

Metallicafan212's Harry Potter 2

Editor and Engine

Version 3.4

Info and FAQs



Disclaimers

General Disclaimer

Please do not share the editor/engine binaries and executables (including the installer) outside of the [Harry Potter Modding Discord Server](#). The links can go dead at any time, people won't be able to get help from us and the editor/engine is still in beta.

64bit Disclaimer

The editor and engine are 64bit and will therefore only work on a 64bit operating system.

Third Party Programs Disclaimer

Third party programs such as Dxtory, texture upscalers and other renderers are not compatible with the engine and will cause the editor and game to crash. No attempt will be made to make the editor/engine compatible.

Programs such as Dxtory are completely redundant in this version as there are no speed issues and there is the ability to natively FPS cap the game.

Please do not use these programs or ask for assistance in using them. If you'd like to cap your framerate, you may instead do so through the M212 ([ICBIN](#)) DirectX11 renderer or the M212 DirectX9 renderer.

Quick Downloads and Links:

[Installer](#)

Provide your own game, it will update the game and preserve your language setting. A widescreen version of the game's menu and HUDs is provided through the widescreen HGame.u, which supports any widescreen ratio (even those new-fangled ultrawide screens). The installer will try to detect where you installed HP2 to, but you can redirect it to another game copy if you want.

The installer also allows you to specify what documents folder that game copy will use for save games and ini files (defaults to Harry - Coding Evolved) and to automatically delete the folder when updating. This way, you can install multiple games/mods without overwriting save games and ini files.

[Harry Potter Modding Discord Server](#)

Join if you need help with anything (use #current_engine_discussion) or just want to hang out with other Harry Potter modders. Please do not share any binaries or executables related to the editor/engine outside of the Discord server.

What is the new engine/editor?

Well, it's not just a game editor and it also isn't isolated from the game itself.

This is the game now, everything you can see in the editor is exactly how it will be in the game. Technically; this is a brand new engine version featuring fixes, improvements, optimizations and a few new graphical features that have been combined into a game-editor combo. So, this is now the intended way for modders to both create maps and have them be played. The editor has been given a heavy facelift, with its own set of huge overhauls and improvements as well.

Overall it is an improved, more compatible version of the game for newer PCs. The goal currently encompasses making both the game and editor function significantly better on modern hardware, with some fixes and features sprinkled in.

Is my PC/Laptop compatible?

Currently, Windows 7 and Windows 8/8.1 may not work correctly or at all so be warned when downloading if you are using an older operating system than Windows 10. **We have had reports about Windows 11 causing issues which are not present in Windows 10 so please keep this in mind if you are using Windows 11.**

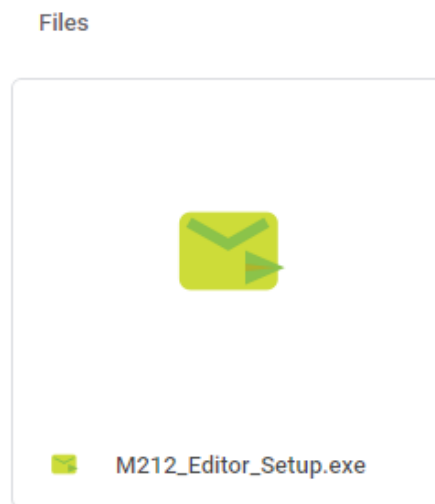
Specifications

Absolute Minimum Specs (Unsupported*)	Minimum Specs	Recommended Specs
Windows 7 SP1 64bit	Windows 8.1 64bit	Windows 10 64bit
8GB system RAM minimum STRONGLY Recommended	8GB system RAM with 2GB+ free memory	16GB system RAM
A 64bit AMD or Intel CPU with SSE1 and SSE2	AMD FX based CPUs or Intel equivalent (includes AMD laptop FX APUs)	AMD Ryzen series CPU or Intel equivalent
DirectX 9 supported GPU with Shader model 3 support, 512MB of VRAM	DirectX 9 supported GPU with Shader model 3 support, 1GB of VRAM	DirectX 11 supported GPU with Shader model 5 support, 4GB of VRAM
DirectX supported sound card	DirectX supported sound card	DirectX supported sound card
2GB+ of free memory (must at least have 1GB of continuous memory)	N/A	N/A
Platform update for Windows 7	N/A	N/A

*Note: Windows 7 support could be dropped at any time

How do I install the editor?

