

Basic eSports for Engineers Installation and Walkthrough

tar xzf esports-for-engineers-2204LTS.tar.gz

cd esports-for-engineers-v41/

./runThisScriptFirst.sh

./launcher.py

eSports for Engineers

average score for last 7 days: 0

- [1] MON: Contract Bridge**
- [2] TUE: Historical Sim Racing**
- [3] WED: Deep Learning Chess**
- [4] THU: Historical Flight/War Sim**
- [5] FRI: Deep Learning Weiqi**
- [6] SAT: Flight/War Sim (Advanced)**
- [7] SUN: Politics (Experimental)**
- [8] Export Scores and game output files**
- [9] Read Documentation**
- [10] Reset Scores**
- [11] Exit**

Choose number listed above:

1

MON: Contract Bridge

CurrentScore: 0

- [1] Contract Bridge**
- [2] Bridge Analyzer**
- [3] How To Calculate Score**
- [4] Enter New Score**
- [5] Return to Main Menu**

Choose number listed above:

Read about scoring, via option 3, then install and play Contract Bridge, via option 1

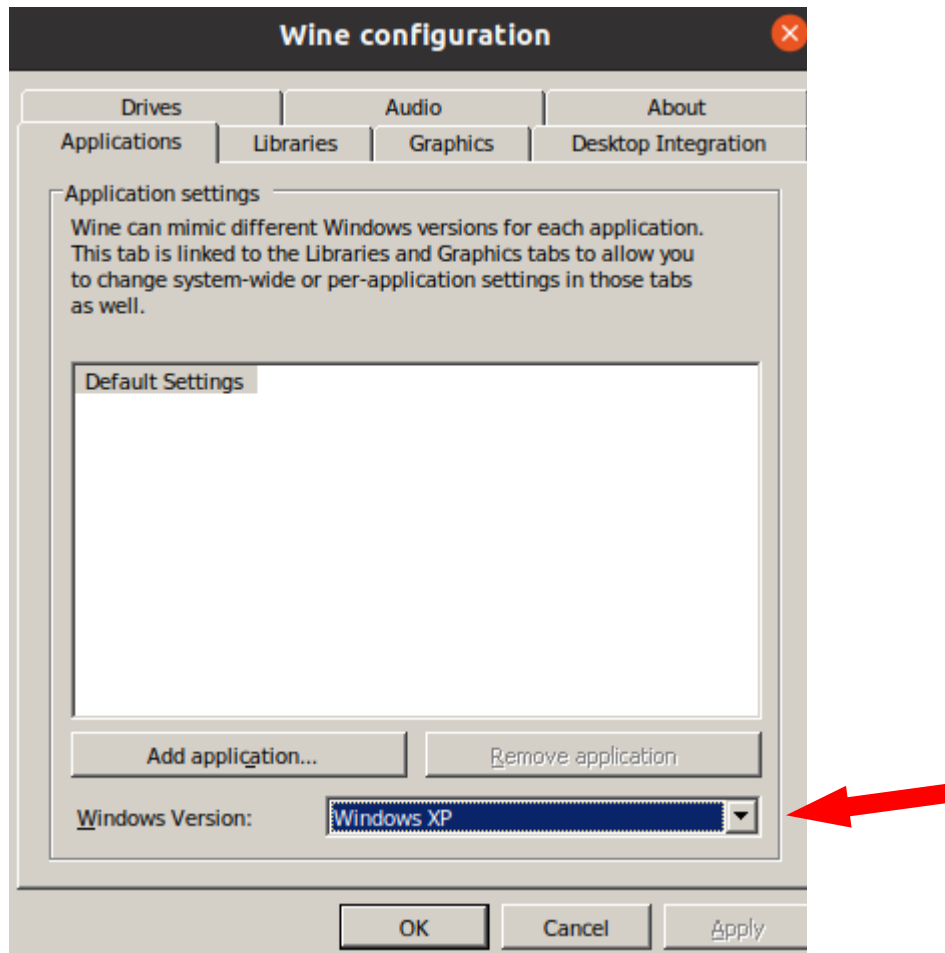
Running MON/wBridge5.sh

press Enter to continue:

exit from the program. Change to the MON directory and change a configuration setting.

```
cd MON
```

```
./setWineDisplayResolution.sh
```



set Windows version to Windows XP

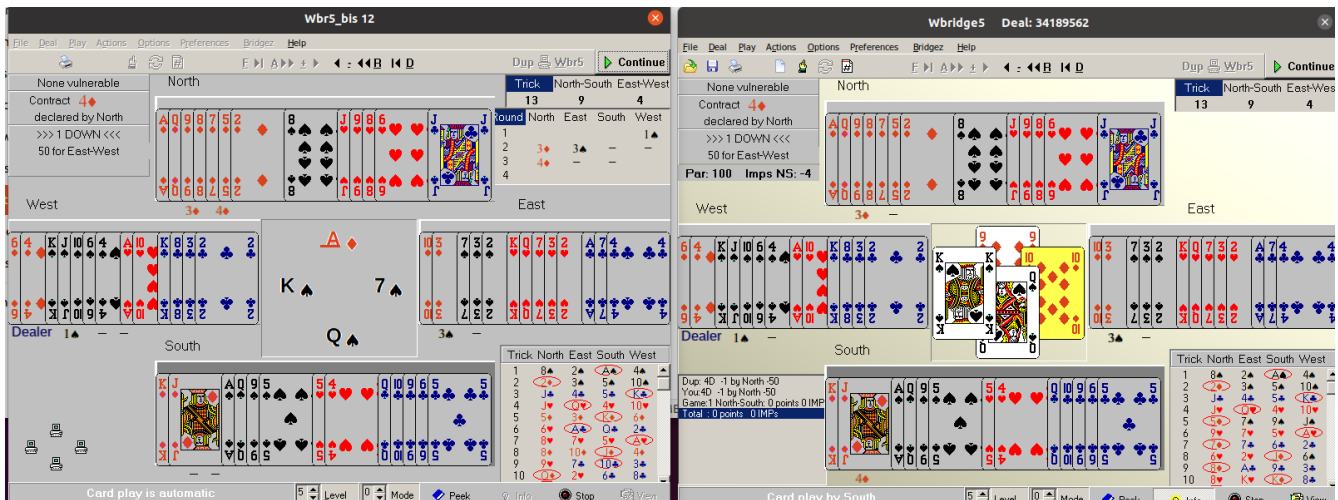
return to the base directory and run the launcher again, then start wBridge5 again.

```
cd ..  
./launcher  
1  
1
```

