Spynaptron Install Guide
Version 1_1_15

Before you begin make sure your Graphics Card has at least 4GB of VRAM and is listed on this NVidia website of CUDA capable cards here :-
https://developer.nvidia.com/cuda-gpus

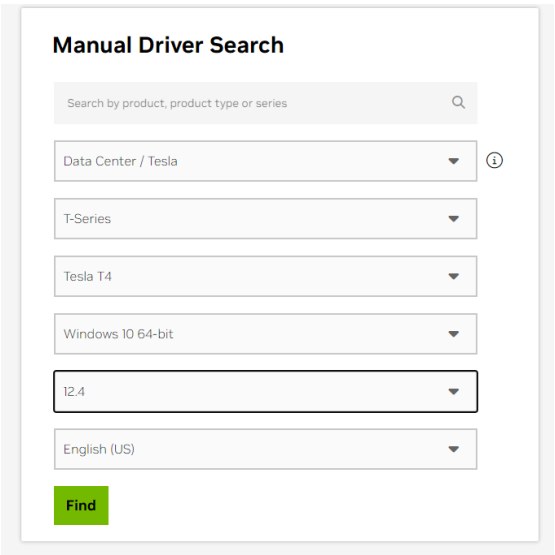
Step 1, Install / Verify version of Graphics Driver.

Regardless if this is a machine with the graphics driver already installed or a new install we will go to the nvidia driver site to check the version is compatible and then download and install if necessary

The Nvidia Driver website is here ➖

https://nvidia.com/en-us/drivers

Choose your hardware and Windows version.



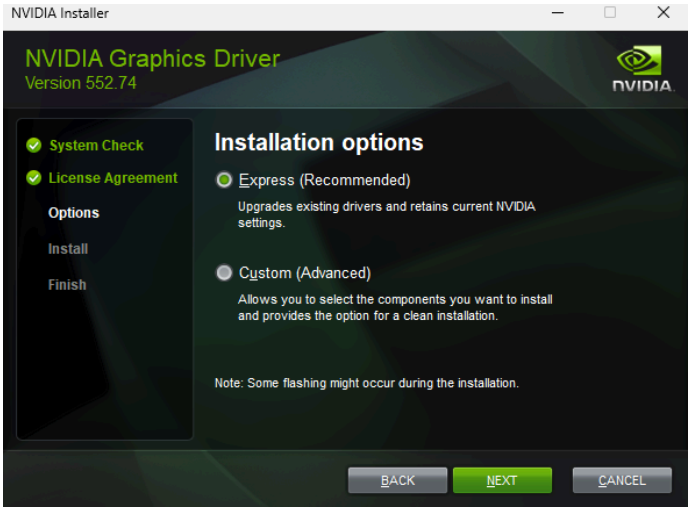
Make sure to select CUDA 12.4

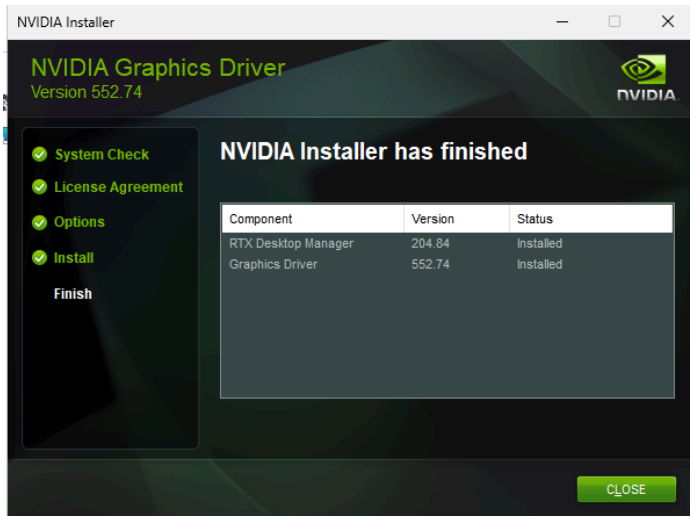
IF this is a new install simply Download the file and Launch the installation process.

OR

IF you already have a driver installed make sure it is Greater than the version indicated on the NVidia website just prior to View and Download.

