



**CYBERITH SDK**

Unity Project - Integration Guideline

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# Prerequisites

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## **DirectX**

<https://www.microsoft.com/en-us/download/details.aspx?displaylang=en&id=35>

## **Unity3D Game Engine**

<http://unity3d.com/>

## First Steps

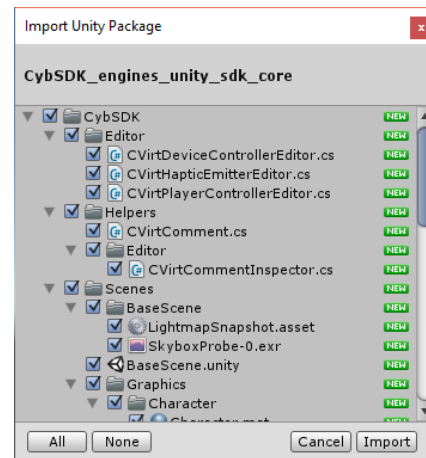
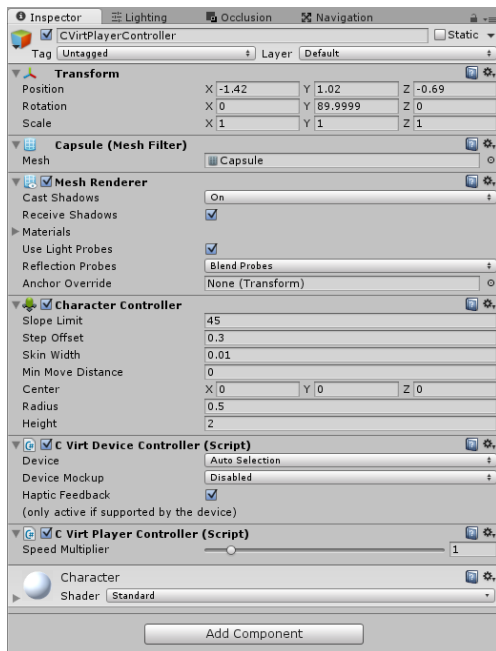
First of all, please note that:

- If you don't have a Virtualizer plugged in, the SDK will detect it and switch automatically to a mouse+keyboard or gamepad controller (Xbox360 gamepad is recommended).

### The Cyberith SDK

The Unity package you received works totally independently so you can import it in an empty Unity project and you should be able to try it using the example scene located in [“CybSDK/Scenes/ BaseScene”](#).

There is an example Character Controller that you will find in this scene named [“CVirtPlayerController”](#).



### The HMD

Drag and drop your HMD prefab / Camera directly in the CVirtPlayerController child called [“CameraHolder”](#) to have an already Virtualizer ready demo.

If you are able to move your character with WASD keys (movement) and Q/E to rotate... In short, if your demo looks good with these, you are good to go with a Virtualizer!

### The Character's body

If you want to add a body to your character, please drop your model inside the [“ForwardDirection”](#) child of the CVirtPlayerController. It will be rotated when the player rotates in the device.

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## SDK Documentation

In the CVirtPlayerController script, you'll find an example on how to implement the SDK and use all the Virtualizer capacities.

Here's the description of them, written in the CVirtDevice script.

### GetPlayerHeight

*Returns: float.*

Gives back the current height of the ring construction in centimeters.

0 is default height (upon reset), <0 is when you're getting lower (crouching) and >0 is upper (on your toes, jumping).

### ResetPlayerHeight

*Returns: void.*

Resets the default height of the ring construction.

Basically, you will call this function when pressing a "reset" button for example.

### GetPlayerOrientation

*Returns: Vector3.*

Gives back the orientation as being the forward vector of the body.

#### Exemple of integration



```
Quaternion rotation = new Quaternion();  
rotation.SetLookRotation(virtOrientation, Vector3.up);  
transform.localRotation = rotation;
```

### GetMovementSpeed

*Returns: float.*

Gives back the speed of the player's movement in meter per second.

### GetMovementDirection

*Returns: Vector3.*

Gives back the Movement Direction as a normalized vector of structure: (right, 0, forward).

### ResetPlayerOrientation

*Returns: void.*

Currently disabled.