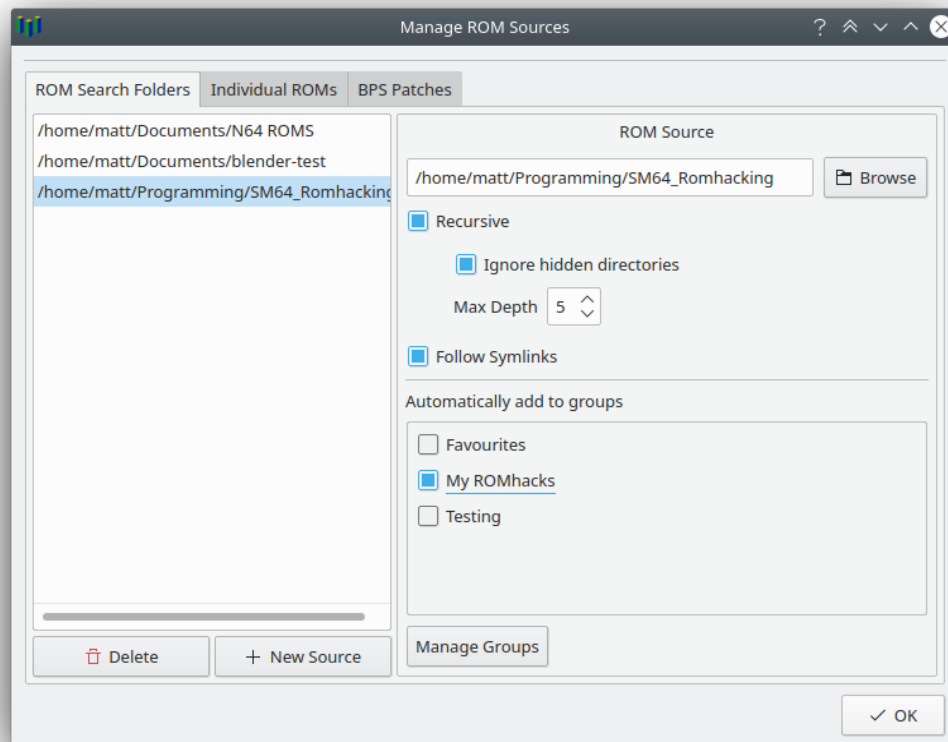


Importing ROMs

Parallel Launcher will automatically maintain a list of available ROMs based on the folders you tell it to search for ROMs in. At any time, you can add or remove folders to search in by clicking on the ≡ settings button and selecting **Manage ROM Sources**. If you check the **Recursive** checkbox, then Parallel Launcher will also search subfolders for ROMs. If you check **Ignore hidden directories**, Parallel Launcher will ignore POSIX-style hidden directories (directories whose name begins with a period). You can optionally choose to automatically add new ROMs found in the specified folder to a group. You can always manually add or remove ROMs from groups later.

You can also add individual ROMs without adding a search folder by going to the Individual ROMs tab, or simply by opening a ROM or patch file with Parallel Launcher. Patches are automatically applied so long as the base ROM the patch uses is in your Parallel Launcher ROM list.



Settings

Hide launcher while playing ROM: Don't show the Now Playing window when playing a ROM.

Discord "Now Playing" Integration: When playing a ROM in Parallel Launcher while the Discord app is running, set your Discord game status to the ROM you are playing.

Visible Columns: Select which columns to show in the ROM list.

Window Scale: Determines how much to scale up the window size, and how much to scale up the internal resolution in HLE graphics plugins.

Default Emulator Core: Sets the emulator core that is selected by default when selecting a newly added ROM.

Default GFX Plugin: Sets the graphics plugin to default to when a new ROM is found. ParaLLEl is usually the best choice, though you may need to use Glide64 or GlideN64 for some older romhacks.

Vsync: Enables vsync, which prevents screen tearing but may cause audio crackling in ROMhacks with custom music.

Reset RetroArch Config: Deletes your retroarch.cfg file, reverting all RetroArch settings to their default values. All settings set by Parallel Launcher will still be saved.