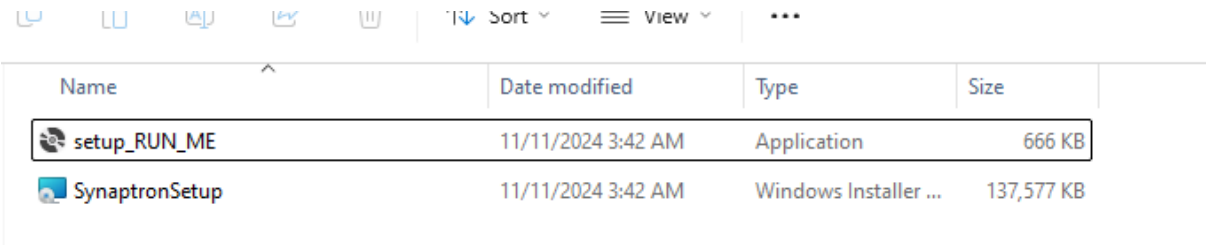
Driver Version:	CUDA Toolkit:	Release Date:	File Size:	Info:	
552.74	12.4	Tue Jul 09, 2024	502.61 MB	Production Branch WHQL	View



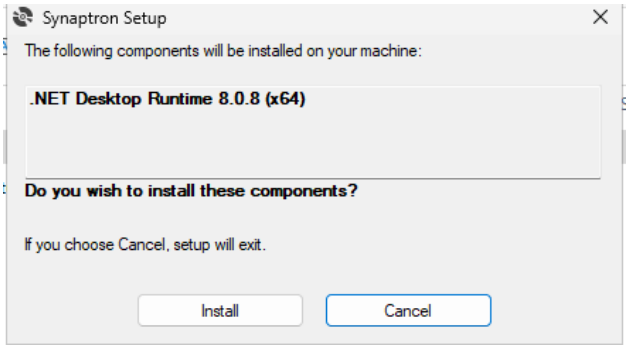


Step 2, Install Synaptron Application.

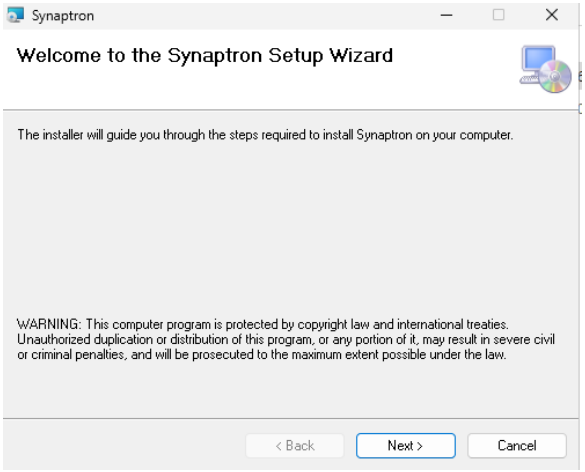
Launch Setup_.exe, you may get this preliminary step below if your machine does not have .net desktop runtime 8 already installed.



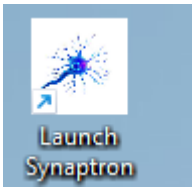
NOTE YOU MAY GET MESSAGES FROM WINDOWS USER ACCOUNT CONTROL ABOUT PERMISSION TO INSTALL, YOU CAN SAFELY ANSWER YES TO THESE



After this you will see the Synaptron setup wizard where you can simply press next until you get to the end of the process.



Once this install is complete, launch Synaptron from this desktop icon.

