

How to get Links 2003 running on SteamOS (Steam Deck only)

What you need

- (1) Steam Deck running SteamOS
- (2) Unlocked Steam Deck with disable read-only file system
- (3) Lutris (an Open-Source gaming platform for Linux)
- (4) Links 2003 Download version from Links Country Club
- (5) Links 2003 V1.07 patch
- (6) Nvidia patch

SteamOS vs Windows: With each update to Windows 11, Links (along with other older Windows games) is becoming increasingly difficult to execute. Games often require various wrappers and work-around options to get them to run. With Links 2003, this is achieved with dgVoodoo tool and there is no guarantee that this will work on all systems. Historically, getting Windows games to work on Linux has been extremely difficult and in many cases impossible. Due to recent advancements with WINE (a compatibility layer to allow Windows games run on Linux) and the development of Steam Proton (by Valve), it's actually now easier to run most older Windows games on modern Linux distributions than it is on Windows 11. SteamOS is basically a light-versioned operating system based on an Arch Linux core. Windows is known to have lots of bloatware and background processes that really are not needed for a platform such as the Steam Deck (which is designed primarily for gaming). For these reasons, it would seem to me that it makes more sense to use SteamOS rather than creating a separate partition and running Windows 11 as some players have.

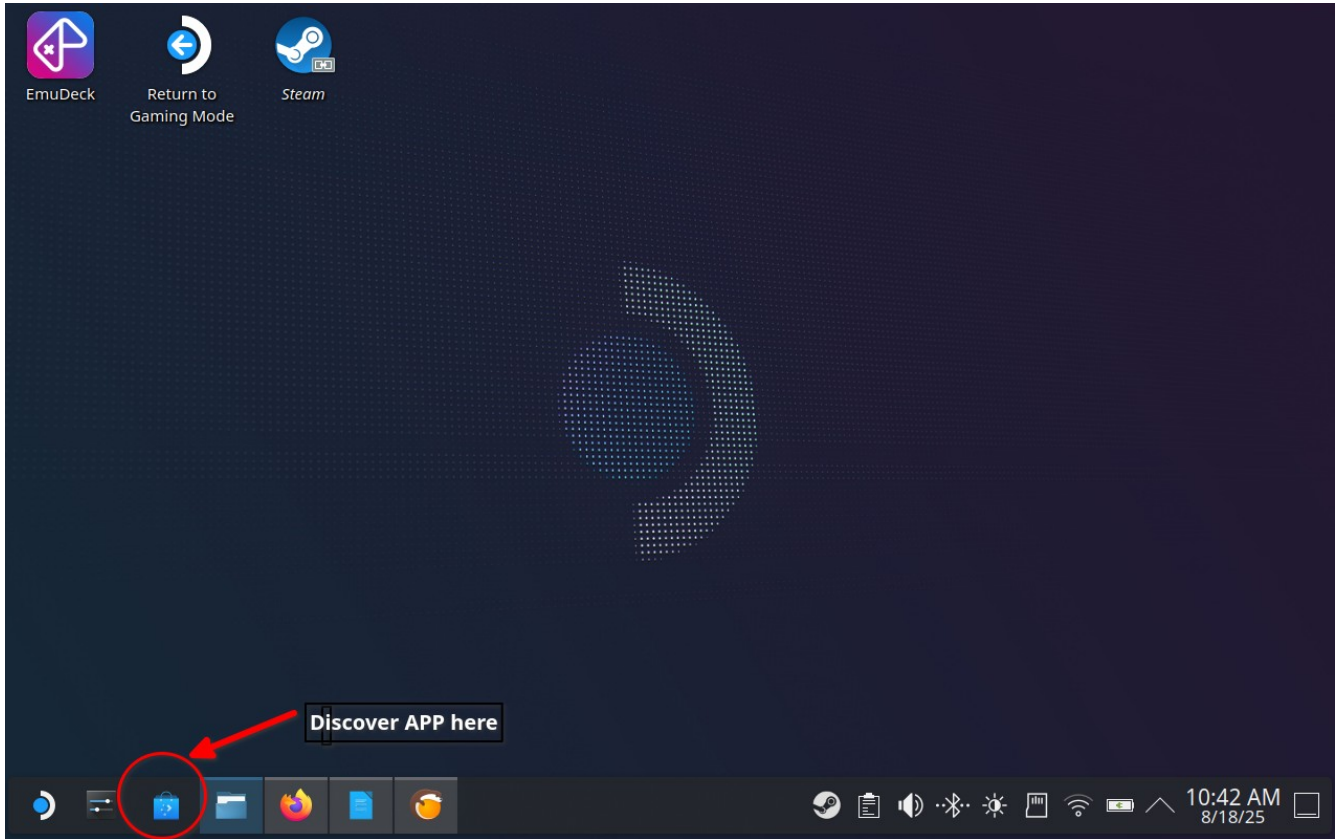
WINE: WINE is a compatibility layer that allows users to run Windows games on Linux. The WINE acronym is "WINE Is Not an Emulator". It is more of a translator of Windows DirectX graphics routines allowing games to be run on POSIX compliant Linux systems. Historically, being an open-sourced project, WINE has been sketchy with running a lot of Windows games accurately. WINE has been around for many years and the most recent advancement now allows Links 2003 to be run accurately on a system running Linux.

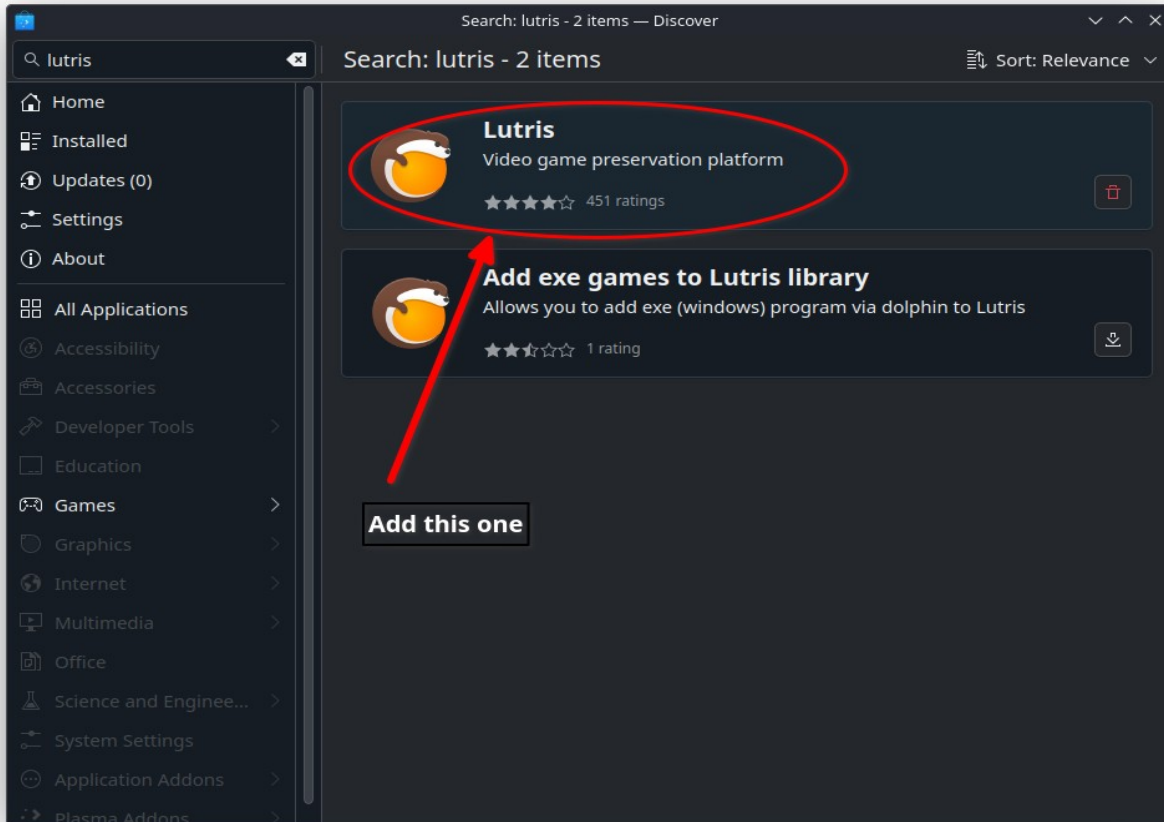
What is Lutris?: Lutris is a open-sourced gaming platform with the purpose of installing and executing games on Linux. In addition to installing native-Linux games, it also supports installing games requiring WINE such as Links 2003. Lutris is available to install via Linux's package manager on just about all Linux distributions including SteamOS. On other Linux systems, one can simple install WINE separately without Lutris, but this is the not the case with SteamOS (at least to my understanding). If you are using SteamOS, Lutris is the best way to manage WINE (and perhaps the only way).

