

# Blync

## Create Your Own Environment using Unity

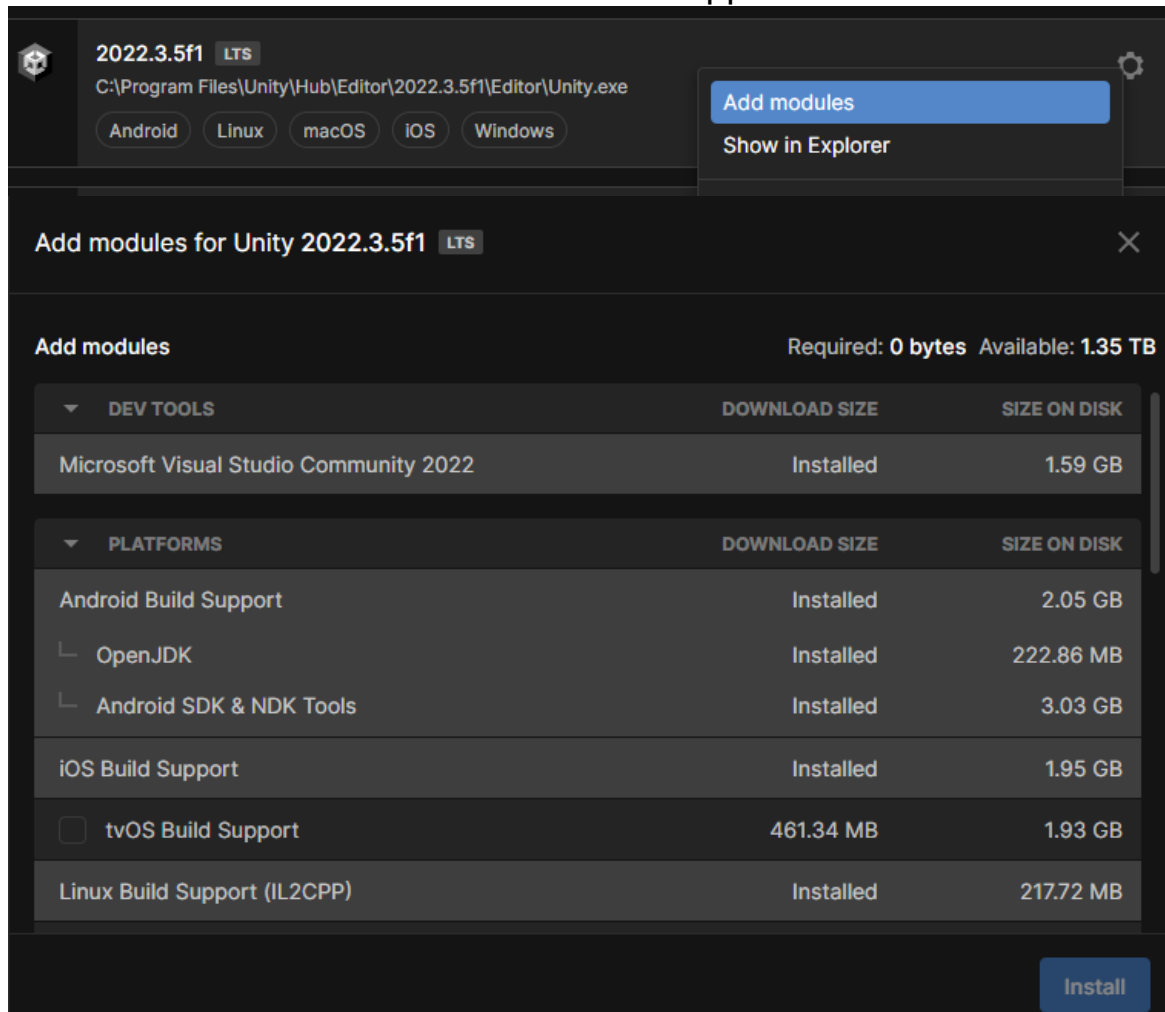
You can create a personalized Blync experience by creating your own environment using the Unity engine and uploading them to the Blync servers. Below are the steps needed to create and upload an environment to the Blync servers and start biking in them.

### Step 1: Download and Install Unity

Download **Unity 2022.3.5f1 LTS** using Unity Hub

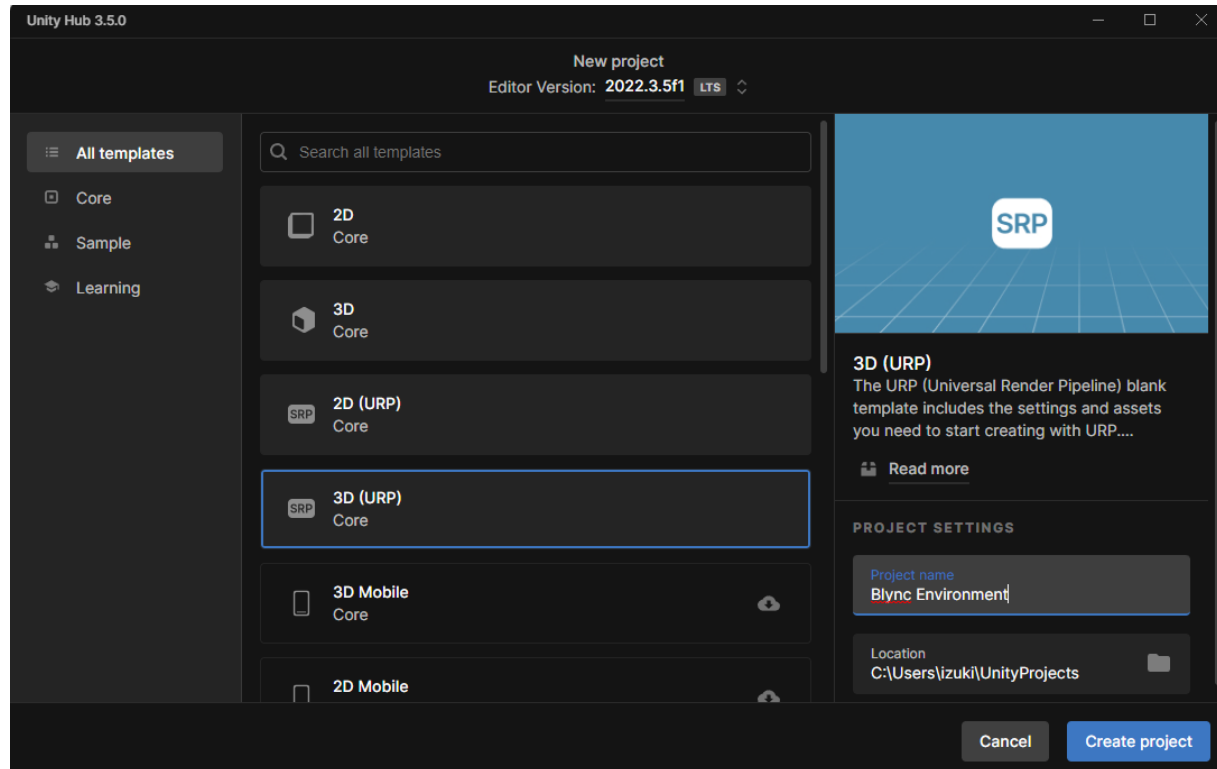
(<https://unity.com/download>)