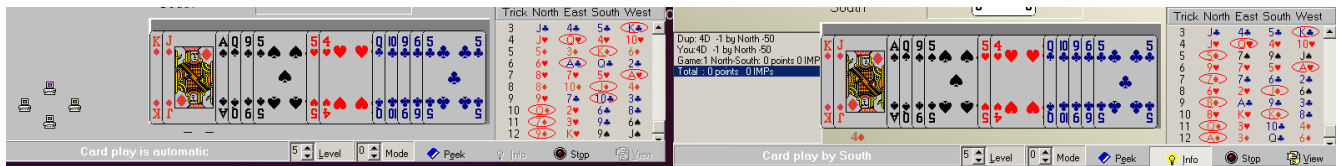


Set the playing level to maximum strength, which is level 5, select info if desired and start a closed room session by selecting Dup.

(optional) save screenshots of your game, and dup game to MON/afterGameReport

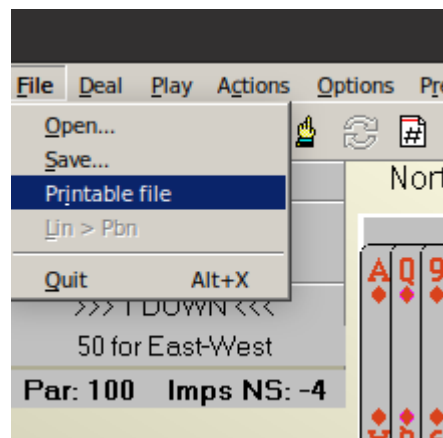


(optional) Scroll down on lower right to show the last 3 tricks, then take a second screenshot.



Save the game, using File/Printable file or File/Save option

put saved files in MON/afterGameReport



Calculate your score, following the instructions in option 3 below, then type 4 to enter your score for MON.

eSports for Engineers

average score for last 7 days: 0.032

- [1] MON: Contract Bridge
- [2] TUE: Historical Sim Racing
- [3] WED: Deep Learning Chess

- [4] THU: Historical Flight/War Sim
- [5] FRI: Deep Learning Weiqi
- [6] SAT: Flight/War Sim (Advanced)
- [7] SUN: Politics (Experimental)
- [8] Export Scores and game output files
- [9] Read Documentation
- [10] Reset Scores
- [11] Exit

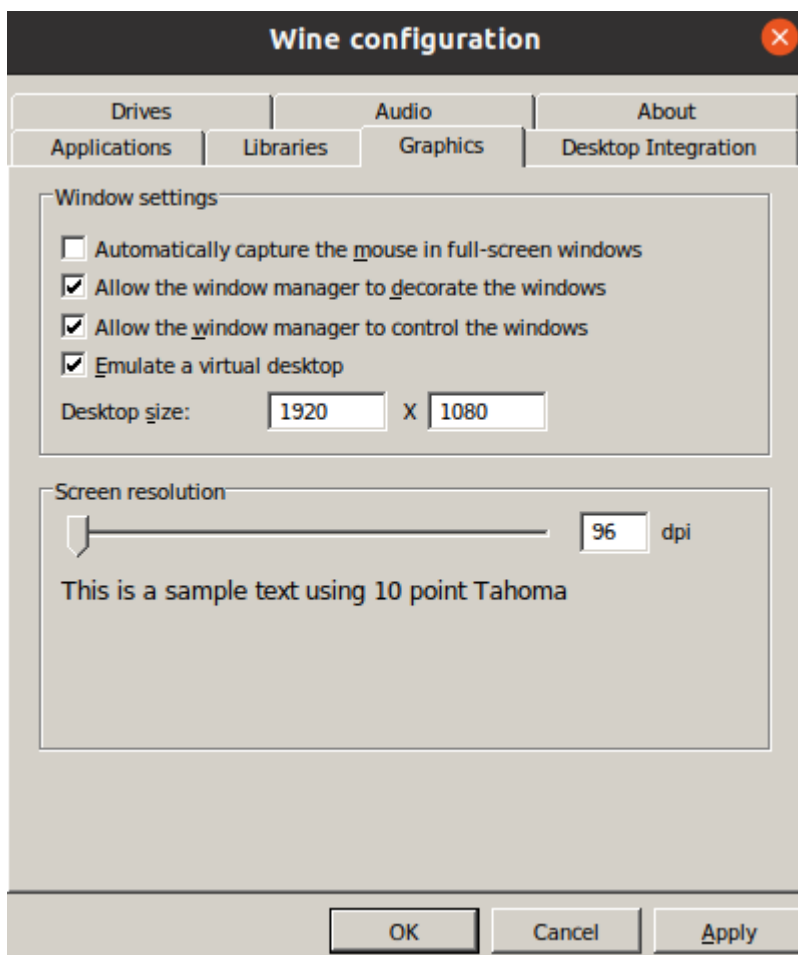
Choose number listed above:

Select 2, then 1, to install and run the racing sim. Follow the instructions carefully! If installing GPL demo rather than downloading and mounting the iso, remember to paste the path C:\Sierra\GPL when asked for GPL path, which happens twice during the install. If you don't succeed in installing GPL the first time, run TUE/uninstall.sh, which resets the installation process, and then start again.

