Multiplayer VR Asset Documentation

Thank you for downloading the asset.

As **IRONHEAD Games**, we will do our best to help you set up the asset and provide the support needed in the future.

This asset uses **PUN 2- FREE** and **Photon Voice 2** assets for Multiplayer and uses **Unity XR Interaction Toolkit** package for VR functionality.

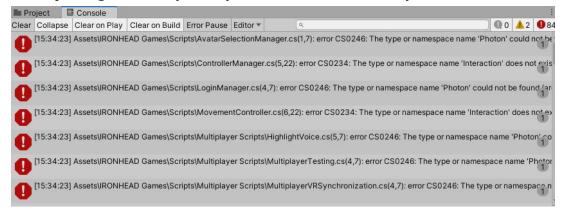
Also, this asset is compatible with at least Unity 2019.3. So, make sure not to use a lower version than Unity 2019.3!

You can follow the below steps to set up the asset. Good luck!

How to Set Up the Asset

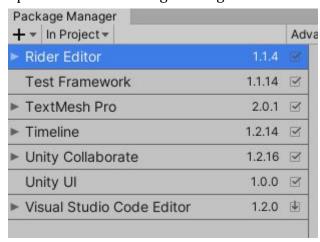
Importing the Asset and Configuring Photon Settings

1. After importing the asset, you may see lots of errors on Unity Console.

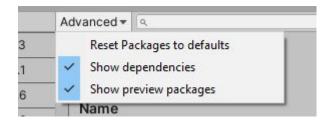


This is very normal and we will fix it soon. First, we will import Unity XR Toolkit Interaction if it is not imported automatically when you imported the asset.

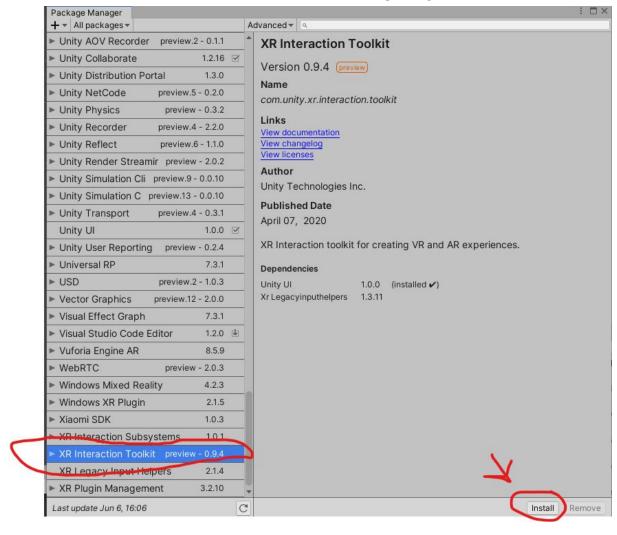
Open Window > Package Manager.



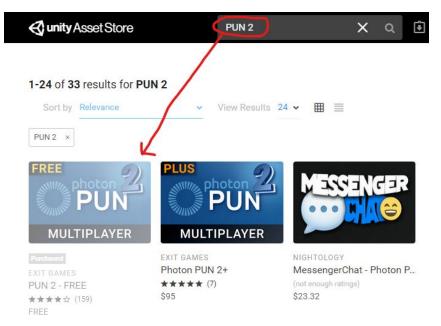
2. Under Advanced tab, check *Show preview packages* toggle.



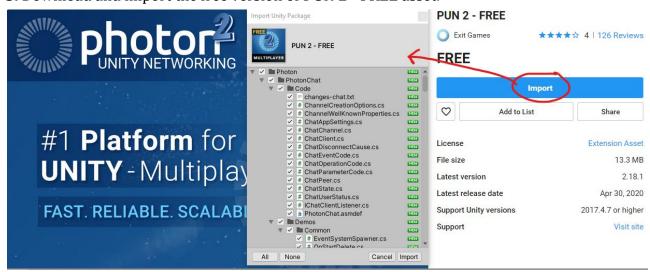
3. Locate and install XR Interaction Toolkit under All packages.