What is an "Unlocked Steam Deck"?: The Steam Deck is a pretty cool device that, unlike other gaming platforms such as the Nintendo Switch, allows users unprecedented customization. As far as I know, unlocking a Steam Deck does not void the warranty, though might put your Steam Deck at risk for potentially corrupting the file system by users who are not being careful with the powerful Linux command line interface. In order to run Links 2003 on a Steam Deck, the file system must be unlocked. From my experience, the risk of corrupting the file system is pretty low. But, don't say I did not warn you. I am not going to provide the instructions in this guide for unlocking the file system. Suffice to say that there are many guides on the Internet if you search for them. There are also some pretty good ones that explain the process more on YouTube. The one piece of advice that I will give is

(2) **Unlock the file system.** Search how to do that on the Internet and implement the procedure.

(3) **Install Lutris from the “Discover” app.** The Discover app in SteamOS, allows is essentially a package manager that can be found on most Linux distributions. For SteamOS, this is the only way to install external Linux packages onto your Steam Deck. Once you open the Discover app, do a search for “lutris”.



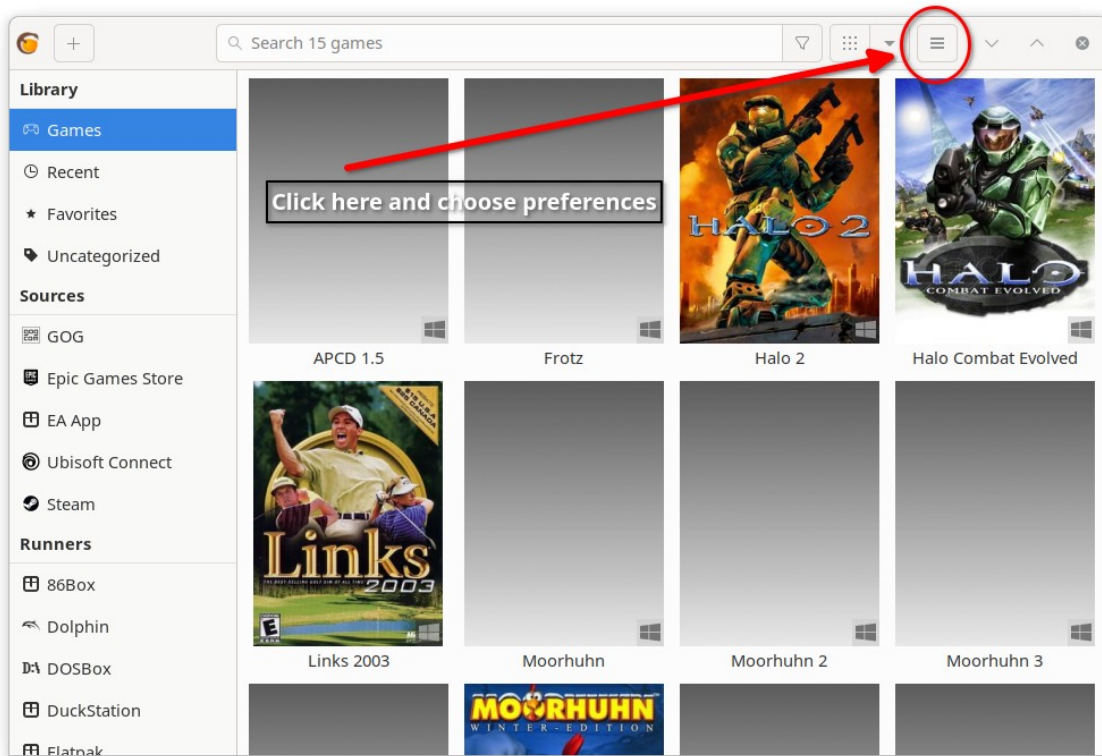


(4) Copy or download the Links 2003 files, required patches and any courses you want to add to you Steam Deck. In addition to being a gaming device, the Steam Deck can be easily converted into a near fully featured computer complete with a web browser. If you want to simply download the files to your deck, you can also install a fully featured Firefox web browser using the same process for installing Lutris via the Discover app. Save the files to a folder on your Steam Deck (I just use the 'Downloads' folder). You should have the following files:

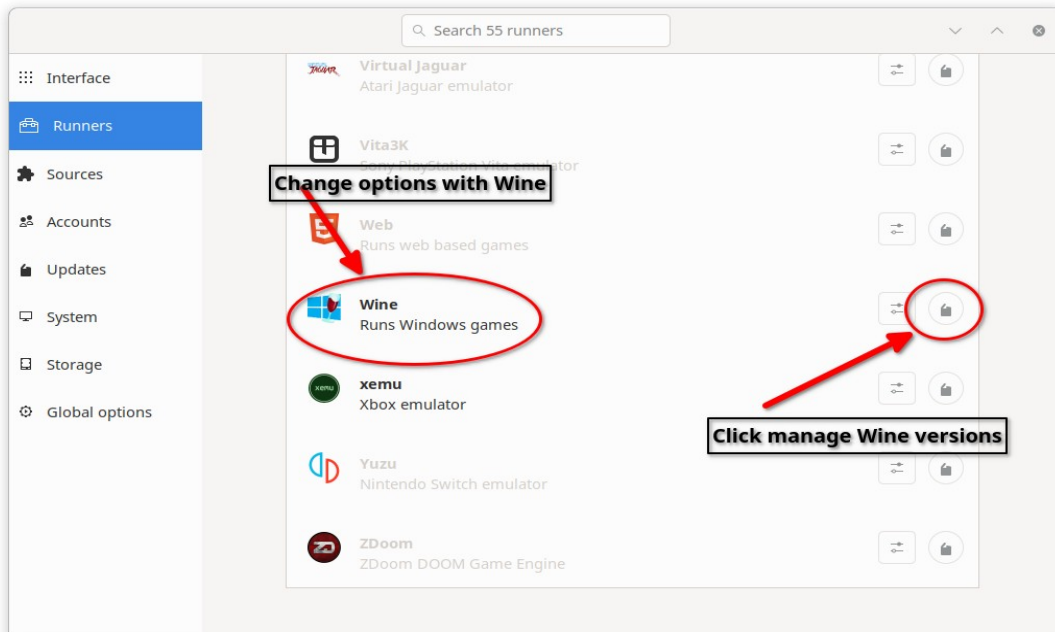
- a) Links2k3_Down.exe (or whatever file you downloaded from Links Country Club)
- b) Links_2k3_107_Final.exe (which can be obtained from Links Corner site)
- c) Links2k3_nvidia_win7_FINAL.exe (also obtained from Links Corner)

Make sure that you put them all in one place. We will need those later.

