HOWTO install ECS 2.0 on ASUS EEE 701 4G PC

(can be used as well with ECS 1.2R (confirmed) and OS/2 Warp 4 FP 15 (not yet tested))

About this document

This document might help you to install eComstation 2.0 on the ASUS EEE PC 701 4G. eComstationVersion 1.2R has been tested to work as well, IBM OS/2 Versions haven't been tested yet. It might be possible to use this Howto to install eComstation on other systems that haven't got an optical device (i.e.: CD, DVD) either. Supporting the installaton of eComstation via USB devices sometime in the future would be a great step.

While writing this howto the next generation ASUS EEE 900PC has been announced at the CEBIT, with a bigger display, an SSD Drive with 12 GB and so on. I am not sure if this Howto will cover the new model as well. Perhaps we will have better supported hardware in it, especially LAN and WLAN adapters.

And it is as always – there are many roads that lead to Rome, this is the one, that worked for me several times, I am sure that there are or should be a lot of other and better ways to reach this goal. So if you have got your own methods and ways – please use them! Feel free to use your own favourite programs and files. I tried to use LINUX programs (e.g.: Puppy Linux, EEE-Linux ....) to do some of the necessary things – unfortunately without success. This document shall just support you and give you some hints. I would be happy to get some feedback from you – especially what can be done better! The screenshot of eComstation have been taken with IMPOS 2.

This is what it looks like after finishing the installation that is described in this HOWTO (eComstation 2.0 RC 4, Resolution 800 X 480, Truecolour):

Index:

The Howto comes with the following chapters:

Note: I have used a lot of pictures, because I think they illustrate this Howto quit well. Because of this the document needs about 1.5 Megabyte.

1. **Requirements**

   To install eComstation on the ASUS EEE PC I used the following Hard- and Software:

   - **Hardware:**
     - ASUS EEE PC 701 4G (upgraded to 2 GB of RAM – this is not necessary)
     - USB DVD Drive

- 1 USB Stick (to transfer files – not necessary during install)

- **Software:**
  - Microsoft Windows XP
  - Partition Magic for Windows 8.0 (or any other Program you prefer to partition drives)
  - DFSee for Windows
  - eComstation 2.0 RC 4
  - Panorama Vesa Driver + widescreen 0.71 Treiber (only necessary if you want to work with the resolution 800 X 480 !)
  - Uniaud 114RC 5 + uniaud32.sys dated 31.12.2005 (Version 1.1.3)
  - ASUS EEE PC Drivers and Utilities DVD (boxed with the EEE PC)

2. Installation of Windows XP

Connect the Hardware and install Microsoft Windows XP as it is decribed in the ASUS EEE PC manual. To install eComstation it is not necessary to install the drivers from the Support DVD, but if you want to compare Windows and eComstation you should do so. For me it didn't make sense because I needed XP just to partition the SSD disc.
After finishing the installation the Microsoft Windows XP desktop will appaer like this (you might have seen it somewhere else before :-)):


, You need to reduce the amount of the virtual space used by Windows XP to 200 MB, to get enough spare space on the SSD disc (Sorry – only pictures of the german XP version

availiable):
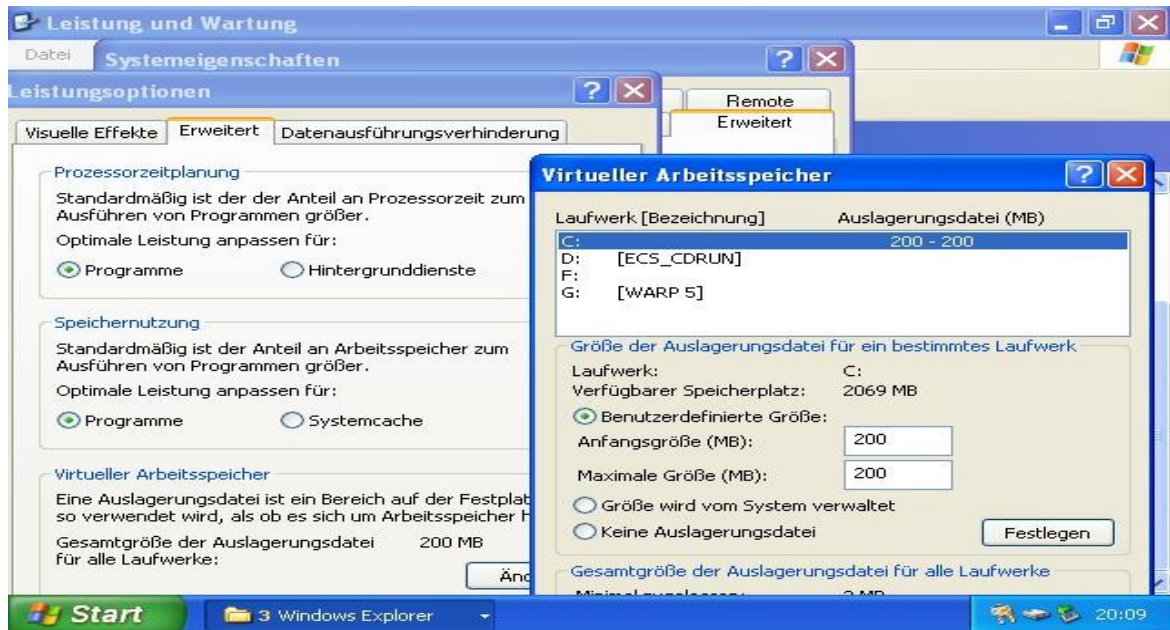
3. **Prepare the internal SSD drive**

Install your Partioning program after a reboot. I had to use both of the progams, Partition Magic and DFSEE, because I was not able to do all the things I needed with only one of them. Shrink „Drive C" and create a FAT (**HPFS - if supported by your Partition proram – works as well!**) formatted „Drive D" with at least a size of 900 MB at the end of the SSD disc. **VERY IMPORTANT: You have to label this drive D: ECS_CDRUN** , otherwise you will get the message „Can't find the ECS CD" during boot process and the installation will fail.
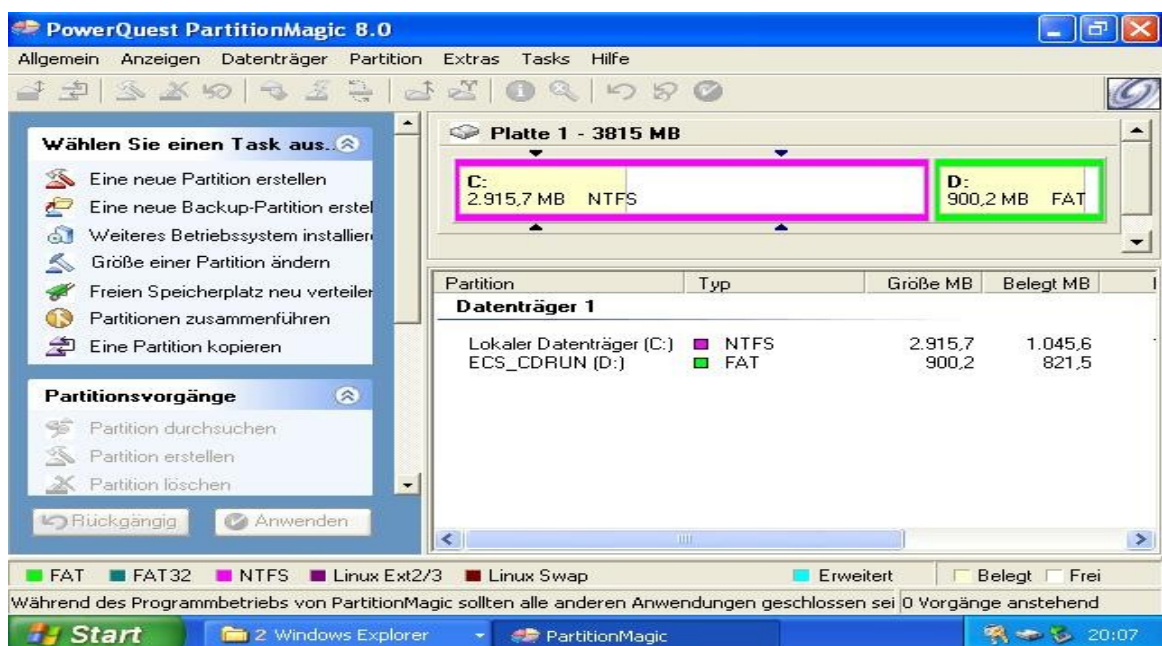
4. Prepare to install eComstation