The main way to install the new editor is to use the editor installer. This installer will place the editor and engine files in a copy of HP2 for you and will keep your installed language as is, so you can even play Japanese HP2 with the new engine binaries without any tinkering. Included is also the widescreen mod (by default) or the decomp project. Additionally, the installer is portable so you can install it into as many copies of HP2 as you like. [Download it here](#).



A Google Drive link to install the raw files directly is also available but will only be provided on a case by case basis. Please ask in the **#current_engine_discussion** channel for assistance and more information.

I noticed a bug! How do I report it?

We tried to catch all the bugs and issues before this release, but some may have slipped through the cracks.

First, determine if it's a real bug with the new engine. The base game has a lot of issues that this editor/engine does not fix nor address.

If you're not sure it is something new, go ahead and ping *@Editor Devs* in the **#current_engine_discussion** channel. One of us will get back to you to tell you what to do from there. Otherwise post your bug in the **#current_engine_bugs** channel.

I have an idea for a new feature! Where do I put my idea?

Post them in the **#public_engine_ideas** channel and we'll provide feedback on the idea's possibility of inclusion or implementation.

What are the features in this Editor/Engine?

That's a **loaded** question. Lots of things have been changed/added and this list will continue to get more and more out of date. Here's a list of features/fixes that I've made, which will not include everything. Also this list is unordered, be warned.

- DirectX11
- DirectX9
- DXT1/3/5 BC4-7 texture support
- Widescreen and ultra-wide support
- FOV correction
- Streaming OGG sound support from within Sound Packages
- MiMalloc for increased speed and stability (thanks Death Stranding for introducing me to it!)
- Actor rotation gizmo
- Actor translation gizmo
- Actor scale gizmo
- Alpha layer support
- GUI based mesh and animation importing/exporting
- EFX per zone reverb and effects
- Multiple Sky Zones per level

- Raw input for mouse movement
- Full floating point UV coordinates
- Animation scrubbing
- Load error handling
- Load error displaying
- Selection Context Box: Gives you information on CutName, Tag, Event, and the like on actors, gives the applied texture when a surface is selected

Texture BitOGoyle.Floors.Forestgrass_BG (256 X 256)

Class HGame.firecrabLarge Name: firecrabLarge5

- Modern look and feel
- New stat fps command that displays the real frame rate and changes color based on the framerate you're running at (100+ = green, 100-60 = green to yellow, 60 - 30 = yellow to red, < 30 = red)
- New front-end without Safedisc, so no crack is needed anymore
- Front-end doesn't restart the whole application after picking new game or load game, making it easier to record or stream
- Movers update lighting when moving in game

- Ability to apply a texture's alpha layer as Alpha to Coverage. This special mode requires DX9 and Anti Aliasing on, however.
- 200+ FPS speedup fix
- Prefab browser
- Particle browser
- Ability to see and select fonts in the texture browser (a la UE2)
- Lighting only mode in the game and editor
- Unlocked debug render modes in game (bsp cuts, zones, etc.)
- Ability to see actors out of bounds in the editor
- Ability to clip brushes to the 3D geometry, to make brush placement easier, which can be disabled on the Viewport toolbar
- Ability to import a wide range of texture formats (PNG, DDS, BMP, JPG, GIF, etc.)
- Ability to scale up textures automatically on import to fix compression artifacts
- Ability to export textures in PNG format with masking converted to alpha
- Ability to link animation packages to meshes, like UE2
- Ability to import nearly every audio format using FFMPEG
- Ability to export XA encoded audio natively to raw WAV files

