

Getting Started – Nano Networking Appliance

1) Starting Device-Manager

After plugging in a serial-to-USB converter to a host system (in the following example we're using a Windows 10 – based system)

 \rightarrow Right klick on the Windows symbol \rightarrow Open the device manager



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2) Check Out COM-Port Number

Drop down the COM-Port interfaces and look for a USB-Serial device $\rightarrow~$ In our example it's COM5

| 击 Geräte-Manager | | | |
|---|--|--|--|
| Datei Aktion Ansicht ? | | | |
| ⇐ ⇒ 🖬 🗐 🛛 🖬 🖳 🖌 € | | | |
| ✓ ▲ DESKTOP-OBRPDH7 | | | |
| 🗸 🛱 Anschlüsse (COM & LPT) | | | |
| 🛱 Druckeranschluss (LPT1) | | | |
| 🛱 Kommunikationsanschluss (COM1) | | | |
| USB-SERIAL CH340 (COM5) | | | |
| > 💐 Audio, Video und Gamecontroller | | | |
| > 💐 Audioeingänge und -ausgänge | | | |
| > 💻 Computer | | | |
| > 🚍 Drucker | | | |
| > 📇 Druckwarteschlangen | | | |
| > 🛺 Eingabegeräte (Human Interface Devices) | | | |
| > 🏣 Grafikkarten | | | |
| > 📹 IDE ATA/ATAPI-Controller | | | |
| > 🚃 Laufwerke | | | |
| 🔉 🎒 Mäuse und andere Zeigegeräte | | | |
| > 🛄 Monitore | | | |
| > 🚅 Netzwerkadapter | | | |
| > 🔲 Prozessoren | | | |
| > 📱 Softwaregeräte | | | |
| > 🍇 Speichercontroller | | | |
| > 🏣 Systemgeräte | | | |
| > Tastaturen | | | |
| > 📮 Tragbare Geräte | | | |
| > 🏺 USB-Controller | | | |
| > 🚍 WSD-Druckanbieter | | | |
| | | | |



3) Start Putty

In that step you need to start the Tool "Putty" (or a similar tool of your favour) (Putty is a free SSH and telnet client for Linux and Windows)

You can download it here:

https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html

| 🕵 PuTTY Configuration | | ? | Х | |
|--|--|-----------------------|--------------|--|
| Category: Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Connection Proxy Telnet Rlogin SSH Serial About Help | Basic options for your PuTTY session Specify the destination you want to connect to Serial line COM5 Connection type: O Raw O Telnet O Rlogin O SSH O Serial | | | |
| | Load, save or delete a stored session Saved Sessions Default Settings | Load Save Delet | d e :e | |
| | Close window on exit: Always Never Only on clean exit Open Cancel | | | |

Enter these settings Notice that you have to fill in your specific COM-Port Number



4) After clicking on 'Open' a Terminal-Window will be opened



4) Adjust Account-Settings

You will be logged in as a normal user named 'pi'

 \rightarrow For changing to user "root" you have to enter the following command:

pi@NanoPi-Duo:~\$ su - root

Now you will be asked for the root password Enter ''fa''



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Now you are root with all it's privilleges. (Pls. be noted to pay attention on what you are doing as root!)

5) Network-Settings

Normally the Network-Manager is enabled and will assign your LAN-Adapter an appropriate IP-Address automatically. This address assignment is recommended by us.

You, as well, can manually adjust the address assignment in the file <u>/etc/network/interfaces</u>

In the following example a static IP-Address 192.168.0.111 will be assigned to interface eth0.

netmask, gateway and DNS-Server needs to be assigned as well.

(To check out your interfaces enter the command: ifconfig)

```
iface eth0 inet static
address 192.168.0.111
netmask 255.255.255.0
gateway 192.168.0.1
dns-search somedomain.org
dns-nameservers 192.168.0.1
```



When using the manual method of address assignment please notice to disable the Network-Manager in the file <a/>/etc/NetworkManager/NetworkManager.conf at first:

| [main] |
|--------------------------|
| plugins=ifupdown,keyfile |
| |
| [ifupdown] |
| managed=false |