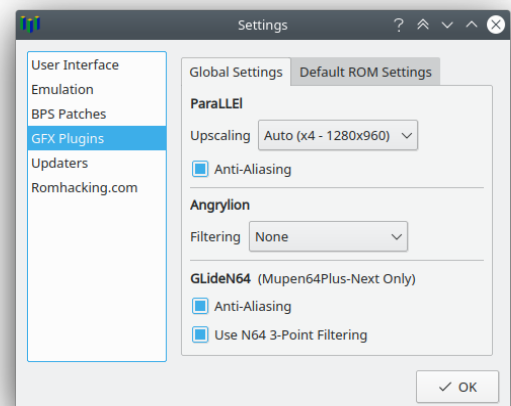
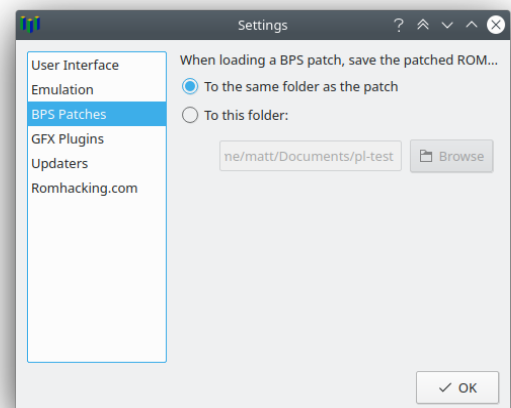
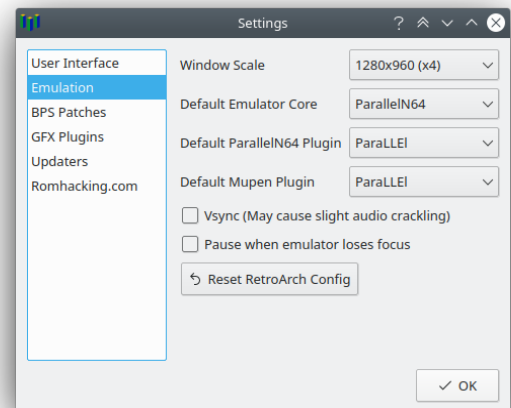
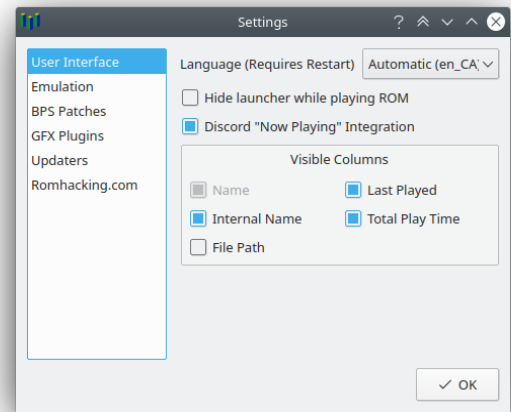
BPS Patch Folder: Specifies where to place patched ROMs when you load a BPS patch.

[ParaLLEl] Upscaling: Determines how much to upscale the internal resolution when using the ParaLLEl graphics plugin. Note that using x8 requires a lot of VRAM and may cause lag.

[ParaLLEl] Anti-Aliasing: Determines whether or not to apply anti-aliasing when using the ParaLLEl plugin

[ParaLLEl] Upscale TEXTRECTs: Determines whether or not to upscale textures drawn using the TEXTRECT command. What this actually means in practice is that 2D elements will be a much higher quality; however, this can cause graphical artifacts in certain games such as Ocarina of Time and Majora's Mask due to subpixel misalignments.

[Angrylion] Filtering: Determines what filters are applied when scaling up from native N64 resolution to the window size in the Angrylion plugin.



[GLideN64/OGRE] Anti-Aliasing: Determines whether or not to use anti-aliasing when using the GLideN64 plugin. The type of anti-aliasing used depends on if you have framebuffer emulation enabled or not.

[GLideN64/OGRE] Use N64 3-Point Filtering: Whether the GLideN64 plugin should use 3-point filtering or bilinear filtering. 3-point filtering is more accurate to console, but bilinear may look slightly better.

[GLideN64] Emulate Framebuffer: Allows the game to read from and write to the native framebuffer, which is required for certain graphical effects to function in some games. This can cause poor performance on low-end or outdated GPUs, however.

[GLideN64] Emulate N64 Depth Compare: Correctly emulates depth comparison, greatly improving accuracy of decals, but potentially causing performance problems on older hardware.

Graphics Plugins

The two most useful graphics plugins are ParaLLEl and either Glide64 or GLideN64, though in some cases you may need to use one of the other plugins. ParaLLEl and Angrylion are LLE (low-level emulation) plugins that nearly perfectly emulate an actual N64. The other plugins are HLE (high-level emulation) plugins which instead settle for a “close enough” approach that tries to map sets of instructions to the closest OpenGL equivalent. These plugins are unable to emulate some features, but until recently, were the only plugins capable of running without major lag, so many older ROMhacks have come to rely on these inaccuracies and will not function on more accurate LLE plugins.

ParaLLEl

An extremely accurate LLE plugin that is great for console compatible hacks. Its goal is to render games exactly as they are on N64 or as they would be on an N64 if the N64 was capable of higher resolutions. While previous LLE plugins relied on software rendering, making them too slow to use in most cases, ParaLLEl is capable of hardware acceleration, making it able to run at a full framerate. It does require your graphics drivers to support Vulkan, so some very old graphics cards may not support it, and some onboard laptop GPUs may have performance issues. If your computer is not able to run ParaLLEl, then the next best plugin to try is GLideN64.

