

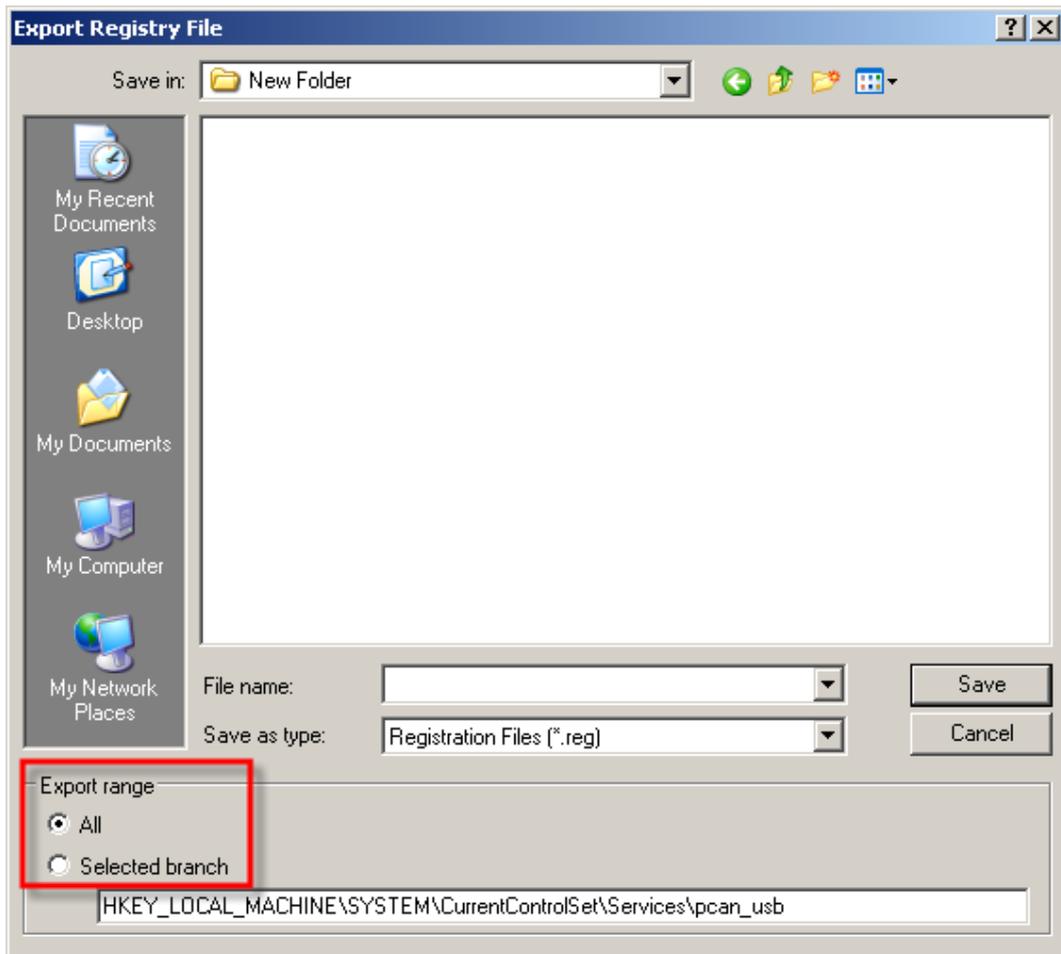
## Using multiple UCC-1 in an IRIS project

If you need more than 100 remote amplifiers in an IRIS-Net project, the connection of the amplifiers over a single UCC-1 to the PC is not possible. If no PCI-CAN interface is available for connecting the amplifiers to the PC, more than one UCC-1 must be used at the same time. IRIS needs a constant allocation between the UCC-1 attached over USB to the PC and the amplifiers attached to the UCC-1. However Microsoft Windows assigns a random „USB identifier“ to a USB devices when connecting it to the PC (or restarting the PC). Because of this random USB identifiers IRIS cannot make firm allocations of amplifiers to UCC-1. This application note describes the assignment of constant USB identifiers to several UCC-1.

