

Little Documentation on the AmigaOS 4.1 Installation on Sam440EP / Sam440Flex boards

After receiving a brand new Sam440EP or Sam440Flex board with the AmigaOS 4.1 CD, you just have to install it on your empty harddrive.

This document has been realised in order to help people having problems to make the installation of their AmigaOS.

First step : Harddrive Initialisation

Here, you will have to prepare your harddrive in order to be able to install AmigaOS 4.1 on it.

For that, put the AmigaOS 4.1 CD in your optical drive and start your computer.

As your harddrive is still empty, your Sam440EP should automatically launch the installation's CD.

After the KICKSTART has been loaded, the CD will launch the Workbench with only 3 requesters before where you have to specify the keyboard's layout you use and your country.

When you are on the Workbench, you have to launch the 'Media Toolbox' utility from the 'dock'. Its icon is at the left border of the 'dock'.

A new screen will be opened and the next window will appear :



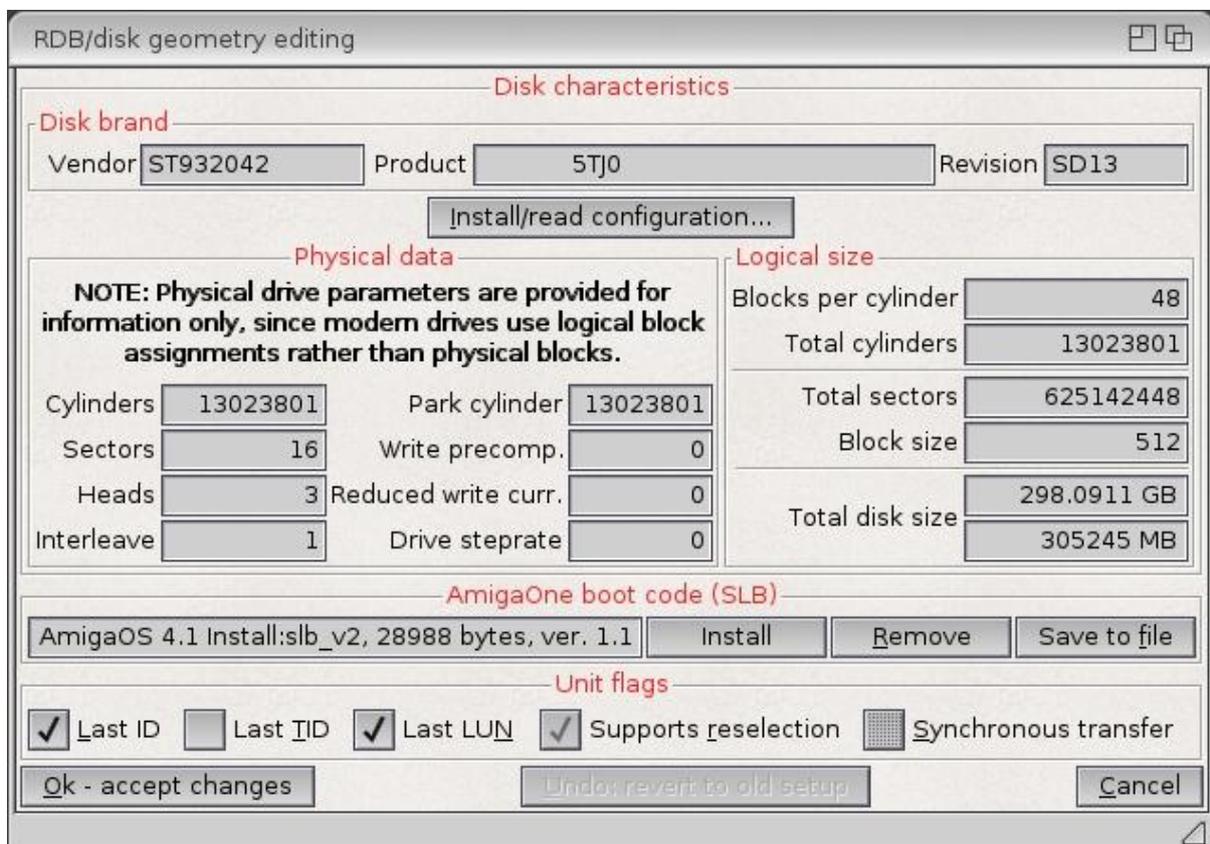
Click on the 'Start' button here in order to initialize your harddrive.

