



# Pimax VR SDK\_Unreal

## Development Description Document

Version: v\_1.1.3

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# 1. preface

## 1.1 Purpose of writing

This document was written to help Unreal Engine developers develop Pimax SDK-based applications quickly. This document is mainly object-oriented: technicians, developers.

## 1.2 Background of compiling

This document is a SDK (Software Development Kit) software development toolkit developed by pimax Technology (Shanghai) Co., Ltd. in order to cooperate with the development of Unreal Engine software developers and apply to Pimax 5K and Pimax 8K virtual reality helmet. The development kit mainly supports head tracking, distortion correction, binocular parallax and other functions, providing convenient support for developers. SDK in this document is issued in the format of PVR folder. Before accessing SDK, it is necessary to configure Unreal development environment and copy SDK folder to the project plugins directory, so that PVRSDK can be directly used in engineering.

## 1.3 Support device

Manufacturer	Device
Pimax	Pimax5K series
Pimax	Pimax 8K series

## 1.4 development environment

Recommended environment configuration

### FOR: pimax 5k

OS: Windows 7 SP1 64bit/Windows 10 64bit  
 Memory: 8GB or above  
 CPU: Intel i5 or above  
 Interface: DP1.4, USB2.0/3.0  
 Graphics card: NVIDIA GTX 1070 or above

### FOR: pimax 8k

OS: Windows 7 SP1 64bit/Windows 10 64bit  
 Memory: 8GB or above  
 CPU: Intel i5 or above  
 Interface: DP1.4, USB2.0/3.0  
 Graphics card: NVIDIA GTX 1080Ti or above

## Software description

1. "PVR\_Unreal\_SDK" need to work with Pitool.

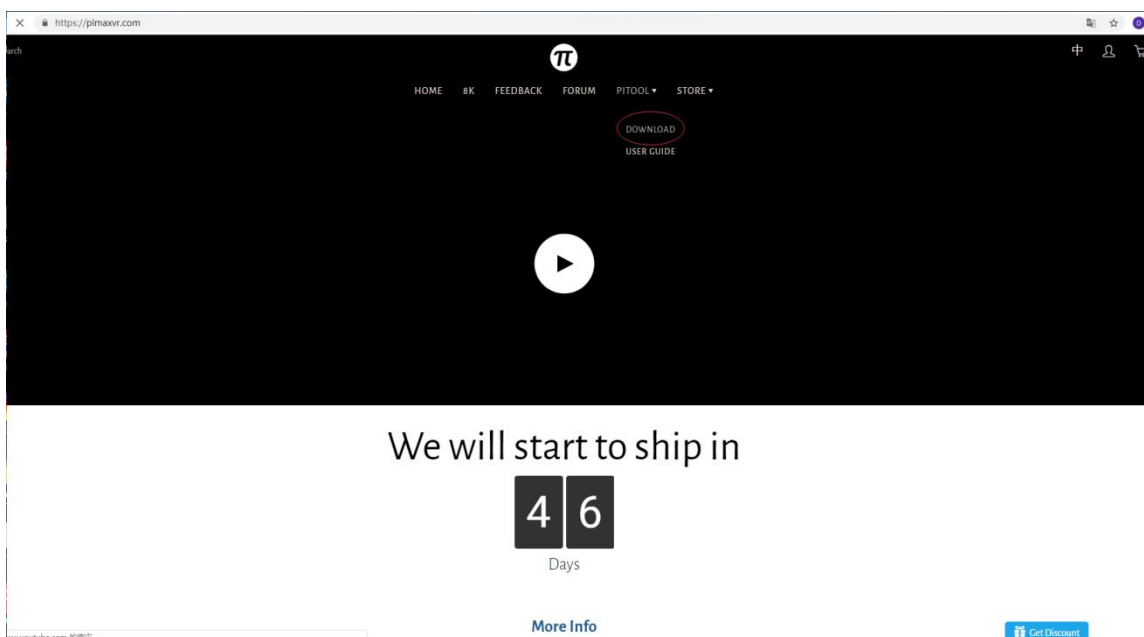


2. after installing PVR\_Unreal\_SDK\_Steup, you can find the PVR corresponding to the Unreal version., Copy it to the project plugins directory and use PVRSDK directly in the project.

