

April, 2018

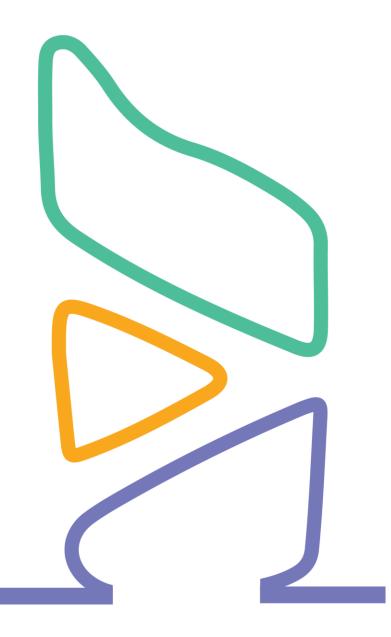




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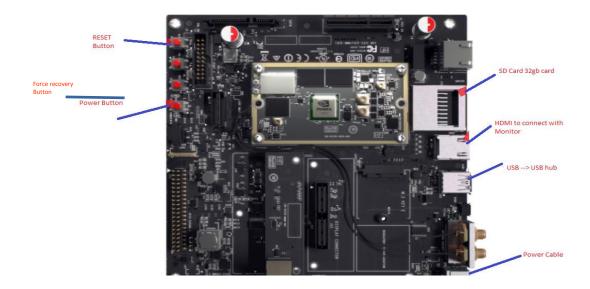


JETSON BOARD PREPARATION.

Please follow the following steps to setup Security and Surveillance Stack.

NOTE: Assumption is Devices are new and blank.

Nvidia Jetson:-



A. Board Preparation:

1. Download Nvidia Jetson Jetpack for flashing:

https://developer.nvidia.com/embedded/jetpack

- 2. Create a folder named **jetson_jetpack** for installation of Jetpack libraries.
- 3. Place the downloaded JetPack-\${VERSION}.run (Eg: JetPack-L4T-3.1-linux-x64.run) file in this folder
- 4. Add exec permission for the JetPack-L4T-3.1-linux-x64.run -

