

Platform Shutdown Plugin Guide

About

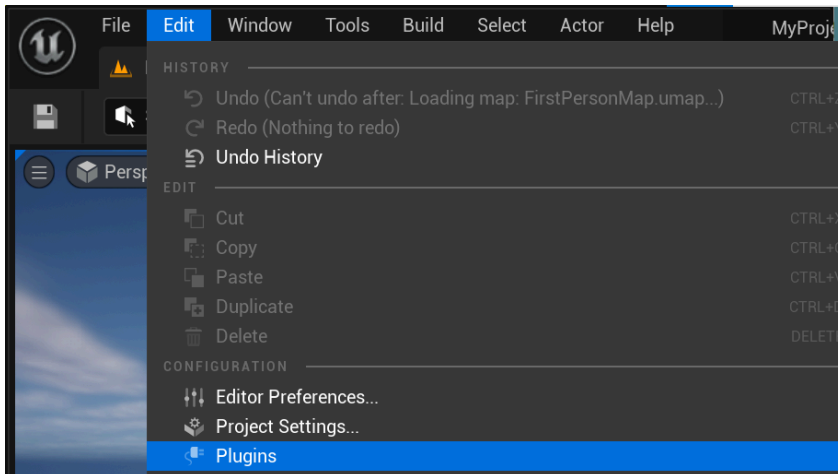
Please exercise caution when using these features as they can disrupt your machine's state. This plugin is intended to Shutdown, Hibernate, Restart, Sleep, Lock, Abort Shutdown, or Log Off a user's Windows machine. This is not normal game development functionality but rather has its uses in allowing developers to utilize this plugin to manage applications running in kiosk mode, automatically put the application to sleep or perform other actions when the user has been inactive for a specified period, remote shutdown or restart functionality within educational or training applications, etc.

Installation

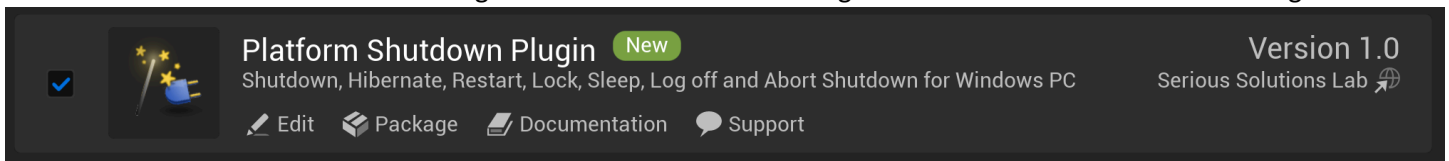
- Please follow Unreal's guide on enabling and installing marketplace plugins:
<https://docs.unrealengine.com/5.1/en-US/working-with-plugins-in-unreal-engine/>

Set Up

- Start a new project or open an existing project
- Go to the Edit Tab and select Plugins



- Find the Platform Shutdown Plugin under Installed -> Code Plugins and check the box next to the Plugin

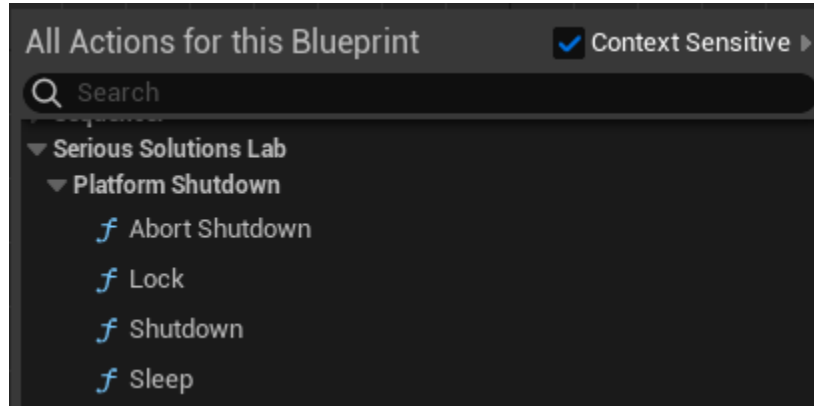


- Restart UE by selecting Restart Now

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Plugin Use

Platform Shutdown Blueprint Nodes can be found in the context menu in any Blueprint under Serious Solutions Lab, and can be searched by name.