## 2.Environment building

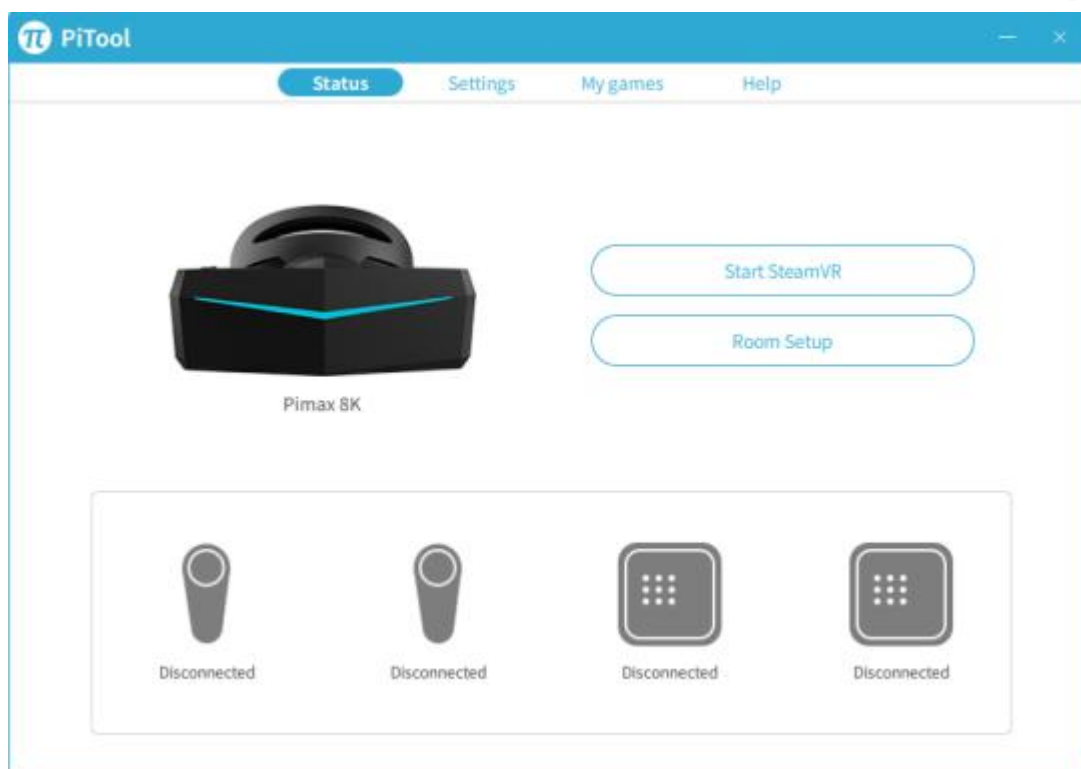
### 2.1 Installation of Pitool

Log on to pimax official website <https://cn.pimaxvr.com/>. Mouse to the user support panel, pop-up options click download and install.



### 2.2 Connecting Pimax Helmet Equipments

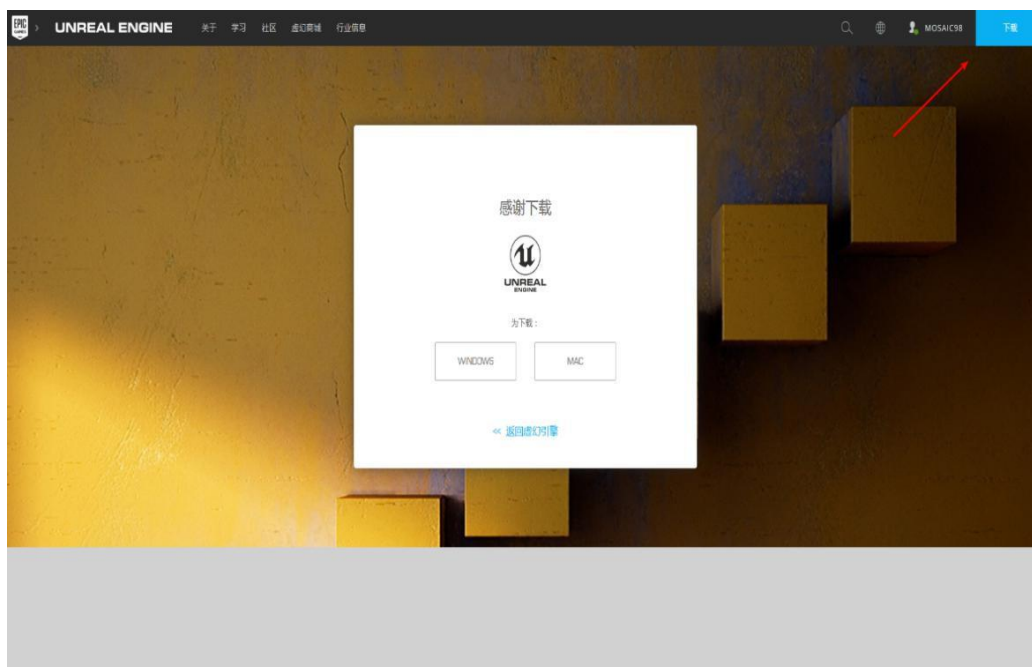
Connect the power adapter data line, DP and USB cable to the computer, turn on Pitool and wait for the device to connect to the computer. When the helmet shows the green light, the connection is successful.