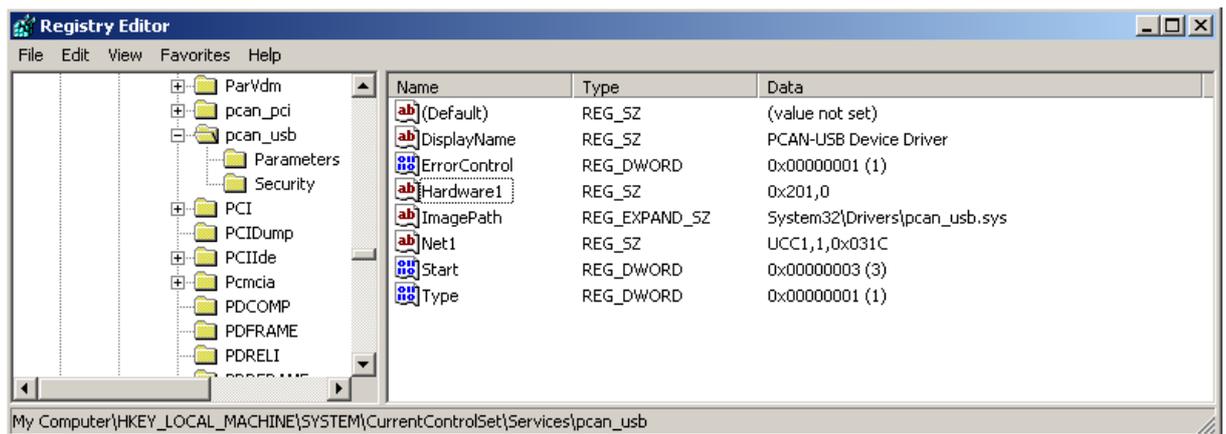
1. You need the [PCAN-USB SetDevice Tool](http://www.peak-system.com) from PEAK System. You can find it on the website [www.peak-system.com](http://www.peak-system.com)
2. Extract the downloaded file and copy the two files **pcan\_usb.dll** and **setdevicenr.exe** into the directory `\IRIS\Driver\PEAKCAN`
3. Disconnect the UCC-1 from your PC and quit IRIS.
4. Start the Registry Editor via **Start | Run | regedit**

### Important Note!

**It is STRONGLY recommended to backup your registry before making any changes! This can be done by selecting Export in the File Menu of the Registry Editor, select All in the Export Range and save the file to a folder directory or CD-ROM.**



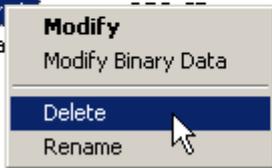
5. In the Registry Editor open the key **HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\pcan\_usb** in the left frame.