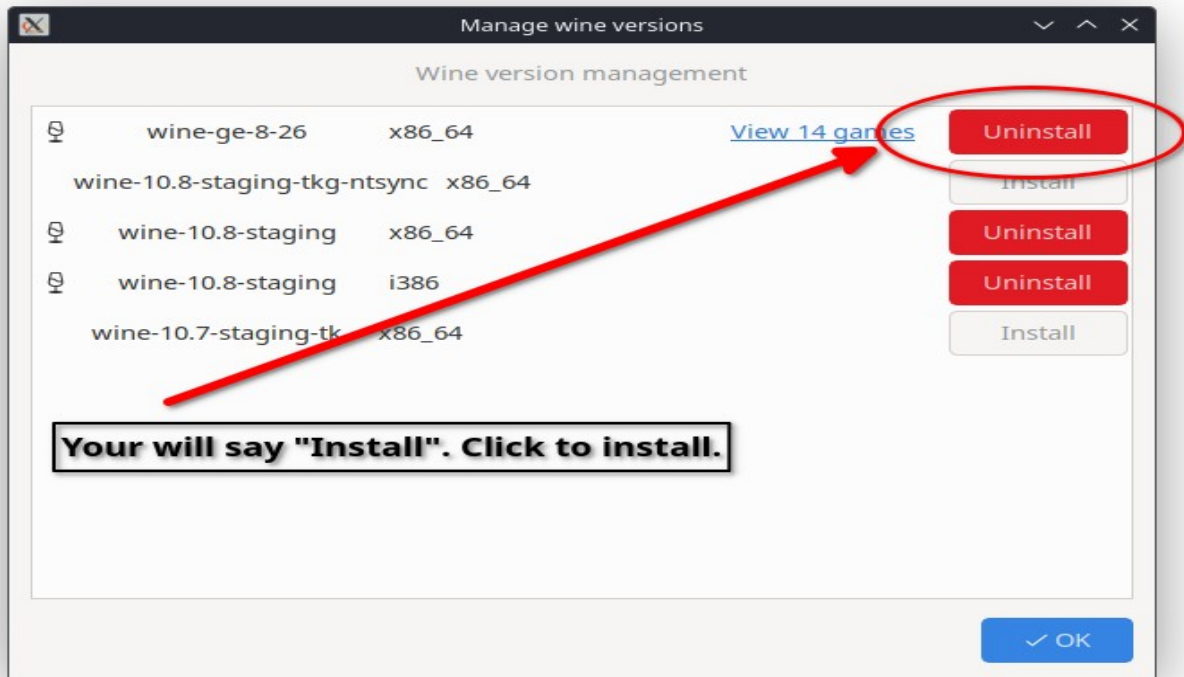
(5) Open Lutris for the first time and install Wine. If this is the first time, you will not have any games listed. Click the hamburger menu icon in the upper right corner and choose “Preferences” and then the option “Runners”:



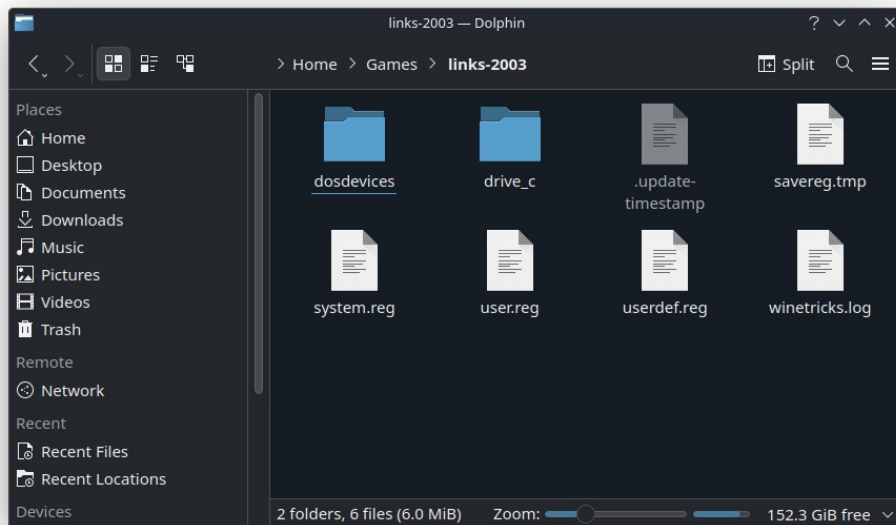
Scroll down until you see the entry for Wine as shown below:



Make sure you choose “wine-ge-8-26 x86_64”. This is what we will use to run Links 2003.

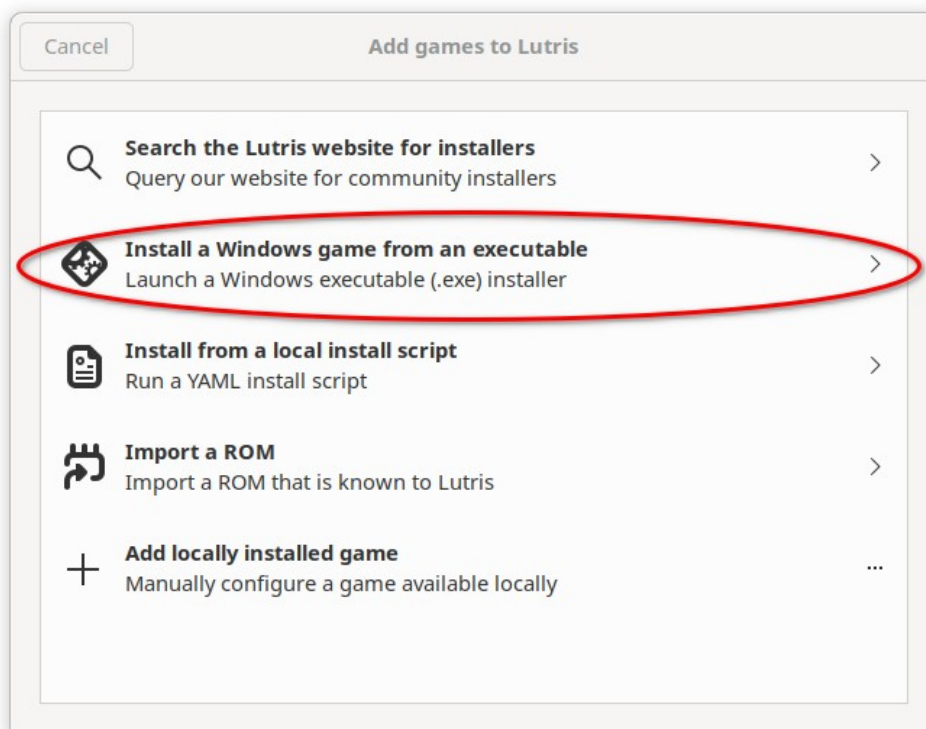


(6) It's now time to create a Wine prefix and install Links 2003. A “Wine Prefix” is a folder that contains a pseudo Windows directory structure that allows the game to install and execute as if it were actually running on a Windows volume. If your were to open the folder via Linux of the Wine Prefix it would look something like this:

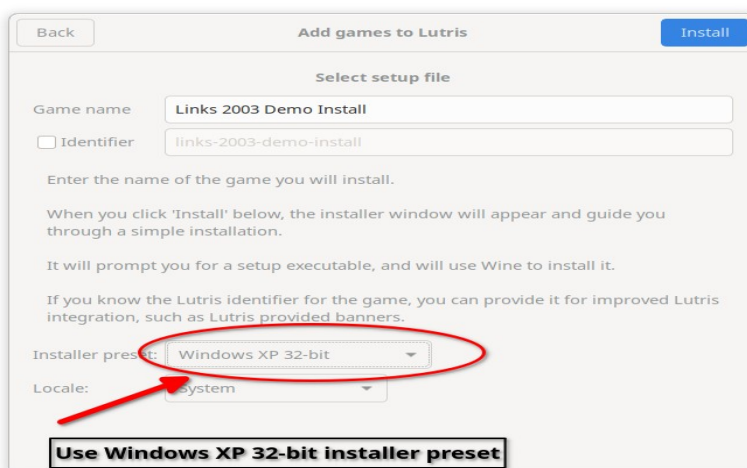


As you can see, there is a C drive and if you open that, you would see a familiar Windows directory structure. This is not a virtual machine, but just allows the Windows program to believe that it's actually running on a windows machine.

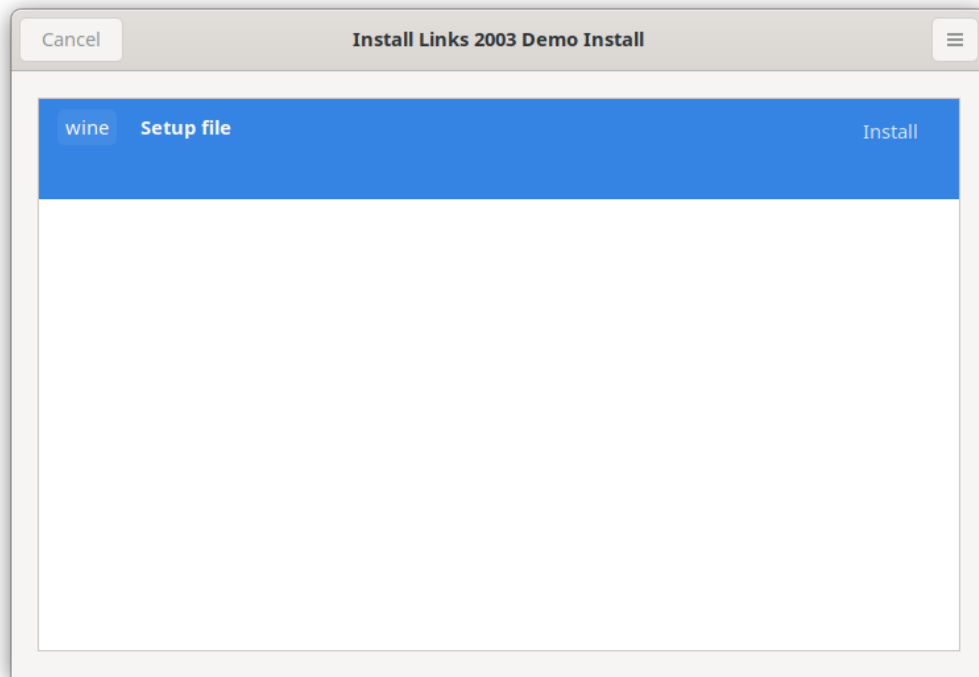
Back to the main Lutris window, click the “+” symbol in the upper right corner. You should see the following:



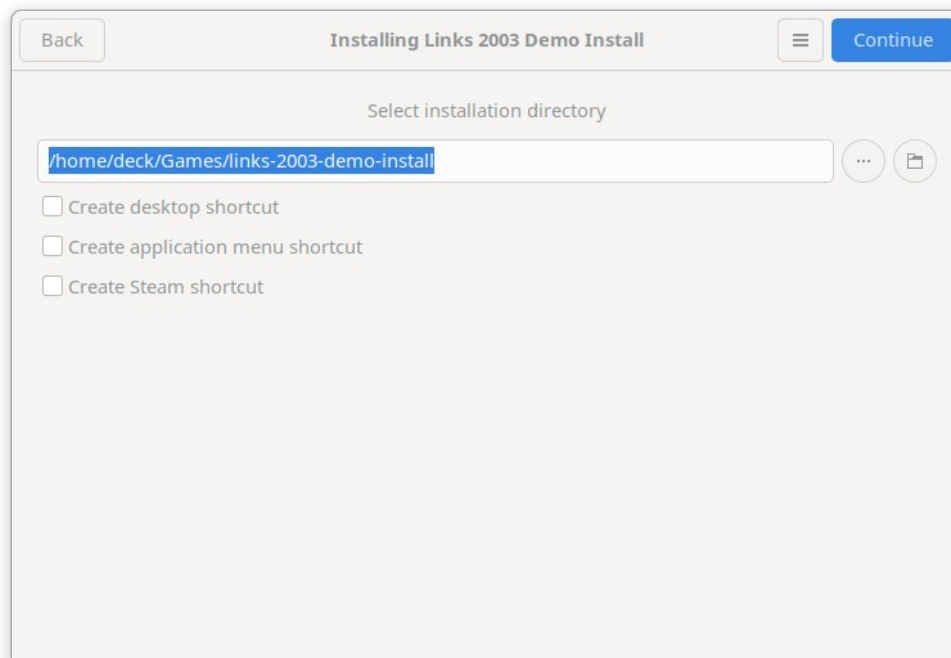
Select the “Install a Windows game from an executable” option. Click that and then you should get:



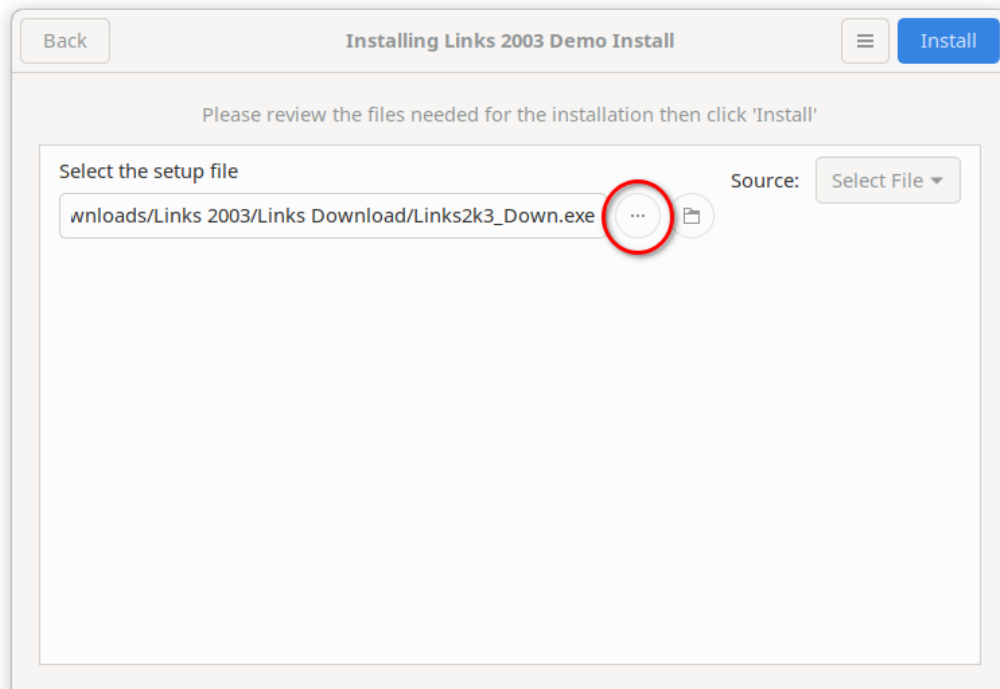
Create your own Wine prefix name (I am using the term demo here because I already have a working copy of links 2003 Wine prefix and am creating another one for this guide.) Make sure to use the installer preset listed here (Windows XP 32-bit). This is very important.