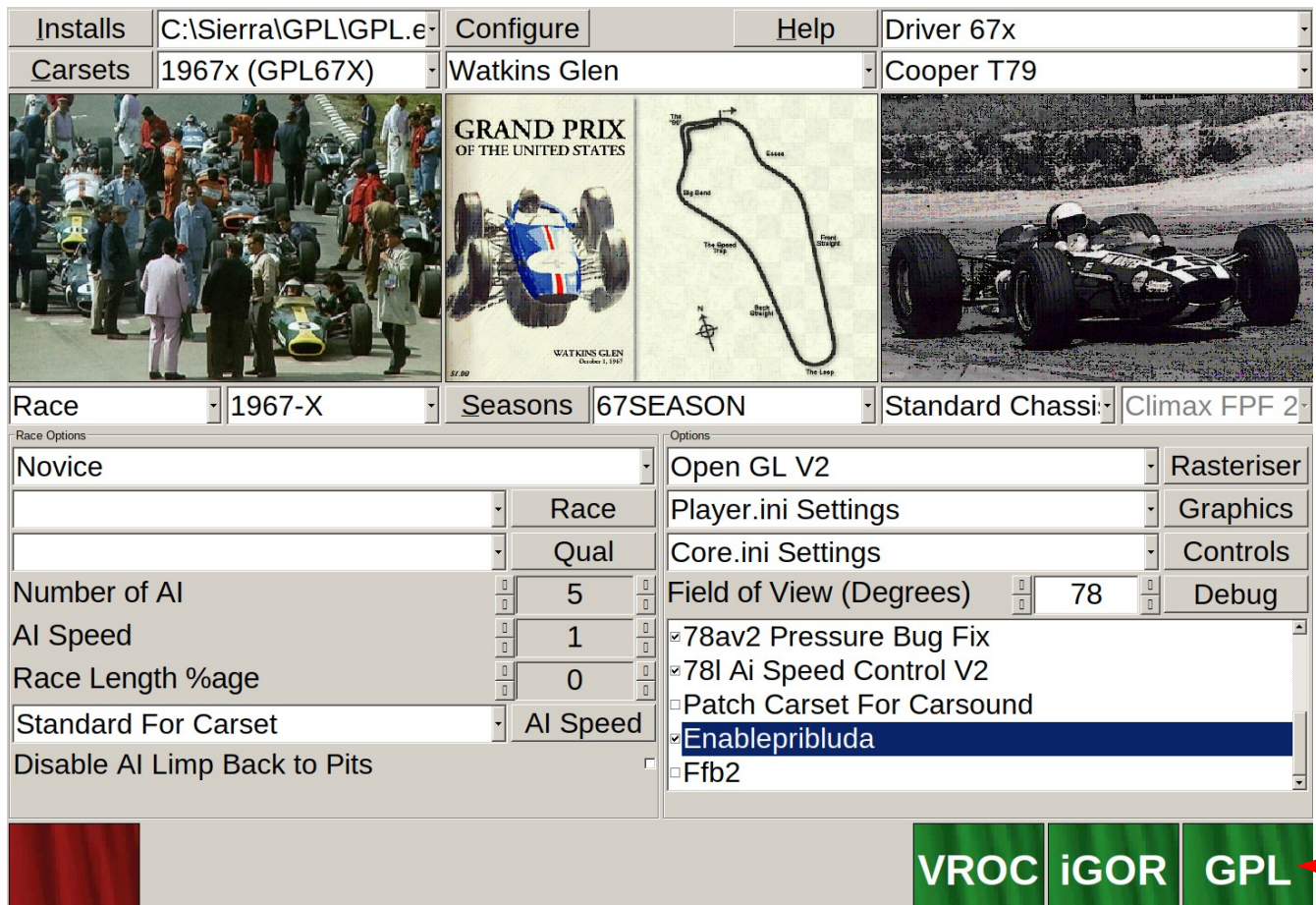
(Optional, but recommended) download and mount the Grand Prix Legends iso per the instructions

(Optional) buy and connect a Extreme3DPro USB joystick; the sims are configured to work with this joystick by default. Other game controllers can be used. It is even possible, though difficult, to run the sims with keyboard control only.

When prompted during installation, select Graphics/Emulate a Virtual Desktop, and enter your monitor resolution:



Select GPL on lower right to run Grand Prix Legends:



When sim racing with Grand Prix Legends, warm up your tires until the tire temperatures (show at lower left for the left/center/right of each tire) are green, which means the tires are at the optimal temperature for grip.

How to heat up tires on a classic racecar without aero by “drifting”, i.e. sliding sideways on turns:

It is both a learned technique and dependent on a good setup, GPL originally came with a second manual (The Art of Four Wheel Drift) describing it. Essentially you must balance the weight of the car such that you induce a controlled slide on corner entry - an initial oversteer so the back end slides, quick countersteer to catch that, enough throttle to maintain that sideways drift through the corner so on exit you are perfectly lined up for the next straight, then just power out. As much as learning how to do this is learning when not to do it, as it isn't suitable for every turn.

Once wings and, later, undercar tunnels providing massive downforce became the norm this technique virtually disappeared since the last thing you want in a high downforce car is for it to move sideways.

I found make big increases to the roll bars (e.g. 25%+) made it easier to learn to drift - even if the lap times were slower because those settings were too much for that.

Don't go flat out, go fast enough to go through the turns just lifting off the throttle, no braking. If you lift off sharply the rear of the car comes out, then you can steer the car through the turn on the throttle. After I got comfortable doing that, I started combining drifting through and out of the turns with drifting into them, by trail braking.

Then for me the final thing was being aware of the difference between rotating the car and turning it through the corner, and using the brakes to control the former.

One thing is for sure, you can control/manage your tiretemps by your driving. Pushing more on entries when the fronts are too cold, and pushing more on exits when the rears are too cold. And keeping the momentum/speed up. This all helped by having a fitting setup for your driving style.



Before exiting Grand Prix Legends, save a replay by selecting the file icon (in middle right row of icons, second from right).