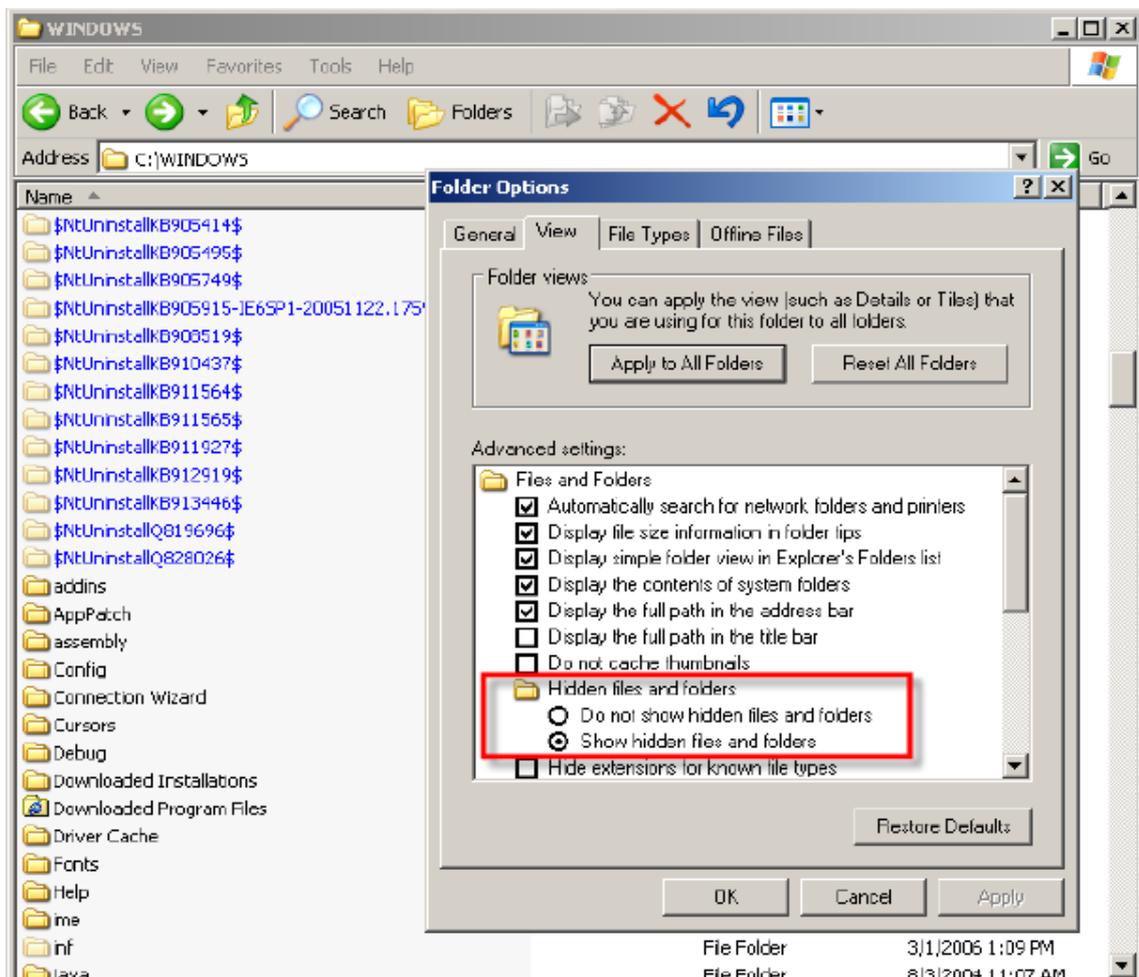
6. Right-click on the **Hardware1** entry to open the context menu.

