Steam

Steam became available in Batocera v31 via manual Flatpak installation, and in v32 it became an integrated system! You can only install Steam on x86_64 platforms (unfortunately we aren't magic).

If intending on running Windows-only games, it is recommended to use btrfs or ext4 for /userdata/ as WINE explains on their FAQ that some games won't run on a non-Linux native file system. Steam games are notoriously known to be unusable under WINE when using ntfs.

In Batocera v32 and v33 there is a bug where Flatpaks (including Steam) cannot be installed if you are using a NAS.

If you still want to use a NAS for the rest of your systems' saves, Flatpaks can still be installed to internal storage as a workaround.

This system scrapes metadata for the “steam” group (no scraper supports this group (yet)) and loads the steam set from the currently selected theme, if available.

Quick reference

- **Emulator:** steam
- **Folder:** /userdata/roms/steam
- **Accepted ROM formats:** .steam

Since Steam is a Flatpak, it too saves program data to the saves folder instead as well. Only the shortcuts are stored in the ROMs folder.
Installation

A mouse and keyboard will be required for installation.

Installing the Steam flatpak

Steam will be installed via flatpak. The recommended way to do so is using the flatpak-config GUI. Search for “Steam” and install the appropriate package.

If for some reason that doesn't work, you can always install Steam via SSH:

```
flatpak install com.valvesoftware.Steam
```

For Batocera v31, if this is the first time you've used flatpak you'll need to add the repository first:

```
flatpak remote-add --if-not-exists flathub https://flathub.org/repo/flathub.flatpakrepo
```

Batocera v32 and higher already have this set as the default repository.

Once that's done, simply update the game list to see Steam in the Ports system!
To do this via SSH:

```
batocera-flatpak-update
```

Then launch Steam! You'll be greeted by the Steam login dialog. If you have two-factor authentication, you'll need your phone handy as well. Sign in and wait patiently for Steam to do some house-cleaning.

**Initial Steam configuration**

Unfortunately Steam has some not-so-desirable defaults that need to be changed. First, navigate to **View → Settings → Steam Play** and check “Enable Steam Play for supported titles”. This will automatically have Steam activate Steam Play/Proton to play white-listed non-Linux native games on your system.
While in this menu, go to **Interface** and check “Start Steam in Big Picture Mode”. Big picture mode (BPM for short) is a 10-foot user interface, optimal for use with couches facing large-screen TVs.

Exit and relaunch Steam. You no longer need a mouse and keyboard at this point.
Steam's Flatpak version currently does not support PS4/5 controllers correctly. This is a known issue to Steam and they are investigating.

The issue is unrelated to Batocera. You can employ the workaround as specified in the troubleshooting section below for PS4 controllers to work around it for now.

Installing native Linux games

Installing Linux-native games is straightforward. Navigate to the game in your library and install it.
On the first launch of a game, it may take a moment to generate shaders. But after that, launching should be relatively quick!

**Installing Windows-only games**

When “Enable Steam Play for supported titles” is checked and the game is white-listed by Valve, the process is similar. Navigate to the game in your library and install it. Non-Linux compatible titles will utilize Steam Play/Proton to function in Batocera. If however your game is “Not on SteamOS”, you can manually force Steam to use Proton to attempt to launch it.

You can also search for your games on the tested Windows games running on Batocera spreadsheet, however do note this includes all Windows games, not just ones from Steam. In case that link ever goes down, a static copy is available on this wiki.

**In Big Picture Mode**

First, install all the versions of Proton you would like to try via Flatpak (search for “Proton”). Then once installed:

1. Navigate to the game in Steam
2. Go to **Manage Game → Set Steam Play Options...**
3. Check “Force the use of a specific Steam Play compatibility tool” and select the latest stable Proton release (the highest numbered entry)
4. Steam will now let you install the game, do so and wait for it to complete (you can still navigate to other pages in Steam if you want to)
5. Test the game, it may take several minutes for each attempt as it needs to recompile shaders for each version of Proton used
6. If the game fails to launch (indicated by the Steam page offering to “PLAY” again instead of opening the game), try forcing the next older Proton version
7. Repeat steps 5 and 6 until you find a version of Proton that launches the game correctly

A community-maintained list of games compatible with Proton and what version of Proton was used is available at the ProtonDB website.