Next, run `./launcher.sh` again and choose 3, WED: Deep Learning Chess

WED: Deep Learning Chess

CurrentScore: 0

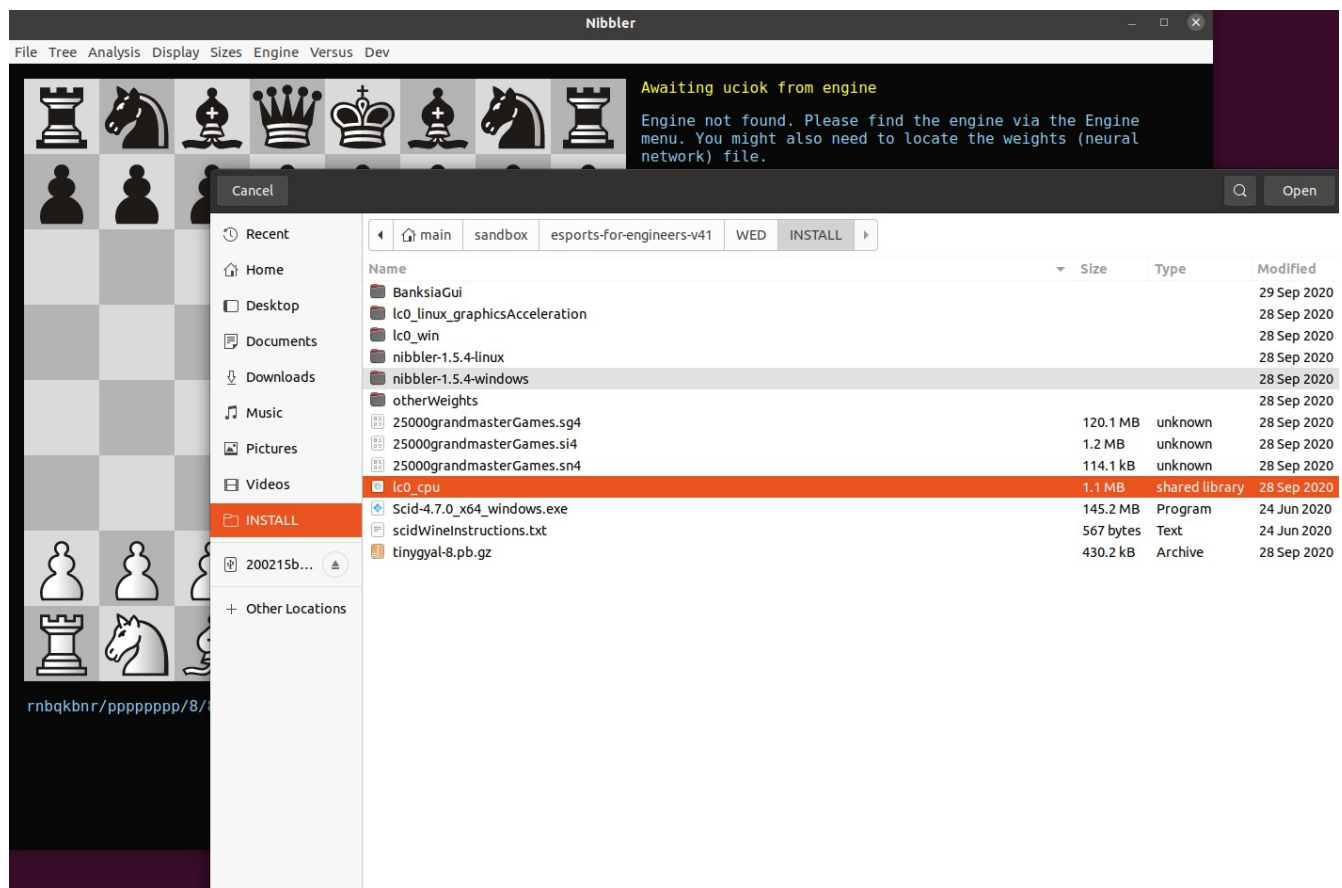
- [1] Deep Learning Chess
- [2] Chess Analysis
- [3] Chess Statistics
- [4] How To Calculate Score
- [5] Enter New Score
- [6] Return to Main Menu

Choose number listed above:

Choose 1, Deep Learning Chess.