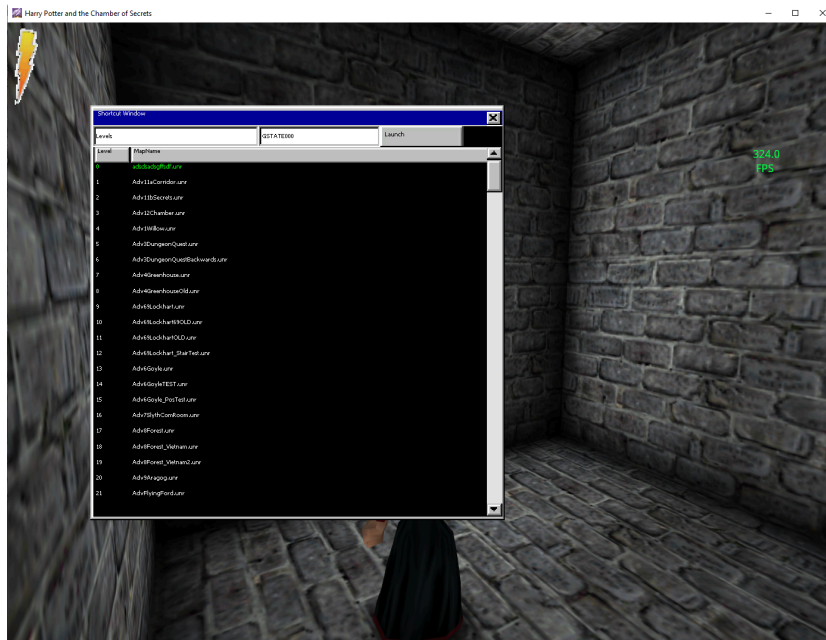
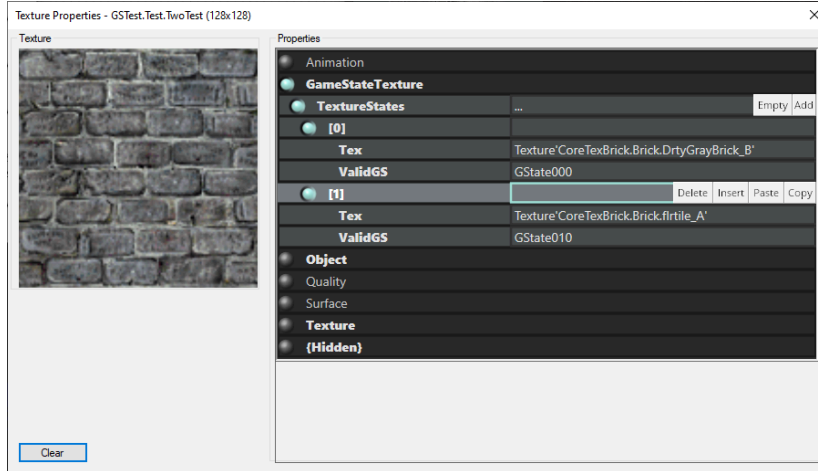
- Ability to import sounds with lipsync, including the ability to override lipsync data with another sound
- Ability to specify the gamestate when launching the game (-GSTATE=GState000)
- Ability to open maps with missing actors and/or textures
- Enhanced UCC
- Ability to extend/replace KnowWonder classes
- Fix for dynamic arrays. Dynamic arrays can be used in the editor, in UC, and in game
- New Properties window
- Static properties window, as an optional secondary type in the context menu: use it to compare two actors against each other
- Ability to see which property was modified from the defaults or from the parent
- Static properties sheet, one that will stick around and not update to the currently selected actor (F3 by default)
- Free actor movement. Movement is not locked to the axes like in regular UE1/2, think like the editor in Star Wars Republic Commando (View > Advanced Options > Editor > Advanced)
- Ability to view hidden actor properties

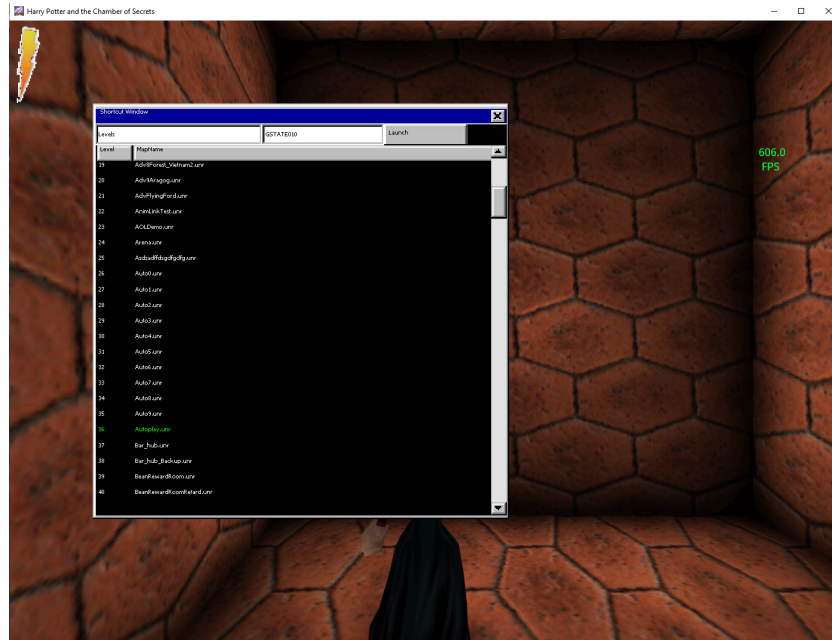
- C style macros and CPPText
- Ability to modify any editor icon externally
- Enhanced Surface Properties Sheet
- Enhanced Brush Builder Sheet
- Enhanced Actor placement menu
- Ability to add multiple custom splash images
- Custom GameStateTexture: The texture will use the first texture in the list that has the current gamestate in its list, changing the base texture. Easily can make gamestated versions of maps this way, including snow versions with little effort. See New Modding Features for image examples
- etc.