The first thing to do is to install the SLB ('Second Level Bootloader') on your harddrive in order it to be recognized by U-Boot as the boot device.

Just click on the button 'Edit RDB / Reinstall...'.



Here, the goal is to copy the 'slb_v2' file from your AmigaOS CD to your harddrive at the right place, which is the RDB ('Rigid Disk Block' or starting sector) in order to be recognized by U-Boot as the boot harddrive.



Click here on the 'Install' button, select the 'slb_v2' file from the installation CD (directly at the root of the CD) and click on the 'OK, Accept changes' button.

You will return to the first window of 'Media Toolbox' and you will have to click on the 'Save to disk' button in order to save the modifications, but don't leave 'Media Toolbox' utility yet !

N.B. : Please note that if you plan to install the special Linux Debian distribution for Sam440EP or Sam440Flex, you'll have to download another 'SLB' especially developed by ACube for dual boot.

For that, please download the following file :

http://ngi-dyndns.org:8080/AmigaOS_4.1_Installation_Guides/Parthenope

Then, instead of selecting the 'slb_v2' file on the AmigaOS 4.1 cd in the previous process, please select the Parthenope file in order to install it on your harddrive to be able to have the dual boot.

For any installation of the Linux Debian special distribution on your Sam's motherboard, don't hesitate to read the great guide realised **Philippe 'Elwood' Ferrucci** available here :

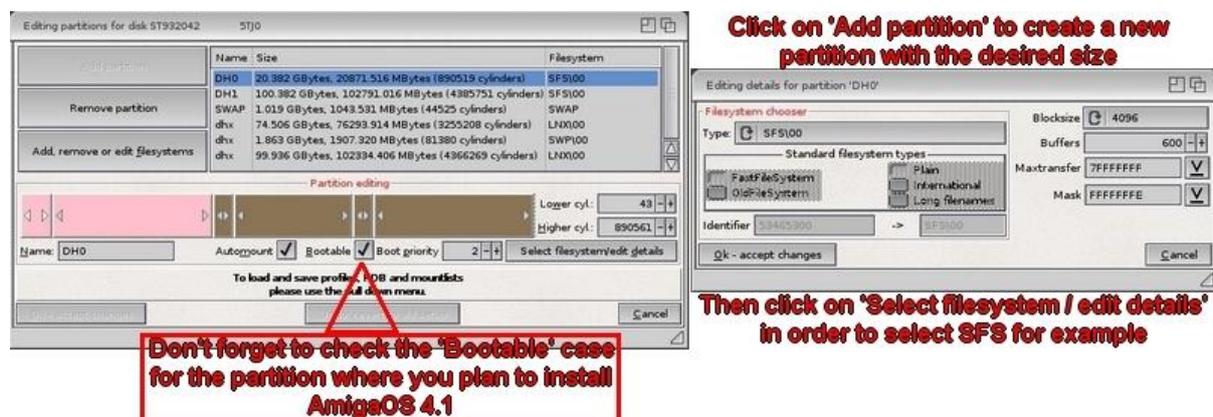
<http://elwoodb.free.fr/articles/Sam440/debian.html>

Second Step : Partition's Layout

Here, the goal is to create at least 2 partitions in order to make the AmigaOS 4.1 installation.

For that, click on the 'Edit partitions and Filesystems'.

You will now see this window :



Click on the 'Add partition' button in order to create the first partition which will contain the AmigaOS 4.1 system.

