Managing Putty sessions and uploads

Sessions

Putty is the program that communicates between the Arduino and your PC.

In this document 'Arduino' means:
- Arduino UNO, Nano or MEGA module
- DCCNext
- LocoNext

Communication with Putty is always via a Windows COM-port.

If an Arduino is connected to an USB port Windows assigns automatically a COM-port to it.
Mostly the same COM-port is assigned to the same USB-port.
Via this COM-port you upload a program to the Arduino or communicates with a program already loaded on the Arduino. Putty uses so called *sessions* to configure the communication for a specific COM-port.
The configuration for a specific session is stored in the Windows registry.

Putty communication is always started with a specific session. Putty creates a connection between the COM-port specified in that session and the Arduino. The Window header of Putty shows the name of the session. The program loaded on the Arduino starts running.
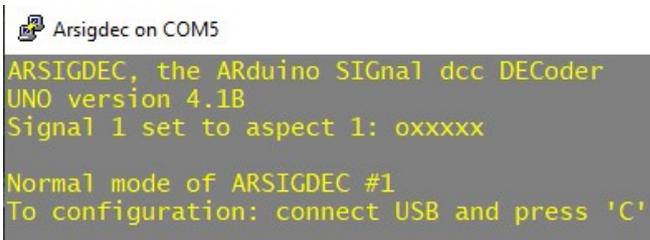
With the Arcomora management tool you can upload and create sessions for multiple Arduino's.
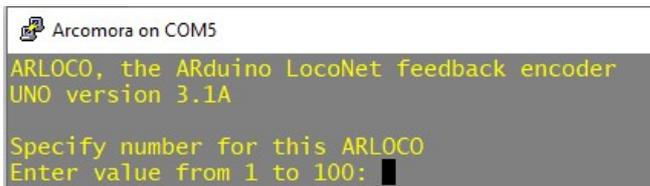You can use:
- A single session for all Arcomora modules.
Use always the same USB-port, to be sure that the COM-port does not change.
Name the session e.g. Arcomora

- A separate session for each module.
  Multiple sessions may share the same COM-port.

Please Note: Putty will ALWAYS start the program on the Arduino that is connected to the COM-port specified in the session! That means that e.g. if you start a session named ArLoco with COM-port 5 and COM5 is connected to an Arduino with Mardec then Mardec will start and not ArLoco.
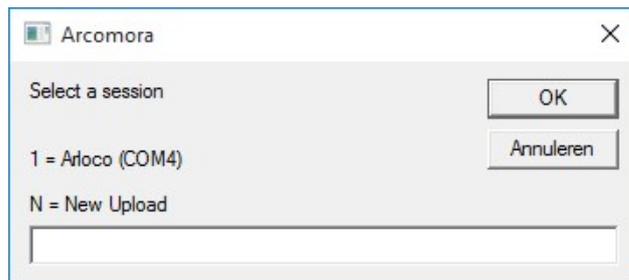
Uploading software

After installing the Arcomora software click on the Arcomora shortcut on the desktop.

If you have previously installed Arcomora software a list of existing sessions is showed.

You can type the number to start Putty.
You can also type 'N' for uploading a program to an Arduino.

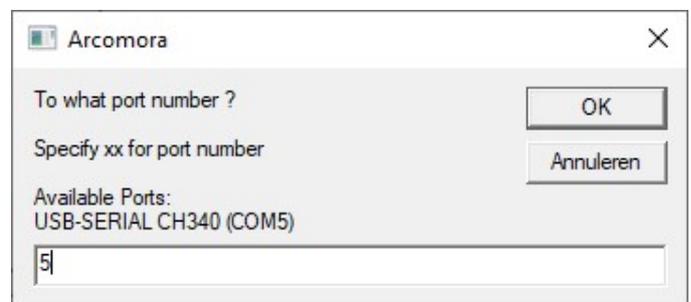If this is a new installation then the following message appears:

Click OK to start uploading an Arcomora program to your first Arduino/DCCNext/LocoNext.