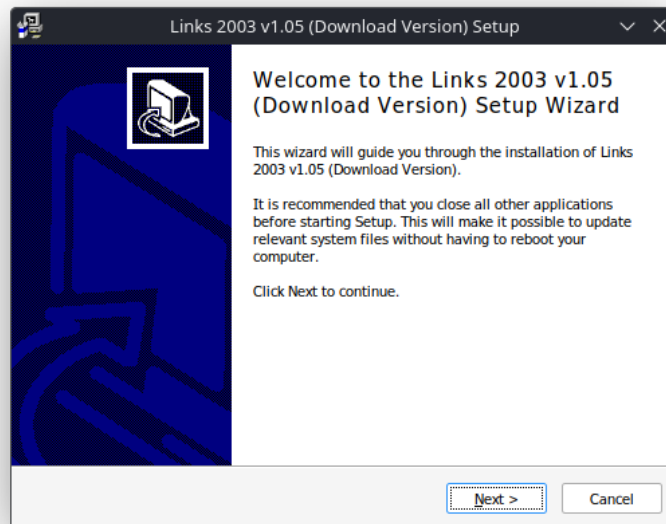
Click “Install” again and then:



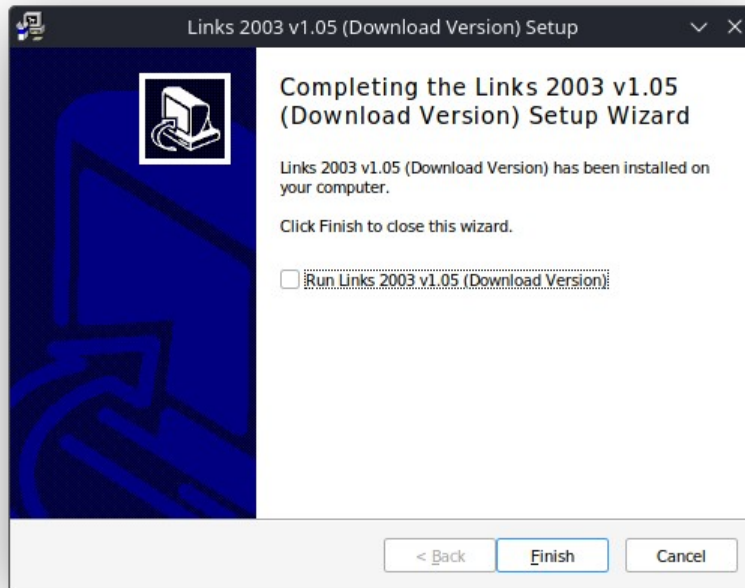
Note the path of your Wine prefix. If you use the Dolphin file manager on your Steam Deck, you can navigate to this directory for future purposes (i.e. add-ons, courses, etc). If your using a Steam Deck, your path should be nearly identical (depending on what you named the prefix). Now click “Continue” and then



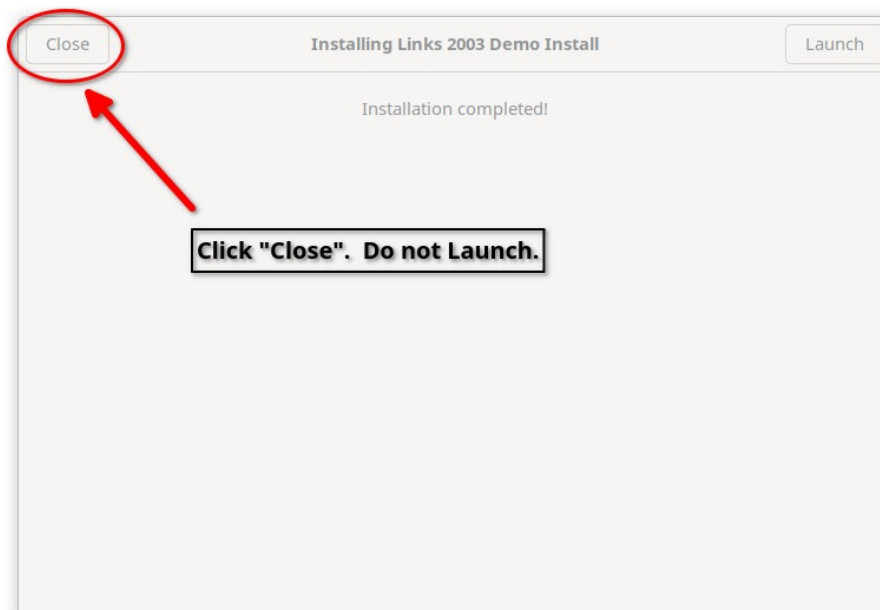
Click the ellipse button and navigate to your Links 2003 install EXE (the one that you use on Windows to install the game). Mine is “Links2k3_Down.exe”. After this has been selected, click “Install”.



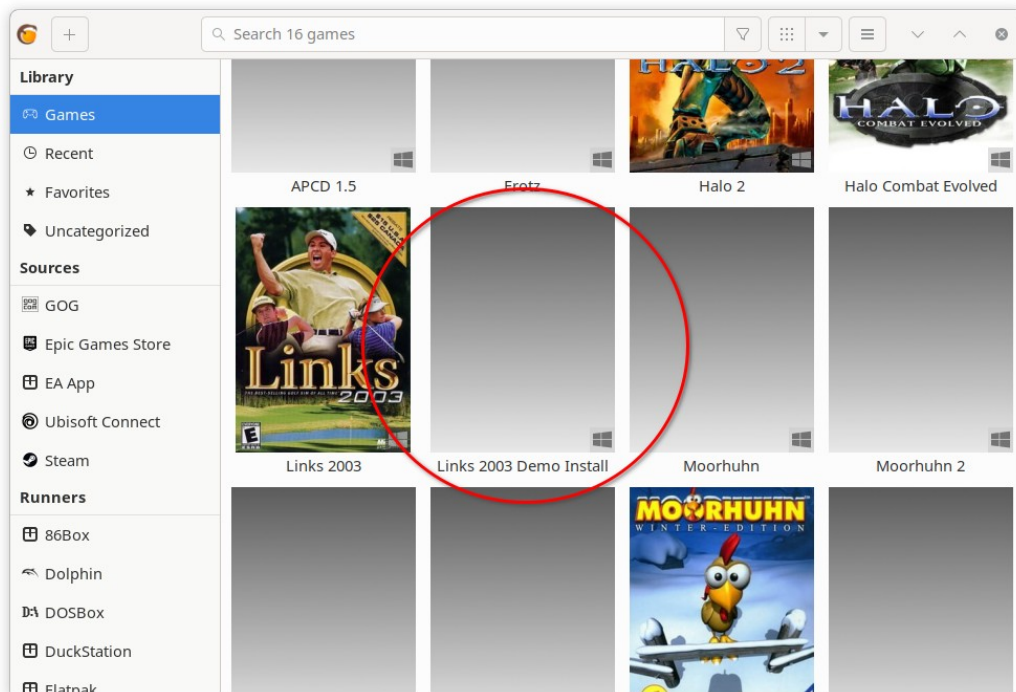
You will see a few screens and one that looks like a command-line console. Eventually, you should see the familiar Links 2003 Windows install window. Click “Next” and install just like you would on Windows.