Make sure the “Android Build Support” module is installed



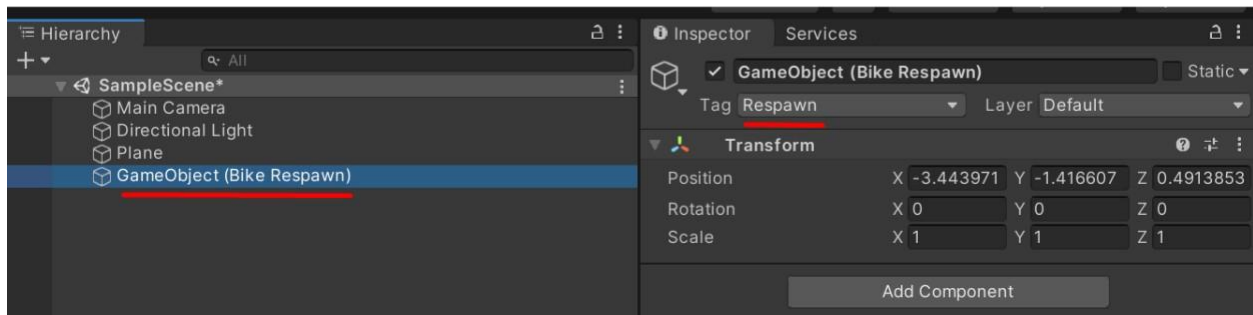
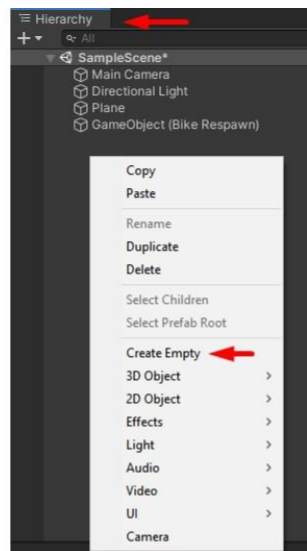
## Step 2: Create a new Project

Once Unity 2022.3.5f1 LTS is downloaded and installed, create a new project. If building an environment for PC then create a URP project. If building an environment for Android and mobile then create a 3D project.



From here you can design your environment with 3D assets you have created or downloaded from the Unity Asset Store (<https://assetstore.unity.com/>).

To add a location of where the biker will be spawned, you must create an empty Game Object in the “Hierarchy window” and attach a “Respawn” Tag to it from the “Inspector Window.” To create an empty Game Object, right-click in the “Hierarchy” window and click “Create Empty.”