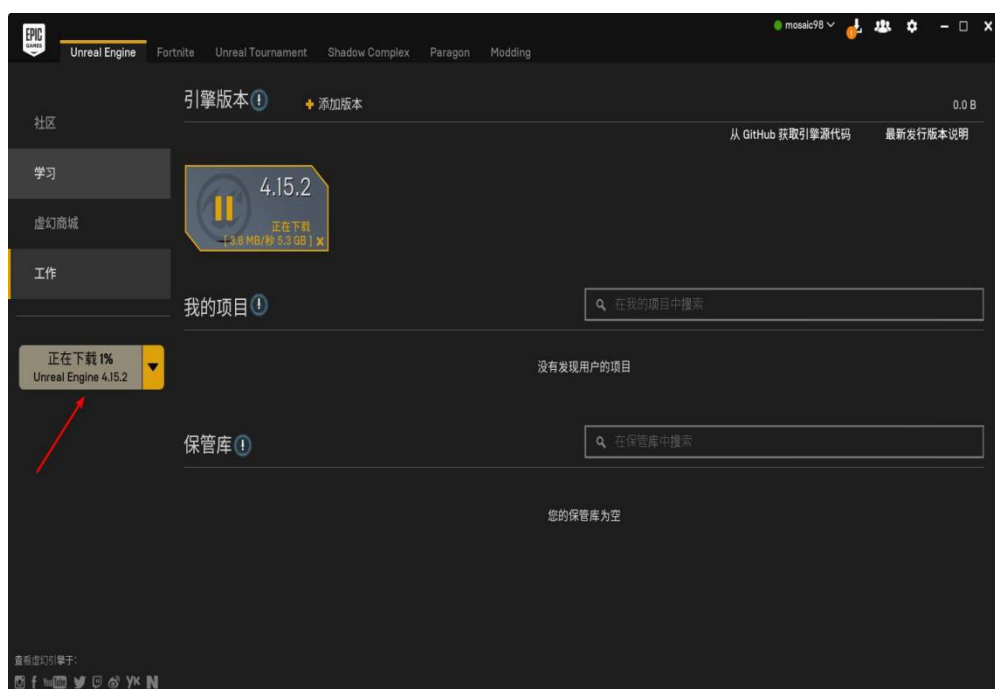
### 3. Use of Unreal

#### 3.1. Download and install of UnrealEngine

1. log on Unreal website <https://www.unrealengine.com> register account number of epic games , download epic starter (If you want to download the source code, you need binding account number of Github , wait until EpicGames automatically invites you to browse the source code.)