The most important thing here is to check the 'Bootable' case in order to point that the system's files will be placed in this new empty area.

Select the size of your partition as you wish and then, click on the 'Choose Filesystem / Edit details' button in order to specify which filesystem will be used.

Here, we have selected SFS\00. If you want to optimize the transfert on SFS partition, you can also set the blocksize to 512 and the buffers to at least 1000 for informations.

After that, we advise you to create a 'swap' partition with these settings :



The filesystem is 'SWAP', the blocksize is 4096 and the name of this partition is 'SWAP' with a size of 1 GB.

You just have to click on the 'Ok, Accept changes' button and then the 'Save to Disk' button on the first window.

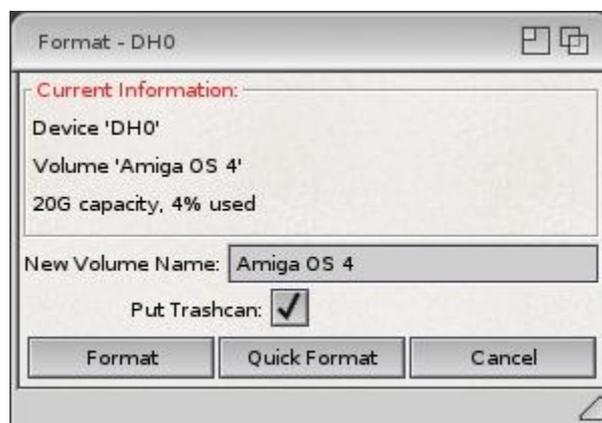
Now, you can exit from the 'Media Toolbox' utility and restart your computer in order to format the new partition you have created.

Last Step : AmigaOS 4.1 Installation

At this point, you only have to format your system's partition and to install AmigaOS 4.1 on it.

When you have restart your Sam and when you are on the Workbench, a new icon will be displayed with the name :
'DH0: not initialized'.

Select this icon and make a right click to choose the 'Format disk' option.



Here, we have named this volume 'AmigaOS 4'. Check the case 'Put Trashcan' if you want to be able to eventually restore some deleted files and then, click on 'Quick format' for formatting the partition.