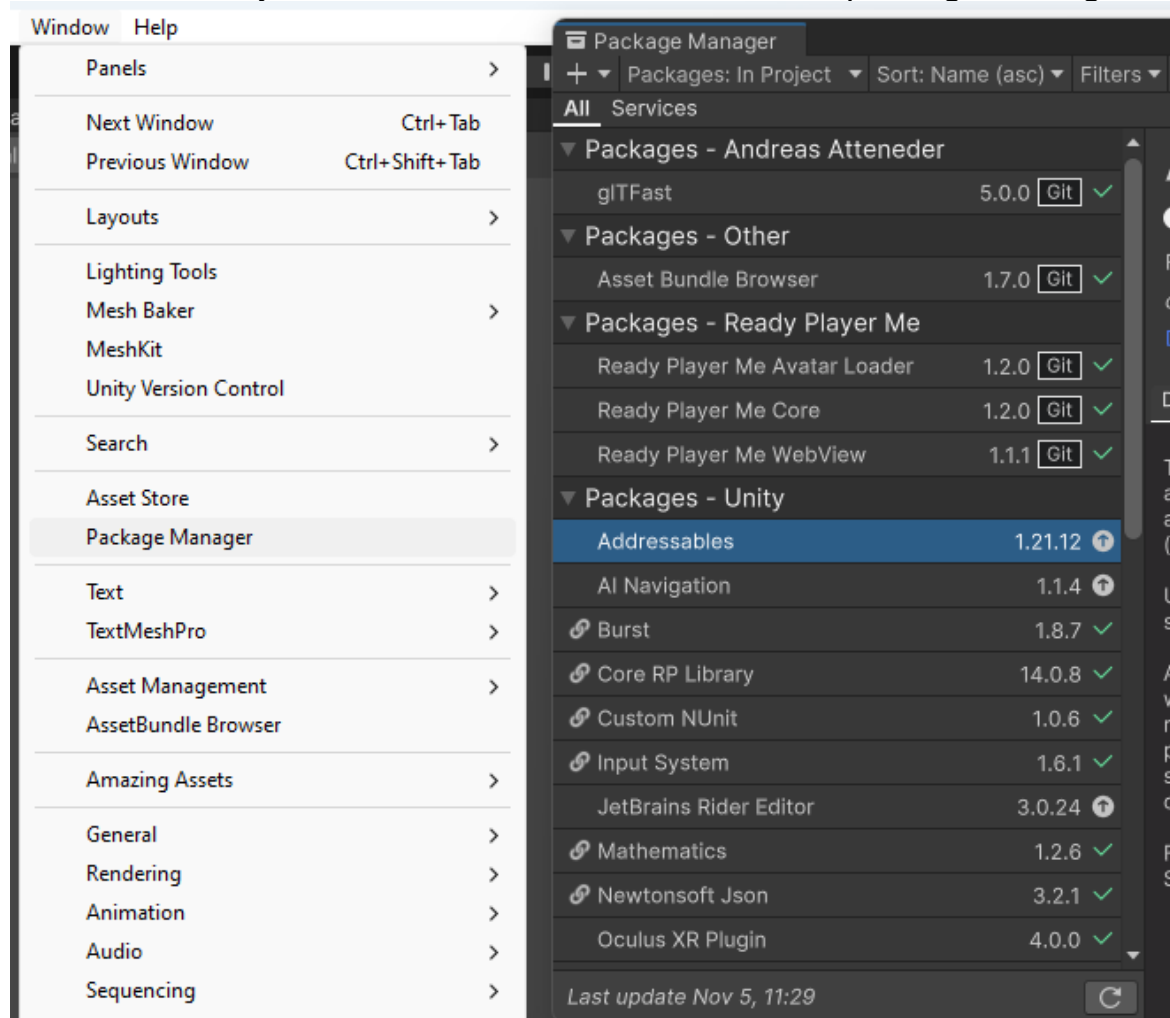


*Note: Multiple empty Game Objects with a “Respawn” tag can be added for additional biker spawn points.*

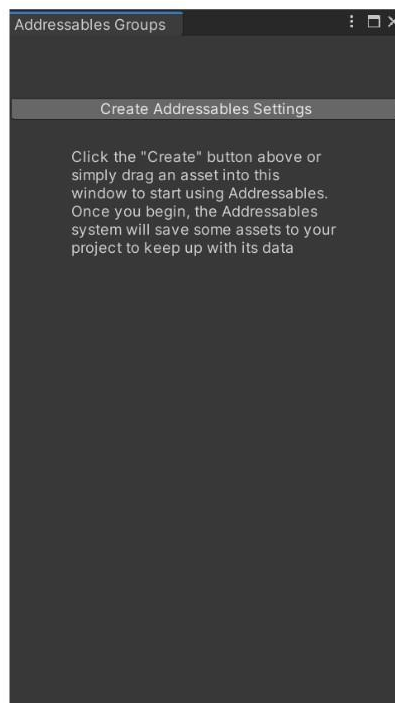
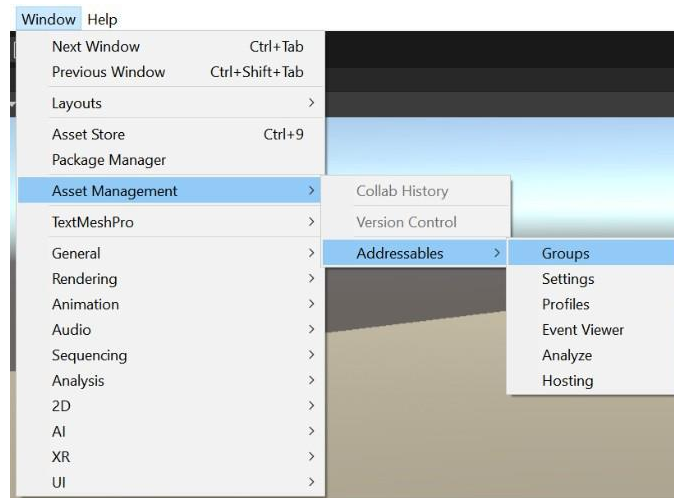
### Step 3: Using Addressable (v 1.8.5)

Blync uses Unity Addressables to load external environments.

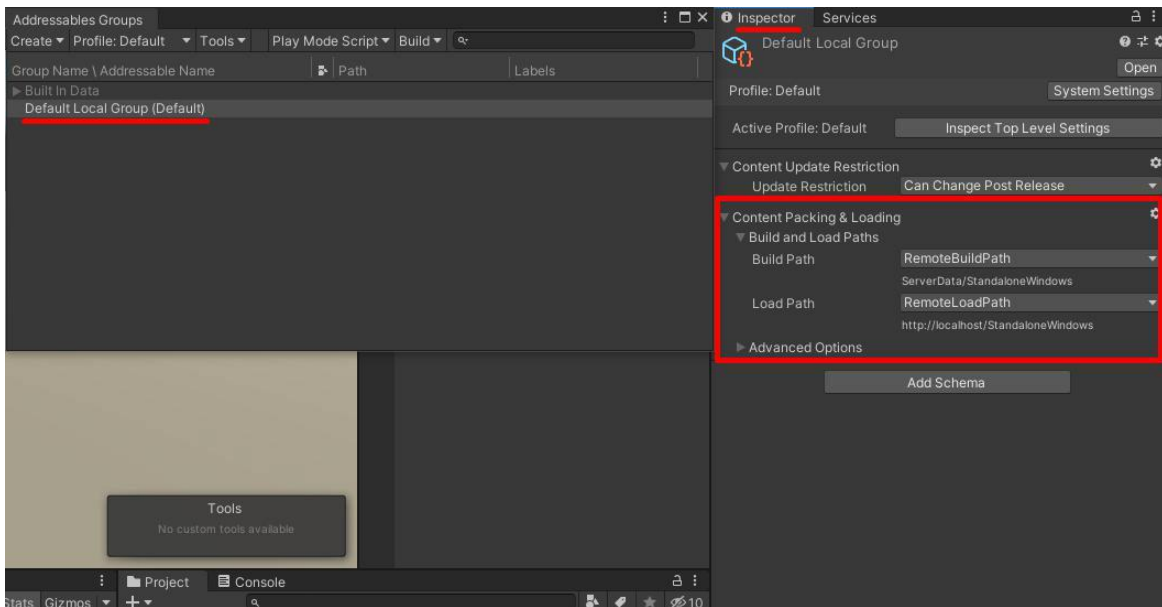
Download Unity Addressable version 1.21.12 in the package manager.