Copy all the files of the eComstation 2.0 CD (eCS 1.2R or OS/2 Warp CD) to the new drive D. Create another folder (i.e.: „EEEPC") and copy all the drivers, the eCS registry key and every other file you might want to use into this folder (Please note the 8.3 convention and limitation of the FAT File system!)
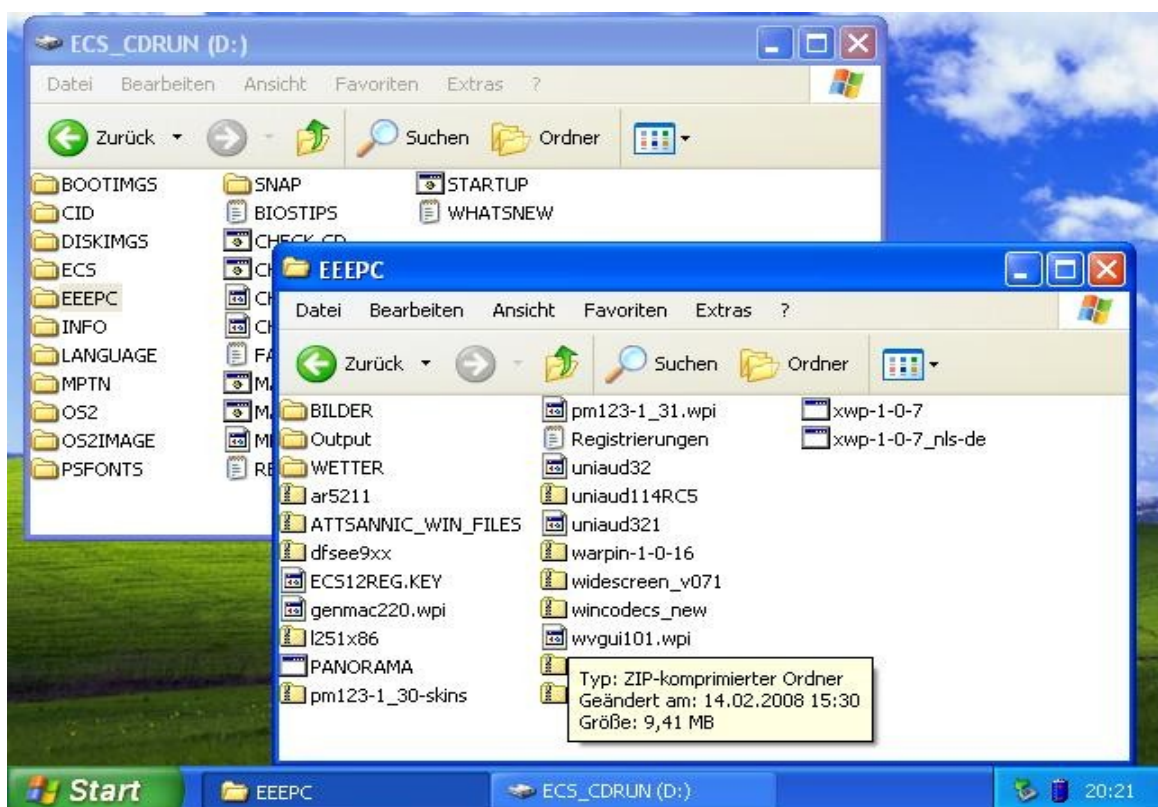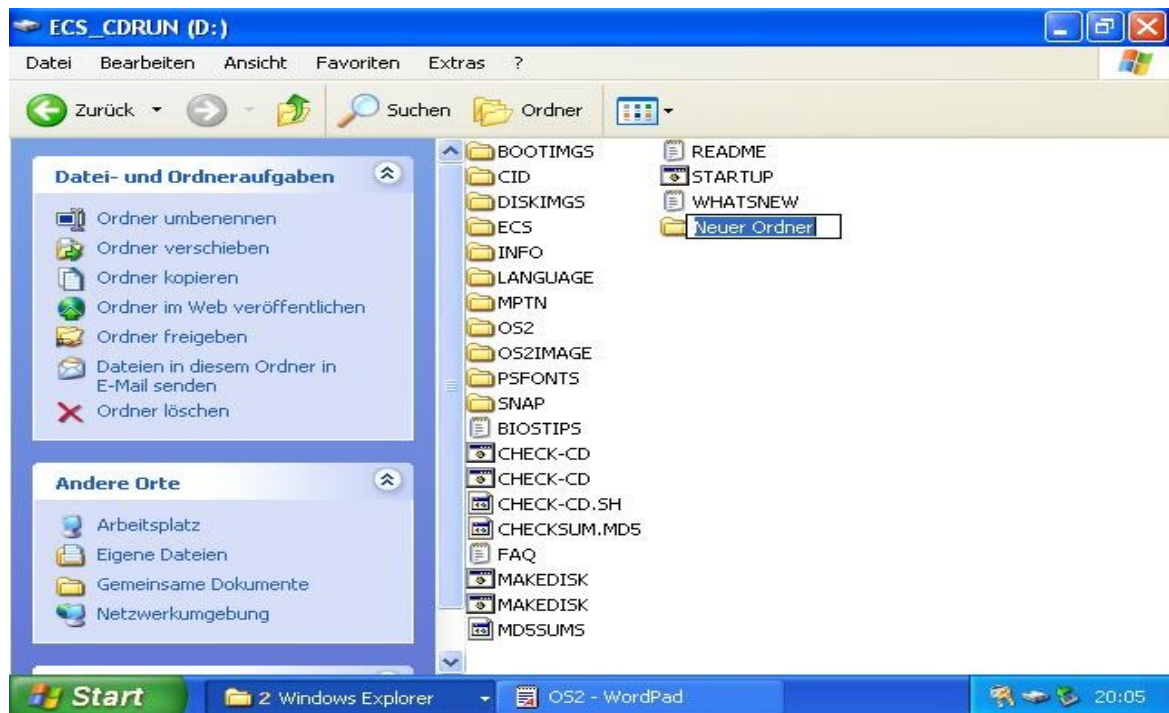
Note: If you are not able to create partitions with the eComstation installer during the eCS installation procedure and you get messages like „Partitiontable is corrupt" (or something similar), boot Windows again and install DFSee for Windows. Open DFSEE for Windows and go to the command prompt – type „ lvm -c „ (see the bottom of the picture), click RETURN or ENTER. Right after that make DFSee refresh the LVM table. This procedure will make sure that you can continue the installation.


Preparation is finished.

5. Install eComstation

- Insert the eComstation CD into the attached USB Drive
- Start the ASUS EEE PC
- As soon as the EEE Startlogo appears click „ Escape" to access the EEE PC boot menue
- Choose to boot from the attached USB Drive
- Choose „Start from eComstation"
- Choose „with own values"
- Walk through the pages using „FN" and „Page down" keys.
- Change the installation method from SNAP to VGA
- Got to page four
- Check the box to install the support for USB CD Drive
- Once you have finished please press the buttons „ALT" and „F2" to restart the EEE PC. This gives you the chance to view the status of the loaded drivers during boot

process. So, in cas an error occures you can see witch driver is responsible for the hang.

- Press ENTER
- The Installation process starts
- **(IMPORTANT:** If the installation stops at „\LOCATECD.SYS" (this is the point where eCS is trying to locate the eCS CD, because of having no USB support at that time it will search for a Drive labeled ECS_CDRUN and should find the one we already created on the SSD – Drive D) you might have not labeld the Drive D the right way, so you should go back to Point 3.
- Install eComstation the way you are used to. You have to choose **ADVANCED INSTALLATION** and to use the eComstation partition program (I guess it's a special version of DFSee) to delete the windows Partition and create the new Drive C (at least 1.2 GB, this fits it for me). **DO NOT DELETE DRIVE D**, keep it still where it is!
- Install all the options that are given during the installation and choose the programs you like, **but please follow these LIMITATIONS**:
    - Choose „No Sound" for the sound card, even though install the „Multimedia support" that is given later
    - Network installation: choose „No Adapter"
    - Graphic card: choose „Generic support" (If you use eCS 1.2R please choose: SNAP), because we want to install the PANORAMA Driver later
- The install process should procide without any errors. This might take about 35 to 45 Minutes.