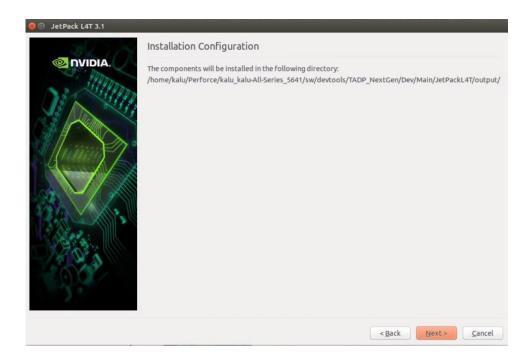


chmod +x JetPack-L4T-3.1-linux-x64.run

5. Run JetPack-L4T-3.1-linux-x64.run in terminal on your host Ubuntu machine.

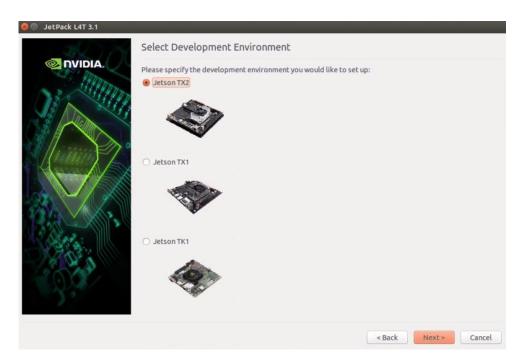


6. Next, the JetPack installer will indicate the installation directory.

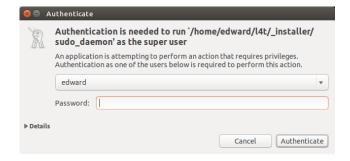




7. Select the development environment to setup.

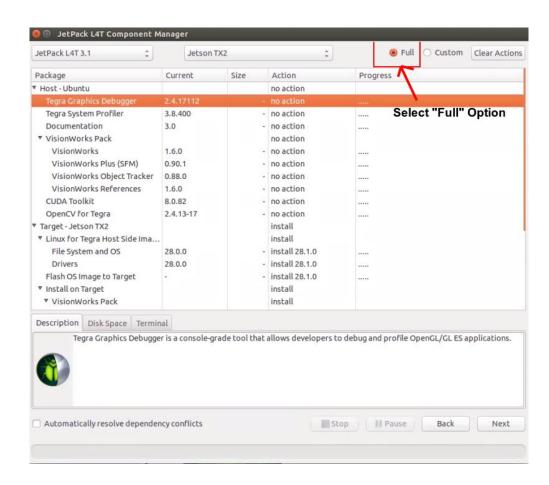


8. The JetPack installer will pop up a window to ask for permission to use during the installation process; you will need to enter your sudo password here



9. Select the **Full** option for installing all the packages on the jetson.

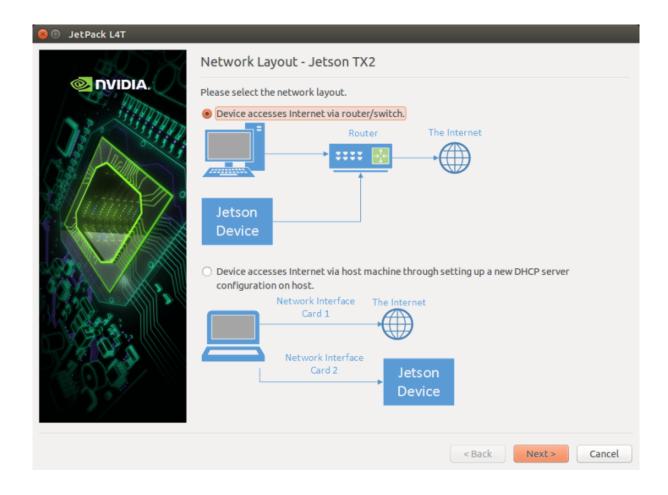




- 10. Accept the license agreement for the selected components.
- 11. The Component Manager will proceed with the installation. Once the host installation steps are completed, click the Next button to continue with the installation of target components.

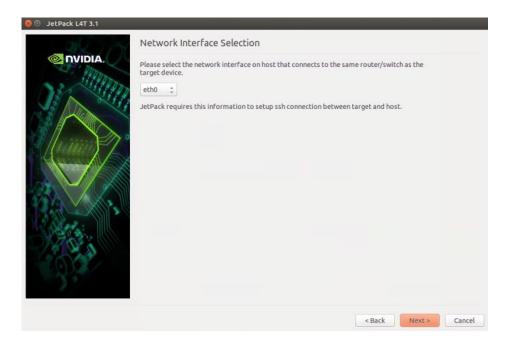


12. You will need to select the network layout for your specific environment.



13. If you selected the **Device access Internet via router/switch** layout, you will be asked to select which interface to use for Internet access.





14. A pop-up window will instruct you to put your device into Force USB Recovery Mode, so you can flash the OS.

```
Please put your device to Force USB Recovery Mode, when your are ready, press En ter key
To place system in Force USB Recovery Mode:

1. Power down the device. If connected, remove the AC adapter from the device. The device MUST be powered OFF, not in a suspend or sleep state.

2. Connect the Micro-B plug on the USB cable to the Recovery (USB Micro-B) Port on the device and the other end to an available USB port on the host PC.

3. Connect the power adapter to the device.

4. Press and release the POWER button to power on device. Press and hold the FOR CE RECOVERY button; while pressing the FORCE RECOVERY button, press and release the RESET button; wait two seconds and release the FORCE RECOVERY button.;

5. When device is in recovery mode, lsusb command on host will list a line of "N Vidia Corp"
```

Fix for this step:



Substep 4: Long press FORCE RECOVERY button, meanwhile press POWER button and release POWER button after a second. Then release FORCE RECOVERY button.

- 15. Next the host will try to identify the IP address of Jetson system. If it **gives up**, enter IP manually. (To know IP Jetson: Open Terminal on Jetson machine->**ifconfig**)
- 16. Make sure you are on **nvidia** user for further installations.
- 17. After obtaining the IP the host PC will install all the libraries on Jetson device.
- 18. After all the processing the host PC will give a 'Done Installation' message. Then Jetson is completely flashed .