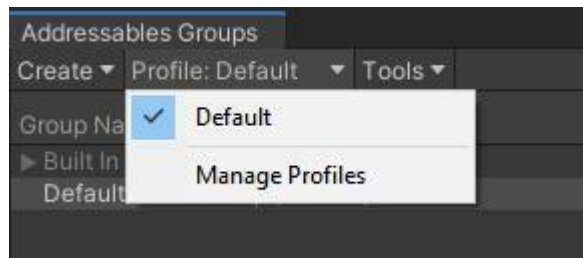
After installation, create Addressable settings by opening the Group window (Window -> AssetManagement -> Groups) and clicking the “Create Addressables Settings” button.



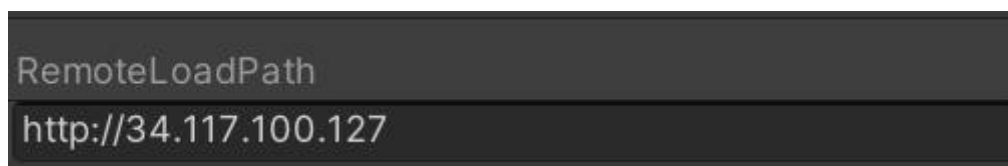
Highlight “Default Local Group” and look at the Inspector window. “Build Path and “Load Path” should be set to “RemoteBuildPath” and “RemoteLoadPath.”



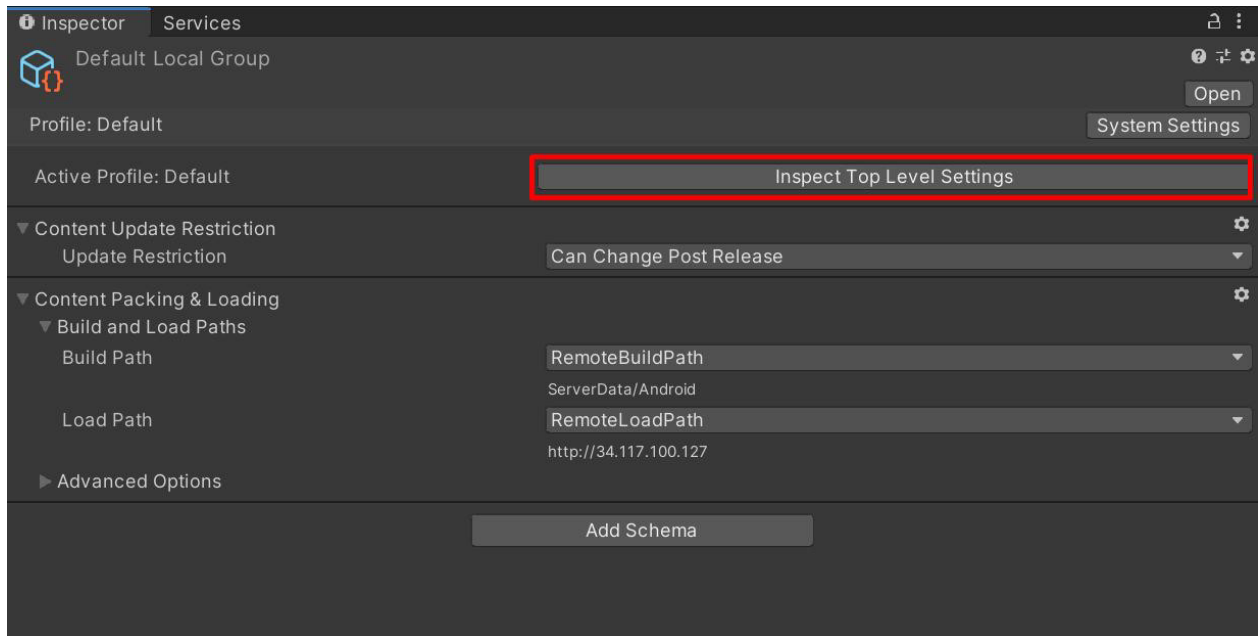
In the “Addressables Groups” window, select the profile menu and click “Manage Profile.”



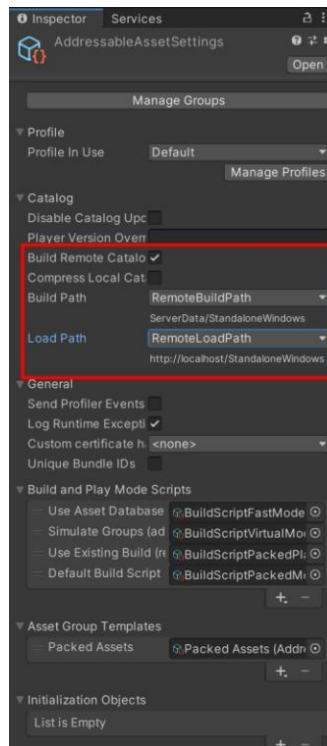
A window called “Addressables Profiles” should appear. Set the value to `http://34.117.100.127` in “RemoteLoadPath.”



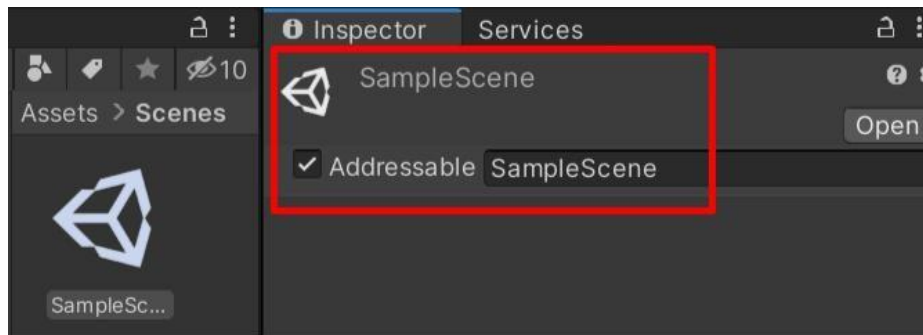
Next, go back to highlighting “Default, Local Group,” go to the Inspector window and click “Inspect Top Level Settings.”