Arcomora ✕

No sessions available
First Upload a program to an Arduino/DCCNext/LocoNext
Click OK or Cancel

OK   Annuleren
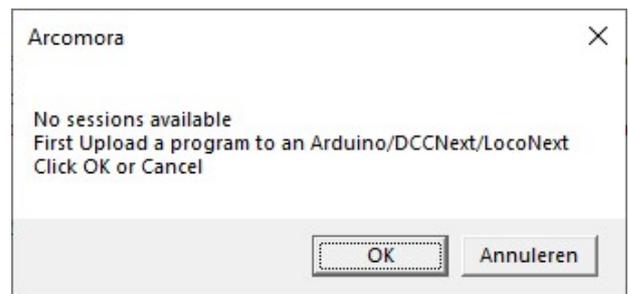
Now connect your Arduino to an USB port.
Or connect a DCCNext or LocoNext with the USB-CH340 interface to an USB port.
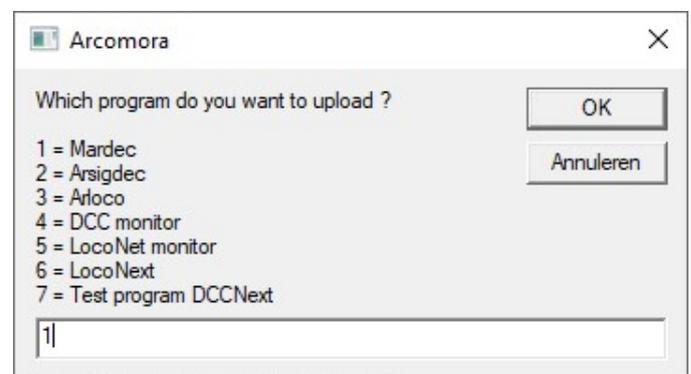Click 'Yes' to continue.

Arcomora ✕

❓ Is the Arduino/DCCNext/LocoNext connected to an USB port ?

Ja   Nee

A list of available COM-ports is shown.
Type the number of the correct COM-port and click 'Ok'.

Arcomora ✕

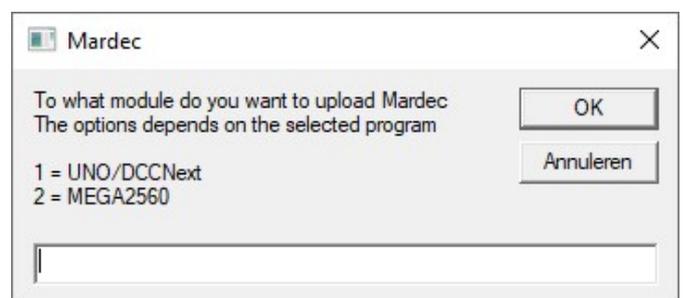To what port number ?   OK

Specify xx for port number   Annuleren

Available Ports:
USB-SERIAL CH340 (COM5)

5

Now you can select which program you want to upload.

Type the number of required program and click 'Ok'

Arcomora ✕

Which program do you want to upload ?   OK

1 = Mardec   Annuleren
2 = Arsigdec
3 = Arloco
4 = DCC monitor
5 = LocoNet monitor
6 = LocoNext
7 = Test program DCCNext

1

Select the connected device and click 'Ok'.
Not all programs can be uploaded to all possible devices. Therefore you see only relevant devices

.

Mardec ✕

To what module do you want to upload Mardec   OK
The options depends on the selected program
    Annuleren
1 = UNO/DCCNext
2 = MEGA2560

Now confirm you want to upload the chosen program.

Arcomora ✕

❓ Upload Mardec to module UNO/DCCNext on port COM5 ?