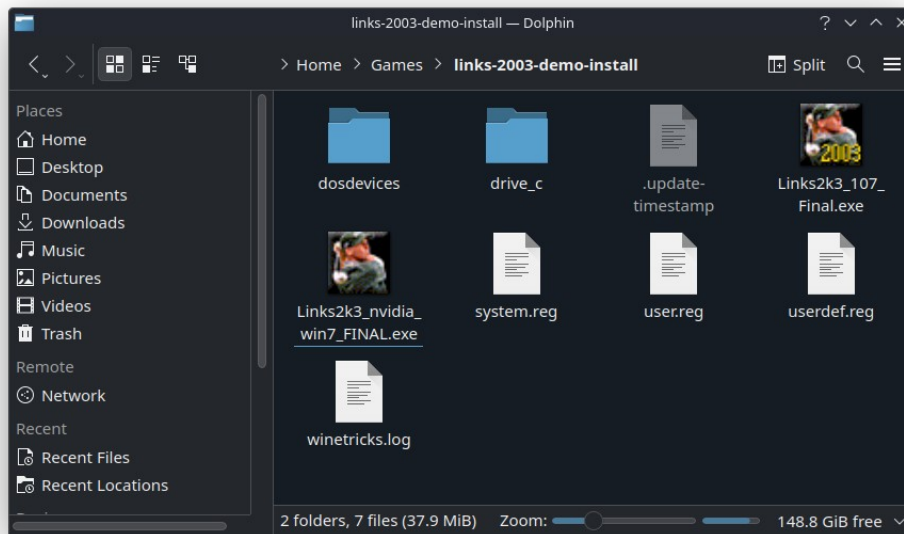
When you come to the last screen, DO NOT run Links 2003. Make sure this is unchecked when you click “Finish”.



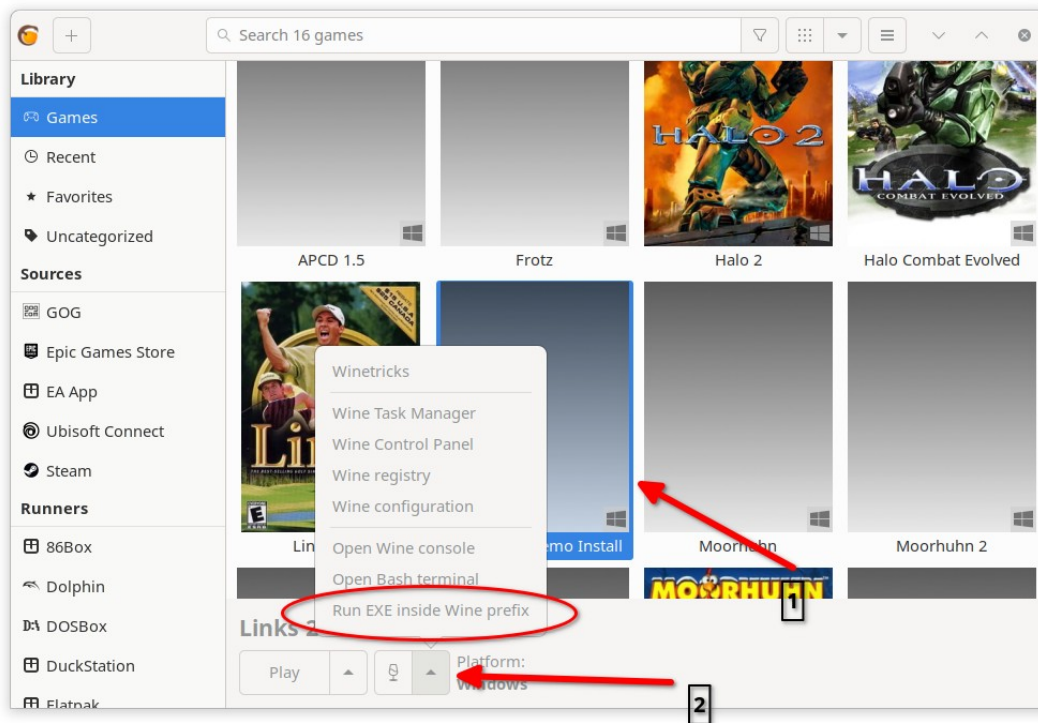
When the installation is complete, close out this process. DO NOT launch yet. We need to do a few things before launching the game for the first time.



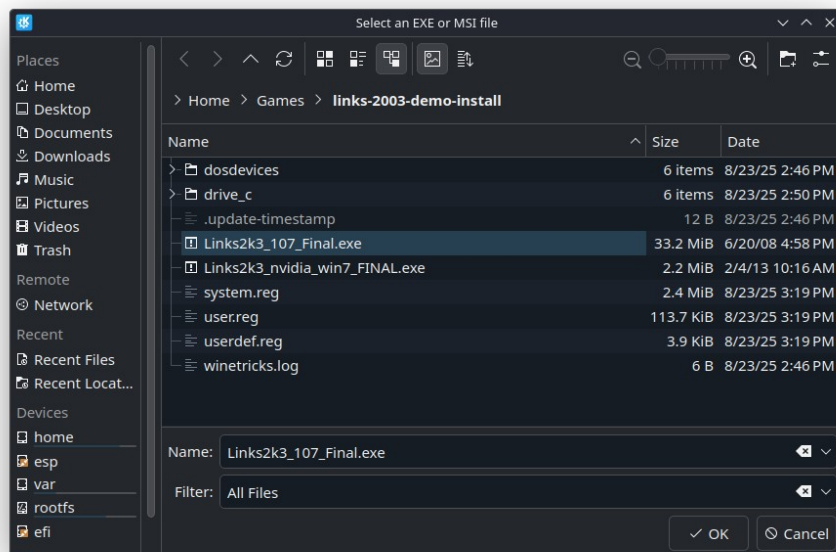
You should now see your new prefix in the main window. If you are using Lutris for the first time, this will probably be the only one. Now we have to copy some files over into the Wine Prefix folder.



(6) Install the 1.07 update and Nvidia patch. Open the Wine prefix that we created in Lutris using the Dolphin file manager and navigate to your prefix using the path that was created earlier. Copy the 1.07 update and Nvidia fix files into the prefix like so.