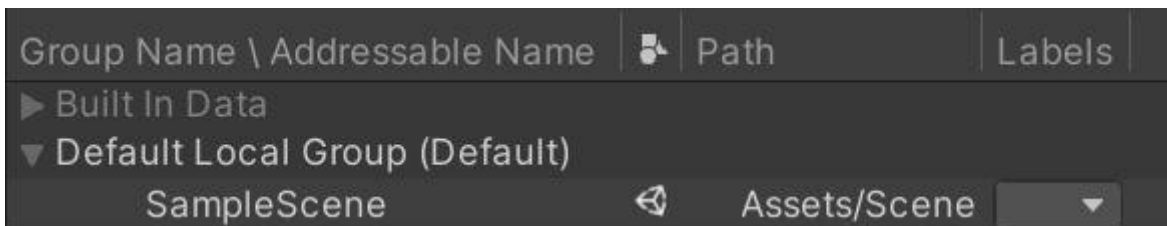
Checkmark “Build Remote Catalog” and set “Build Path” to “RemoteBuildPath” and set “Load Path” to “RemoteLoadPath.”



Go to the folder location of your saved scene, click on the saved scene and checkmark the “Addressable” box in the inspector window. Also, in the text field, enter in the name of the Scene name (.unity does not need to be included).



This will add the scene inside the “Default Local Group” in the addressable window that was previously accessed.



From here, navigate to the build drop-down button and go to “New Build” and click “Default Build Script.” Unity will start to build some files. Once the files are built, you will see 4 build files in your project folder inside a folder called “ServerData.” These 4 files will be used to upload to the Blync Servers.

*Note: If you are building for Android and/or Mobile devices, read the next section before building*



Play Mode Script ▾ Build ▾ 🔍 × +

- New Build > Default Build Script
- Update a Previous Build
- Clean Build >

.vscode	3/1/2022 3:37 PM	File folder	
Assets	3/1/2022 4:12 PM	File folder	
Library	3/1/2022 6:53 PM	File folder	
Logs	3/1/2022 3:36 PM	File folder	
Packages	3/1/2022 4:11 PM	File folder	
ProjectSettings	3/1/2022 4:13 PM	File folder	
ServerData	3/1/2022 6:53 PM	File folder	
Temp	3/1/2022 6:55 PM	File folder	
Blync.sln	3/1/2022 3:37 PM	Visual Studio Solution	1 KB

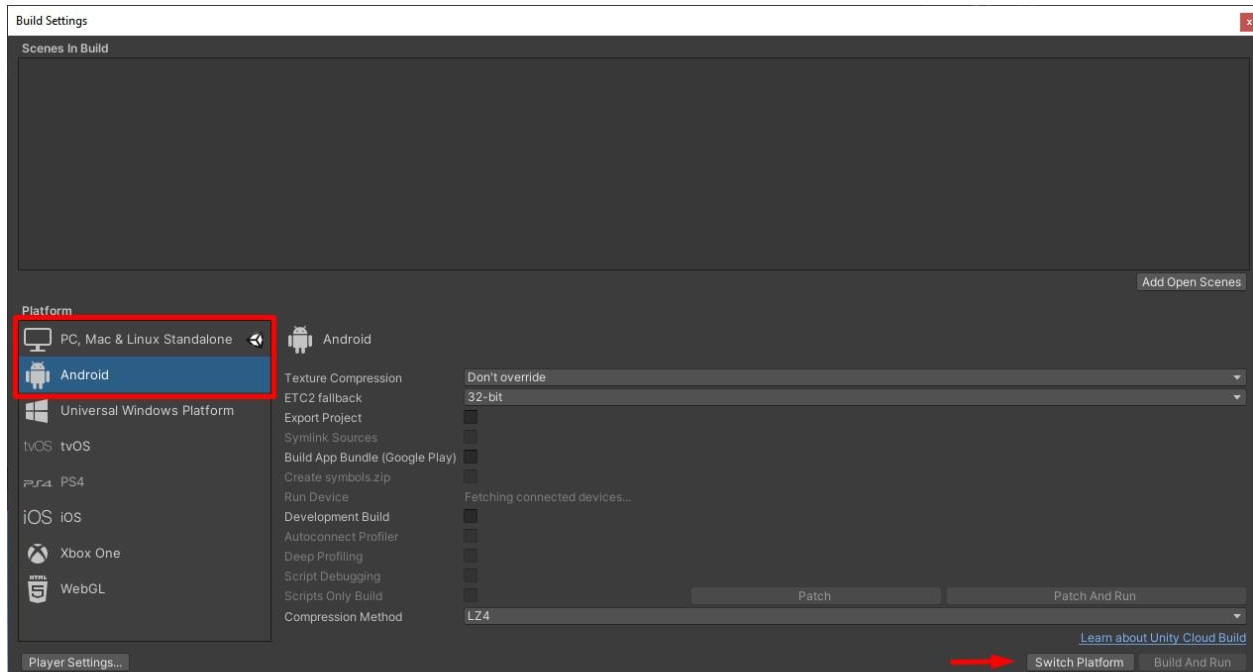
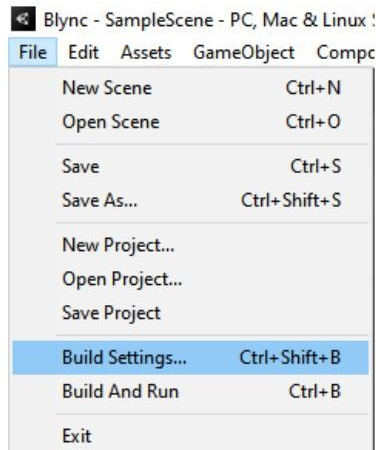
StandaloneWindows	3/1/2022 6:53 PM	File folder	
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catalog_2022.03.01.23.53.10.hash	3/1/2022 6:53 PM	HASH File	1 KB
catalog_2022.03.01.23.53.10.json	3/1/2022 6:53 PM	JSON File	5 KB
defaultlocalgroup_scenes_all_748588d6afafdbd03d683ccbc4cf80e8.bundle	3/1/2022 6:53 PM	BUNDLE File	10 KB
defaultlocalgroup_unitybuiltinshaders_e9dd479789cb5fc1dff14538de8a608a.bundle	3/1/2022 6:53 PM	BUNDLE File	44 KB