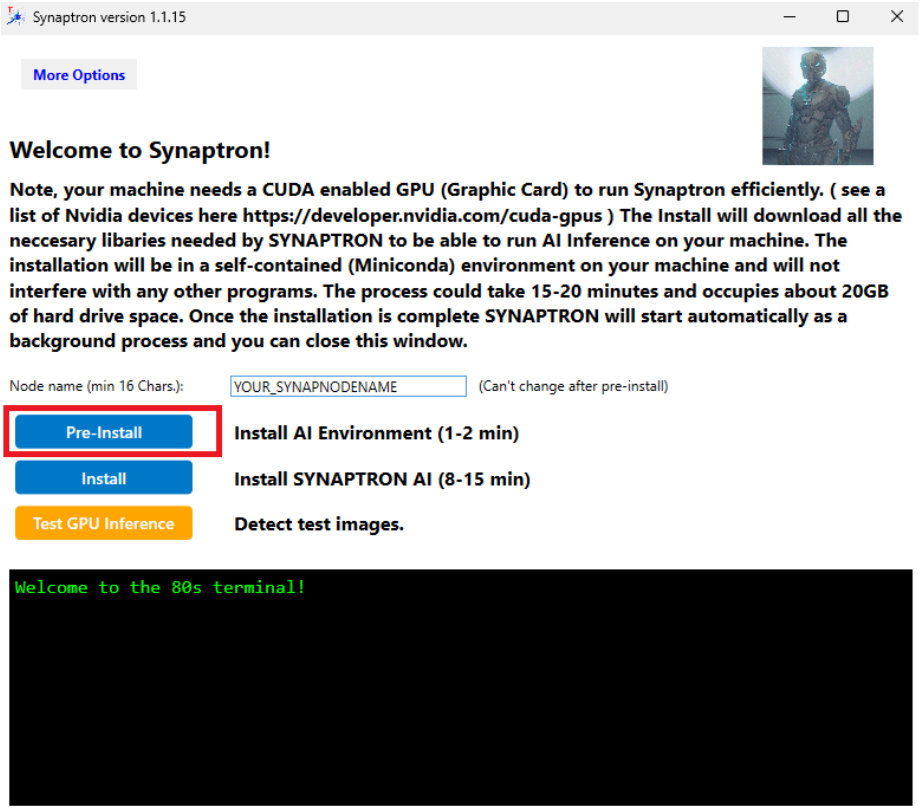


Step 3, RUN Synaptron Application and install inference engine.

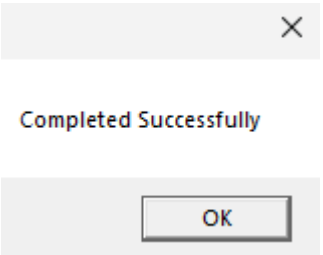
Here you will need to follow 3 steps (2 Blue buttons then one optional Orange)

FIRST PICK ANY NODE NAME YOU LIKE THAT IS 16 OR MORE CHARACTERS
TYPE THIS NAME INTO THE BOX LIKE THIS

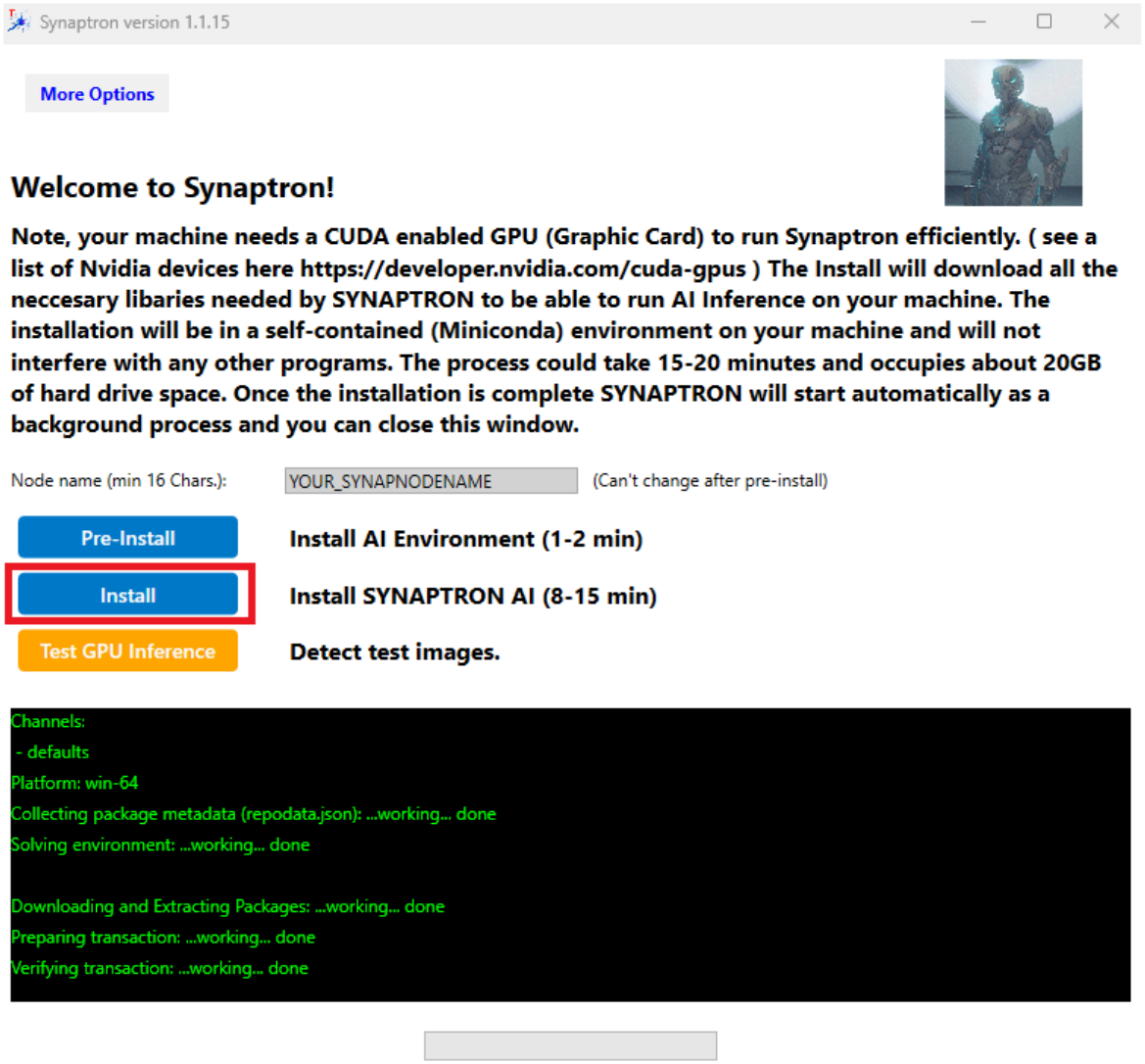
PRESS "Pre Install" - This takes 1-2 minutes and installs the required Python version and the Conda environment management software. Press the blue button and wait for the process to complete, on completion you will see the output below.