4. Next, open the Asset Store and search for PUN 2.

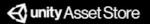


5. Download and import the free version of PUN 2 - FREE asset.



6. Then, search for Photon Voice 2.

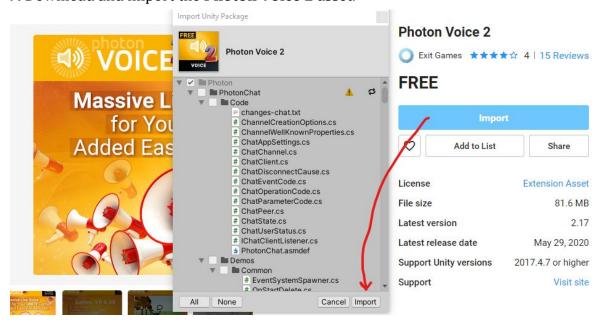
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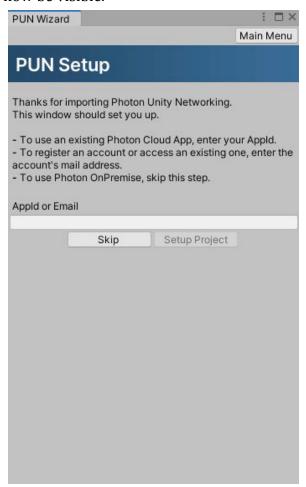


7. Download and import the **Photon Voice 2** asset.





8. Pun Wizard should now be visible.

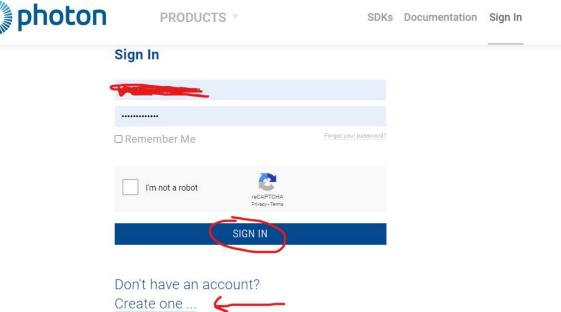


- **9.** Now, we need to enter the appID from Photon cloud in order to set up Photon. So, Go to https://www.photonengine.com/
- 10. Sign in OR Sign up if you don't have an account.

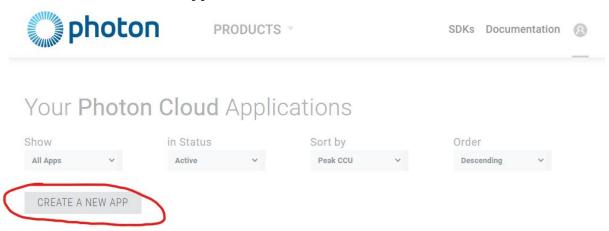








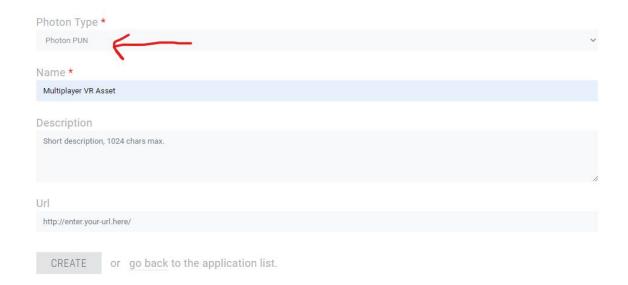
11. Click on *Create A New App* button.



12. Create a new cloud application with Photon Pun type.

Create a New Application

The application defaults to the **Free Plan**. You can change the plan at any time.



13. Copy its appID.



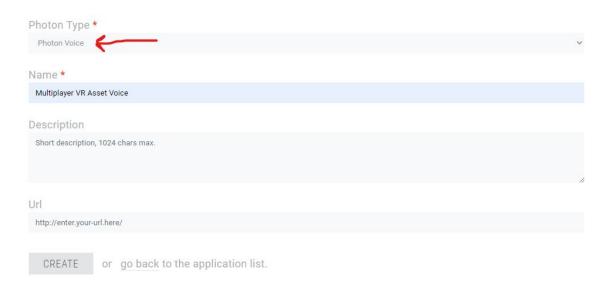
14. Then, paste it here and click on Setup.