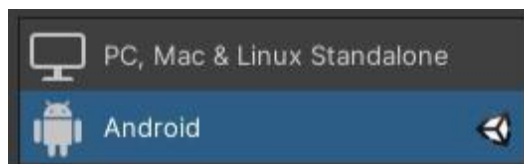
## Building for Android & Mobile Devices

If you are building for Android or Mobile devices such as the Oculus Quest, make sure to switch the Build Settings to Android.

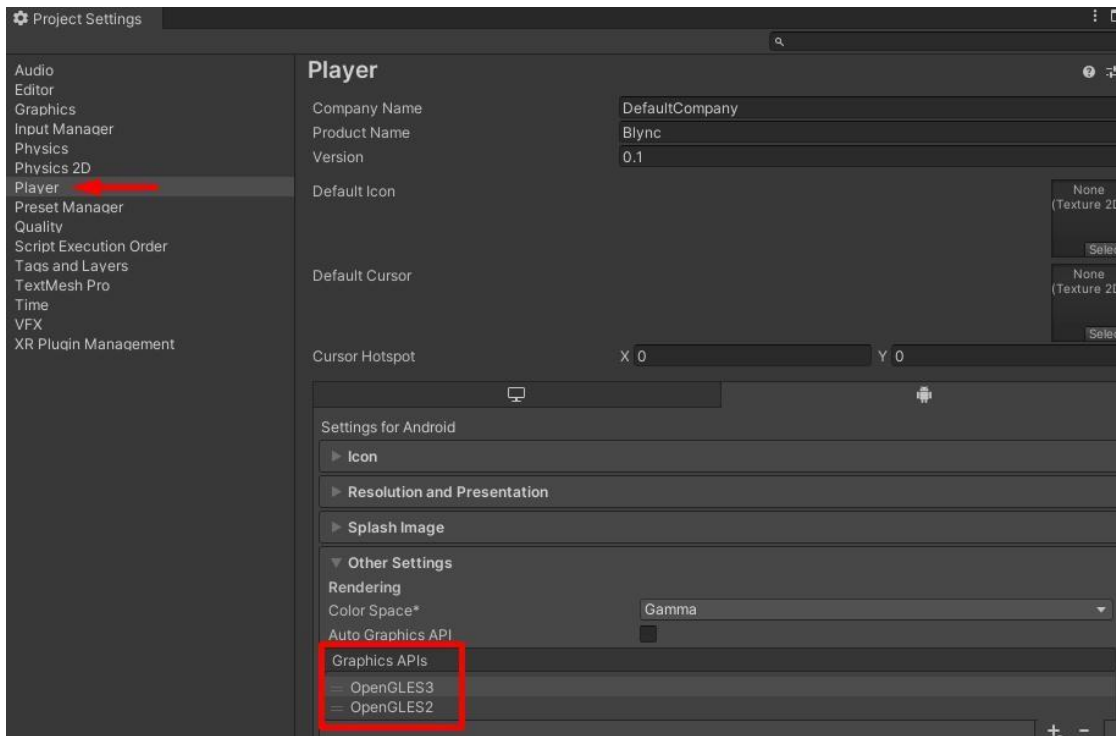
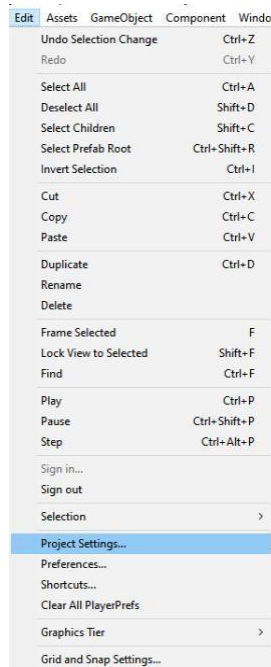
File -> Build Settings