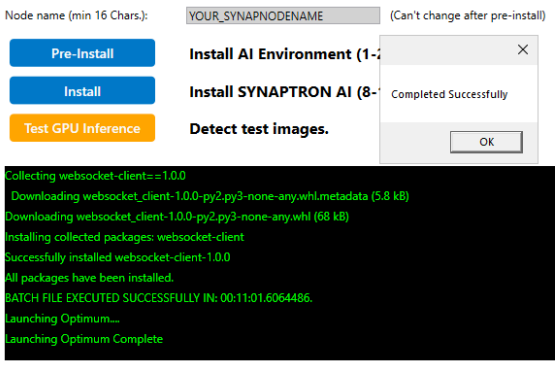
When this is complete you will see:-



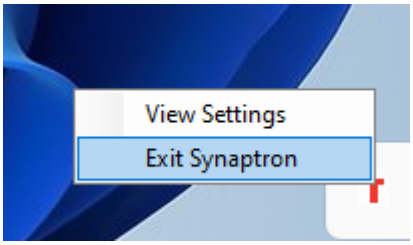
Next PRESS Install - This installs all the libraries required to run Synaptron, Machine Learning and CUDA. Press the blue button and wait for the process to complete.



On Completion ,



Restart Synaptron



And reopen by clicking on the synaptron icon on the desktop…

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Congratulations you are DONE, and have completed the Synaptron node installation.

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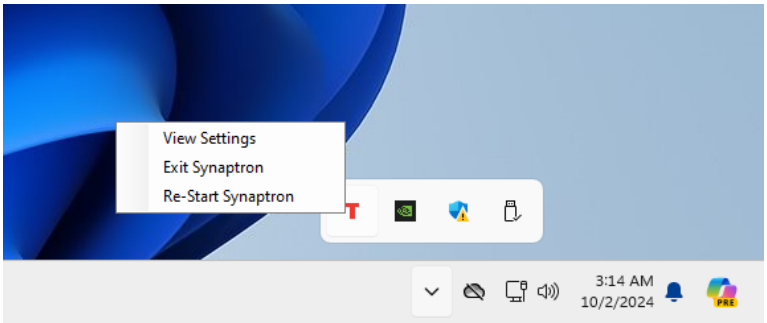
NOTE : At this point you are all done and you can safely close the main window and Synaptron will keep running in the background in the system tray as shown below.