Sometimes running a game through Proton is even better than its Linux-native version!

**In desktop mode**

1. Right-click the game's entry in the list on the left side.

![Properties menu]

2. Go to **Properties → Compatibility**.
3. Check “Force use of a specific Steam Play compatibility tool”.

![Compatibility settings]

4. Select the appropriate Proton version (a community-maintained list of games compatible with Proton and what version of Proton was used on the ProtonDB).
Adding to the Steam system in ES

Simply update the game list (MAIN MENU → GAMES SETTINGS → UPDATE GAMES LIST) to add the installed Steam games to the Steam system in EmulationStation.

![Steam interface](image)

To do this via CLI/SSH (Batocera v32 and up):

```
batocera-steam-update
```

**Controls**

Steam uses your controllers as it does on a regular computer, refer to Steam's official documentation to see whether your game supports it or not.

**Troubleshooting**

**Steam itself is not launching**

Try the troubleshooting section for Flatpaks in general.

**Games are not launching/running slowly**

Steam is usually pretty good when you're only using it to run Linux-native games. Here are some
general troubleshooting steps that apply to all Steam games:

- If using a Nvidia GPU, make sure your official Nvidia graphics drivers are enabled and functional.
  - Sometimes, flatpak will “forget” that you have drivers and will need to “redownload” them (you'll find Steam is suddenly lagging in its menus). Run `flatpak update` in the SSH and if it starts downloading `org.freedesktop.Platform.GL.nvidia-###-##-##` then that is what happened.
- Verify a game's file integrity by going to **Manage Game → Validate Content**. This may take a while.
- PC games in general (especially ones that were ported from home consoles to PC) can be buggy. Check out the PCGamingWiki for general tips, settings configurations, launch commands and patches you can apply to fix the game (just keep in mind it's focused on Windows, not Linux (and thus, not Batocera) so a lot of external programs/patches won't be compatible).
- Free up some disk space. Most Steam games need to compile and save shaders before being launched for the first time; if there is not enough free space then this will silently fail.

Proton

Proton is still very experimental, there will be cases where a certain game won't function or will have severe game-breaking glitches. Generally, the newer and always-online multiplayer games tend to be completely unsupported. That being said, here are some things to try troubleshooting your issue:

- Search the game on the ProtonDB and see what other users have said they've had to do to make it work. You may need to utilize **custom launch commands** to get a game working.
- You can download additional versions of Proton via flatpak. Search “com.valvesoftware.Steam.CompatibilityTool.Proton”, look for “Proton (community build)” and install it (alternatively just run `flatpak install com.valvesoftware.Steam.CompatibilityTool.Proton from SSH`). If none of your Windows-only games are running, redownloading the version of Proton you're using that's already installed may “fix” it.

Setting up launch commands

Sometimes a game may need certain launch parameters to work. This can be used to configure the settings of a game before it runs, allowing it to boot in the first place if it's by default using incompatible settings. You can refer to **Valve's official documentation** on it. These launch commands should also be respected when launching the game through EmulationStation.

In Big Picture Mode

1. Navigate to the game.
2. Go to **Manage Game Options → Set Launch Options**.
3. Enter your launch commands and press OK.

In desktop mode

If not using Steam's Big Picture Mode the instructions would be as follows:
1. Right-click the game's entry in the list on the left side.

2. Go to **Properties → General**.

3. Enter your launch commands into **LAUNCH OPTIONS** and press OK.

## Editing game files

Should you need to edit a game's files directly, they are in:

```
/userdata/saves/flatpak/data/.var/app/com.valvesoftware.Steam/data/Steam/steamapps/common/
```

You will need to enable “view hidden folders” to see beyond the `.var/` directory.

