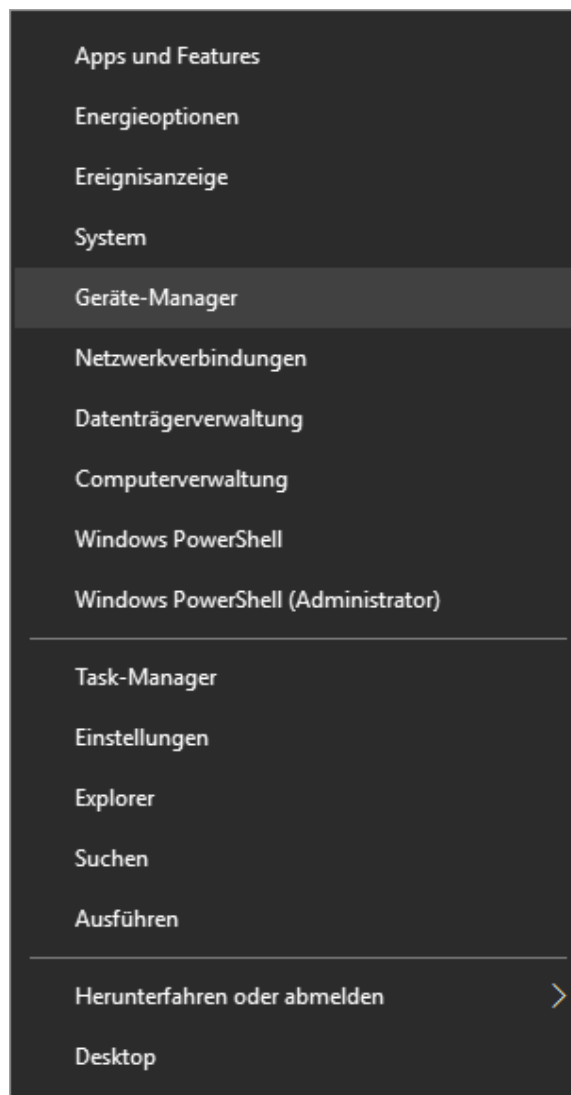


Getting Started – Nano Networking Appliance

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)

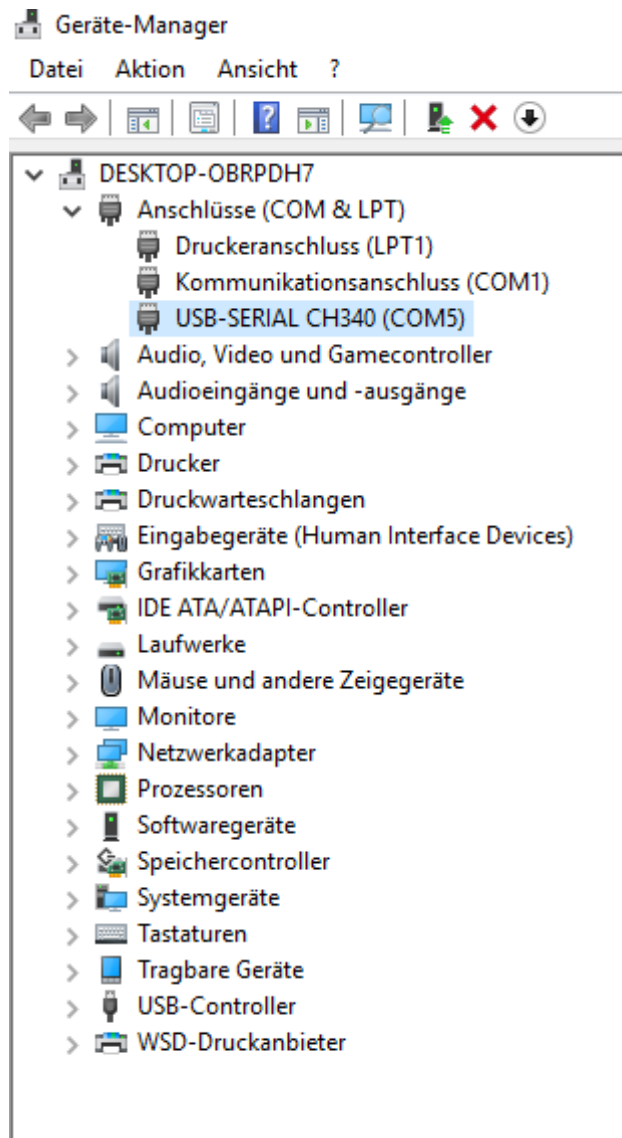
→ Right click on the Windows symbol → Open the device manager