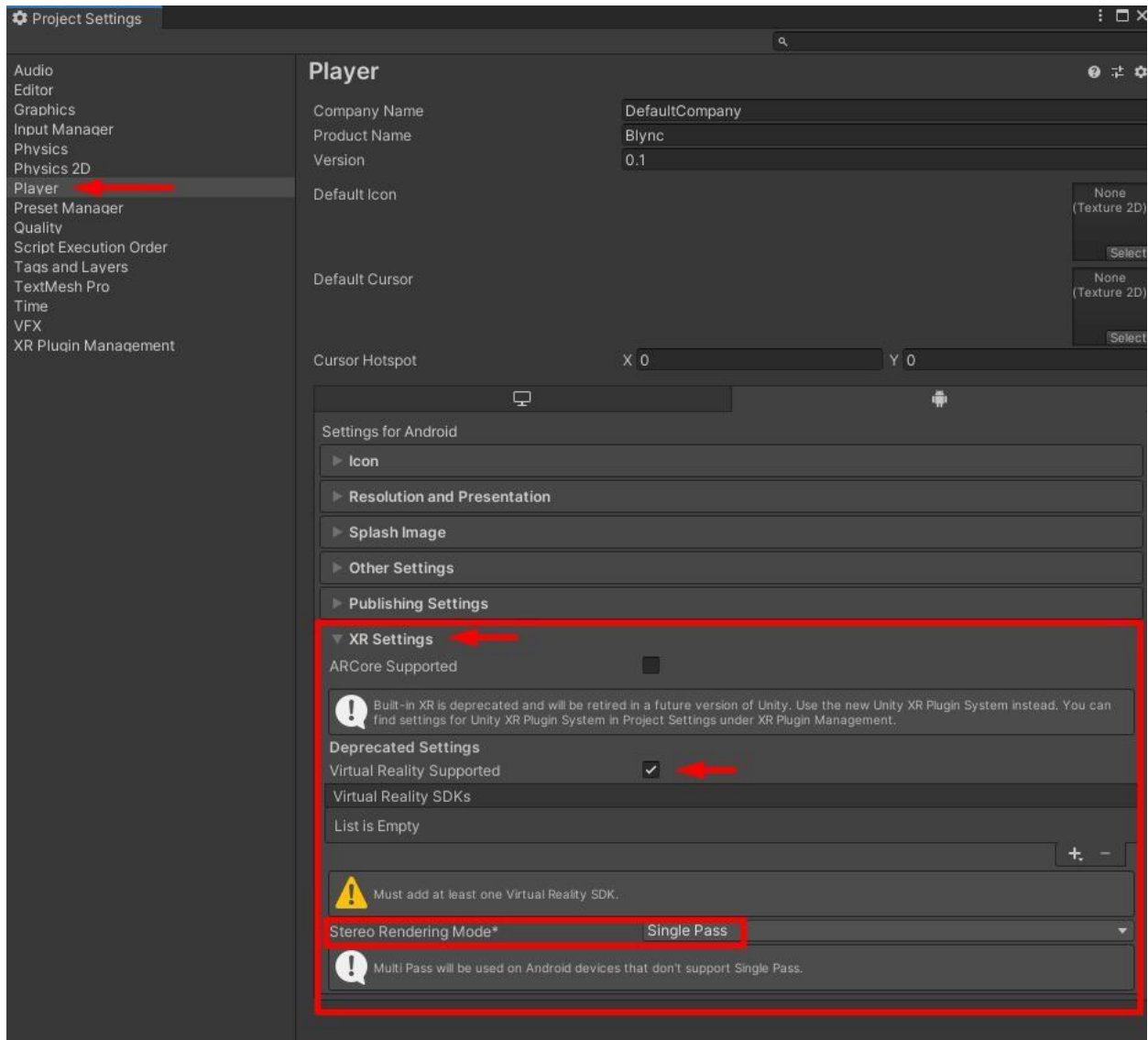
When the Unity logo is next to “Android,” it has switched platforms successfully.



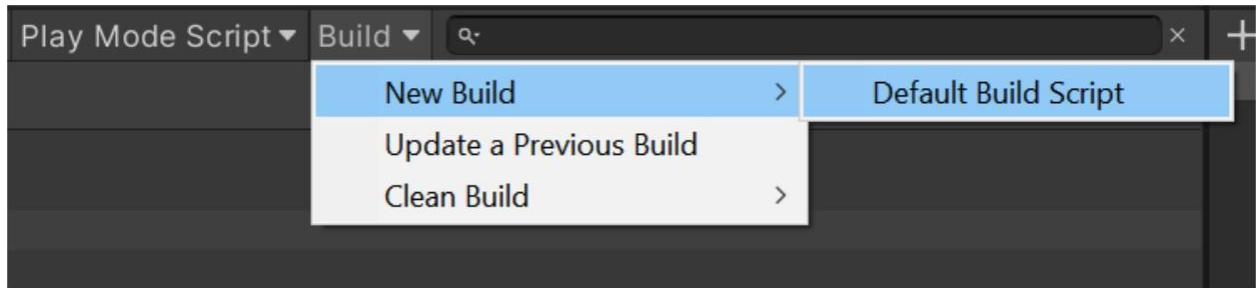
Next, go to Edit -> Project Settings... and navigate to Player -> Graphics APIs and ensure OpenGL ES3 and OpenGL ES2 are added and that other Graphics APIs are removed (e.g., Vulkan).



Then, under the Player -> XR Settings, checkmark “Virtual Reality Supported” and change the “Stereo Rendering Mode” to “Single Pass.”



Lastly, go back to the Addressables Group window and navigate to the build drop-down button and go to “New Build” and click “Default Build Script.” Unity will start to build some files. Once the files are built, you will see 4 build files in your project folder inside a folder called “ServerData.” These 4 files will be used to upload to the Blync Servers.



.vscode	3/1/2022 3:37 PM	File folder	
Assets	3/1/2022 4:12 PM	File folder	
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ServerData	3/1/2022 6:53 PM	File folder	
Temp	3/1/2022 6:55 PM	File folder	
Blync.sln	3/1/2022 3:37 PM	Visual Studio Solution	1 KB

