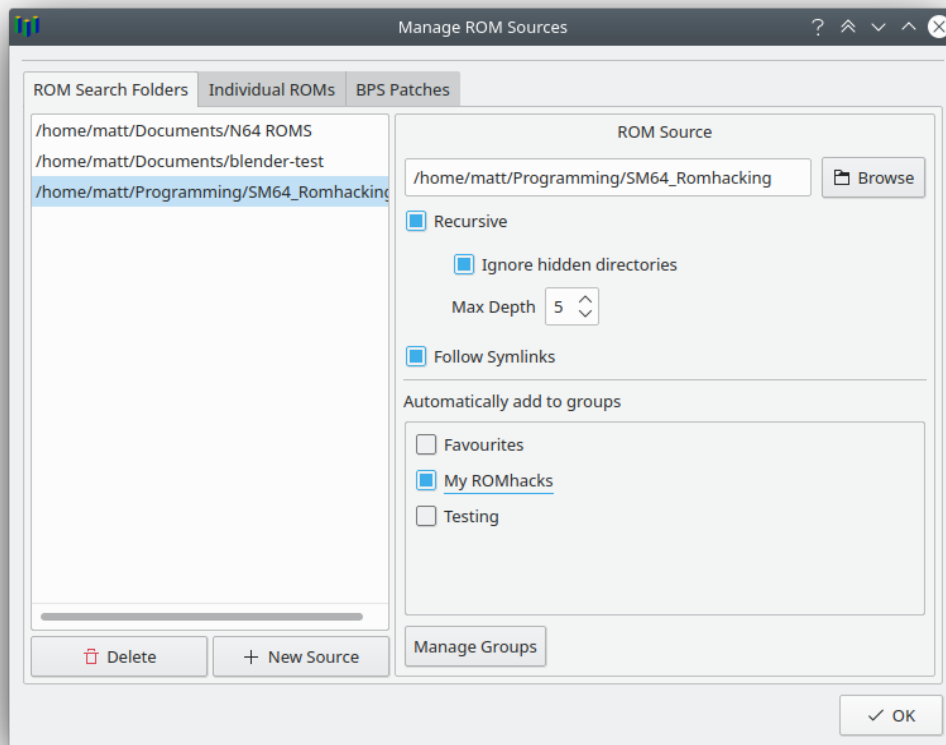


Importing ROMs

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.

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.

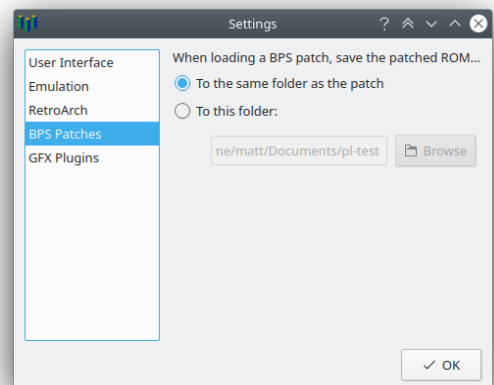
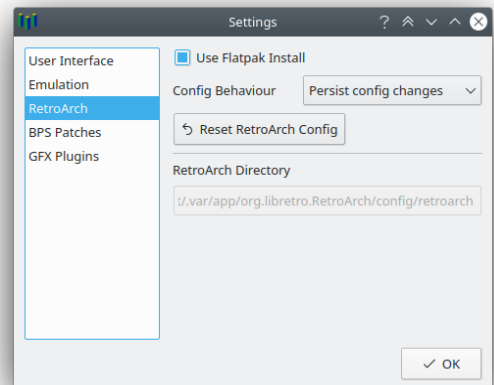
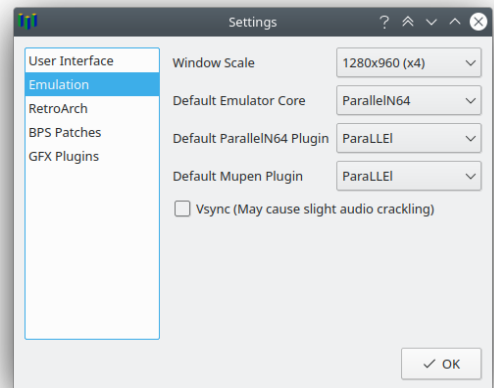
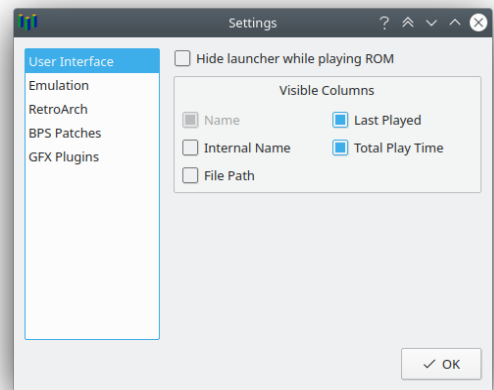
Default GFX Plugin: Sets the graphics plugin to default to when a new ROM is found. ParaLLEl is usually the best choice, though you may need to use Glide64 or GlideN64 for some older romhacks.