7. Click on **Delete** in the context menu.

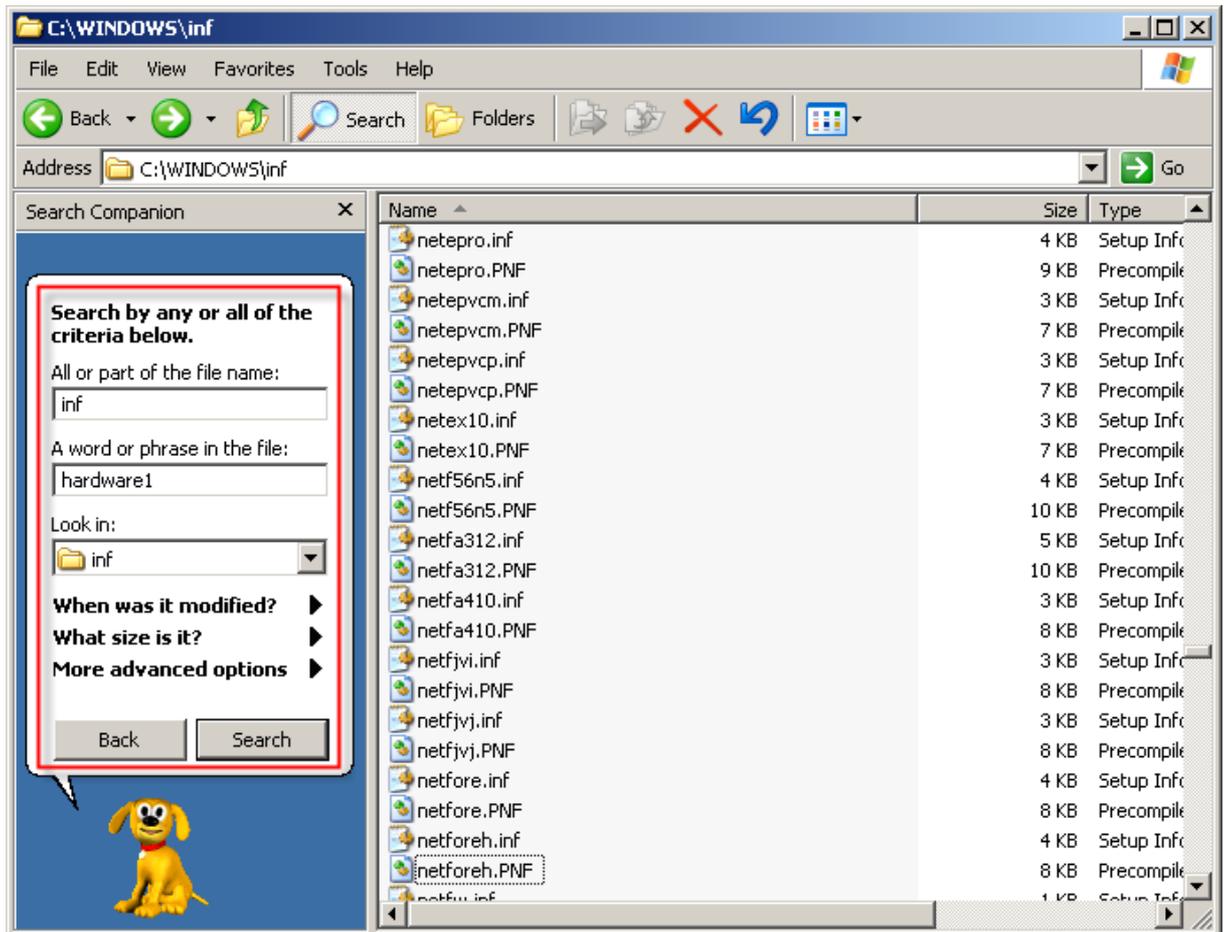
Name	Type	Data
(Default)	REG_SZ	(value not set)
DisplayName	REG_SZ	PCAN-USB Device Driver
ErrorControl	REG_DWORD	0x00000001 (1)
Hardware	REG_SZ	0x201,0
ImagePath	REG_SZ	System32\Drivers\pcan_usb.sys
Net1	REG_SZ	UCC1,1,0x031C
Start	REG_DWORD	0x00000003 (3)
Type	REG_SZ	0x00000001 (1)