2) Check Out COM-Port Number

Drop down the COM-Port interfaces and look for a USB-Serial device

→ In our example it's COM5

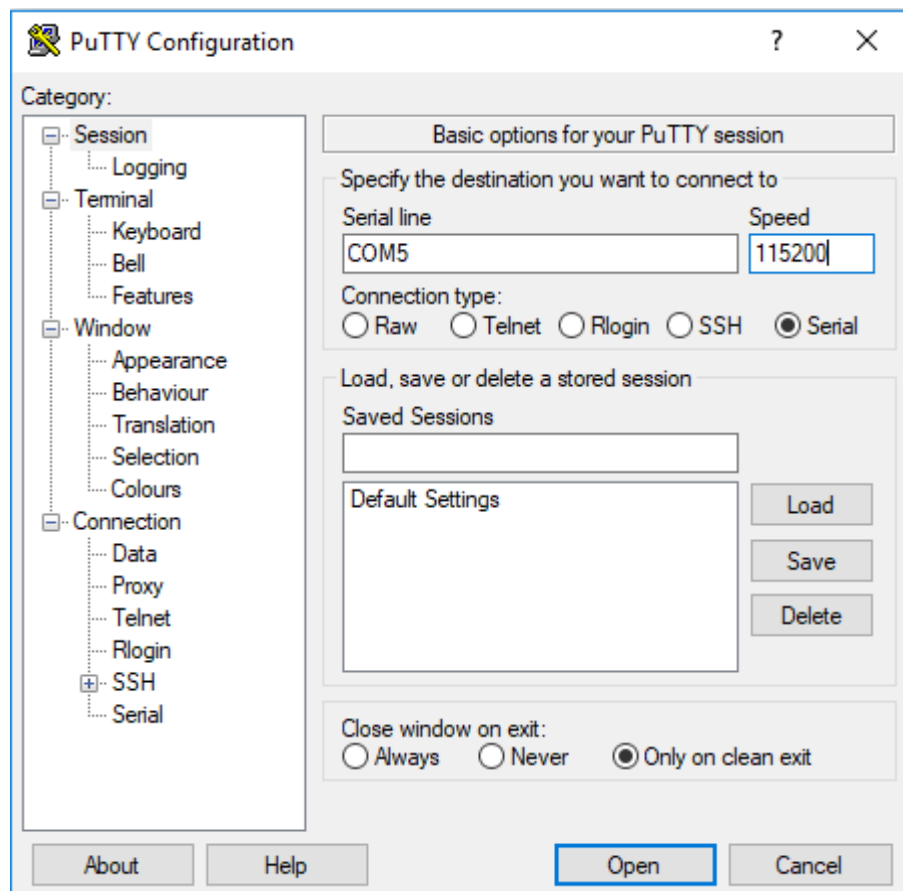


3) Start Putty

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>



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

```
Ubuntu 16.04.5 LTS NanoPi-Duo ttyS0
NanoPi-Duo login: pi (automatic login)
Last login: Fri Dec 14 15:25:22 UTC 2018 on ttyS0
          _   _
         | |_| | | | |
         | |_| | |_| |
         |  __/ | __/ |
         |_____|_____|
Welcome to Ubuntu 16.04.5 LTS 4.14.52
System load: 0.39          Up time:      29 sec
Memory usage: 8 % of 491Mb      IP:      192.168.178.158
CPU temp:    45°C
Usage of /:  14% of 15G

* Documentation: http://wiki.friendlyarm.com/Ubuntu
* Forum: http://www.friendlyarm.com/Forum/

pi@NanoPi-Duo:~$ █
```

4) Adjust Account-Settings

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

→ 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"

```
pi@NanoPi-Duo:~$ su - root
Password:
root@NanoPi-Duo:~# █
```



Now you are root with all it's privileges.
(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 /etc/network/interfaces

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 [/etc/NetworkManager/NetworkManager.conf](#) at first:

```
[main]
plugins=ifupdown, keyfile

[ifupdown]
managed=false
```