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

Use Flatpak Install: (Linux Only) Always use the Flatpak install of RetroArch when a non-Flatpak install also exists.

Config Behaviour: Determines how Parallel Launcher builds its RetroArch configuration file:

- **Fresh config each launch:** No changes to settings you make in RetroArch while the ROM is running are saved. Each time you launch a ROM, a fresh config with default values is built, then controller mappings and some optimization settings are overridden based on your Parallel Launcher settings.
- **Persist config changes:** Changes you make in RetroArch while the ROM is running (accomplished by pressing F1 in the emulator to access the quick menu) will be saved and used next time you launch a ROM. Controller mappings and certain optimization settings will always be overridden by Parallel Launcher.
- **Inherit system config:** Parallel Launcher will use your regular RetroArch config (like you would get if you launched RetroArch directly rather than using Parallel Launcher) and only override controller mappings and certain optimization settings. Any changes you make while the ROM is running will *not* be saved. If you want to persist changes, you will need to launch RetroArch directly (not through Parallel Launcher) and change it there.



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.

RetroArch Directory: (Windows only) Specifies where Parallel Launcher should look for your RetroArch installation.

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

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

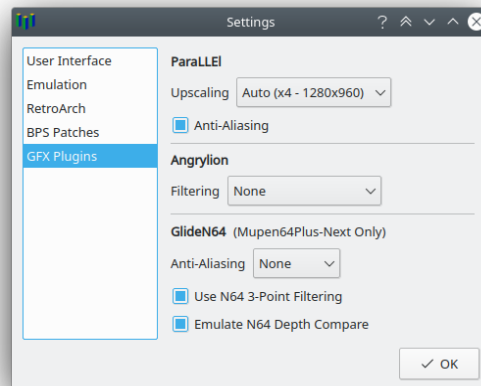
[ParaLLEI] Anti-Aliasing: Determines whether or not to apply anti-aliasing when using the ParaLLEI plugin

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

[GlideN64] Anti-Aliasing: Determines which level (if any) of anti-aliasing to use for the GlideN64 plugin

[GlideN64] 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 N64 Depth Compare: Correctly emulates depth comparison, greatly improving accuracy, but potentially causing performance problems.



Graphics Plugins

The two most useful graphics plugins are ParaLLEI and either Glide64 or GlideN64, though in some cases you may need to use one of the other plugins. ParaLLEI 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 or DirectX 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.

ParaLLEI

ParaLLEI is by far the best graphics plugin currently available. It uses the low-level Vulkan graphics API to accurately emulate N64 graphics on your GPU. If you are running a console compatible ROM, you will want to use this plugin. If you have a very old onboard graphics card that does not support Vulkan, you will have to use another plugin instead (RetroArch may cause Glide64 to be used instead if you select the ParaLLEI plugin on a system that does not support it.)

Glide64

Glide64 is an HLE plugin that generally has pretty good compatibility with ROMhacks, especially older ones. It has some issues, such as buggy handling of textures that are very stretched and repeat many times, but if you are playing an older ROMhack that doesn't suggest a specific plugin to use, this is a good plugin to try first.

Angrylion

Like ParaLLEl, Angrylion accurately emulates how the N64 processes graphics. Unlike ParaLLEl, however, it uses software rendering, and as a result, is very slow. The libretro implementation somewhat mitigates this with parallelization, but it will still struggle to run fullspeed in areas with many polygons. There is very little reason to use this over ParaLLEl, but it can be useful for testing console compatibility.