After eComstation finished the installation and after you have rebooted the EEE PC, the Workplace Shell will look like this: (In case of using SNAP you will get Truecolour and a resolution of 640 X 480):
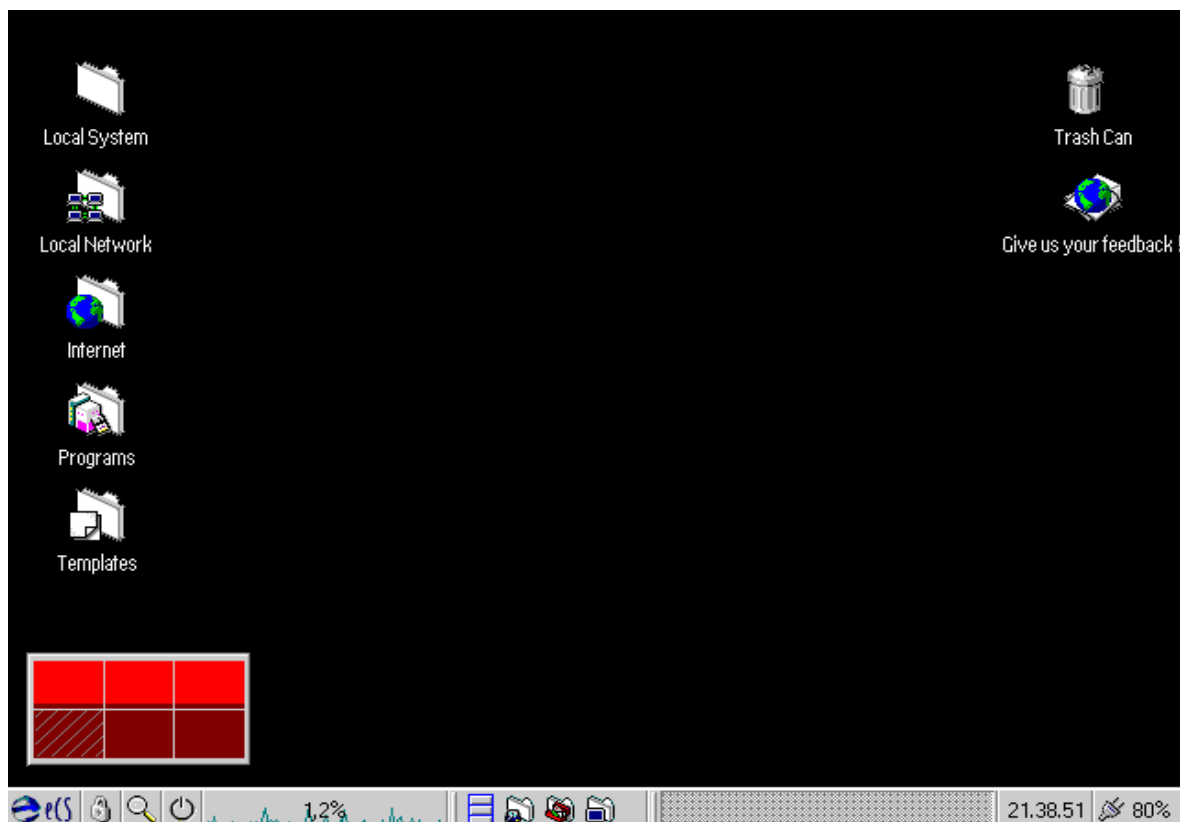
As you can see on the next picture the eComstation System claims about 760 MB of the internal SSD drive.
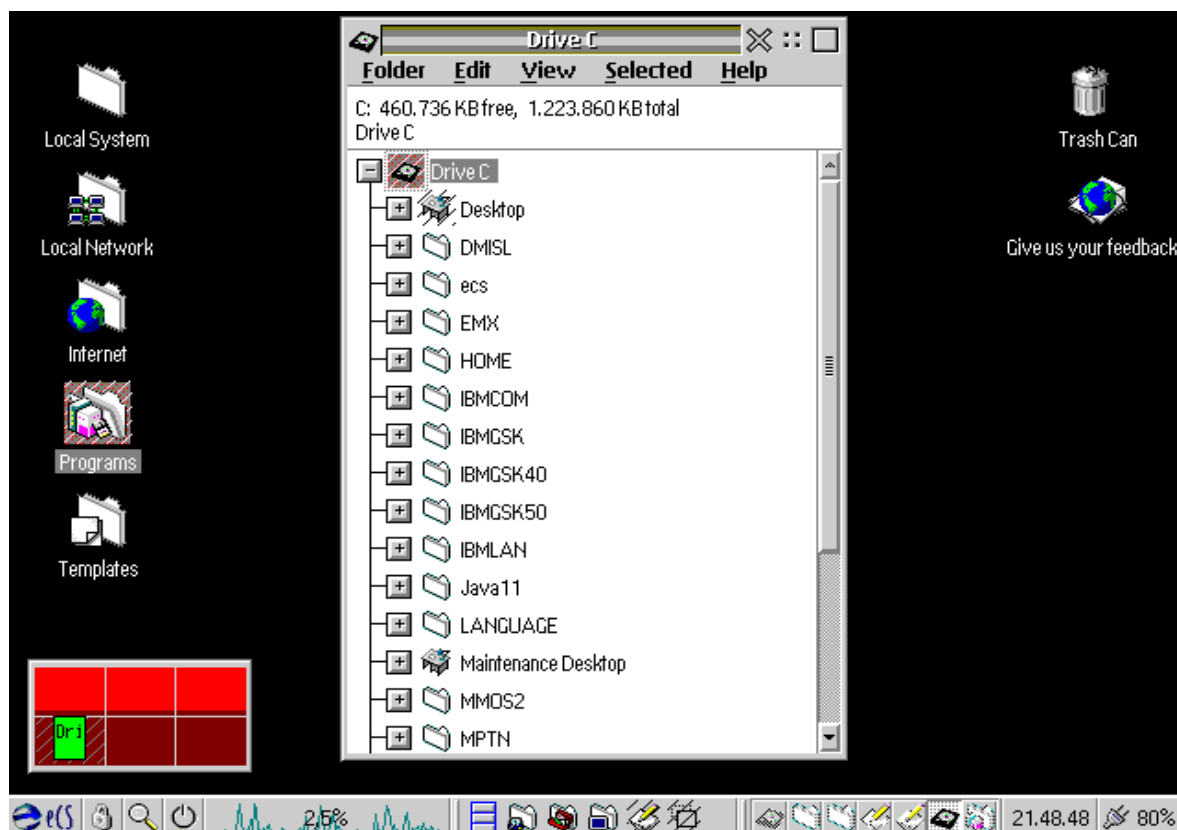
6. How to Install support for the Grafics Adapter

This is necesarry if you want to use the standard Resolution 800 X 480 on the EEE PC (recommended). If you install the SNAP Driver, there is nothing more to do. Even with a resolution of 640 X 480 you can work quite well with the EEE PC.
To install we need these files:

- Panorama.exe (dated 2/2008)
- Panorama-vesa-20071120.wpi
- widescreen071.zip

You can find these files at the eComstation betazone. We start with the installation of the widescreen071.zip, this file patches the BIOS of the graphic adapter so that the resolution of 800 X 480 is availiable. Unfortunately the SNAP driver is not able to use this even if it is installed.
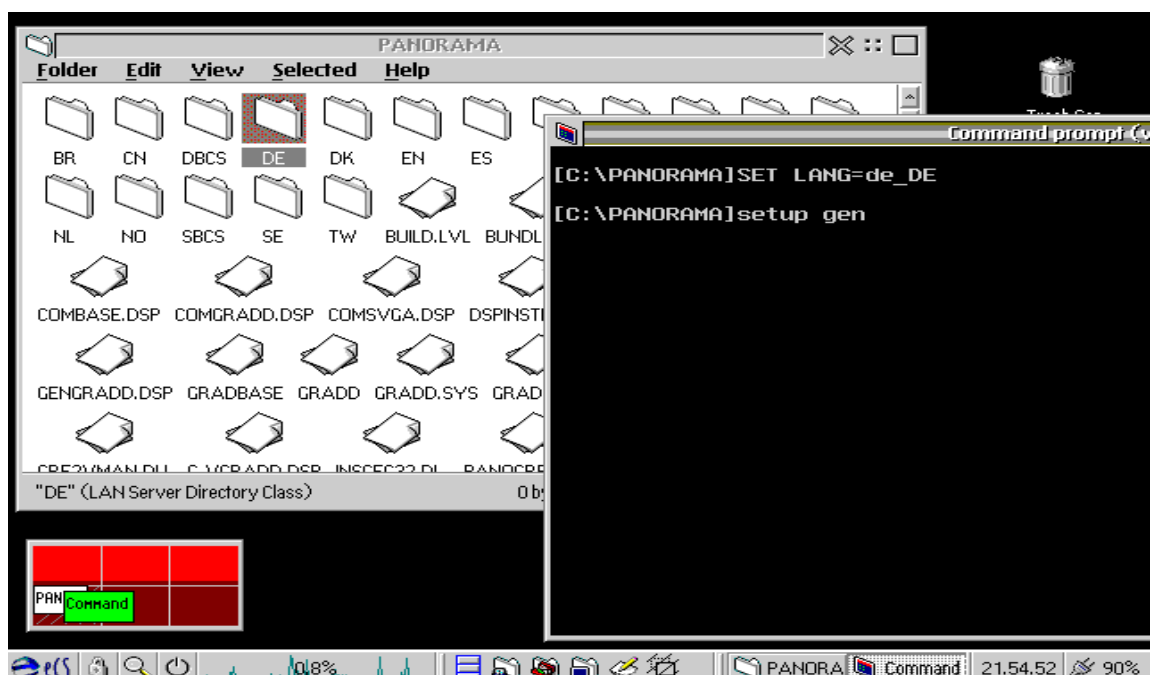
Installation:

1. unzip the file widescreen071.zip and copy the file *intlbios.sys* to the \OS2\BOOT directory.
2. Add the following line to config.sys: *basedev=intlbios.sys /0800* (example given in the next pictuer)
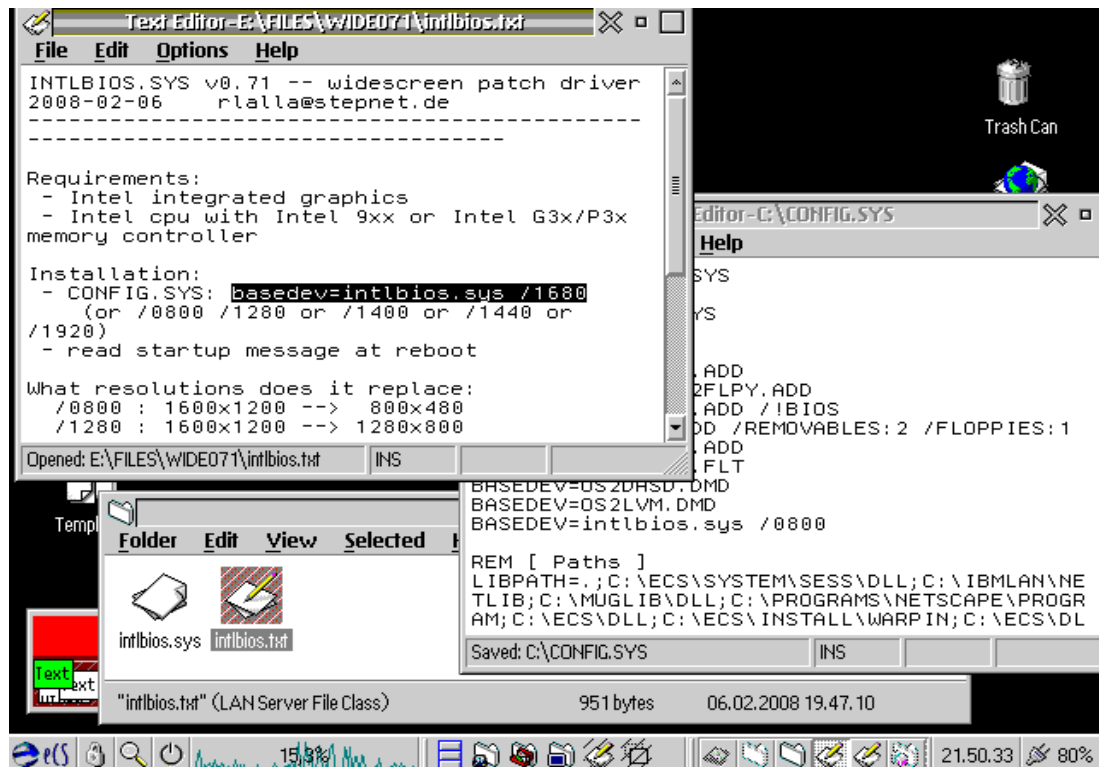
3. Reboot
4. While booting you will get a message from the driver
5. After the reboot copy the fil *Panorama.exe* to your boot drive, open a command prompt and change into that directory. Start the file *Panorama.exe* . This will create a folder called *\Panorama* .
6. Using the command prompt session change to the *\Panorama* directory and type in the commands you can see in the next picture. **SET LANG** configures the language you want to use, *setup gen* installs the driver.
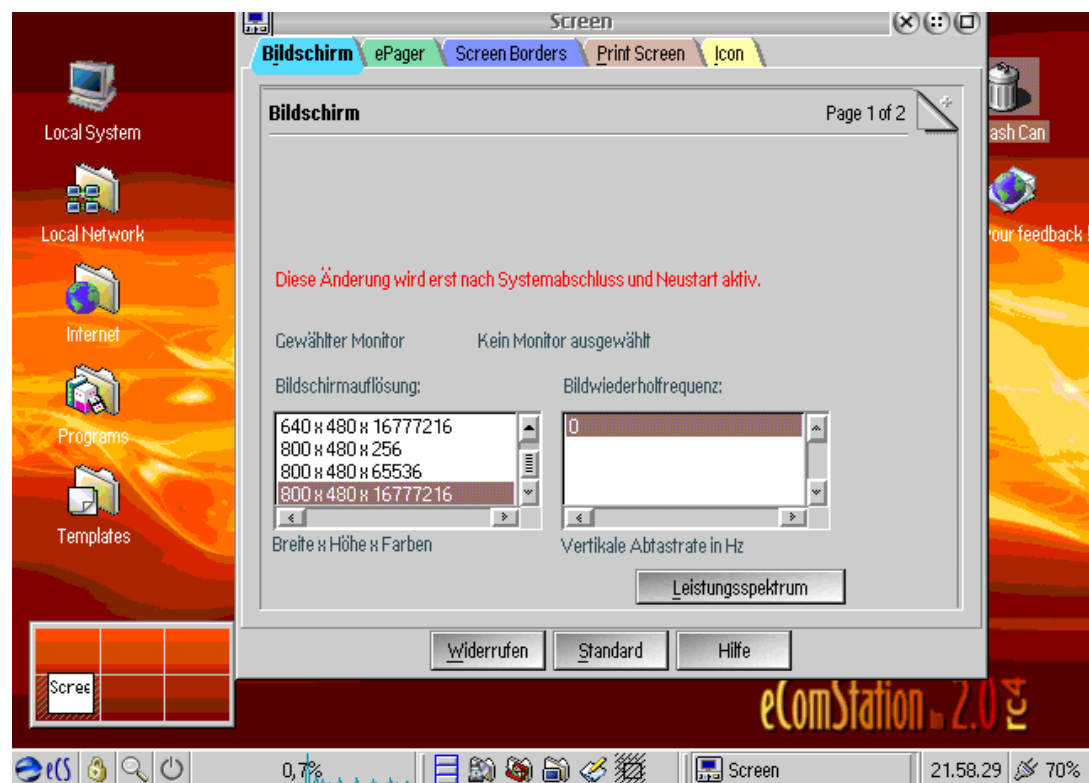

7. Starten Sie nach Abschluss des Vorgangs den PC neu.

8. Ecomstation starts 64K and 640 X 480 mode.
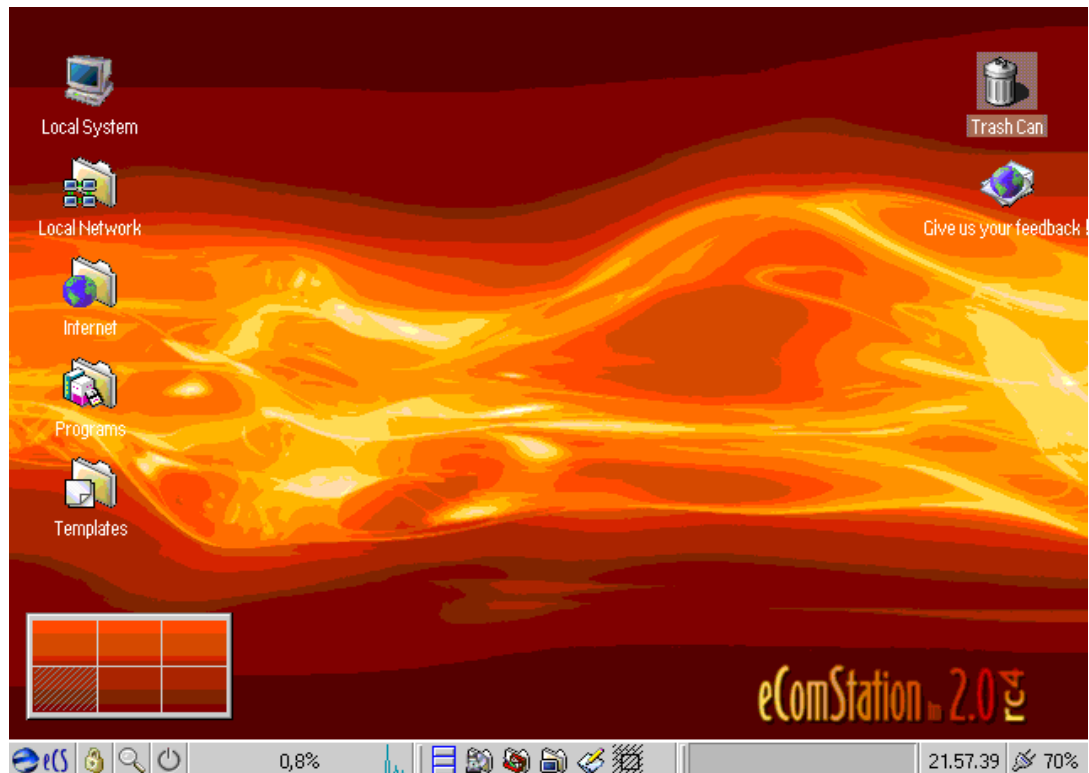
9. Configure the resoultion and the colour depth *("Bildschirm" or "Screen")* to the 800 X 480 X 16777216 mode.


10. Reboot. Et Voila!

11. You need to install the ***Panorama-vesa-20071120.wpi*** to get access to all the capabilities of the Panorama driver. Simply start the wpi file with a double-click. The installation program detects the right values you have to choose.
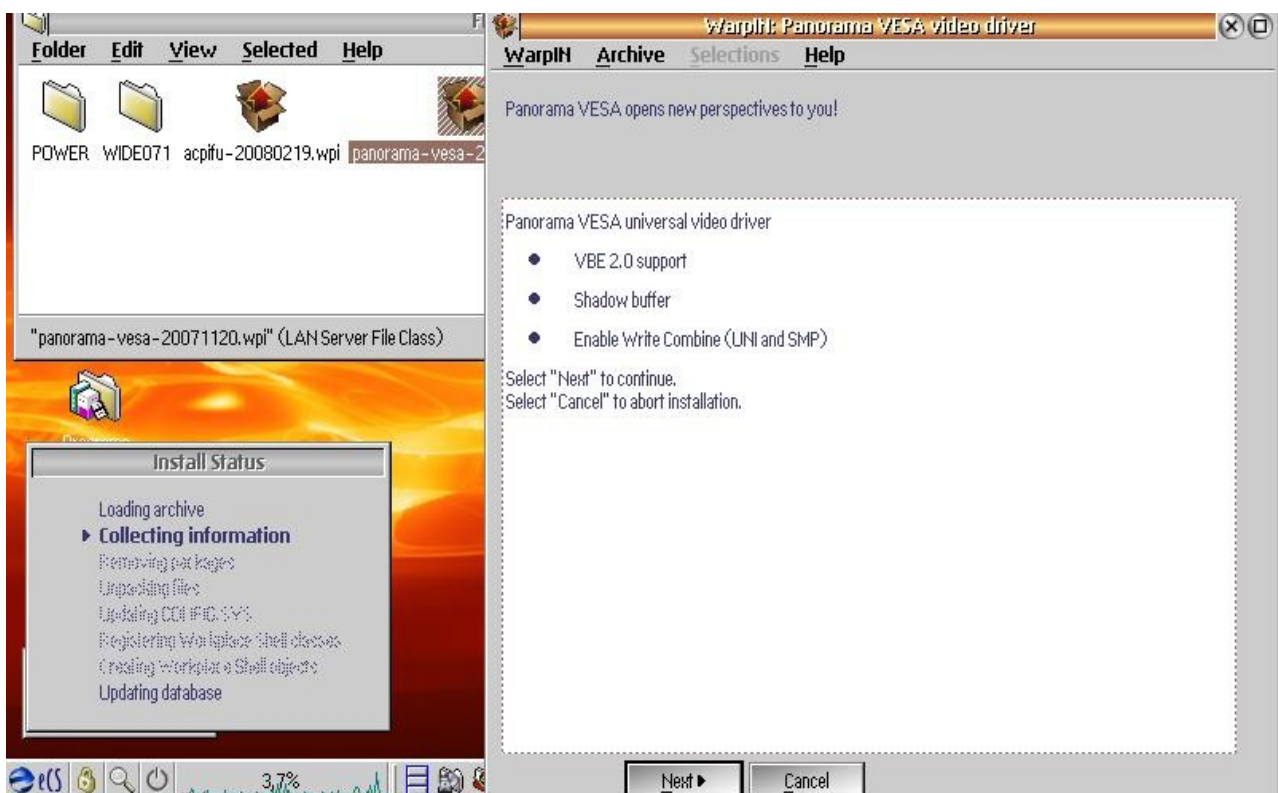
12. Reboot the PC as soon as the installations has finished. Now you can customize the Panorama Driver in much more ways. You can now change the fonts, symbols and