Select Engine/Choose engine

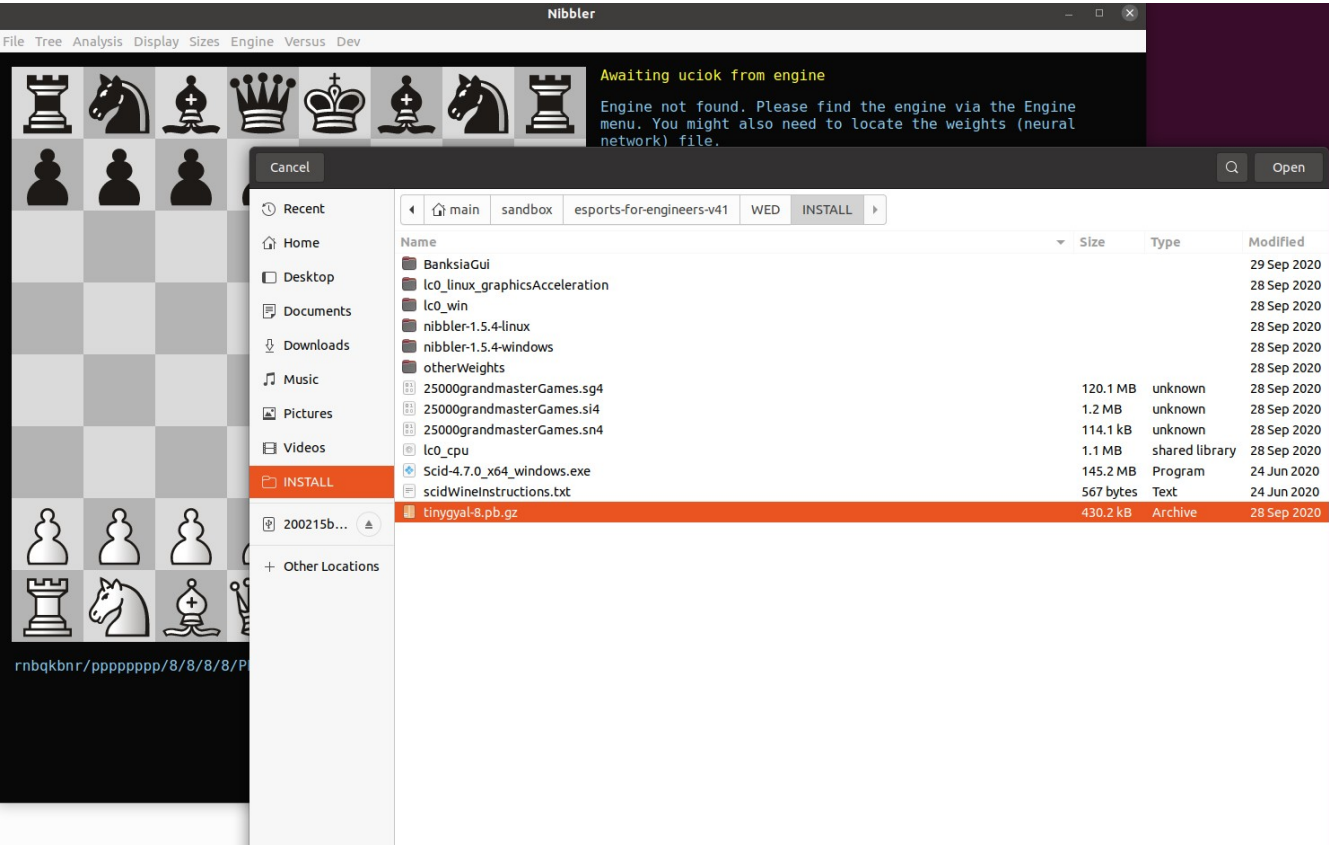
then navigate to WED/INSTALL/lc0_cpu



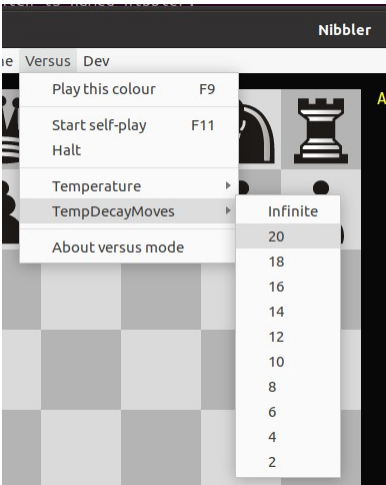
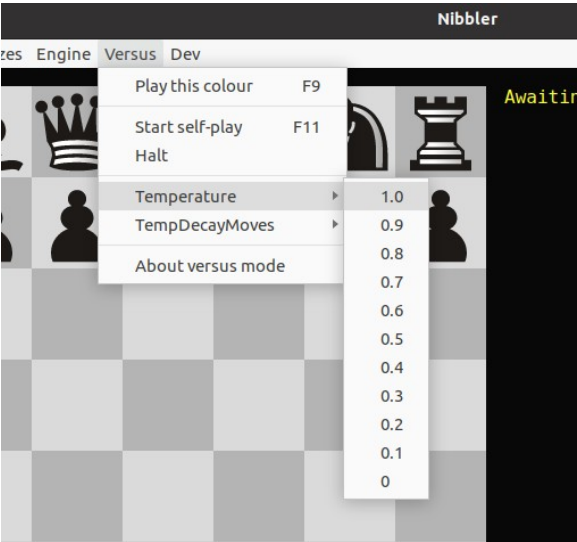
Select

Engine/Choose weights file

then navigate to the smallest (and weakest) opponent, tinygyal-8.pb.gz

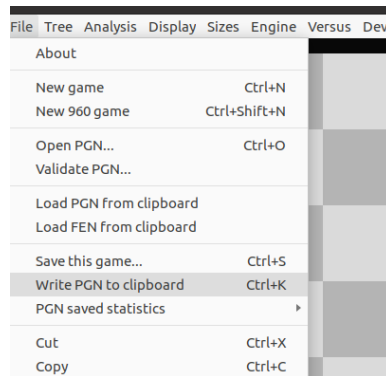


To reduce engine strength and make play more creative, set Versus/Temperature to 1 and Versus/TempDecayMoves to 20:



Make your first move and then select Versus/Play this color to play start a game.

After playing the game, copy the game to the clipboard:



Exit, run ./launcher.sh again, and select Chess, then Chess Analysis:

WED: Deep Learning Chess

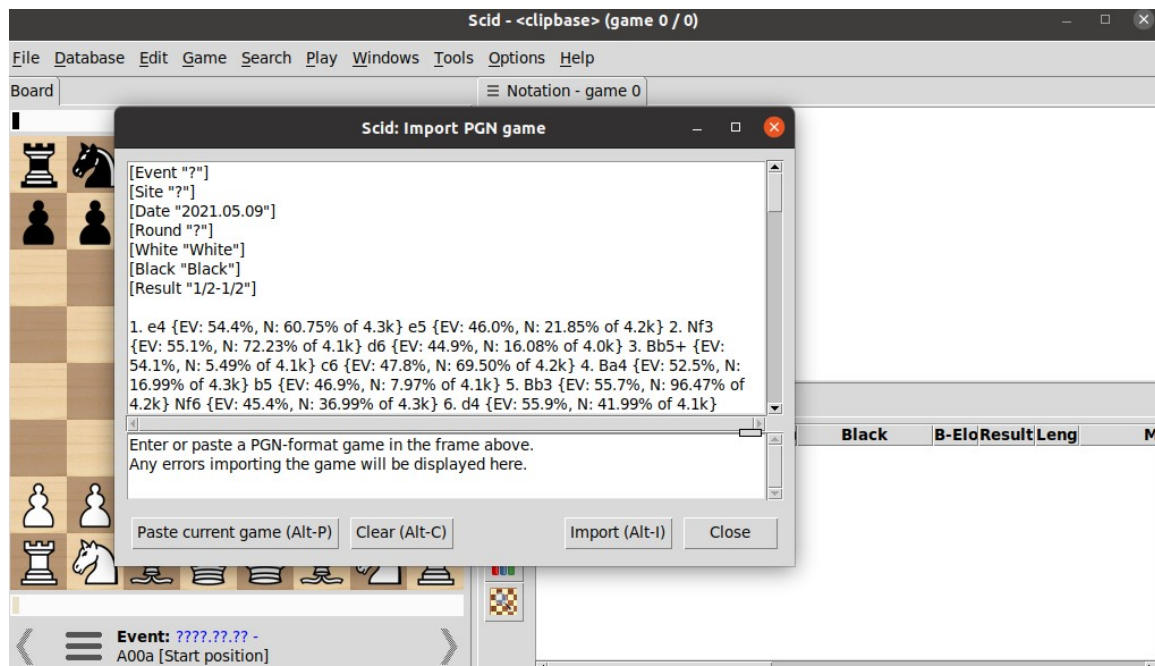
CurrentScore: 0

- [1] Deep Learning Chess
- [2] Chess Analysis
- [3] Chess Statistics
- [4] How To Calculate Score
- [5] Enter New Score
- [6] Return to Main Menu