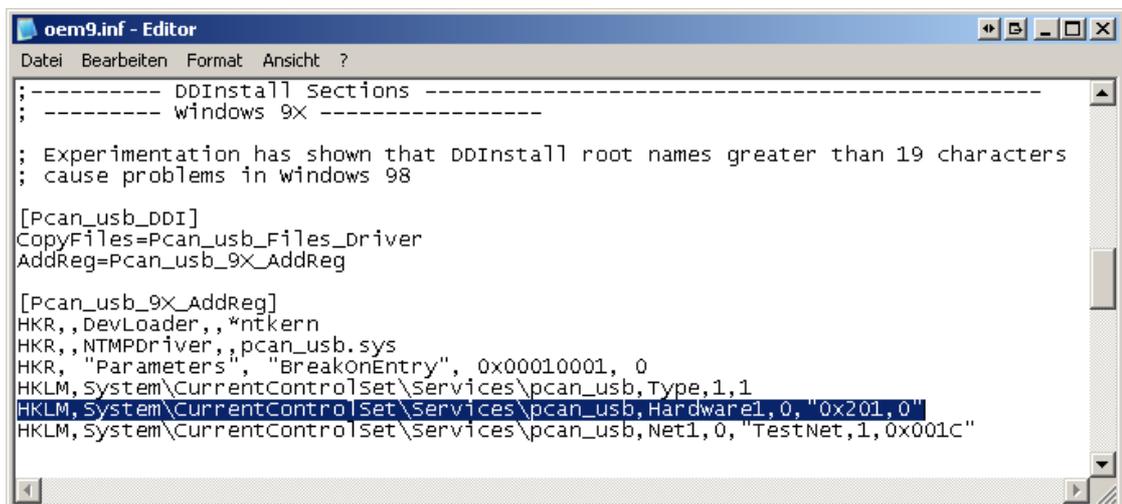
8. Answer the „Are you sure?“ inquiry, with **Yes**.
9. Exit the Registry Editor.
10. Open the directory `\WINDOWS\inf` (Windows XP) on your hard disk. If you are using Windows 2000/NT open the directory `\WINDOWS\system` respectively `\WINNT\system`  
 If the directory is not shown by Windows Explorer, select the **Folder Options** entry in the **Windows Explorer Tools Menu**. Select the **View** tab to get the **Advanced Settings list**. Locate **Hidden Files and Folders** and change the selection to **Show hidden files and folders**. Click **OK** and continue to Step 11.



- Press **F3** to open the Windows Search Utility and search for a file that contains the string **Hardware1** with a **.inf** extension.

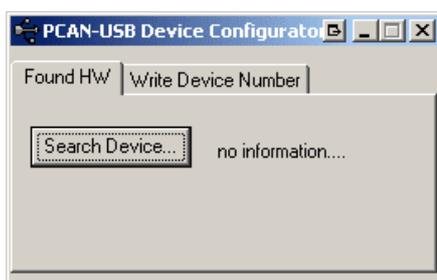


- Open the located file **oem???.inf** (?? is a random number Windows has assigned) using a text editor (e.g. **Notepad**, do not use a word processor like Microsoft Word).
- Look for all lines in the file **oem???.inf**, which contain the string **hardware1**.



- Delete all located lines and save the file.

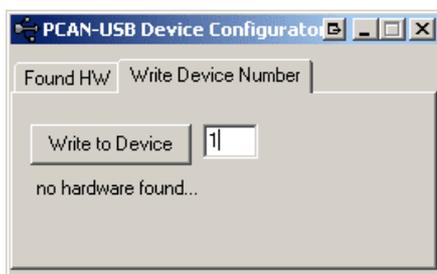
15. Open the directory `\IRIS\Driver\PEAKCAN` on your hard disk.
16. Open the file **Pcan\_usb.inf** using a text editor.
17. Look for all lines in the file **Pcan\_usb.inf**, which contain the string **hardware1**.
18. Delete all located lines and save the file. Close the text editor.
19. Connect one UCC-1 to your PC.
20. Go to the directory `\IRIS\Driver\PEAKCAN` and start the **setdevicennr.exe** file extracted in step 2.



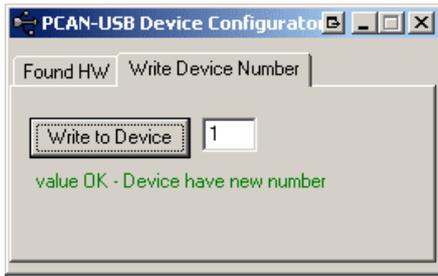
21. Click on the **Search Device...** button.  
The tool finds the connected UCC-1.



22. Select the **Write Device Number** tab.



23. Type **1** in the input field and click on the button **Write to Device**.  
Thereby the constant Device Number 1 is assigned to the UCC-1.



24. Disconnect the UCC-1 from your PC and close the tool.

25. Mark the UCC-1 with the assigned number, in order to be able to identify it later.

Repeat steps 19 till 25 for all UCC-1 to be used in the IRIS project. Assign ascending Device Numbers in step 23.