New modding features that the previous editors were unable to do before:

- Stock maps can be edited now
- Per surface light map scale
- Per surface special lit channels
- Many UnrealScript improvements and additions, like the ability to use dynamic arrays, C style macros, correct state extensions, and more
- Rotation and translation gizmos
- Randomized (or in order) MultiSounds, which allow a mapper to play random sounds easily without having to use custom actors
- Gamestate behavior can be edited now (Both whitelisting and blacklisting actors)
- Animations and meshes can be imported in the editor just like UE2
- Animation linking system like UE2
- Working OGG music browser
- Cutscenes no longer require an INT file to be made, they may be made inside the level. Additionally, the character limit has been removed, allowing for fully commented scripts to be written and remaining easily editable
- Footstep sounds can now be set on textures

- Full RGBA8 and DXT textures can be imported and used in game
- Gamestate Textures: click the bottom images to see a bigger version





- Alpha layered textures can also be used, so you can live out your dream of making Harry wear JC Denton's sunglasses



- Hub maps can be made with the same functionality as the stock game maps. Indeed, you can make your own remakes of levels such as the Entry Hall or the Grand Staircase
- Music triggers have been changed to not end the old music so you can play and hear multiple things at once
- Anything that could be made by the devs can now be made by modders with this editor
- And more!

Notes about porting maps from the UnWorld editor:

For the most part it should work as expected. However, it appears that BSP generation between the UnWorld editor and HP2's are somewhat different and may cause some unexpected issues. Specifically, semisolid brushes in every version of UnrealEd past Unreal 1998 (including HP2's engine version) generate occlusion culling in the BSP tree, whereas UnWorld's (which is based on the Unreal 1998 Old Unreal 227 patch) editor does not. These are generated at build-time. If you're using these with masked textures and having it cull everything behind it (such as a fence or window), the recommended solution is to change these out for Non-Solid brushes and blocking them off with block-all actors (under Keypoint).

Alternatively, Movers may be a desirable solution for similar behavior to the UnWorld Semisolid brushes. Finally, you will have to replace the UnWorld triggers for the regular unreal engine ones used by HP2.

This may more or less be automatic by class name, but be sure to check that the triggers are working correctly.

What about the UnrealScript Decompilation?

That is a separate project to decompile and recompile all the UnrealScript KnowWonder removed from their packages. Stock decompiles of HGame.u, HPModels.u, HPParticle.u, HProps.u and HPSounds.u have now been released along with source code and the assets for each package.

All of the classes are decompiled, recompileable and the assets have been imported which means that the packages can be regenerated from scratch.

You can download, fork or mirror that project [here](#).

There is also a widescreen branch, this is HGame edited for the menu and HUD icons to work on widescreen resolutions as well as some stock bug fixes and new features which can be downloaded [here](#).

The demo version of HGame is also available on a separate branch which can be found [here](#).

Where can I get C++ headers for this engine?

Unfortunately, these are unavailable currently. Too much work has gone into this engine and therefore, the headers are extremely dirty without a lot of documentation and lots of commented out things. Once the engine is nice and stable, expect C++ headers sometime in the future.

Will there be a HP1 editor?

Even better, we are porting HP1 into the new HP2 engine! This port is mainly working but is not quite ready to be released yet. We will be working on getting the HP1 port released after Version 3.0 and once we know the editor/engine is definitely stable.

Helpful Links

BeyondUnreal Wiki:

<https://wiki.beyondunreal.com/>

UnWorld's Tutorials:

https://www.youtube.com/watch?v=_7u1vFg2lAE&list=PLZd0-S5kX5ONb_sbFJRsuBbEgbIuFd8-1y

Unreal Editor 2 Tutorials:

<https://www.youtube.com/watch?v=YAZ9Wmg4tYo&list=PLsHIUYkkz0G6CL8sBXw7D6sAEpNhw0gjE&ab>

Changelog

All changes to the editor and engine since Version 1.0 can be viewed [here](#).