so on using the „DPI" page! The installation is finished.
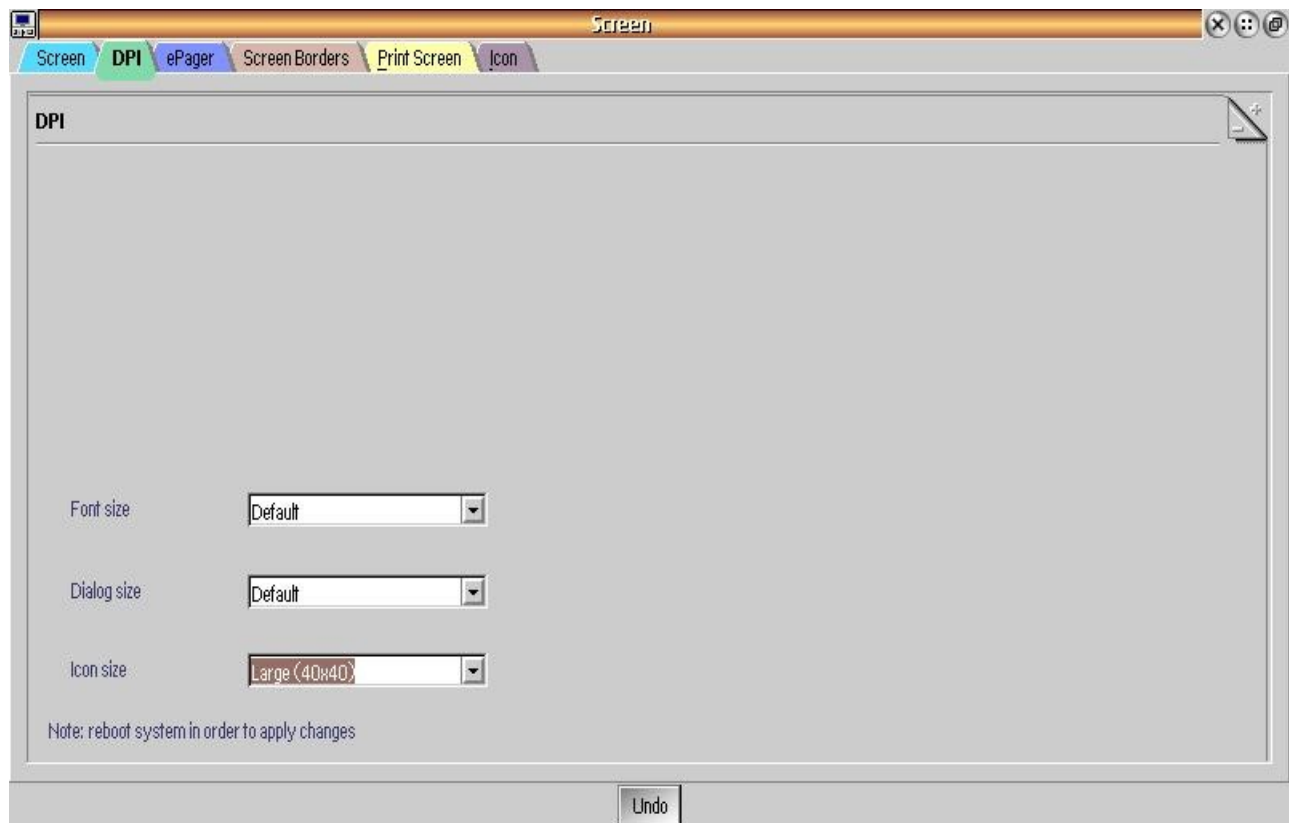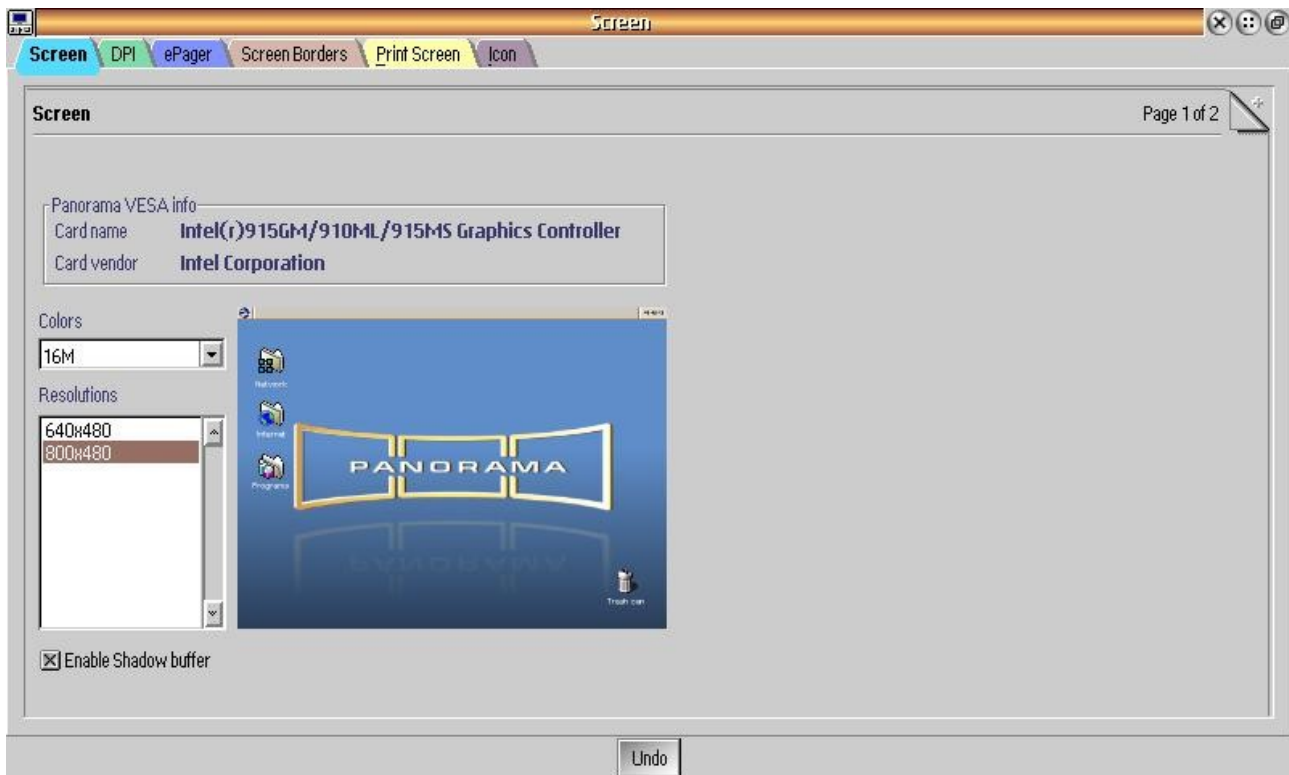
**7. How to install support for the sound card**

We need the following files:

- Latest Uniaud Release – today UNIAUD1.1.4 RC5 (Dated 3/2008)
- the uniaud32.sys files from the former Release 1.1.3 (Dated 12/2005)

Installation: All you have to install is the UNIAUD driver 1.1.4 RC 5 and to replace the uniaud32.sys file by the older one. In my test the older one was the only one that did not make the eComstation boot process come to a trap.