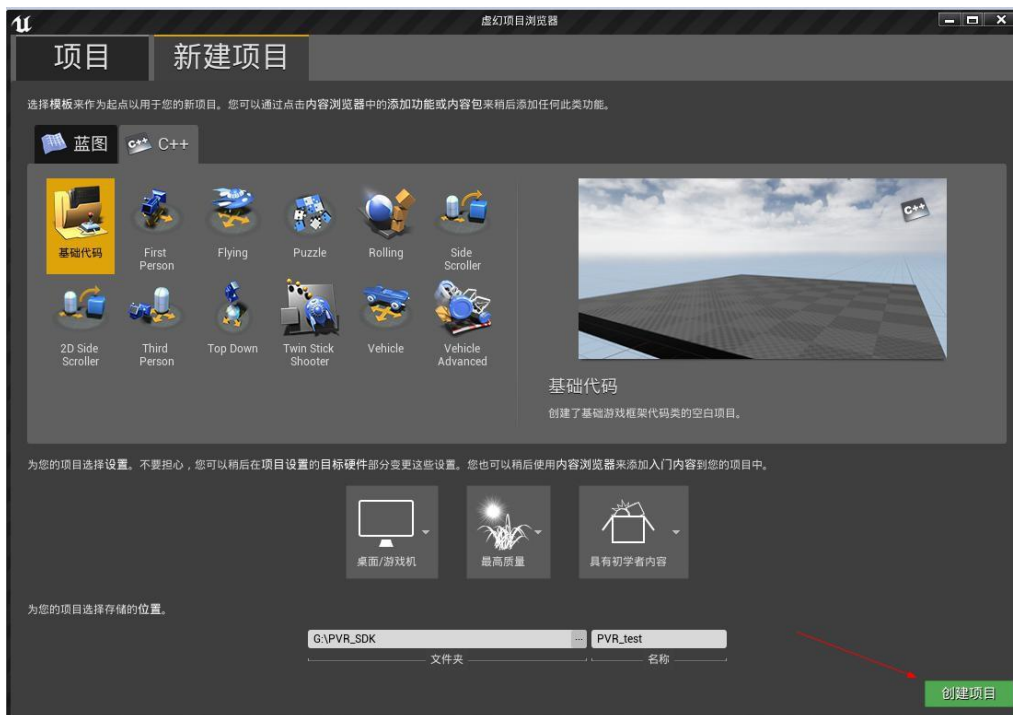


2. After installation, open the Epic Games starter and choose to install the Unreal engine.



### 3.2 New project

1. after installation, start Unreal Engine, select New Project -> c++ -> Basic Code, and click Create Project in the lower right corner

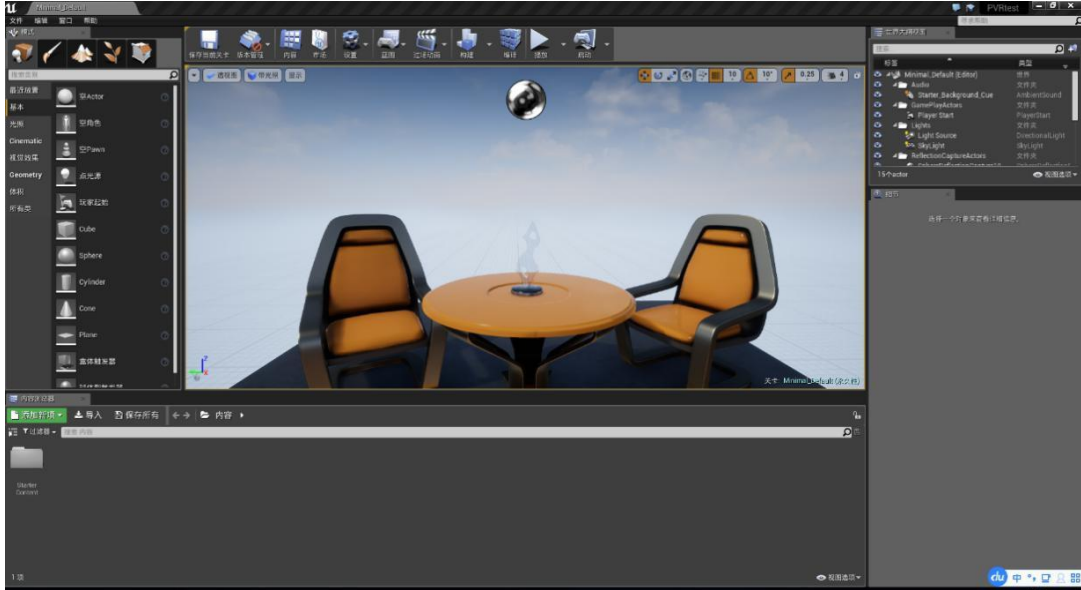


(Pay attention to the path and name of the project before creating the project for subsequent copies of the PVR folder)