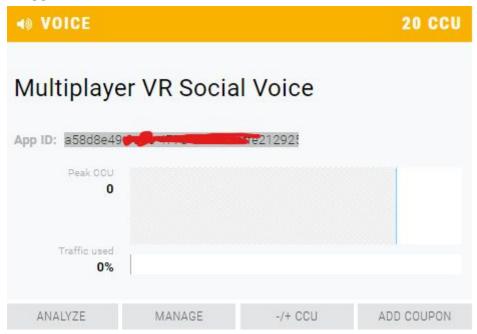
13. Go back to Photon website and create another cloud application with Photon Voice type.

Create a New Application

The application defaults to the **Free Plan**. You can change the plan at any time.

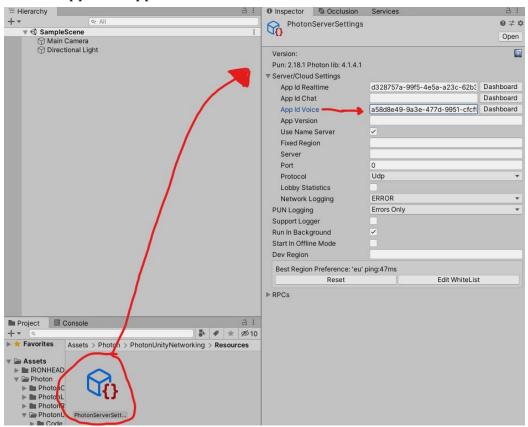


14. Copy its app Id.

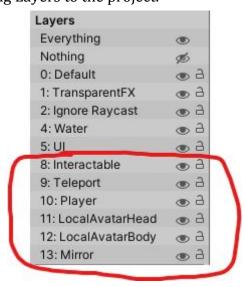


15. Back to Unity, go to Assets> Photon > Photon Unity Networking > Resources and open Photon Server Settings.

And paste the app Id to App Id Voice =>



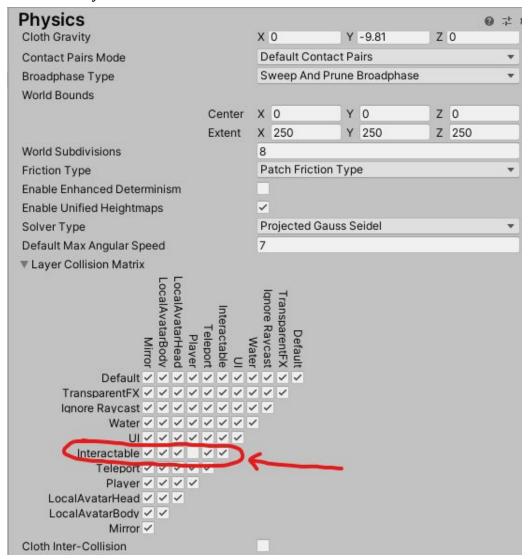
16. Next, add the following Layers to the project.



Note that the order is important.



17. Lastly, open Edit > Project Settings > Physics. Disable the collision between Player and Interactable layer.



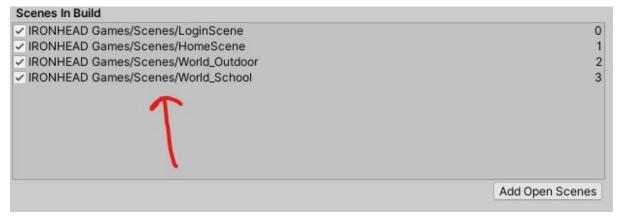
Congrats! You set up the asset. Next is to configure the project for Oculus Quest. This project is tested only with Oculus Quest. However, Unity XR Interaction Toolkit will also support SteamVR soon. I will do the necessary update for the SteamVR when the update is out.

In the meantime, you can use the deprecated OpenVR package to run this project for SteamVR supported devices such as HTC Vive or Cosmos.