## My game has successfully installed and runs from Steam, but is not showing up on my games list in EmulationStation

Some games instead opt to create desktop shortcuts that Batocera fails to detect in

```
/userdata/saves/flatpak/data/.var/app/com.valvesoftware.Steam/Desktop
```

You can remedy this by copying the shortcut to

```
/userdata/saves/flatpak/data/.var/app/com.valvesoftware.Steam/data/applications
```

instead and then refreshing your game list.
If this is a frequent problem for you, you can permanently symlink the folders using the following command:

```bash
```

**My game has no controls!**

This is also a problem with regular Steam on Windows, especially with older titles that didn't adhere to controller API standards such as X-input. This can be worked around by forcing Steam Input on the game in question. Navigate to the game in Steam, then go to **Manage Game → Controller Options → Steam Input Per-Game Setting** and set it to “Forced On”.

Then you can configure your controller from the **Controller Configuration** in that same **Manage Game** menu. It is usually easiest to emulate a mouse and keyboard.

From Batocera v33 and higher, an alternative to this is to use Batocera's pad2key profile. Highlight over the game in EmulationStation and hold to bring up the game options menu. Then navigate to **CREATE PAD2KEY PROFILE**, and configure the keys as necessary.

**My PS4 controller isn't working with Steam**

This was a known issue with Steam in Flatpak. The exact cause and the exact solution aren't clear, but here's one thing users have been doing to moderate success with Steam on Batocera:

Download the following udev rule file and copy it to `/etc/udev/rules.d/99-steam-controller-perms.rules` (you can do this using Batocera's file manager (`[F1]` in the system list) or via WinSCP):

```bash
99-steam-controller-perms.rules

# This rule is needed for basic functionality of the controller in Steam and keyboard/mouse emulation
SUBSYSTEM=="usb", ATTRS{idVendor}=="28de", MODE="0666"

# This rule is necessary for gamepad emulation; make sure you replace 'pgriffais' with a group that the user that runs Steam belongs to
KERNEL=="uinput", MODE="0660", GROUP="batocera", OPTIONS="+static_node=uinput"

# Valve HID devices over USB hidraw
KERNEL=="hidraw*", ATTRS{idVendor}=="28de", MODE="0666"

# Valve HID devices over bluetooth hidraw
```

KERNEL="hidraw*", KERNELS="*28DE:*", MODE="0666"

# DualShock 4 over USB hidraw
KERNEL="hidraw*", ATTRS{idVendor}="054c", ATTRS{idProduct}="05c4", MODE="0666"

# DualShock 4 wireless adapter over USB hidraw
KERNEL="hidraw*", ATTRS{idVendor}="054c", ATTRS{idProduct}="0ba0", MODE="0666"

# DualShock 4 Slim over USB hidraw
KERNEL="hidraw*", ATTRS{idVendor}="054c", ATTRS{idProduct}="09cc", MODE="0666"

# DualShock 4 over bluetooth hidraw
KERNEL="hidraw*", KERNELS="*054C:05C4*", MODE="0666"

# DualShock 4 Slim over bluetooth hidraw
KERNEL="hidraw*", KERNELS="*054C:09CC*", MODE="0666"

Then run `batocera-save-overlay` and reboot. Test if your PS4 controller is working with Steam now. 😊

**No boxart for my Steam games and I can't scrape for them**

Steam *should* provide the boxart and other relevant metadata for the games it installs. This is dependent on the publisher of the original game properly filling out all the metadata themselves to Steam's database when the game is submitted.

Guess how often that happens.

You can always manually add boxart to your games through **GAME OPTIONS** (hold 🖤 while hovering over the game) → **EDIT THIS GAME'S METADATA**.

You might also have more luck using an external scraping tool such as ARRM.