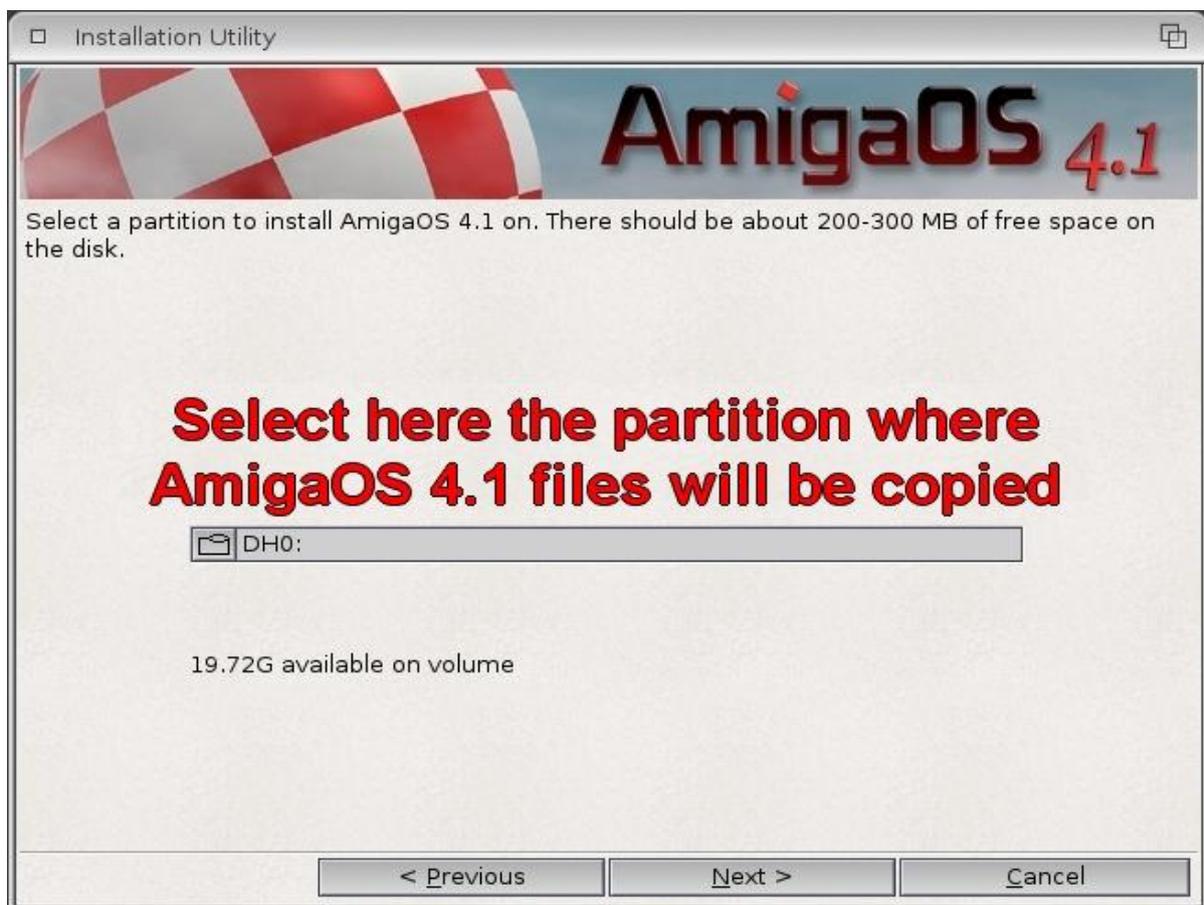
When formatting is finished, the 'AmigaOS 4' icon will appear on the Workbench.

Now, the last thing to do is to launch the AmigaOS 4.1 installation !

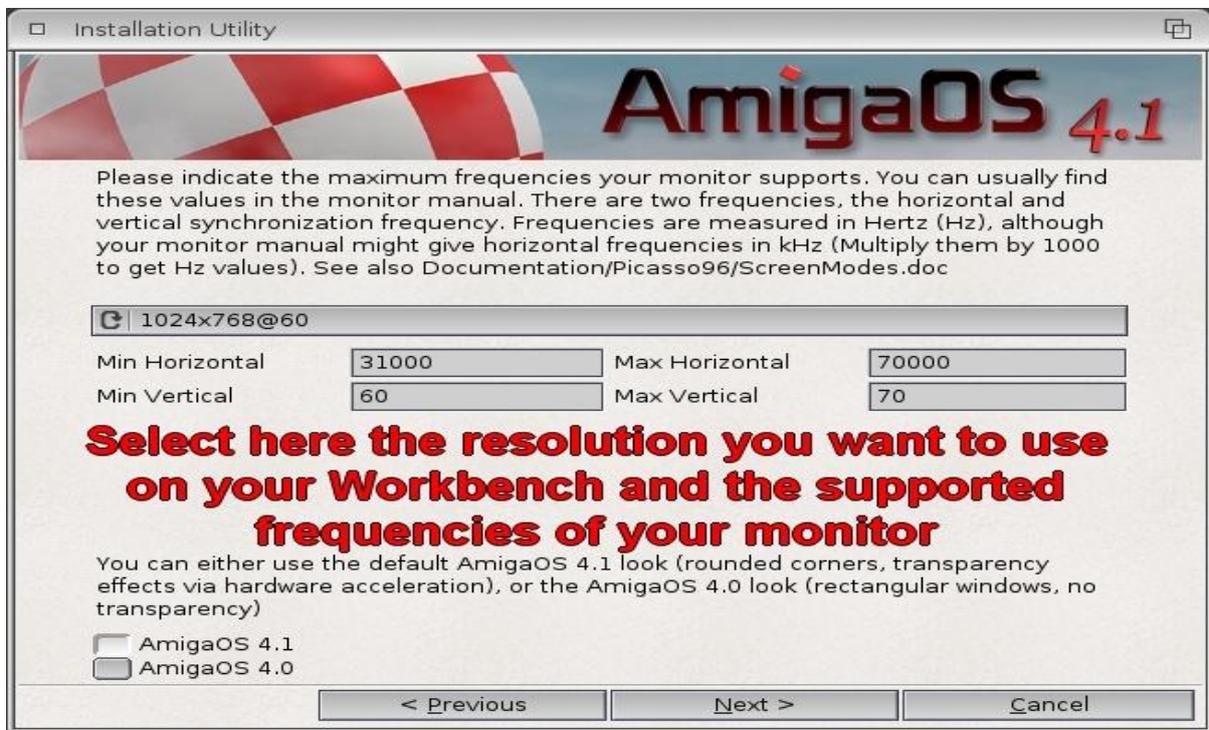
For that, simply click on the 'AmigaOS4.1-Installation' icon to launch the process.