2. The creation process is long. Please wait patiently and do not interrupt without authorization.



3. When the project is created, the virtual editor is automatically started, minimizing the interface first.。



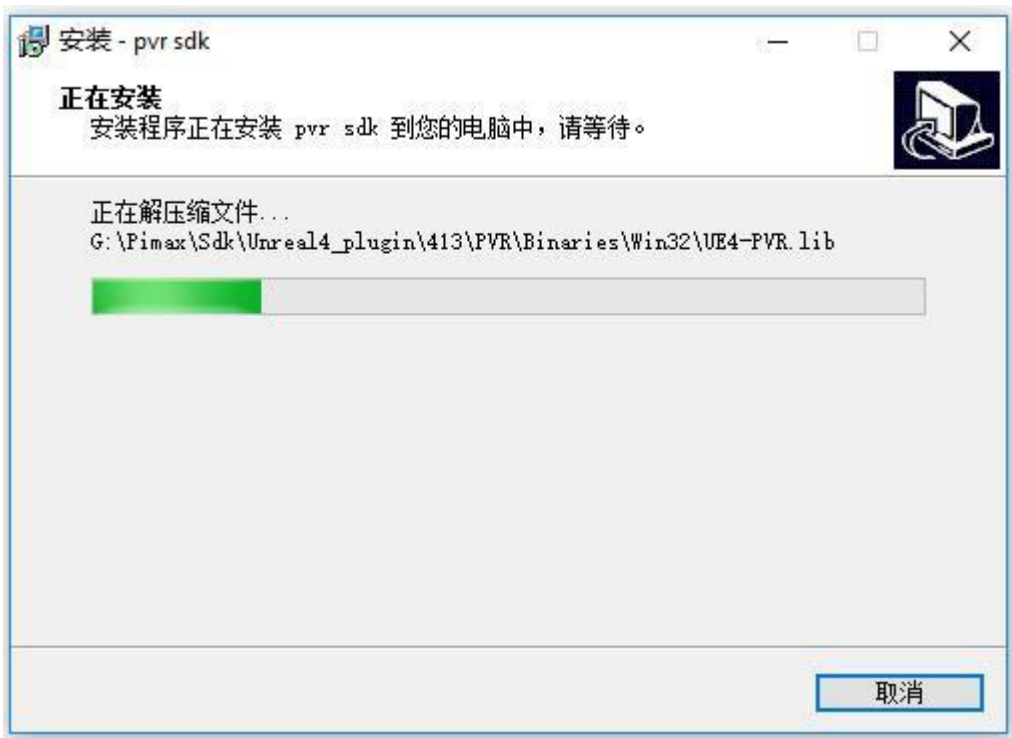
## 4. import SDK

### 4.1 Download/install

log on website <https://pimaxvr.com/> Mouse to the developer board, click SDK.

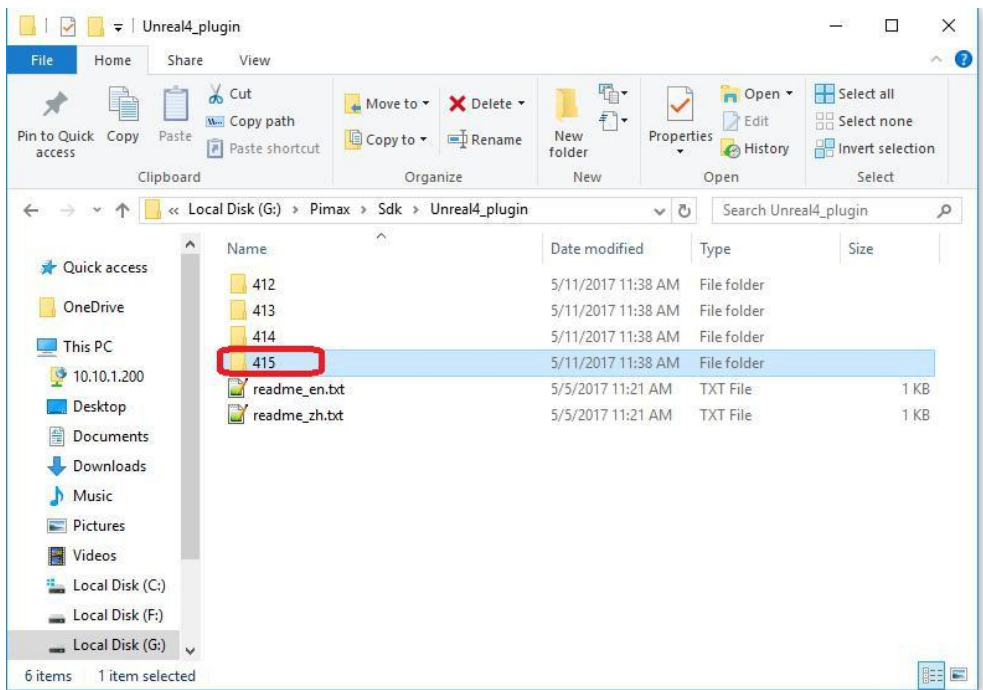
Click to download the corresponding SDK

Double-click the downloaded PVR\_Unreal\_SDK\_Setup.exe file to install (The default installation is in the Pimax directory) :