(optional) If you want Synaptron to launch automatically after a reboot please follow these additional steps:-

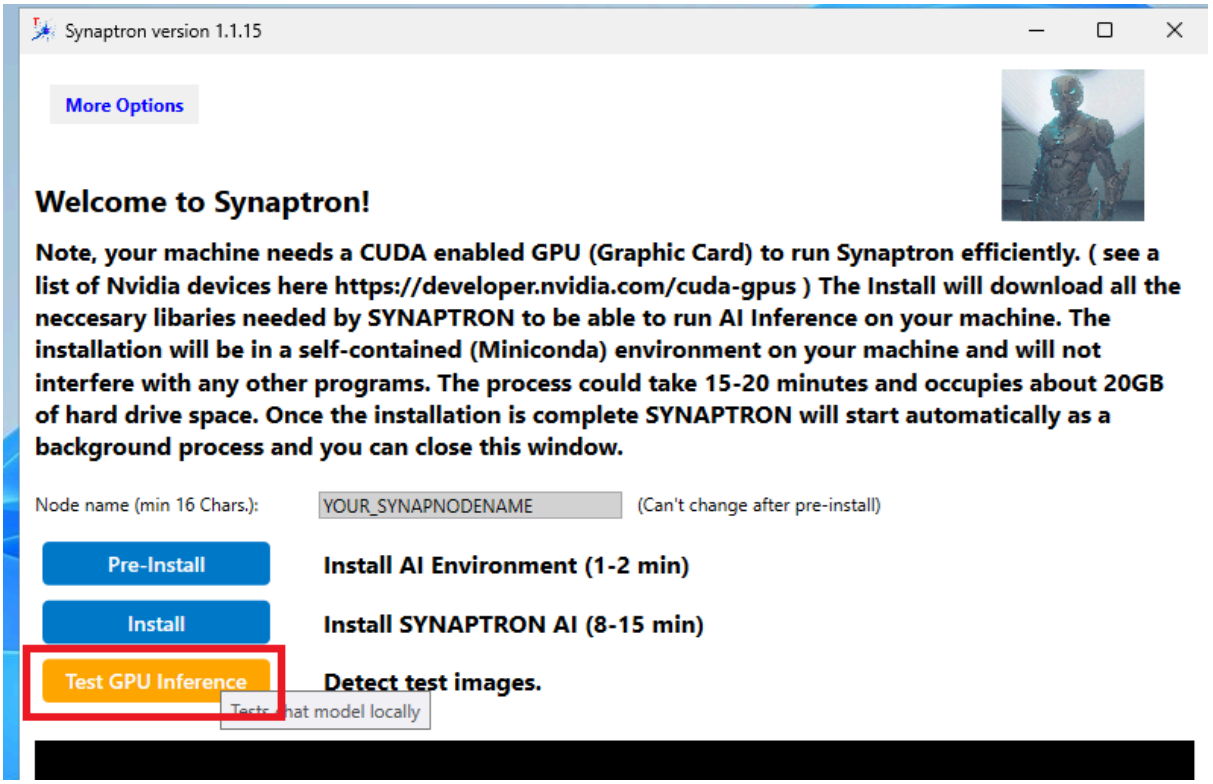
Add to the Startup Folder

1. Press `Win + R` to open the Run dialog.
2. Type `shell:startup` and press Enter. This opens the Startup folder, where any shortcut placed will launch automatically at boot.
3. Create a shortcut to your system tray app's executable file:
    - Right-click in the folder, select **New > Shortcut**, and follow the prompts to locate your SynaptornAgent exe file
      (default = C:\Program Files\Synaptron\SynapAgent.exe)
4. Once the shortcut is added to this folder, your app will start automatically on boot.

Test Image Detection (optional) -

This loads the image detection model into GPU memory and scans some standard images to verify that the inference is running…

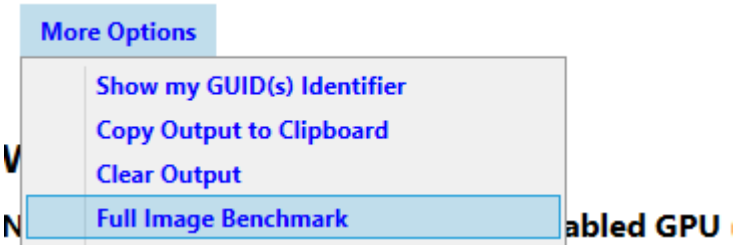
Click the orange Button



Output should be something like this

Full Image Benchmark..(optional)

Tests processing of 50 images as a speed benchmark…



Output will be something like this:-