Android	3/1/2022 7:11 PM	File folder	
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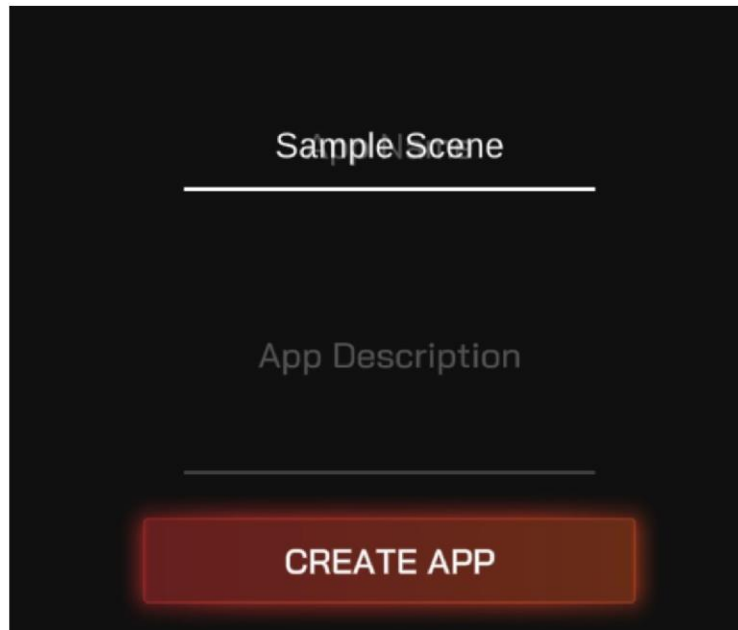
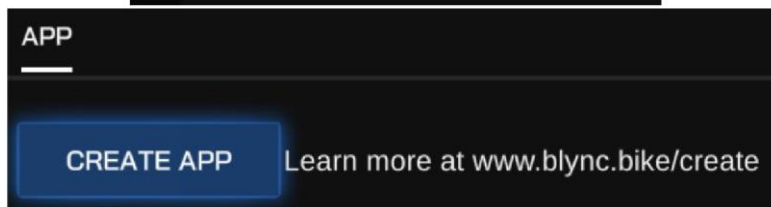
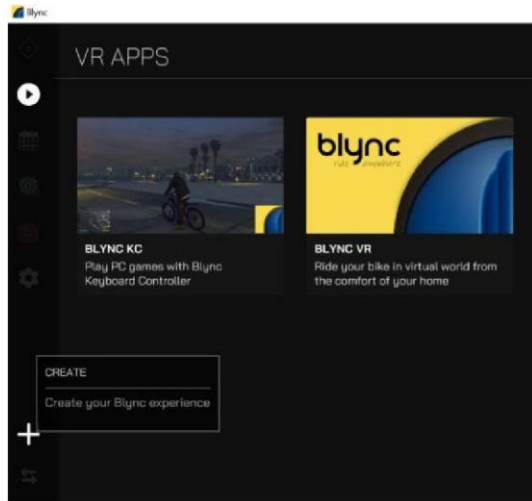
catalog_2022.03.02.00.11.06.hash	3/1/2022 7:11 PM	HASH File	1 KB
catalog_2022.03.02.00.11.06.json	3/1/2022 7:11 PM	JSON File	5 KB
defaultlocalgroup_scenes_all_748588d6afafdbd...	3/1/2022 7:11 PM	BUNDLE File	10 KB
defaultlocalgroup_unitybuiltinshaders_1cfd34a1...	3/1/2022 7:11 PM	BUNDLE File	119 KB

## Step 4: Upload to Blync Server

First, download the Blync Companion App.

<https://www.blync.bike/download.html>

Second, create an app (Create -> Create App) and specify a name and description and then click "Create App"



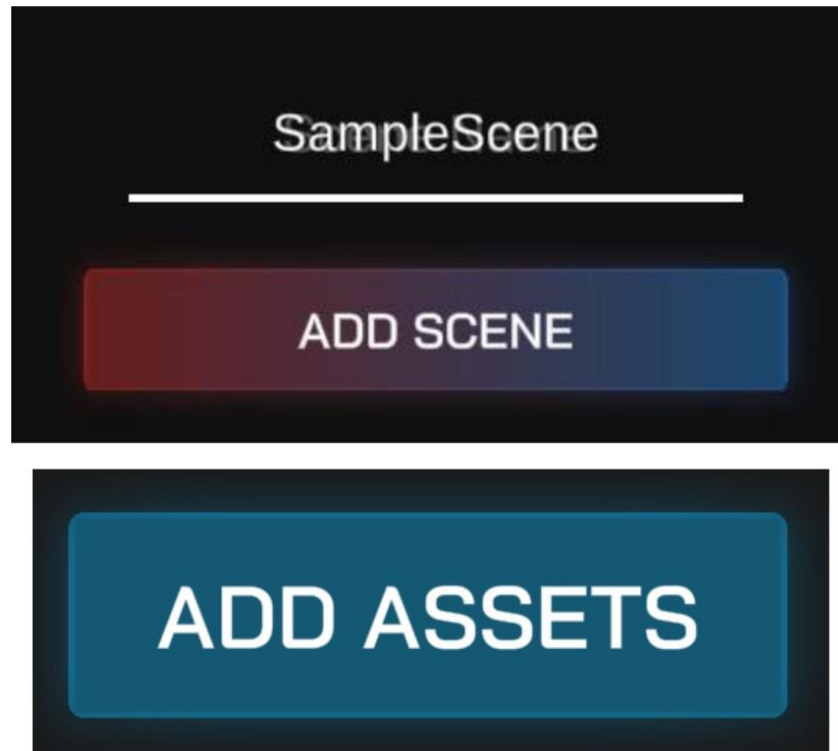
**NAME** Sample Scene

**DESCRIPTION** Envirfonment

**APP ID** f3a78c90-99bf-11ec-b38a-75d7a34efbd1

**SCENES**

From here, click “Scenes” and click “Add Scene.” It will then prompt you to name the scene. Name the scene with what your scene is called in the Unity project. Once the scene is created, click on “Add Assets.”



From here, it will open up your default browser and take you to where you need to upload the 4 build files from earlier to the blync servers. Attach the necessary files.

### Mobile Platform

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Catalog .json file (1MB max)

Choose Files No file chosen

Catalog .hash file (1MB max)

Choose Files No file chosen

Scene .bundle file (60MB max)

Choose Files No file chosen

Shader .bundle file (10MB max)

Choose Files No file chosen

### Mobile Platform

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Catalog .json file (1MB max)

catalog\_2022.03.02.00.11.06.json 

Catalog .hash file (1MB max)

catalog\_2022.03.02.00.11.06.hash 

Scene .bundle file (60MB max)

defaultlocalgroup\_scenes\_all\_748588d6afafdbd03d683ccbc4cf80e8.bundle 

Shader .bundle file (10MB max)

defaultlocalgroup\_unitybuiltinshaders\_1cfd34a16ca47a55c86e400a06b19ce7.bundle 



## Step 5: Ride in your Environment

After uploading the environment assets to the Blync Servers, you are now able to ride in your environment. Run the Blync Game app and get to the home environment (Stadium). Open the main menu panel and select “Community.” Here you should be able to see your new environment. Select to load the environment. You should now be able to ride in your custom environment created from the Unity engine.



### Additional Resources

<https://www.blync.bike/>

<https://www.blync.bike/setup.html>

<https://www.blync.bike/blog.html>

<https://www.blync.bike/blyncsdk.html>

<https://www.blync.bike/contact.html>