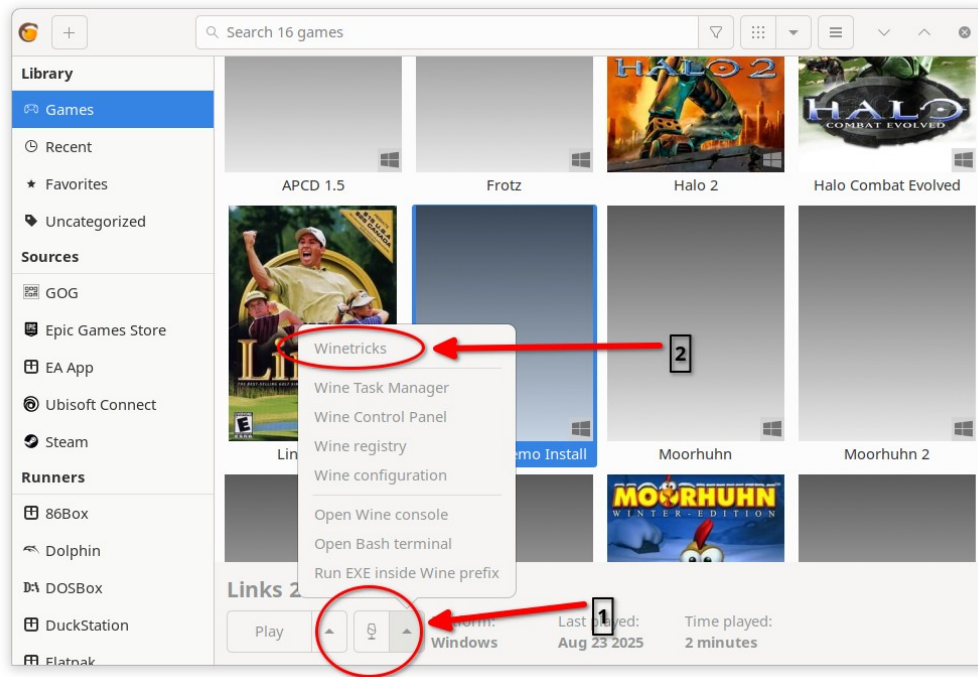
Next, select the Wine prefix in the main Lutris window (labeled “1”). Then (label “2”) click the small bottle icon (this is called a Wine Bottle). Be sure to select the option listed (“Run EXE inside Wine prefix”).



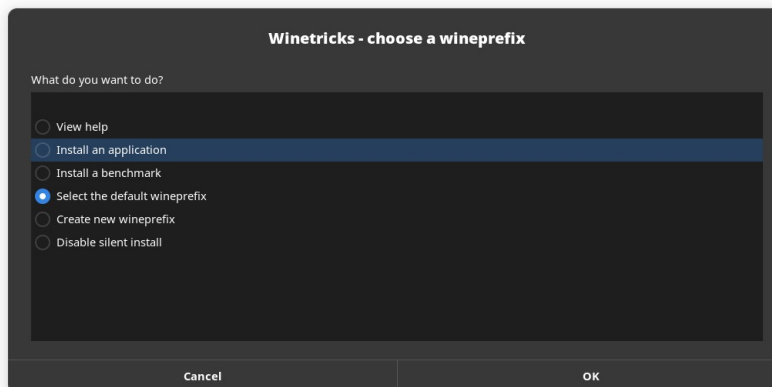
This will immediately open a file manager box with the Wine Prefix open. Provided you copied the files inside the prefix folder, you should see the mod files. We want to install the 1.07 file first. Select that one and click “Ok”. It might take a few moments, but it will then start the 1.07 update. Go ahead and install the update into the correct Links 2003 installation direction. Remember, use the windows path instead of the Wine prefix path because the update .exe thinks it’s running in a Windows

environment, not SteamOS. You will use the same procedure for the Nvidia update as well. Install both of those, but don't start Links yet. There is still one more thing we need to do to get Links 2003 to run without crashing.

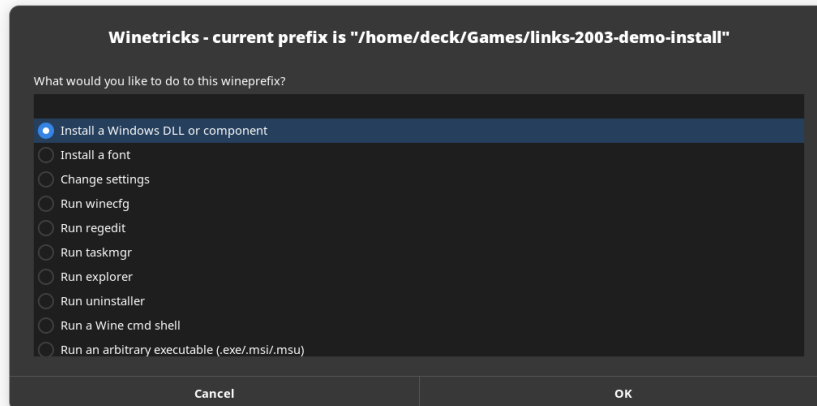
(7) Install Windows Media Player 9. Next, we need to install Windows Media Player 9, otherwise Links 2003 with crash upon starting. The easiest way to do this on Lutris is by using something called Winetricks. See below:



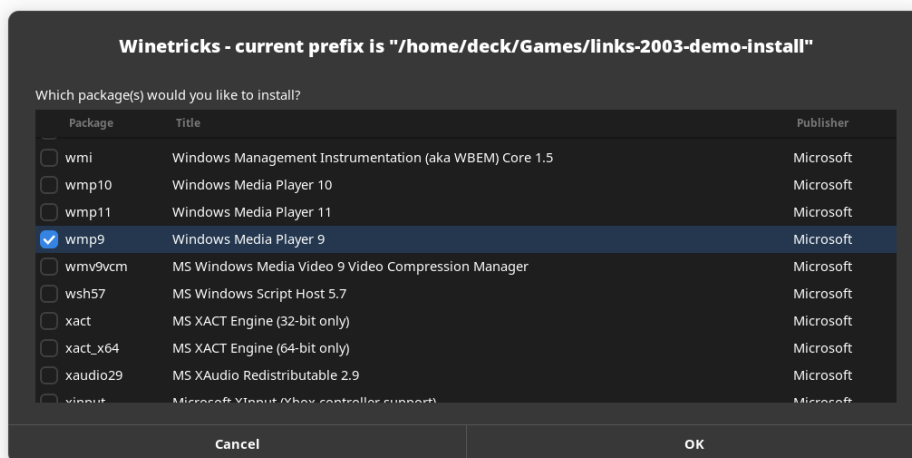
1. Click the bottle button. 2. Select Winetricks. It took my Steam Deck nearly 10 seconds to eventually bring up a menu box. Give it a little time. You should eventually see the following:



The radio button “Select the default Wine prefix” should already to be selected. If it is not, select it and click “Ok”. Then:



Select the “Install a Windows DLL or component” and click “Ok”. Then:

