Visual Studio Integration Tool Documentation

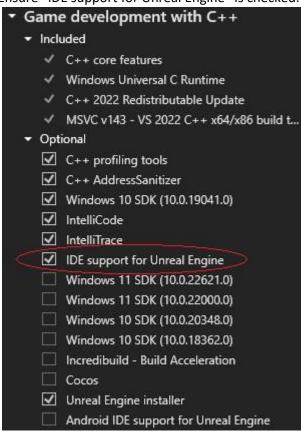
Description

Visual Studio Integration Tool is an Unreal Engine plugin that works in conjunction with Visual Studio to display information about Blueprints assets in C++ code (requires Visual Studio 2022 17.4 or later).

Installation

Visual Studio 2022

- 1. Locate "Game Development for C++" workload in the Visual Studio Installer.
- 2. Ensure "IDE support for Unreal Engine" is checked.



Unreal Engine

You can install the plugin in a couple of ways.

Through the Epic Games Launcher:

- Select the "Install to Engine" option within the Launcher. From there, you can select an engine version for installation.
- If you're using the Marketplace website, you can add the plugin to your account and you will have an option to open the Launcher in order to install it as detailed above.
- If you already added the plugin to your account, go Library -> Vault in the and locate the plugin there.

Through source distribution:

 If you're unable to use the Marketplace-based distribution (e.g., you're building the Unreal Engine from source), then you can install the plugin manually by following the instructions found at https://github.com/microsoft/vc-ue-extensions#readme

Enabling the plugin

- Through the Unreal Editor
 - Open your project and then use the Plugin Manager to enable "VisualStudioTools".
 - See <u>official documentation</u> for more information on how to install and enable plugins.
- (Advanced) Alternatively, you can manually edit the '.uproject' descriptor for your project and add an entry for the "VisualStudioTools" plugin.

Usage

Blueprints Integration

- In Visual Studio, any Blueprints references will now show up as a CodeLens.
- Click the CodeLens to display a pop-up that shows your Blueprint information (figure 1).
- The Output Window will display the Unreal Engine logs from the plugin execution.
- To refresh the blueprint information in the IDE (e.g., after making asset changes in the Unreal Editor, or fixing an error in the plugin execution), you can use the "Rescan UE Blueprint for cproject>" option under the "Project" menu (figure 2).

Troubleshooting

If you encounter any issues when setting up Visual Studio in conjunction with the Unreal Editor plugin, please refer to the <u>Troubleshooting</u> guide in the repository. This guide provides solutions for common issues and is periodically updated to ensure that the latest solutions are available.

Reporting issues

To report new issues, provide feedback, or request new features, please use the following options: Report a Problem and Suggest a Feature. These options will allow you to submit your issue or feedback directly to our team and help us improve the plugin moving forward.

```
#include RFGINVEN
       BP_PlayerCharacter
                                 /Game/Blueprints/BP_PlayerCharacter.BP_PlayerCharacter
         BP_EnemyCharacter
                                  /Game/Blueprints/BP_EnemyCharacter.BP_EnemyCharacter
       BP Character
                                 /Game/Blueprints/BP_Character.BP_Character
       NPC Goblin Level 03
                                 /Game/Blueprints/NPC/NPC_Goblin_Level_03.NPC_Goblin_Level_03
       NPC Goblin Level 02
                                 /Game/Blueprints/NPC/NPC Goblin Level 02.NPC Goblin Level 02
16
17
       NPC_Goblin_Level_01
                                 /Game/Blueprints/NPC/NPC_Goblin_Level_01.NPC_Goblin_Level_01
       NPC_GoblinBP
                                 /Game/Blueprints/NPC/NPC_GoblinBP.NPC_GoblinBP
        UCLASS
        8 Blueprint references
      class ACTIONRPG_API ARPGCharacterBase : public ACharacter, public IAbilitySystemInterface, public ACharacter.
            GENERATED_BODY();
24
             /** Returns maximum health, health will never be greater than this */
             UFUNCTION(BlueprintCallable)
            4 Blueprint references
            virtual float GetHealth() const;
             /** The level of this character, should not be modified directly once it has already spa
            UPROPERTY(EditAnywhere, Replicated, Category = Abilities)
             int32 CharacterLevel;
             /** Returns maximum health, health will never be greater than this */
            UFUNCTION(BlueprintCallable)
```

Figure 1 - Code Lens showing blueprints that derive from a UEClass

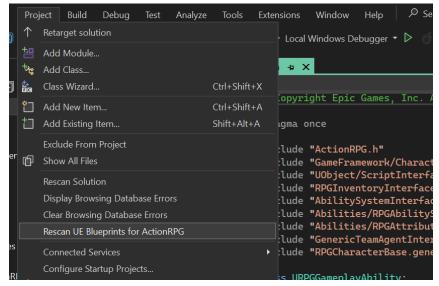


Figure 2 - Menu to rescan the blueprint assets in the game project