Note: In the Shutdown action there is a timeout option for the number of seconds before the action occurs. The timeout will only work for shutdown and restart and the timeout is a windows timeout, not an Unreal delay. Any game delays will need to be implemented by the developer to suit their needs.

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Shutdown

Perform a Windows Shutdown, Hibernate, Log Off, or Restart with the specified parameters.

Target is Windows Shutdown

EShutdownType Enum: [Shutdown, Abort, Hibernate, Log Off, Restart]

The type of shutdown to perform.

Force Bool:

If true, force running applications to close without forewarning users.

Timeout Integer:

Set the time-out period before shutdown to the specified seconds. The valid range is 0-315360000 (10 years), with a default of 30. If the timeout period is greater than 0, the force parameter is implied.

ShutdownPath FString:

The path to the shutdown executable. Defaults to C:\\Windows\\System32\\shutdown.exe

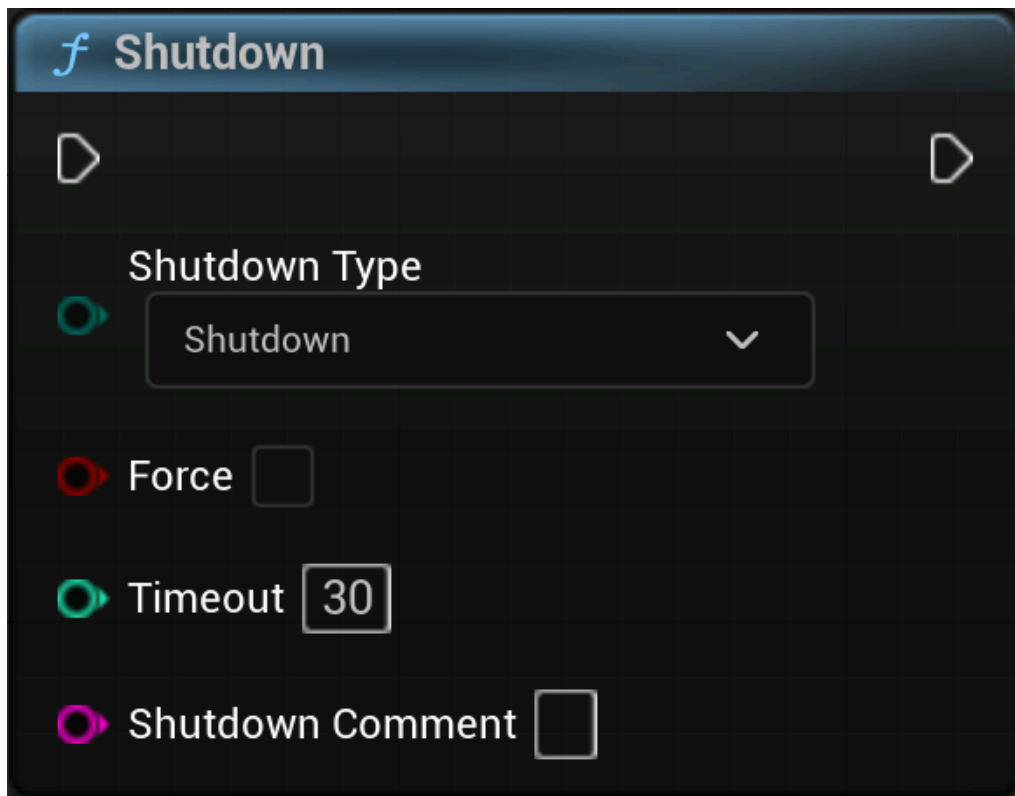
Comment FString:

A comment on the reason for the restart or shutdown. Maximum of 512 characters allowed.