26. Connect all UCC-1s to your PC.

27. Start the program **netcfg32.exe** in the directory `\IRIS\USB Driver\`

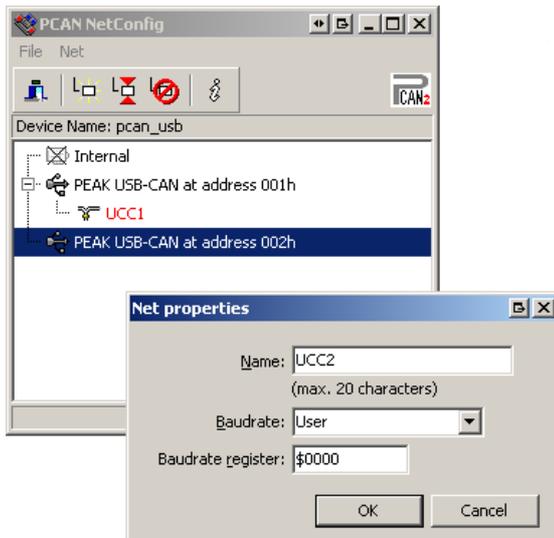


28. Click on (with the right mouse button) the additional UCC-1 with Device Number 2 (002h).

The context menu of the UCC-1 appears.

29. Select the entry **New Net...** in the context menu in order to assign a net to the UCC-1.

The window **Net properties** appears.



30. Type **UCC2** in the **Name:** input field.

Repeat steps 28 till 30 for all remaining UCC-1s. Assign ascending names (UCC3, UCC4...) for the nets in step 30.

31. Exit the tool **netcfg32.exe**.

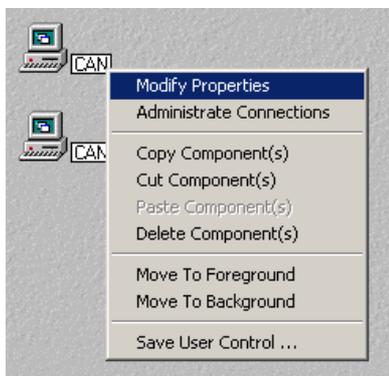
32. Answer the „**Saved changed configuration?**“ inquiry, with **Yes**.

33. Start **IRIS-Net**.

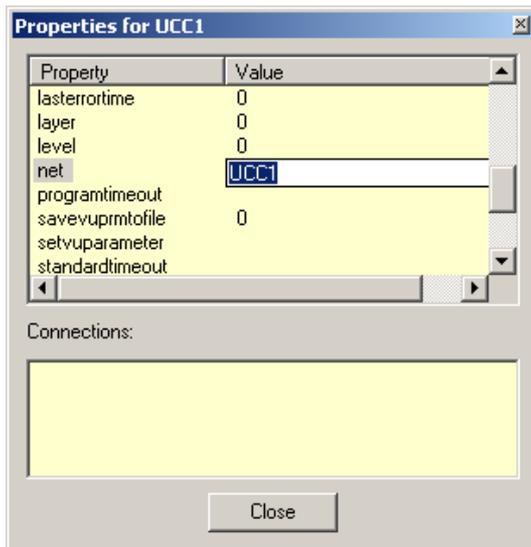
34. Add the needed numbers of **PEAK USB-CAN**-Devices to your IRIS project using **Configuration | Add Device ....**

35. Click on (with the right mouse button) one **PEAK USB-CAN**-Device in the IRIS worksheet.

36. Select the entry **Modify Properties** in the context menu of the PEAK USB-CAN-Device.



37. Verify that the property **net** in the window **Properties for UCC1** has the value **UCC1**.



38. Close the window **Properties for UCC1**.

Repeat steps 35 till 38 for all **PEAK USB-CAN** devices in your IRIS projekt. In step 38 assign as values for the property **net** the names you have assigned in step 30 to the nets (UCC2, UCC3, etc.).



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