Configuring the Project for Oculus Build

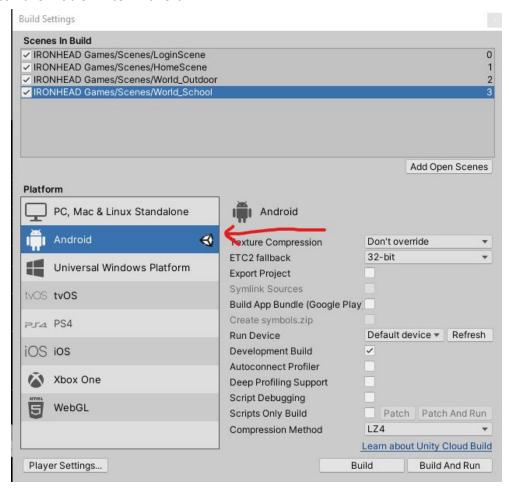
Now, we will prepare the project for Oculus Quest build.

1. First, open File> Build Settings. Add the following scenes to Scenes in Build from IRONHEAD Games > Scenes folder.

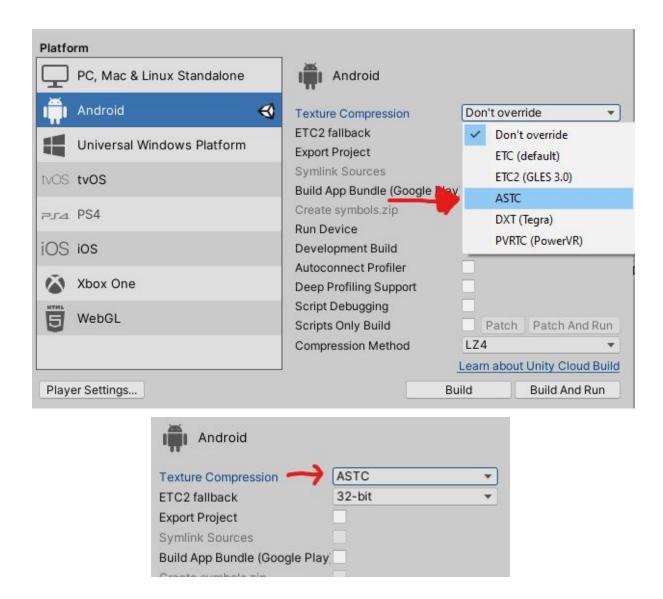


Make sure to follow the order such as LoginScene must be the first scene.

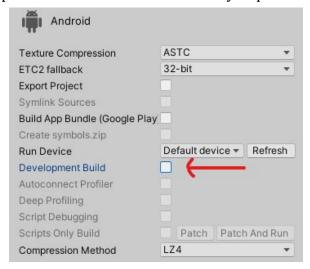
2. Switch the Platform to Android.



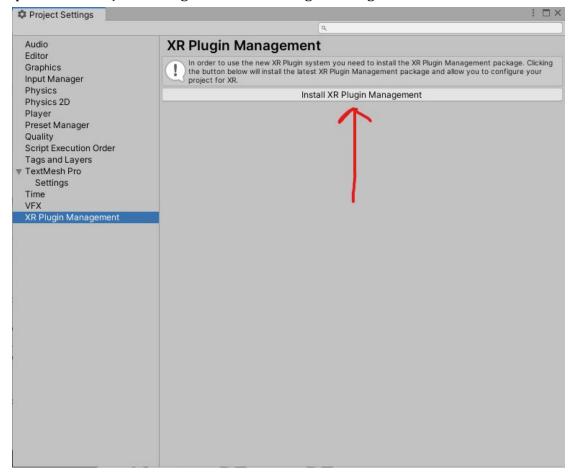
3. Change the Texture Compression to ASTC.



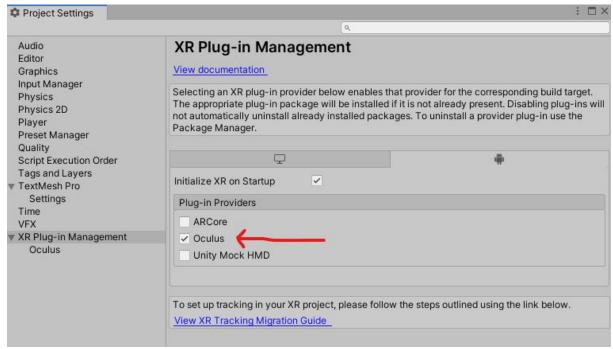
Also, clear the Development Build selection since it may impact the performance.