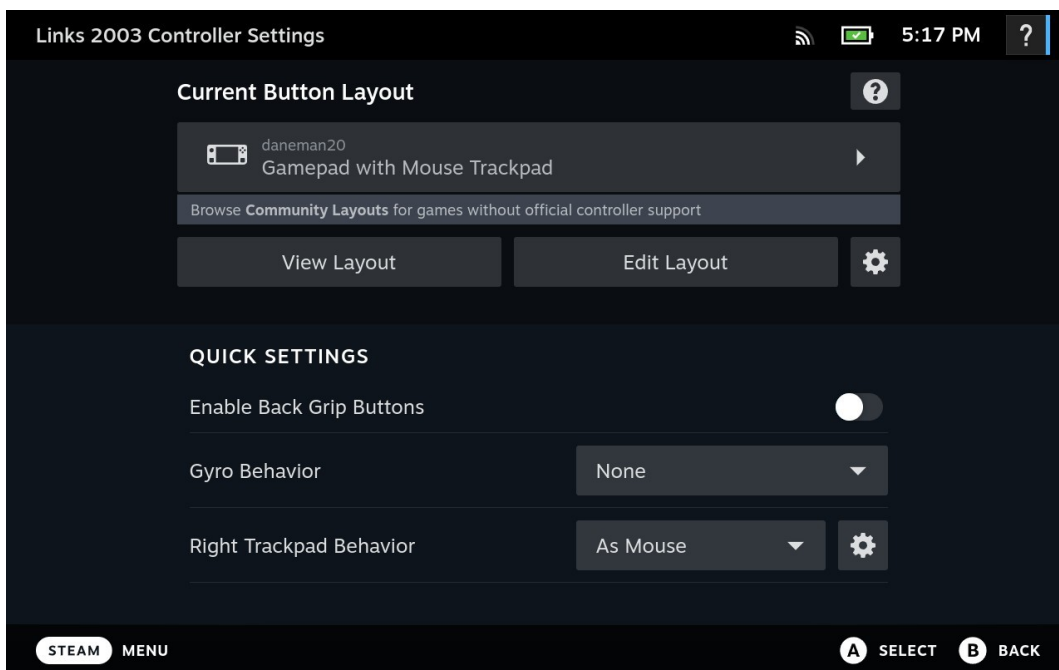


Scroll down until you see “wmp9”. Select this option. This is Windows Media Player 9, which is required by Links 2003 in order to run. Click “Ok” and this will be installed into your Links 2003 Wine prefix. You will see several dialogue boxes appear as it is installing this component. Allow this process to complete until you return to the screen above. We don’t need to install anymore Winetricks for Links 2003. Just hit the “Cancel” button as we are finished.

(8) Set resolution for Links 2003. You should now be able to run Links 2003. The first thing that you will want to do is fix the video. You will notice that there are two video cards that are identically titled. If you are on a Steam Deck, this will be “ATI Radeon HD 5600 Series”. Selecting the bottom one appears to give the proper resolution options. The resolution of Steam Decks (I believe for both LCD and OLED) is 1280x800. I recommend using that resolution in 32 bit mode. Mine has worked flawlessly in that mode. I suppose that you could use a lower resolution, but I can’t attest to how that will look or run.

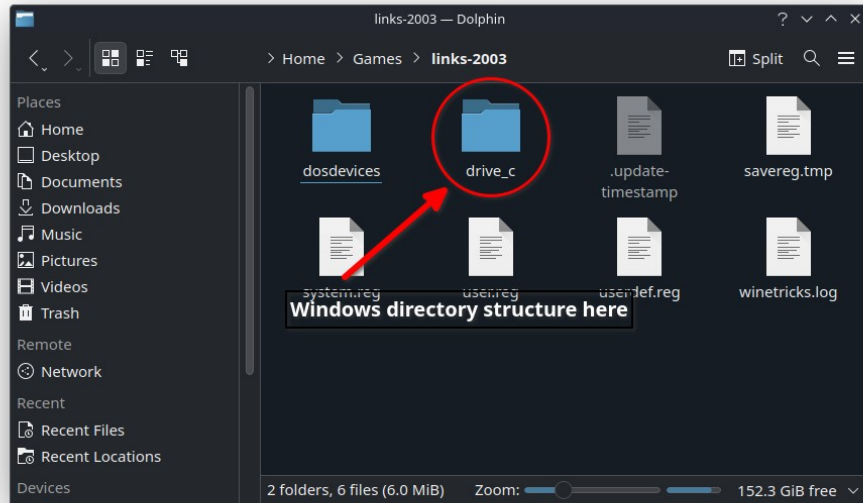
Running Links 2003 from Gaming Mode: Most people will likely want to be able to run Links 2003 from the Steam “Game Mode”. After all, who wants to always have to go to Desktop mode when most games are run from the Steam Deck’s default mode, which is “Gaming Mode.” This can be done very easily. With Lutris open, click on your Links 2003 Wine prefix and right click. One of the options will be “Add Steam Shortcut”. Click on this and a shortcut will be added. If you like to have the proper artwork to your Links 2003 shortcut in Gaming Mode, the only way that I know to do this is to download and install “Decky Loader” app, which has various utilities including one that allows you to add custom artwork. I found that there was existing artwork.

Controlling Links 2003 from Gaming Mode: One of the great features with the Steam Deck is it’s flexibility in allowing the user to create just about any kind of controller profile. This really is a matter of preference. For starters, I would think that any user, regardless of preferences, would need to set your Deck’s controls with the following universal template as shown below:

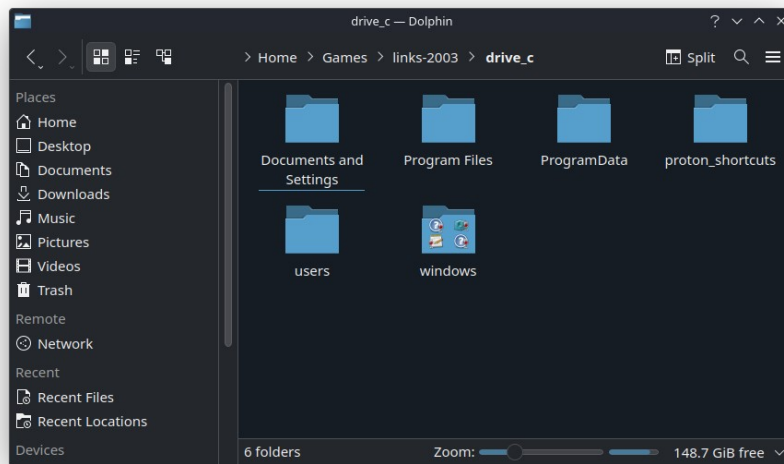


As Links was designed for use with the mouse. Setting up the controls with this in mind seems the most workable solution. You could experiment. Using the “Gamepad with Mouse Trackpad” template will set the right trackpad as the mouse. The Steam Deck’s right trigger is typically used as a mouse left click and the left trigger for the right click. I found this universal template to work without modification to perfectly fine. Bear in mind, I am a 3-click golfer. I have not tried mouse-swing or any other variants. You could of course change the configuration to your liking.

Add courses and other add-ons: I have successfully added courses, golfers, clubs, and sound scripts and all have seemed to execute flawlessly. Just remember, to add these manually, you will need to use the Dolphin file manager in SteamOS and navigate to the Wine prefix location. You can access the Windows directory structure under the “drive_c” folder like below:



To access the actual Links directory structure, navigate to the Wine Prefix folder for Links. The “drive_c” folder represents the Windows portion of the prefix. If you open this folder, you will notice that it looks a bit like the root directory for a Windows partition. See below:



As you can see, you can access the Links 2003 directory as you would in Windows through the “Program Files”. Take note that this is where you would manually copy files such as new courses, etc.

What if I want to run an EXE installation mod: This is easy. You would do it just like we did it when we ran the 1.07 update or the Nvidia update. Copy the EXE file to the base prefix directory and then open Lutris, select the Links 2003 Wine prefix and click the bottle button below and select the “run EXE inside prefix”, and select the EXE you want to run.

Changing video settings: From my experience, if you want to make changes to the video settings, I recommend that you do it from Desktop mode instead of gaming mode. For some reason, not all of the resolution settings are available in the setting menu. The simulation does run in in Gaming Mode from 1280x800x32 bit provided that is what you set it at while in Desktop mode.