C++

```
#include "WindowsShutdown.h"
UWindowsShutdown::Shutdown(
    EShutdownType shutdownType = EShutdownType::Shutdown,
    bool force = false,
    int32 timeout = 30,
    const FString& shutdownComment = "")
```

Blueprint



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Lock

Perform a Windows Lock Command.
Target is Windows Shutdown

C++

```
#Include "WindowsShutdown.h"  
UWindowsShutdown::Lock()
```

Blueprint



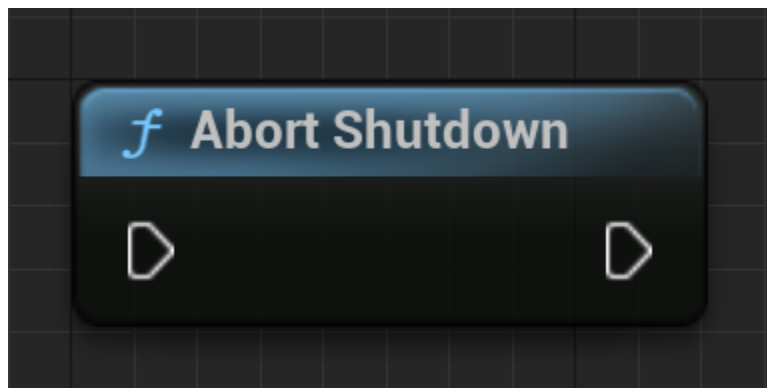
Abort Shutdown

Abort a Windows Shutdown Command.
Target is Windows Shutdown

C++

```
#Include "WindowsShutdown.h"  
UWindowsShutdown::AbortShutdown()
```

Blueprint



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Sleep

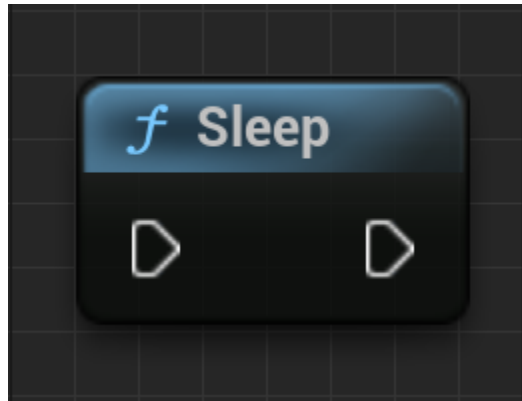
Perform a Windows Sleep command.

Target is Windows Shutdown

C++

```
#Include "WindowsShutdown.h"  
UWindowsShutdown::Sleep()
```

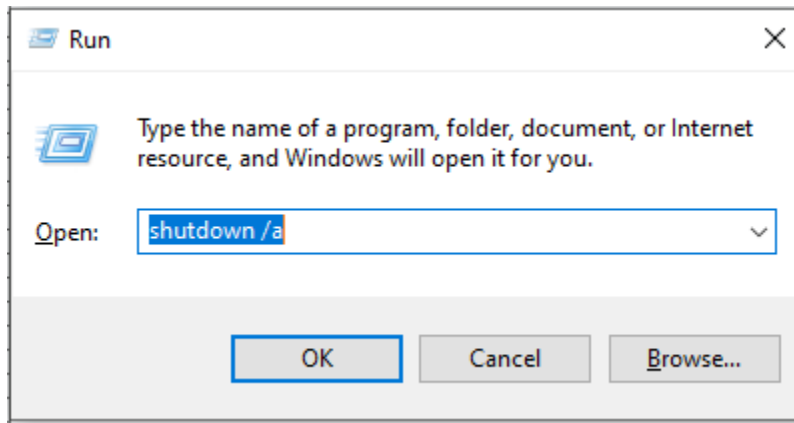
Blueprint



Implementation Best Practices

Windows Abort Command

When implementing any of this plugin, bear in mind that they directly call windows processes. When testing it is helpful to have a timeout set on the shutdown node (defaults to 30 seconds) and have Windows Run (Win+R) at the ready with the text "shutdown /a" ready to submit. This will abort a shutdown. It really is not ideal to have your machine unintentionally shutdown.



Application Shutdown Logic

This plugin does not implement any game or application logic. Please ensure that you implement any game save, or shutdown logic for your unreal application prior to calling the plugin logic. It may also be a good idea to implement any delays in Unreal, or any UI elements necessary to prevent unwanted shutdowns (i.e. confirmation pop up prior to shutdown or restart).