In detail:

1. Unzip the file UNIAUD1.1.4-RC5.ZIP start the installation with a double click on the file *install.cmd* located in the Uniaud directory.
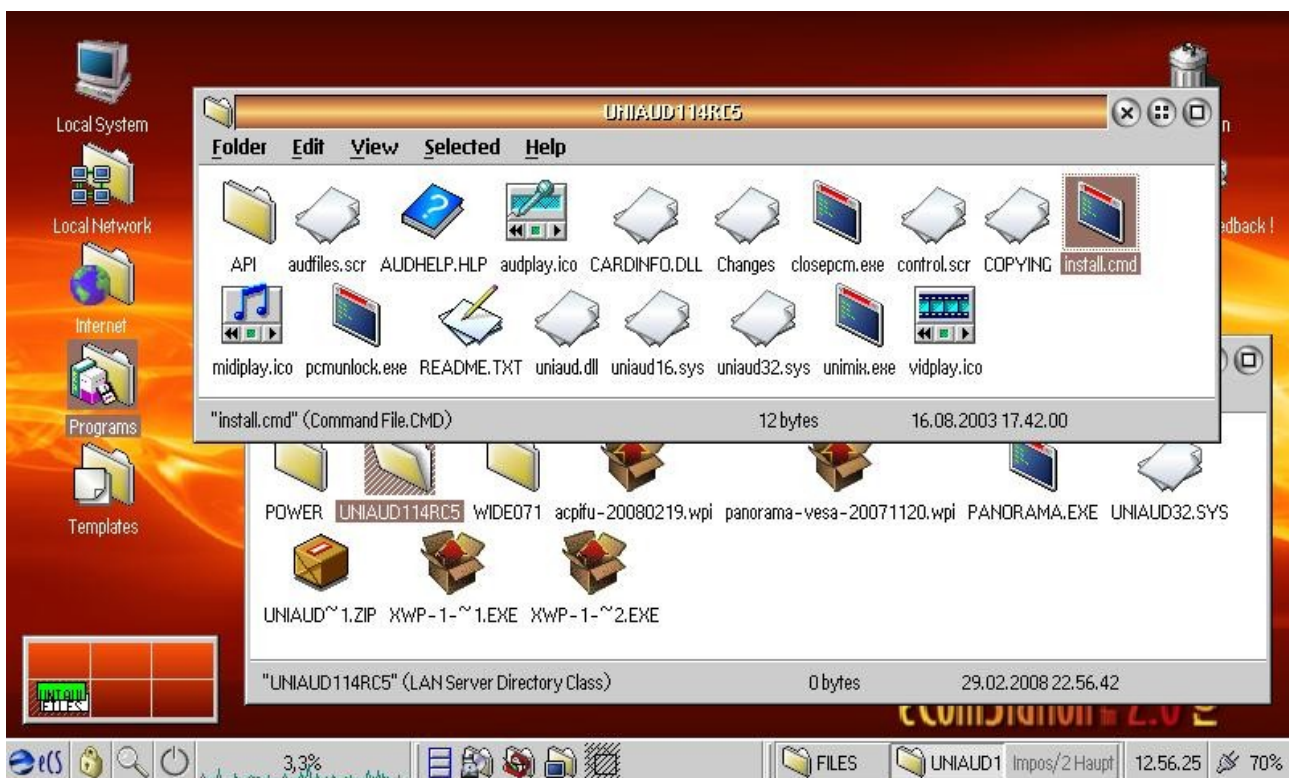

2. The program starts the „eComstation Media Installer", once this happend you have to choose:

- Add multimedia feature
- install a feature from another location
- Type in the UNIAUD1.1.4 folder you just created
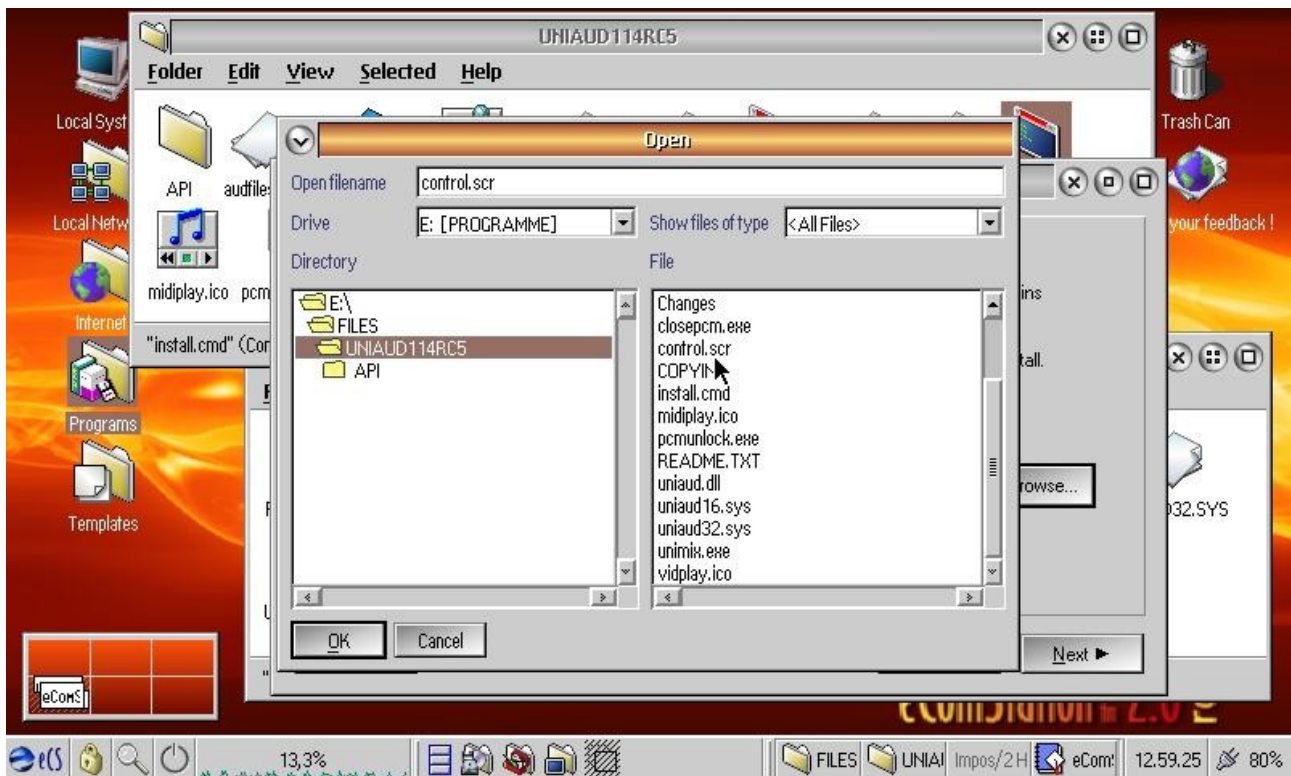
- Confirm and click „Next"
- The Multimediainstaller launches another process