GLideN64

GLideN64 is the most accurate of the currently available HLE plugins and provides a good balance of accuracy and performance. While less accurate than LLE plugins, it has lower hardware requirements, allowing it to be used on lower end computers, and it is still accurate enough to play most modern hacks without any major issues. This plugin also has options that, when enabled, allow it to accurately render some things normally exclusive to LLE plugins, though this comes at the cost of reduced performance.

OGRE

OGRE (Offshoot **GLideN64: Romhack Edition**) is a modification of GLideN64 designed to support older romhacks that don't work in the mainline version of GLideN64. Most retail games and newer hacks should also work with this plugin, though regular GLideN64 is recommended in this case.

Glide64

Despite the similar name, this is not the same plugin as GLideN64. Glide64 is a middle-of-the-road HLE plugin that is more accurate than Rice, but less accurate than GLideN64. It has good performance on low-end computers, but OGRE will generally give a better experience.

Angrylion

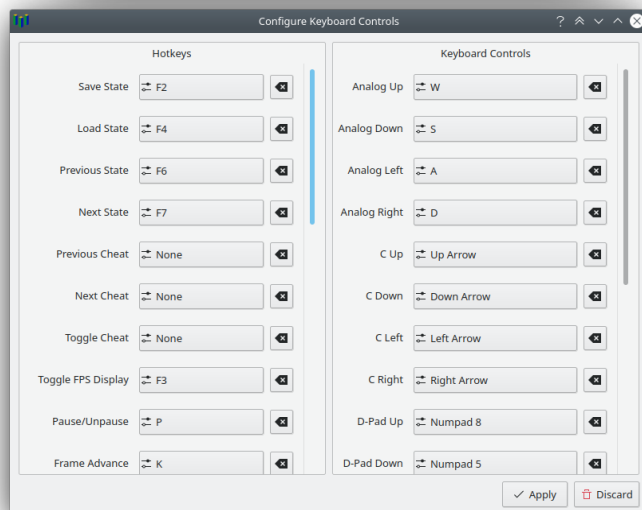
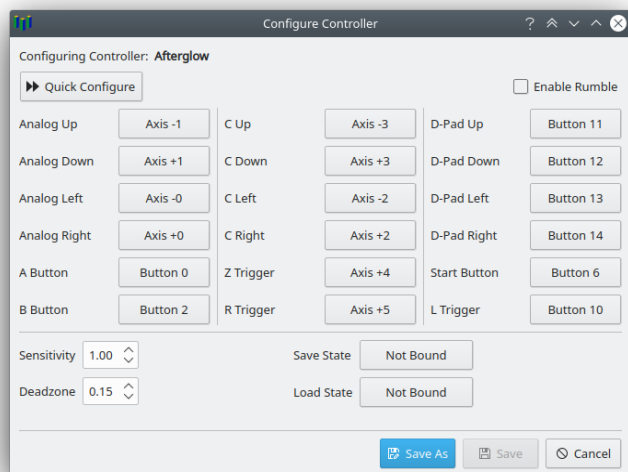
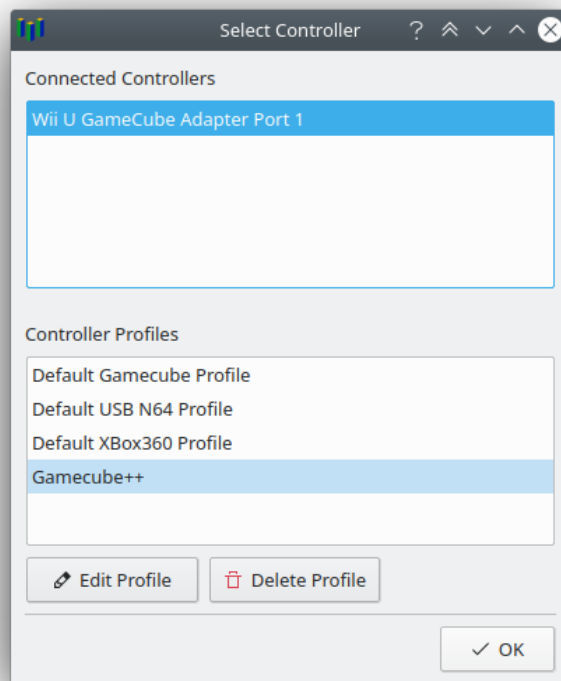
Like ParaLLEl, Angrylion is an LLE plugin that is extremely accurate to console. It does not perform upscaling or any other enhancements, and simply displays the game as it would on a real N64 console. Unlike ParaLLEl, this is a software renderer, so it is very slow, making it unsuitable for general use.