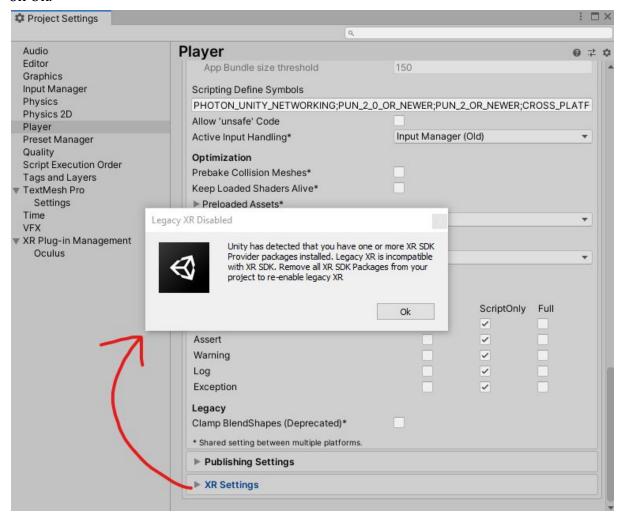
4. Open Edit > Project Settings. Click on XR Plugin Management. And install it.



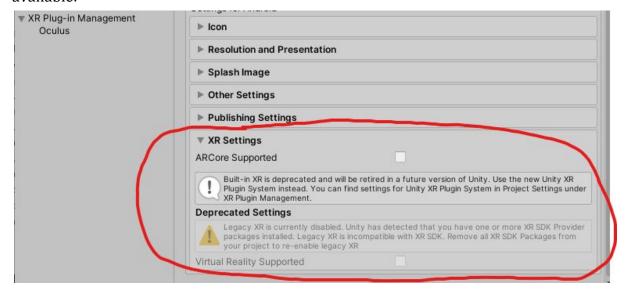
5. Under Plug-in Providers, check Oculus toggle. It could take a while to install Oculus plugin.



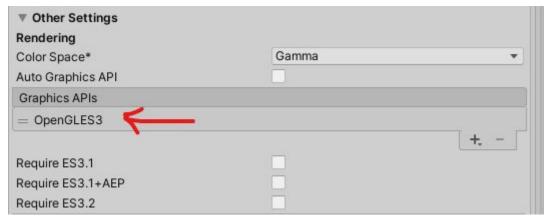
6. Next, click on Player Settings > XR Settings on the bottom. When you do that, you may have a warning like this. It is a formal warning about the legacy XR packages. Click on Ok.



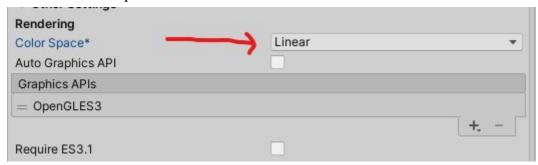
And under XR Settings, you should see that the deprecated settings are no longer available.



7. Open Other Settings. Make sure to have only OpenGLES3 for the Graphics API. You may even need to remote Vulkan Graphics API since it is still experimentally supported for Oculus Quest.



8. Set the Color Space as **Linear**.



This is a suggested setting from Oculus. See more info: https://developer.oculus.com/documentation/unity/unity-conf-settings/

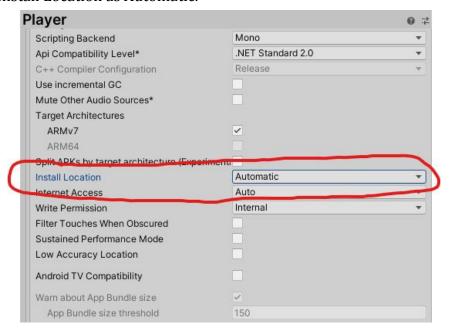
9. Under Identification, enter your unique package name.