Here, you will have to choose the volume where system's files should be installed.

Here it will be on 'AmigaOS 4' partition.



Then, click on the 'Next' button in order to specify the next options.



At this point, you have to specify the supported frequencies of your monitor as well as the resolution you want to use on your Workbench.

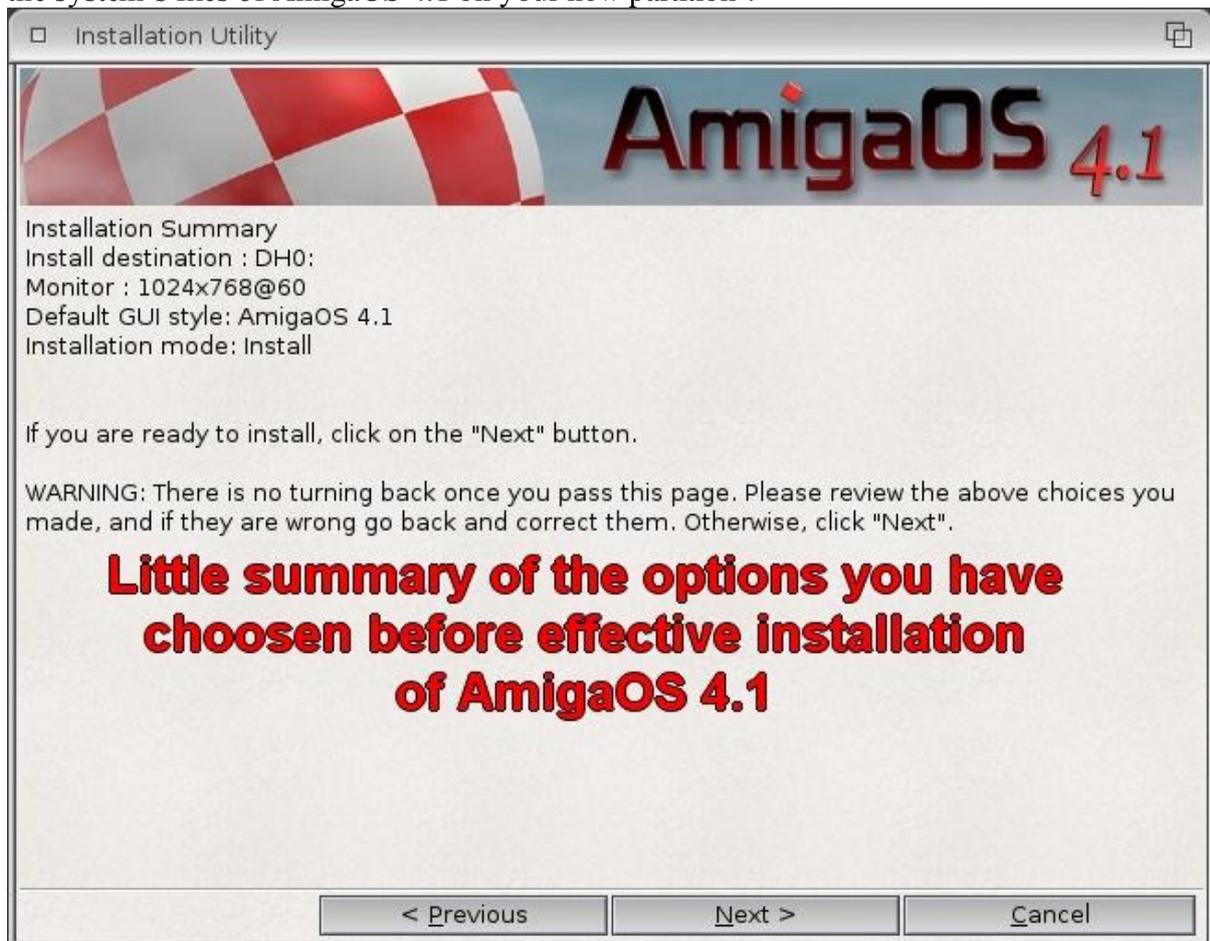
You can also choose the theme you prefer :