Ja   Nee

Now the program is uploaded to the Arduino, DCCNext or LocoNext


```
C:\WINDOWS\system32\cmd.exe

Now uploading Mardec to port COM5 on Arduino UNO

avrdude.exe: AVR device initialized and ready to accept instructions

Reading | ################################################## | 100% -0.00s

avrdude.exe: Device signature = 0x1e950f (probably m328p)
avrdude.exe: reading input file ".\Mardec.hex"
avrdude.exe: input file .\Mardec.hex auto detected as Intel Hex
avrdude.exe: writing flash (32178 bytes):

Writing | ################################################## | 100% 5.94s

avrdude.exe: 32178 bytes of flash written
avrdude.exe: verifying flash memory against .\Mardec.hex:
avrdude.exe: load data flash data from input file .\Mardec.hex:
avrdude.exe: input file .\Mardec.hex auto detected as Intel Hex
avrdude.exe: input file .\Mardec.hex contains 32178 bytes
avrdude.exe: reading on-chip flash data:

Reading | ############ | 24% 1.11s
```

When finished the following message appears:

Mardec

Mardec is succesfully installed on your Arduino/DCCNext!
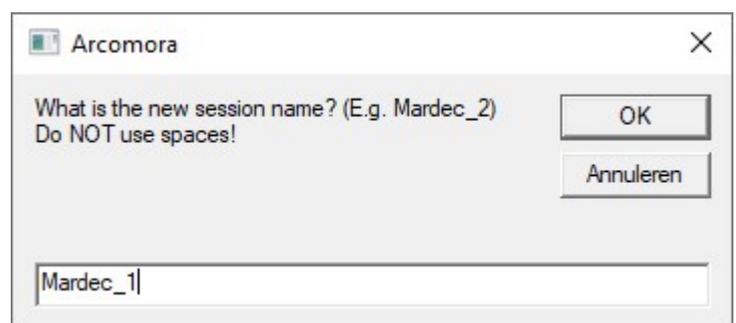
OK
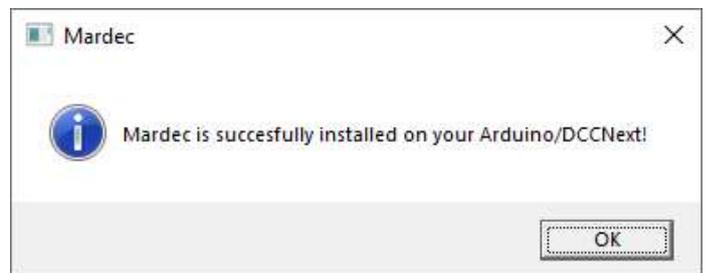
The next step is to create a session for this upload.

If you uploaded to an existing session then you don't need to create a new session

After the first upload you MUST answer with 'Yes'

Arcomora

Do you also want to create a new session?

Ja   Nee

Enter a name for this session and click 'OK'
Do NOT use space characters.

Arcomora

What is the new session name? (E.g. Mardec_2)
Do NOT use spaces!

OK
Annuleren

Mardec_1

Start the session if you want to.
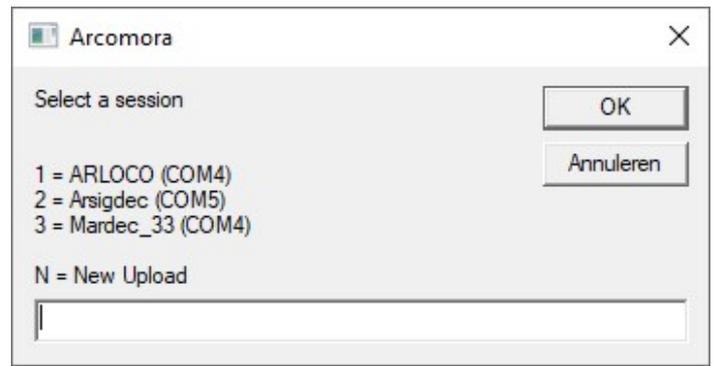

Mardec_33

Start new session now?

Ja   Nee

Managing sessions

Start the Arcomora shortcut. A list of available sessions is showed.

Type the number of the session and click 'OK'.

Type 'S' to start Putty with the selected session. This is the default.

Type 'R' to remove the selected session.

Type 'P' to change the COM-port for the selected session.