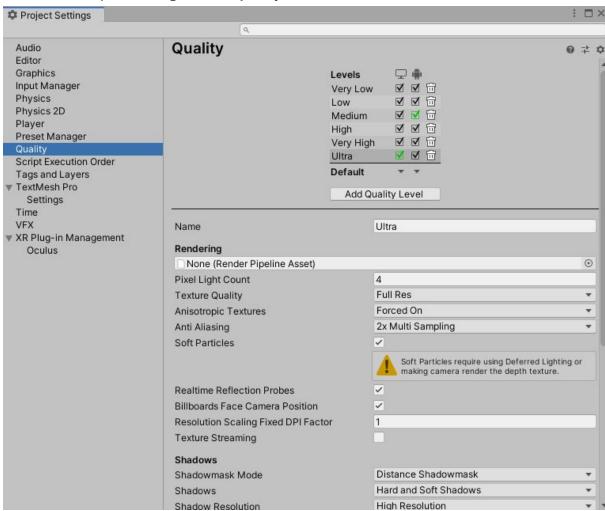
10. Set the minimum API level as 23 and Target API Level as Automatic (highest installed).



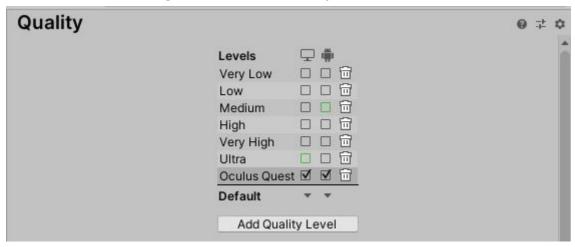
11. Select Install Location as Automatic.



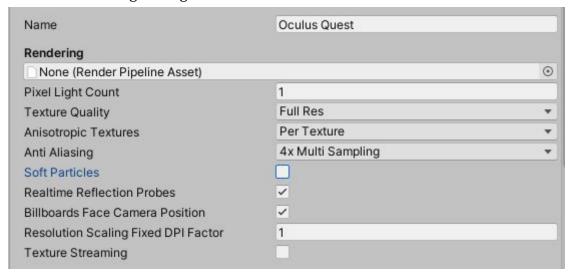
12. Under Project Settings, select Quality.



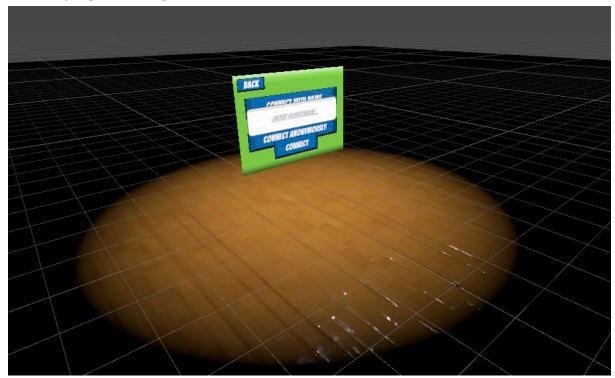
13. Uncheck all the settings and add a new Quality Level called Oculus Quest.



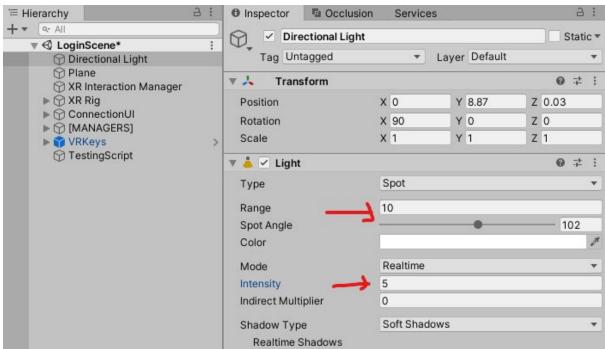
14. Set the Rendering settings as below.



15. Lastly, open the LoginScene.



Adjust the light settings so that the Login panel is visible enough.



Okay, now it is time to build this project to Oculus Quest and have fun with the basics of Multiplayer Virtual Reality.

To build this project to your Oculus Quest, you need to configure your Oculus Quest and do some other things to unlock the development.

To do this, you can follow the setup page from SideQuest: https://sidequestvr.com/setup-howto

You can always ask your questions to me using this email address: tevfikufuk@gmail.com

Good luck!