

Ultimate Steam Proton Tutorial

Proton is based on Wine and includes additional components like DXVK, a library that translates Direct3D 10 and 11 calls to Vulkan on-the-fly.

As a Steam Play feature, it avoids having to set up an additional Steam installation for Wine, which used to be the only way to get Windows-only Steam games working on Linux.

To do this, click Steam > Settings > Steam Play > "Enable Steam Play for all titles".

Save file/settings directories:

```
# ~/.steam/steam/steamapps/compatdata/<app id>/pfx/drive_c/users/steamuser/My Documents/ My Games/<your game here>.
```

WineCFG:

Change your wine prefix to the proton prefix...

```
# env WINEPREFIX=~/.steam/steam/steamapps/common/Proton 3.7/dist/share/default_pfx"
```

Then, change your wine path to the wine path in the Proton directory...

```
# WINEPATH=~/.steam/steam/steamapps/common/Proton 3.7/dist/bin/wine64"
# winecfg
```

Proton can be tuned at runtime to help certain games run. The Steam client sets some options for known games using the STEAM_COMPAT_CONFIG variable. You can override these options using the environment variables described below.

The best way to set these environment overrides for all games is by renaming user_settings.sample.py to user_settings.py and modifying it appropriately. If you want to change the runtime configuration for a specific game, you can use the **Set Launch Options setting in the game's Properties dialog in the Steam client.** You can launch the game as you would with "PROTON_VARIABLE=1 %command%".

To enable an option, set the variable to a non-0 value. To disable an option, set the variable to 0. To use Steam's default configuration, do not specify the variable at all.

All of the below are runtime options. They do not effect permanent changes to the Wine prefix. Removing the option will revert to the previous behavior.

How to enable DXVK HUD with Proton:

- DXVK_HUD=1 %command%
- DXVK_HUD=fps %command%
- DXVK_HUD=fps,devinfo %command%

Crackling sound because of PulseAudio:

```
# PULSE_LATENCY_MSEC=60 %command%
```

Stuttering when shaders are loaded:

```
# DXVK_STATE_CACHE=0
```

I disable esync in Proton:

```
# PROTON_NO_ESYNC=1 %command%
```

Hangup "Start the game on Steam" (update WINEPREFIX):

```
# Kill explorer.exe
```

<https://www.protondb.com/>

<https://github.com/ValveSoftware/Proton#runtime-config-options>