- Start this Installer as well
- Choose the OS/2 Universal Audio Driver in the next section. Be sure to check both boxes.
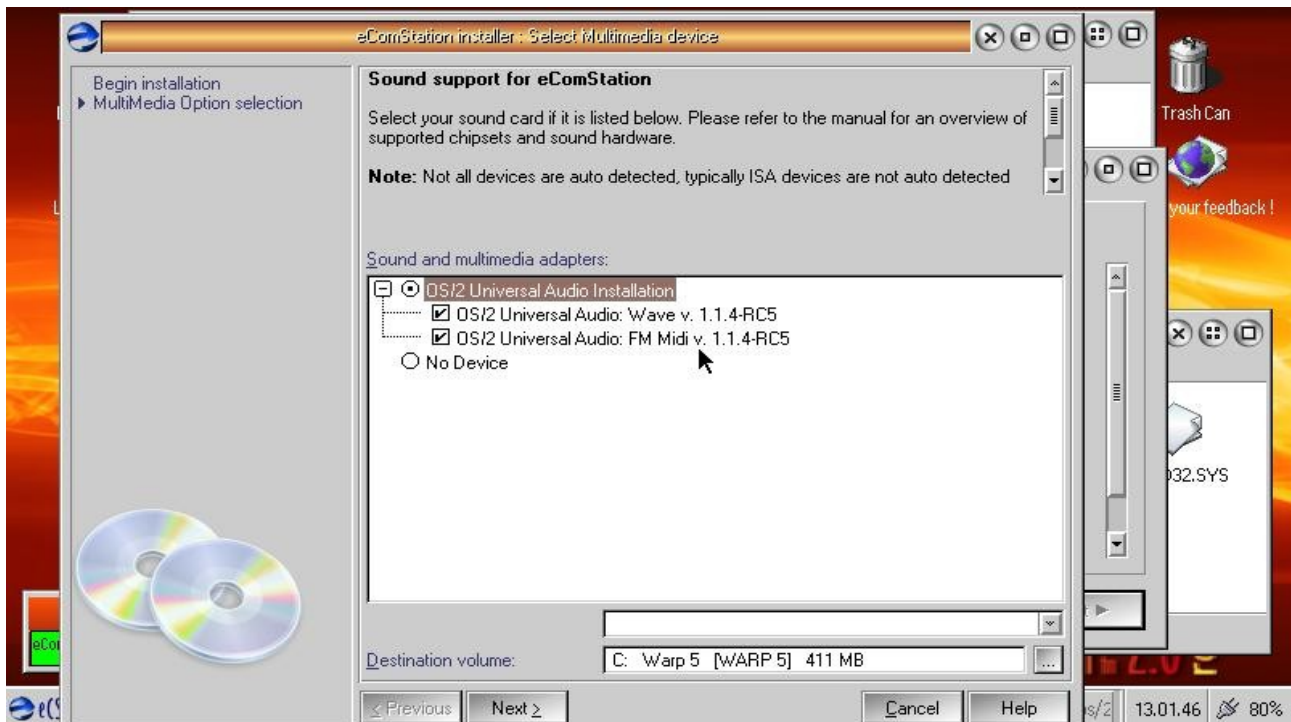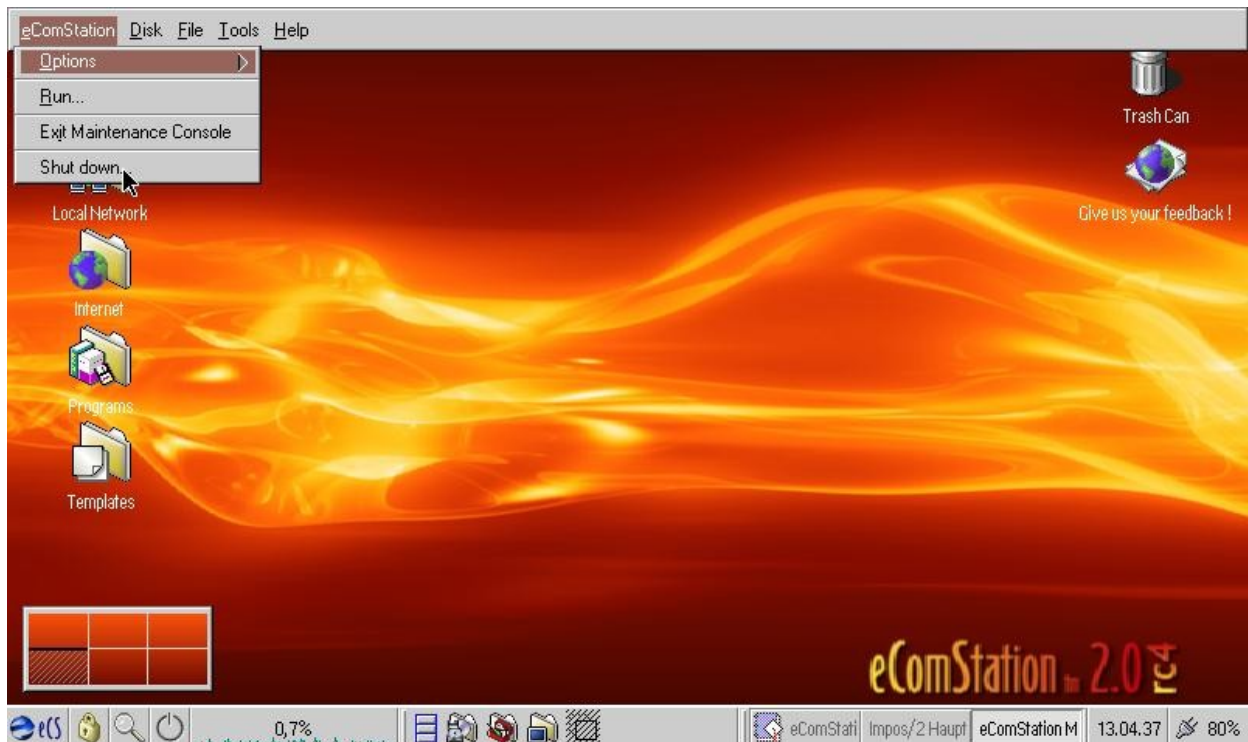
- Once the installation is finished – **DO NOT REBOOT!! -** choose Abort instead.
- The „Maintenance Console" starts, you should ignore this
- Copy the „old" ***uniaud32.sys*** from the Release 1.1.3 into the *\MMOS2* directory
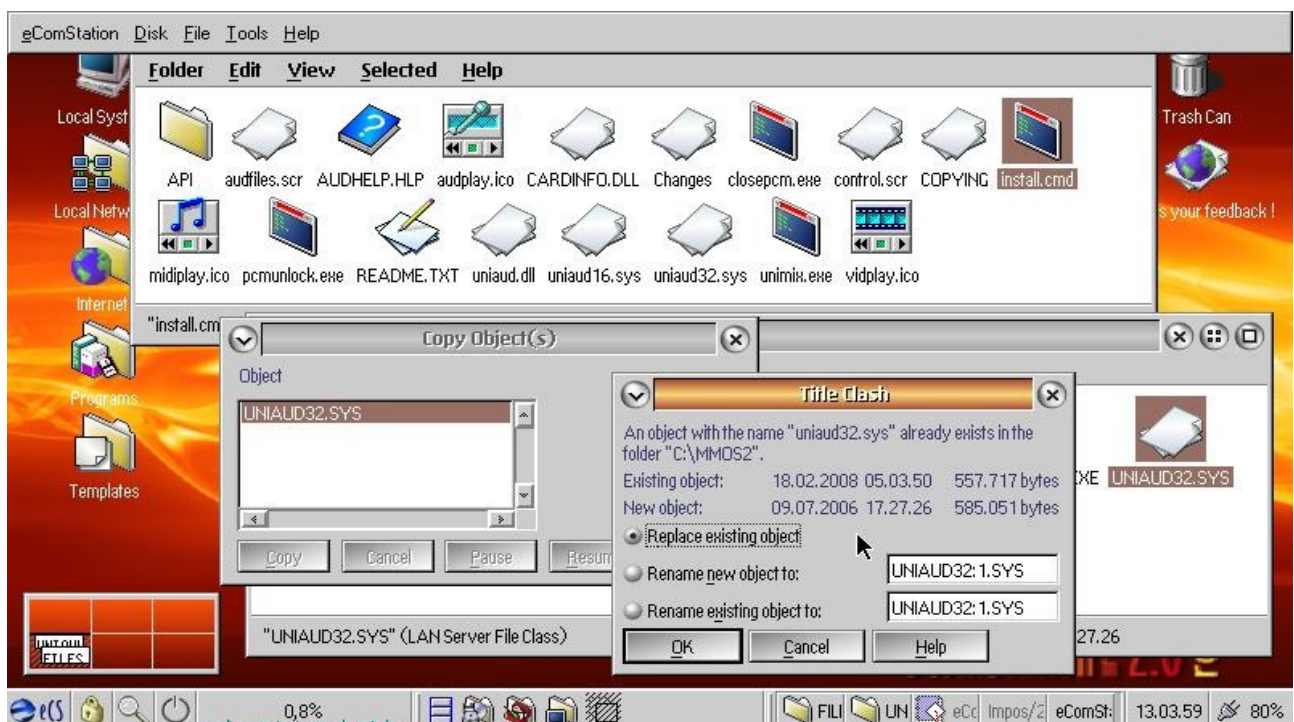
- Cloose the *Maintenance Console* and reboot.

