started with Merge Cube 1.2.0 for Unity 2017.2

Thank you for your interest in the Merge Cube SDK. Here are a few things to go over before you get started developing these exciting new experiences.

Prerequisites

Hardware

1. Merge Cube Development Kit
2. An iOS or Android device
3. A VR viewer such as the Merge VR Goggles
4. A computer or laptop

Software

1. Merge Cube Unity SDK
2. Unity
3. Windows or Mac
4. XCode (Mac only)

Getting the Vuforia SDK

> As of Unity version 2017.2, Vuforia has now been built into Unity as an optional default component! However, you will still need a Vuforia license key by visiting the Vuforia developer portal.

1. Register a Vuforia account at https://developer.vuforia.com/
2. Once you are logged in, navigate to the “Develop” tab and create a new License Key
3. Copy this license key for use in the upcoming steps

Getting the Merge Cube SDK License Key

1. To receive a MergeCubeSDK License Key, please email us at developer@mergevr.com with your Company Name, Contact Name and Info, Email, and App Name. We will reply with a valid key

Setting up Android or iOS

To get started in Unity with Android, see this page
https://docs.unity3d.com/Manual/android-GettingStarted.html

To get started in Unity with iOS, see this page
https://docs.unity3d.com/Manual/iphone-GettingStarted.html

Setting up a scene with Merge Cube

1. Open Unity 2017.2
2. Create a new project
3. Change the build platform to Android or iOS
4. In the default empty scene that opens, delete the MainCamera object
5. Create an ARCamera via the Menubar -> GameObject -> Vuforia -> ARCamera
6. Import Vuforia components when prompted
7. Open build settings
8. Add current scene to build settings
9. Under Player Settings > Other Settings, disable Auto Graphics APIs
    a. If you are developing on iOS, scroll down and remove Metal and OpenGLES 3.0 from the Graphics APIs
    b. If you are developing on Android, scroll down and remove Vulkan and OpenGLES 3.0 from the Graphics APIs
10. If developing for iOS, Under Player Settings > Other Settings, type “Used for Image Recognition” under Camera Usage Description
11. Under Player Settings > XR Settings, enable Vuforia Augmented Reality.
12. Click on the ARCamera object in the scene and select “Configure Vuforia” from the inspector window.
13. In the Configuration File, paste your license key into the “App License Key” text field
14. Under Device Tracker, enable Device Pose Tracking if needed
15. Import the Merge Cube SDK
16. Drag a MergeCubeSDK prefab from the MergeCubeSDK > Prefabs folder into the scene
    a. This will generate a new file called MergeConfigurationFile, if it is ever deleted, the MergeCubeSDK object will attempt to recreate one during any OnValidate calls. Alternatively, it can regenerate it if assigned “none” in the inspector menu
17. In the MergeConfigurationFile, ensure that you type in the Merge Developer License key that we have provided you in the License Key field.
    a. If you do not have one, please email us at developer@mergevr.com with your Company Name, Contact Name and Info, Email, and App Name. We will reply with a valid key
18. Drag a MergeMultiTarget prefab from the MergeCubeSDK > Prefabs folder into the scene
19. Any objects placed under the MergeMultiTargetScalerRoot will now respond to tracking events when the Merge Cube is lost or found
    a. Do note that these objects should not be under the reference cube, as the reference cube will be destroyed at runtime. The reference cube is a visual representation of the Merge Cube’s expected size. Objects placed on the cube should use that as reference for how big the cube is.

    b. If you find that the cube's dimensions in the Unity scene are too small or too big, the size of the cube can be adjusted in the MergeConfigurationFile, via the Cube Scale Factor. (Located in the Resources folder in the Assets folder). Adjusting this will scale the MergeMultiTargetScalerRoot to the new dimension. By default, this is set to the default Unity size of 1 unit or 1 meter. Common applications of changing this setting include scaling it for physics and lighting purposes.

20. If you are using our Permissions Processor, please read the supplied documentation located in the MergeCubeSDK > _Doc folder
21. If you are using our IntroSequencer, please read the supplied documentation located in the MergeCubeSDK > _Doc folder