GlideN64

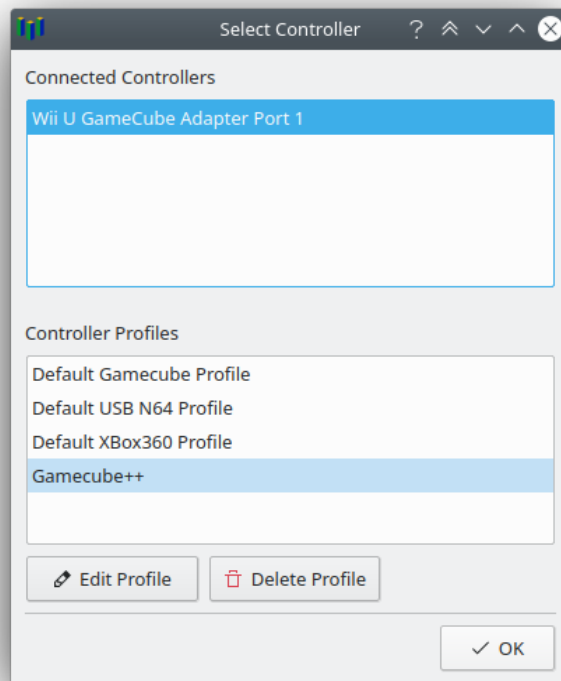
Despite the similar name, this is not the same plugin as Glide64. This plugin has changed significantly over different versions. The version included with ParallelN64 has major issues in almost every area, and is almost never useful. The version included with Mupen64Plus-Next, however, is actually very good for an HLE plugin. It can't match the accuracy of ParaLLEl or Angrylion, but it's the best you're going to get out of an HLE plugin.

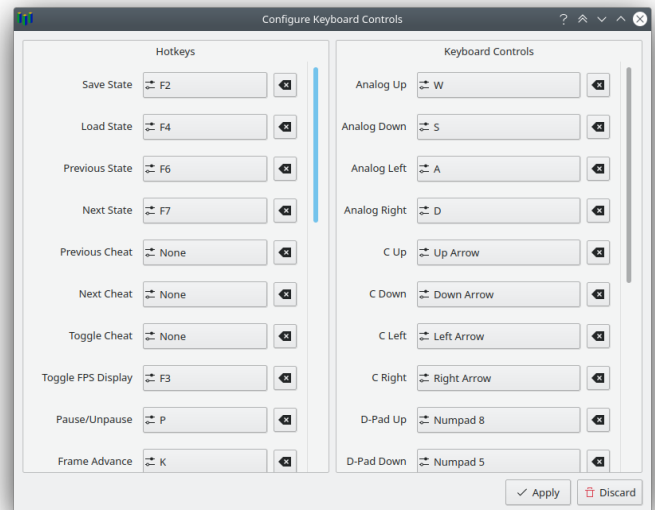
Rice

This plugin has inaccuracies that can cause 2D rendering to be very low quality in some games, and is generally worse than Glide64; however, there are a few niche edge cases where Rice works better, so it is still occasionally useful for some ROMhacks.

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.



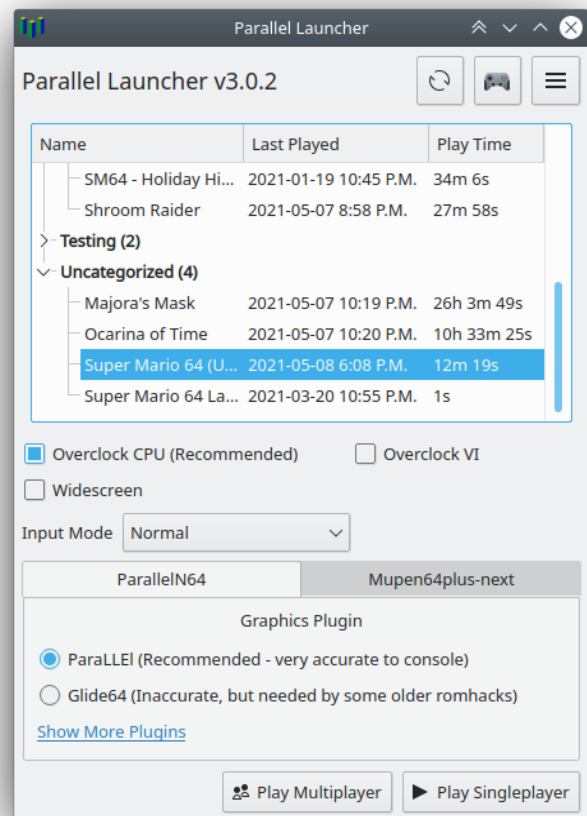


The Main Window

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**.