#### 4.2 import plugins Catalog

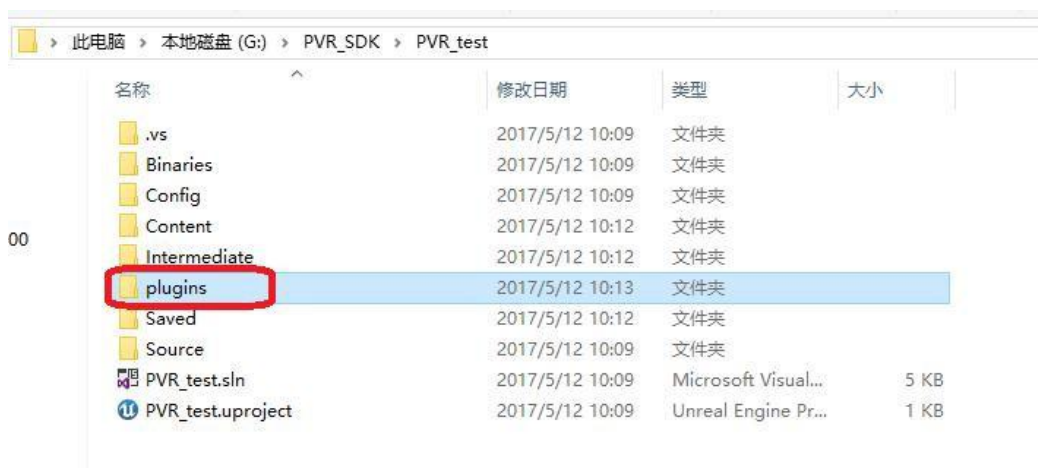
1. Open the SDK file path after installation and consult the PVR folder corresponding to the Unreal version \Pimax\Sdk\Unreal4\_plugin



(The Unreal version of PC installed here is 4.15, so the PVR under the corresponding 415 folder will be copied)

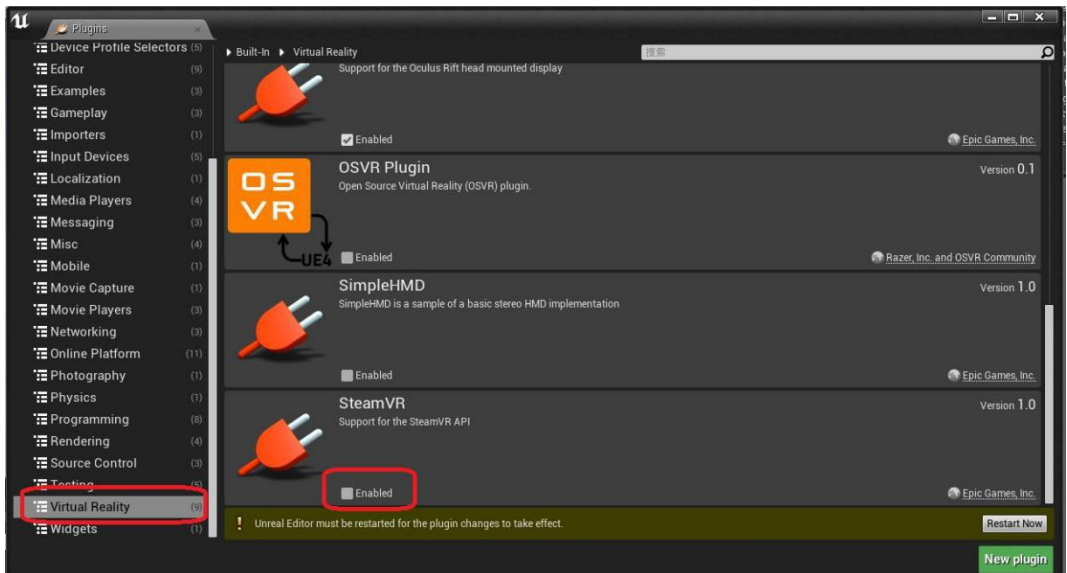
2. Open the project directory you just built, name the new folder plugins, and copy the corresponding Unreal version of the PVR folder to the folder.





### 5. use of Unreal\_SDK

Return to the virtual editor and click the Edit Menu in the upper left corner, choose 'Plugins', Find 'Virtual Reality' in the left directory, On the right side of the menu, check Enable under 'Steam VR', Click 'Restart Now' so that only the PVR plug-in is enable.



When the virtual editor is restarted, select Virtual Reality Preview from the "Play" drop-down menu, and you can interact directly through the Petit Helmet.