Choose number listed above:2

Running WED/scid.sh

press Enter to continue:



In Scid,
select
Edit/Paste
Clipboard
text as
PGN game,

Then in the notation tab, right click and select remove comments. Select the first move in the notation window. In Tools/Analysis Engine select New, then type the name “stockfish” in the top two text fields. In the Analysis: Stockfish tab, click on the notebook icon, set the blunder threshold to 2, and select “OK” to start the analysis of your nibbler game.



After the analysis is complete, select Edit/Copy Game to Clipboard, then paste it into a text file (with suffix .pgn) in WED?afterGameReport. Calculate your score for WED and enter your score, using the same procedure as with MON and TUE.

Restart ./launcher.sh

Now choose THU.

Select 5, Korean War:

THU: Historical Flight/War Sim

CurrentScore: 0

[1] Battle of Britain

- [2] Basic Flight Training
- [3] RAF training
- [4] Axis training
- [5] Korean War
- [6] UN training
- [7] Red training
- [8] How To Calculate Score
- [9] Enter New Score
- [10] Return to Main Menu

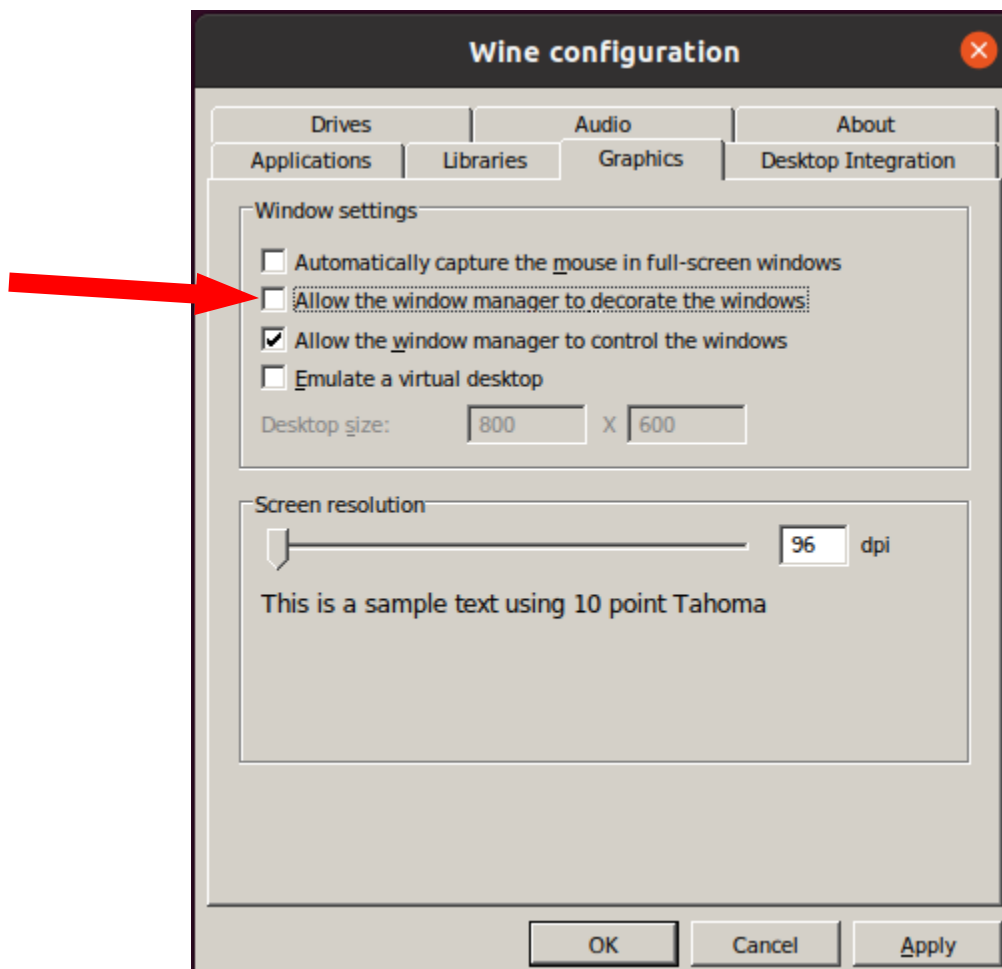
Choose number listed above:5

Running THU/MigAlley/migAlley.sh

press Enter to continue:

Copy and paste the provided “sudo iso mount -o loop ...” line in the terminal. Type in your password to execute this sudo command. Then run ./launch.sh again, choosing Korean War again. This time, the Korean war sim will be installed.

As instructed by the script, choose Windows XP as the windows version, then in the graphics tab remove the tick mark next to ... decorate the windows”