Rice

Rice is an older plugin that was known for being the first plugin to support texture replacement. Nowadays, its main use is to play older hacks that rely on certain plugin inaccuracies common to Rice and Jabo; however, it has now been mostly obsoleted by OGRE, which is also able to play most of these hacks and has superior quality.

Controller Configuration

Parallel Launcher greatly simplifies the controller configuration process, making it much easier to directly bind a controller input to an N64 input and works around some buggy behaviour in how RetroArch does controller mappings. To setup your controller, click on the button with the controller icon, select the controller you want to configure, then chose a controller profile to use for this controller. You can create a new controller profile by selecting a default profile, clicking **Edit Profile**, then saving it as a new profile. You can also edit keyboard controls and hotkeys by selecting **Keyboard Controls and Hotkeys** from the settings menu.

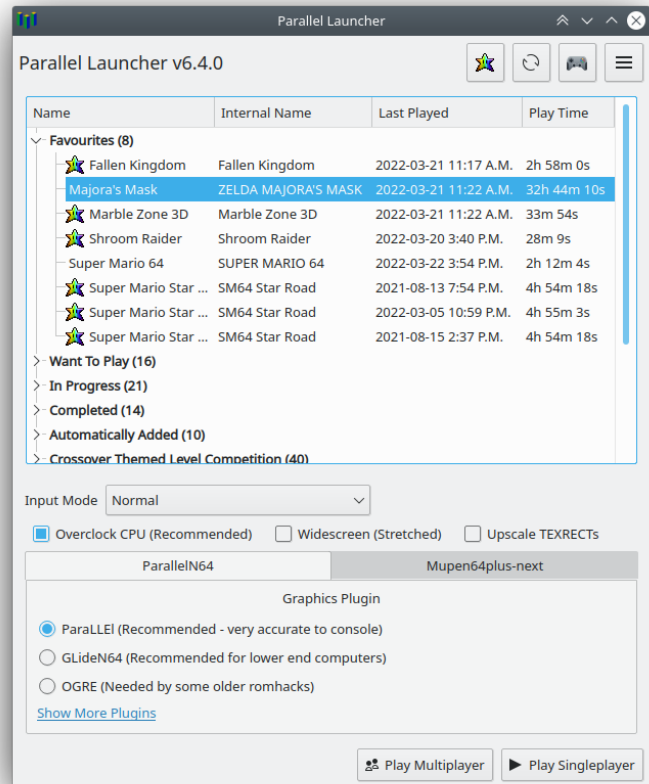


The Main Window

This is the main window of Parallel Launcher where you can select a ROM to play and launch the emulator. Parallel Launcher will remember which graphics plugin to use for each ROM and whether to apply performance optimizations or not. You can categorize your ROMs into groups by right-clicking on a ROM and adding or removing it from a group.

For each ROM, you can select an input mode to use that changes the behaviour of your controller profile:

- **Normal:** Maps your gamepad inputs to a single N64 controller using your controller profile
- **Dual Analog:** Your gamepad inputs that normally bind to the C buttons instead bind to the analog stick on a second N64 controller
- **GoldenEye:** Maps your gamepad inputs to two N64 controllers suitable for playing GoldenEye with the 2.4 *Goodhead* control style
- **Clone:** Your gamepad inputs are sent to two controller ports instead of just one



Parallel Launcher also comes with a save file editor for Super Mario 64 and SM64 romhacks, which you can access by right-clicking the ROM and selecting **[SM64] Edit Save File**.



Romhacking.com Integration

Parallel Launcher has optional integration with romhacking.com, a website hosting romhacks of Super Mario 64. If you enable romhacking.com integration by going to the ≡ button, and clicking on *Enable romhacking.com integration*, all of your followed hacks on RHDC (romhacking.com) will be immediately downloaded, Parallel Launcher will attempt to guess a good graphics plugin to use based on the tool used to create the romhack, and your stars collected will be synced.

Whenever you have more stars collected on a file on your local computer than you have listed on RHDC, your star count progress on RHDC will be updated. To prevent losing progress when removing a file or playing from another device, Parallel Launcher will never lower your star count. If you accidentally submit progress from a modified file or you want to reset your process, you must manually update your star count on the RHDC website. If a hack doesn't have a star count, you can mark it as complete or incomplete from Parallel Launcher by right-clicking on it and selecting *Mark as [In]Complete*.

You can rate a hack's quality and difficulty from Parallel Launcher by right-clicking on a rom synced with RHDC and clicking on Rate Hack.

You can also switch to an RHDC view by clicking on the rainbow star button. In this view, only hacks synced with RHDC will be shown, and they will be presented in a list with a version selector allowing you to download specific versions. You can return to the classic view by clicking the same button (now showing the application icon) again.