- The installation is complete now, you should see the sound card adapter in the Harware Manager, using Interrupt 5. You should hear some sound :-)
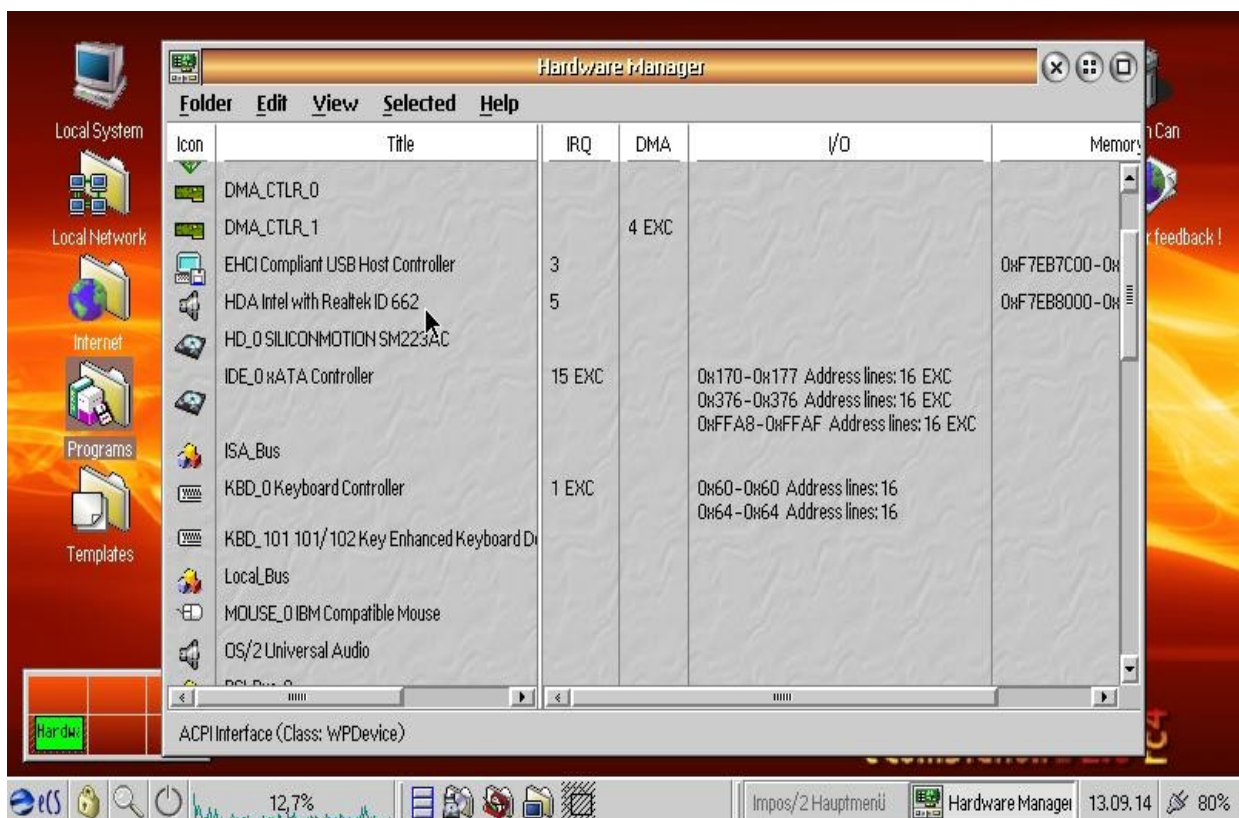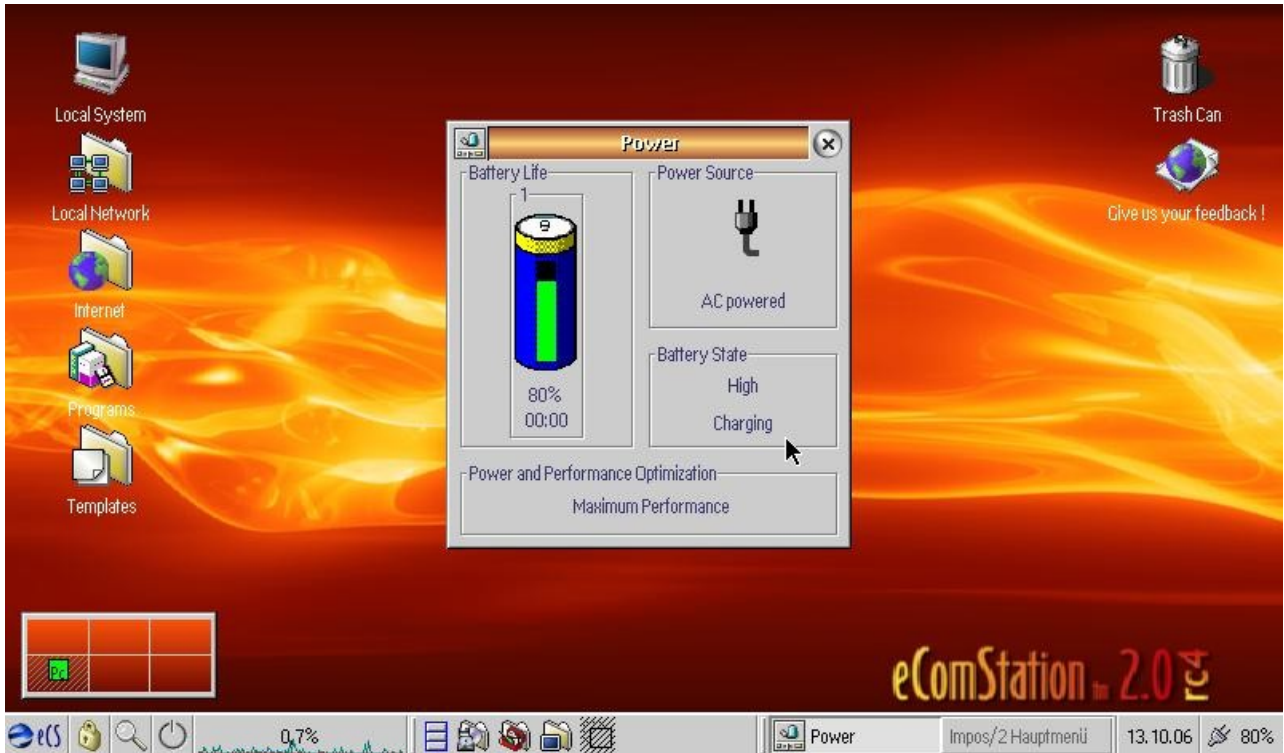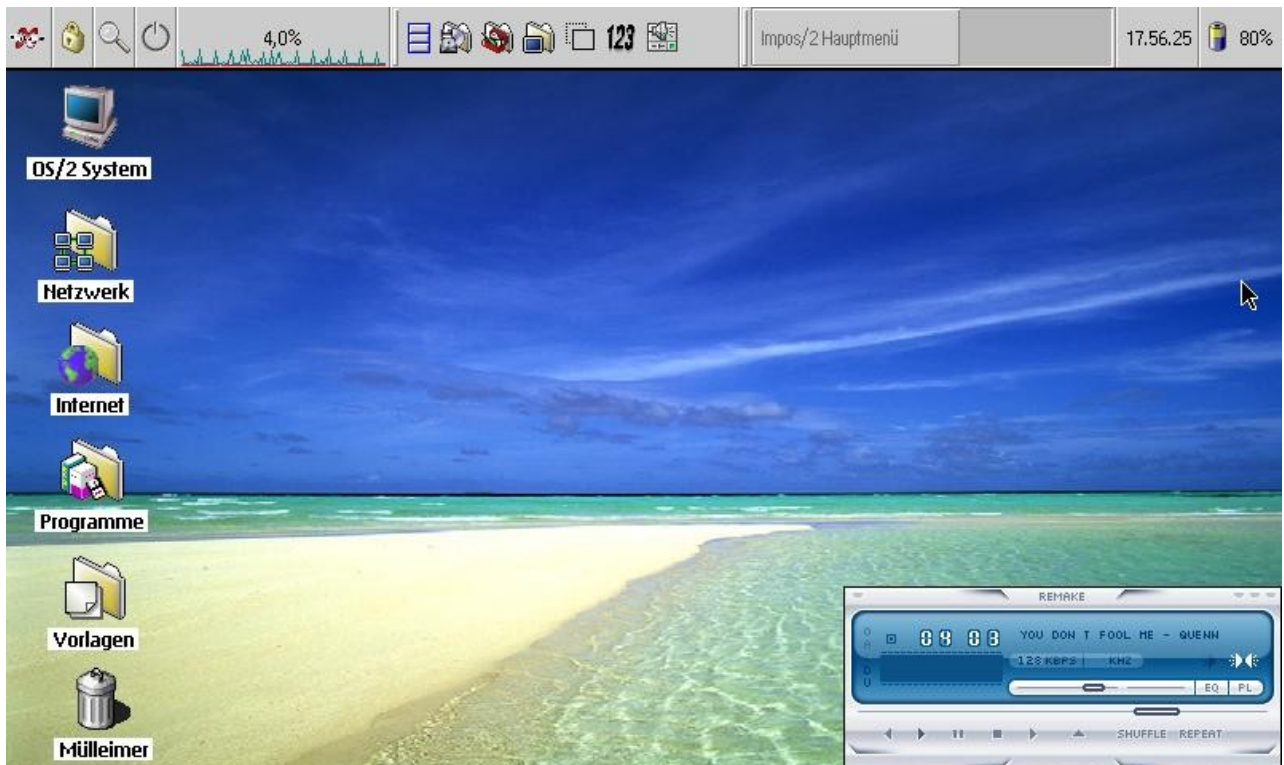
8. **Hot to install support for the network adapters – still in progress -**

9. **Customizing the System**

Now you can customize your system and use your favourite Fonts, Scheme and background images.

- This is what my system looks like....

10. Additional Information

- The boot process takes between 35 – 40 seconds
- The battery works with eComstation between 3 and 3,5 hours, depending on the applications you use.
- The USB support (Sticks, Drives etc.) works well
- Most of the programs start and work very fast, Open Office is (unfortunately as always) very slow, it takes up to three minutes to start....
- Watching Videos via Warpvision is very good
- There is no sound in the DOS Prompts (on my EEE PC)
- Using the program DOSBOX 0.72 solves this problem :-)
- It is a lot of fun!

Challengers:

- LAN/WLAN support (could only be possible via GENMAC)
- support for the Webcam (dreams.....)
- A program like Skype for OS/2 or eComstation, so eComstation could offer the same functions Xandros Linux and Windows XP does....

11. Acknowledgements

While trying to get eComstation work on the EEE PC a lot of people helped me, those are:

With a big „THANK YOU" to

- Ed Durrant
- Rainer Stroebel
- Eugene Gorbunow (Panorama Vesa Driver)
- Robert Lalla (widescreen071)
- Thorolf Godawa (from GENMAC Team)
- Guido Jacob
- all the others that are interested in this :-)

Editions of this document:

Version 1.1. - 10. March 2008

- Rewriting the text
- Adding the Links section
- Adding the Acknowledgements (should have been earlier!)
- First English edition

Version 1.0. - 3. March 2008

- Initial Document with 18 pages, only in German

<u>Disclaimer:</u>

All products and brand marks mentioned are the property of their owners

12. Links

- www.ecomstation.com   - the eComstation home page
- http://eeepc.asus.com/de/index.htm – the official ASUS EEE PC homepage, just change the language to the one you want
- http://os4you.org/wiki-usb-boot-en.html#Booting_the_Asus_EeePC_from_an_OS.2F2_-_eCS_system_on_an_SD_Card – How To written by Rainer Stroebel
- http://forum.eeeuser.com/viewtopic.php?pid=102313 – the ASUS EEE PC OS/2 forum
- http://www.youtube.com/results?search_query=ASUS+EEE+OS%2F2&search_type= - some small, low quality, poor english films I made (just „Quickshots")

I hope, you enjoyed this document!

Sigurd Fastenrath, 10. März 2008