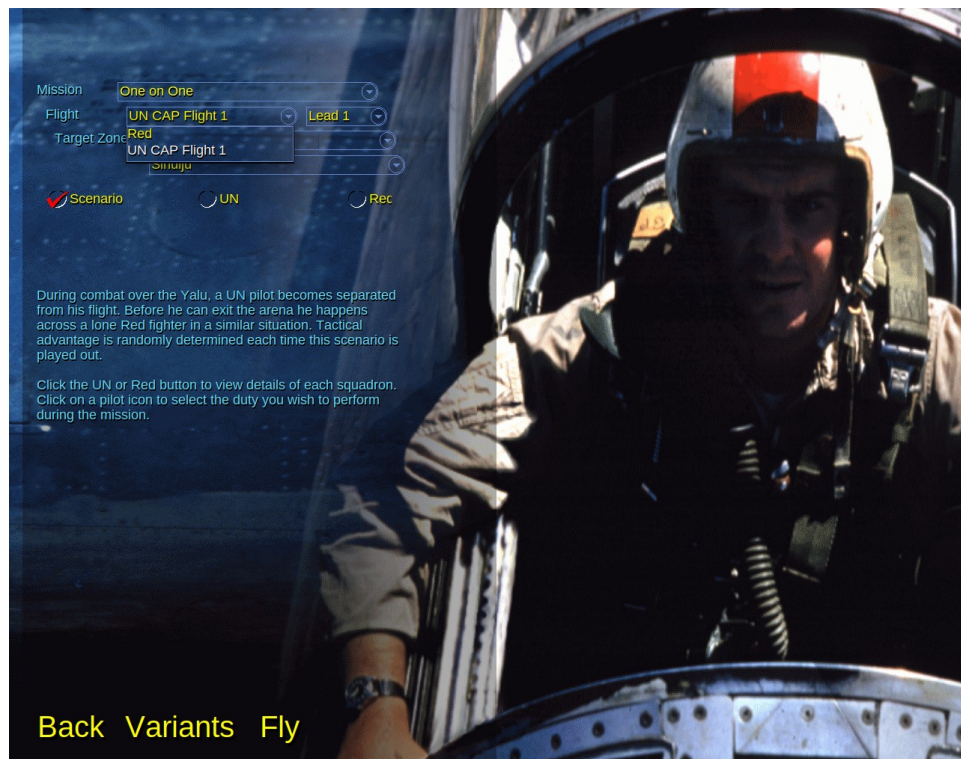
As instructed by the script, remove the tick mark next to ... decorate the windows.”

It is recommended with this game to use a dual-monitor setup, where the two monitors have the same resolution. If you have only one monitor, select “Emulate a virtual desktop” and enter your monitor resolution. If using only a single monitor, single mission works fine, but for campaign you’ll need to change graphics settings every time you switch between 2D and 3D view (see THU/MigAlley/DEBUG and THU/MigAlley/DOC.)

Once Mig Alley is installed and running, select PREFERENCES, then select the maximum available resolution, and maximum settings for all other graphics options. In the Controls tab, select and enable y



our To fly a Mig 15 in the one on one dogfight mission, choose Red flight as shown. To exit the 3D mode, press <ALT> X.



As a Mig 15 pilot, choose opponent skill level as shown:



Save your replay; select **REPLAY** from the main menu. Under **Current File**, type a name for the replay. Then select **“SAVE”**.



Calculate your score and enter your **THU** score as for previous days. Then, for **FRI**, choose AI tutor:

FRI: Deep Learning Weiqi

CurrentScore: 0

[1] AI tutor

[2] Board with training

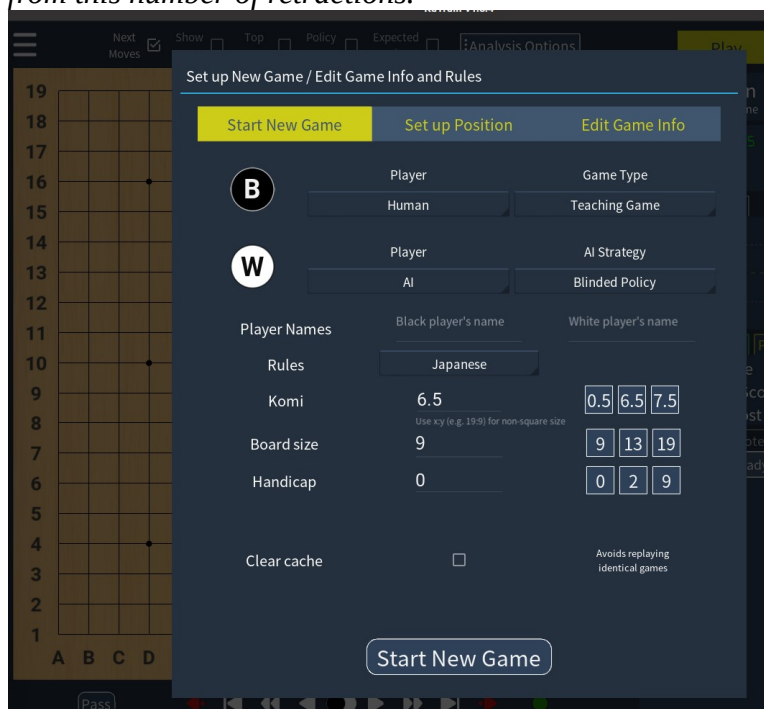
- [3] Heat Map Board
- [4] Analysis
- [5] How To Calculate Score
- [6] Enter New Score
- [7] Return to Main Menu

Choose number listed above:1

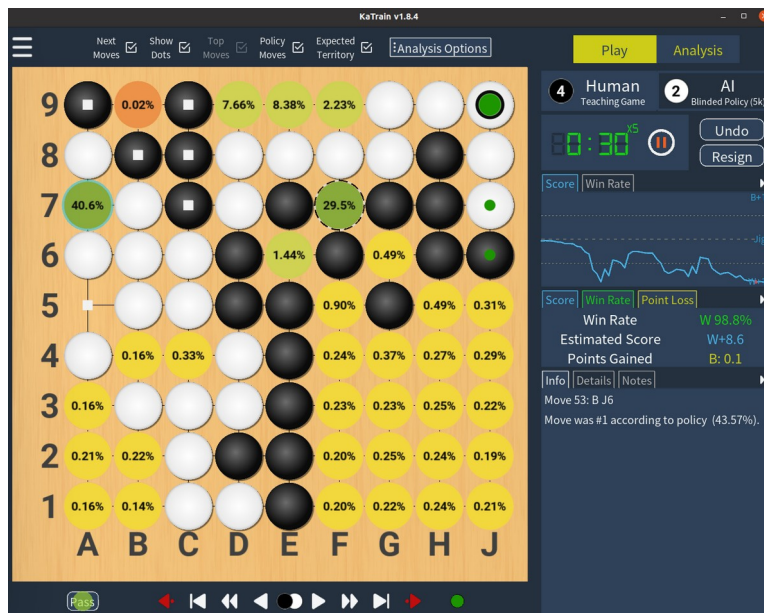
Running FRI/KaTrain.sh

press Enter to continue:

After waiting for KataGo to tune settings, choose Start New Game, then Game Type Teaching Game. Select an AI opponent with a (relatively) weak strategy such as blinded policy. Set a small board size, such as 9. Keep track of the number of times the AI retracts your move – we will use the OKR which calculates your score from this number of retractions.



The FRI games have excellent game analysis graphics, available as you play the game.



Save your game. Calculate score and enter score as usual.

SAT: Flight/War Sim (Advanced)

CurrentScore: 0

- [1] US training**
- [2] Soviet training**
- [3] flight and war sim**
- [4] checklist training**
- [5] Replay**
- [6] flight/war sim (limited scope)**
- [7] How To Calculate Score**
- [8] Enter New Score**
- [9] Return to Main Menu**

Choose number listed above:3

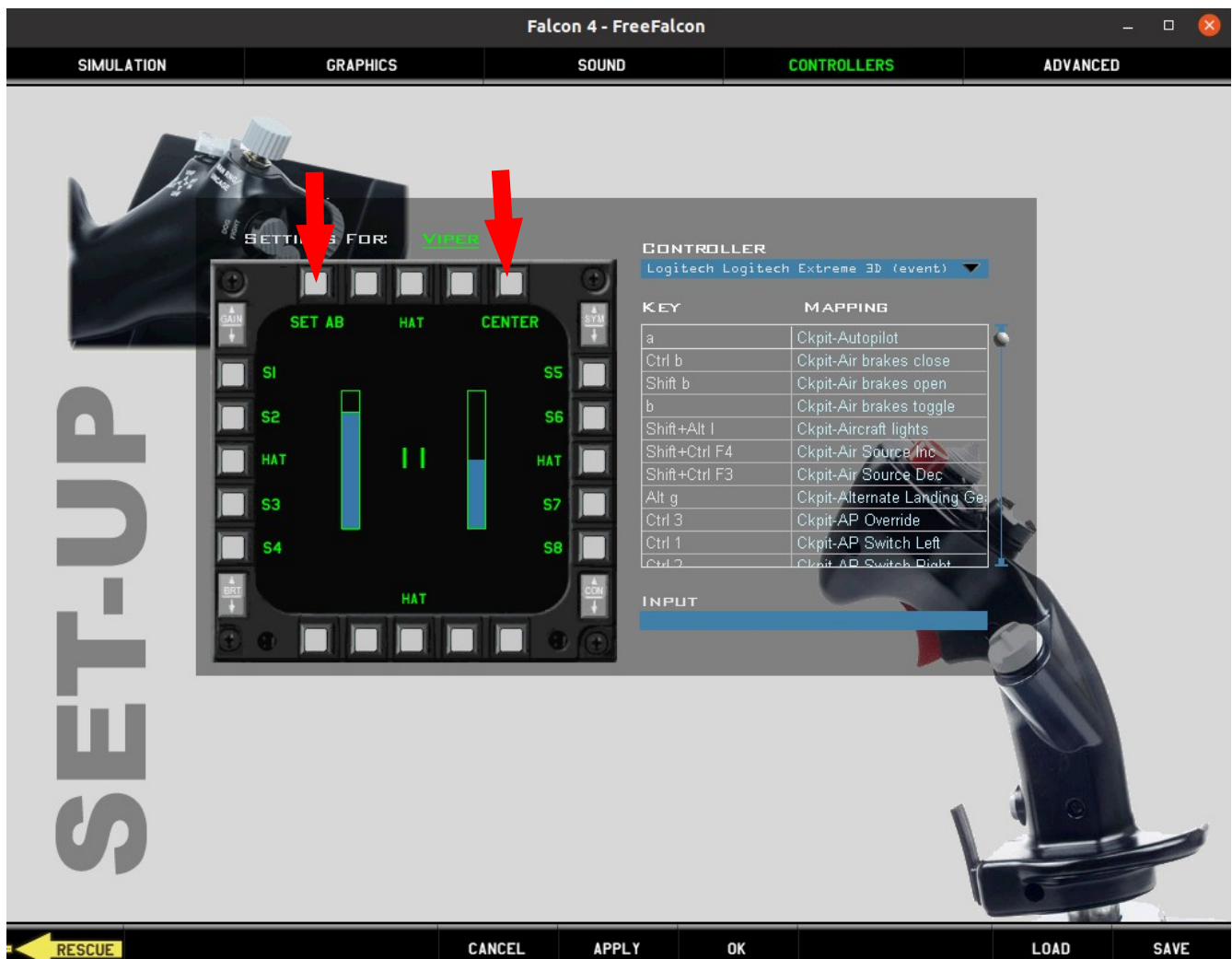
Running SAT/freeFalcon.sh

Choose flight and war sim for your SAT game (see above). This is the freeFalcon version of Falcon 4, released in 2013.

The manual at SAT/DOC is essential reading. While this manual is written for an earlier, simpler version of Falcon 4, almost every command and description in the manual also applies to freeFalcon. Also skim the rest of the documentation in SAT/DOC/Additional Documentation.

The command reference table at SAT/Falcon4KeyboardCommands.pdf is also useful. Pay particular attention to the keyboard commands listed as essential.

When starting freeFalcon for the first time, choose SETUP then ADVANCED/FLIGHT CONTROLS to make sure that your throttle and rudder are configured correctly. Then in SETUP/CONTROLLERS, set your throttle to about 90% and select the white square above SET AB. This engages afterburner when your throttle exceeds 90%. Also select CENTER to center your joystick.



Read “How to Calculate Score” and enter your new score as in previous examples.

The SUN game gives you the choice of playing “Republic: The Revolution”, a innovative game, or revisiting your weakest event from MON ... SAT, trying again, and entering a new score for that game as your SUN score (see the SUN “How To Calculate Score” for details.)

When you’ve completed an entire week of games, choose “Export Scores and game output files” to create a tar file record of your games and scores. If you want to discuss your results or get help with installation issues, register for the eSports for Engineers forum at this link:

<https://fosstodon.org/invite/dTC9KBnA>