- AmigaOS 4.1 with transparency activated and windows rounded corners for example,
- AmigaOS 4.0 without transparency.

Then click on the 'Next' button.

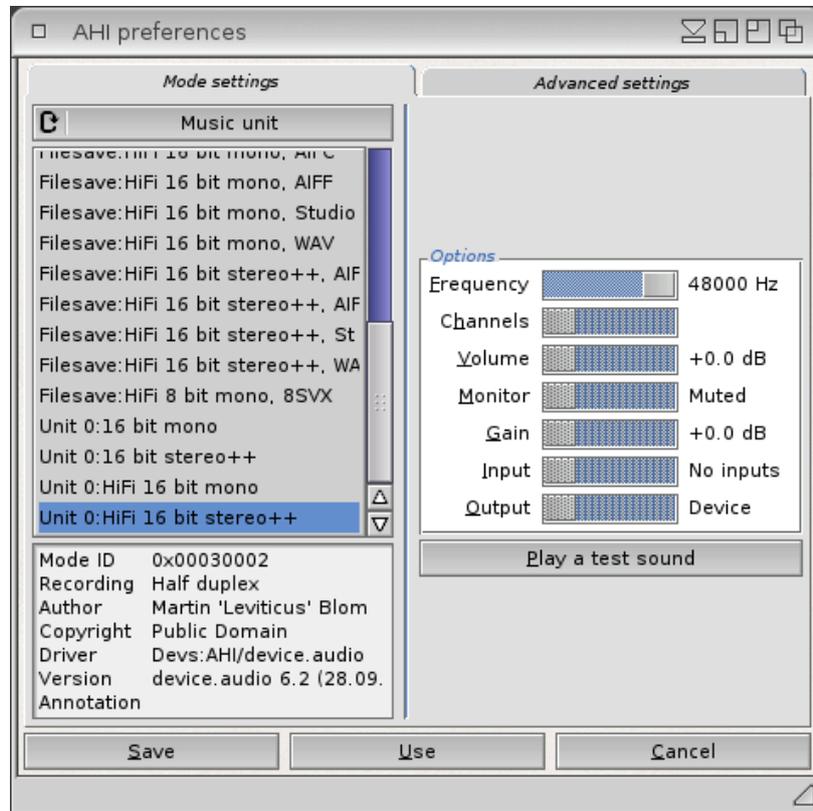
In the next window, a little summary of the chosen options will be displayed.

If all is right, you just have to click on the 'Next' button in order to launch the copy of the system's files of AmigaOS 4.1 on your new partition !

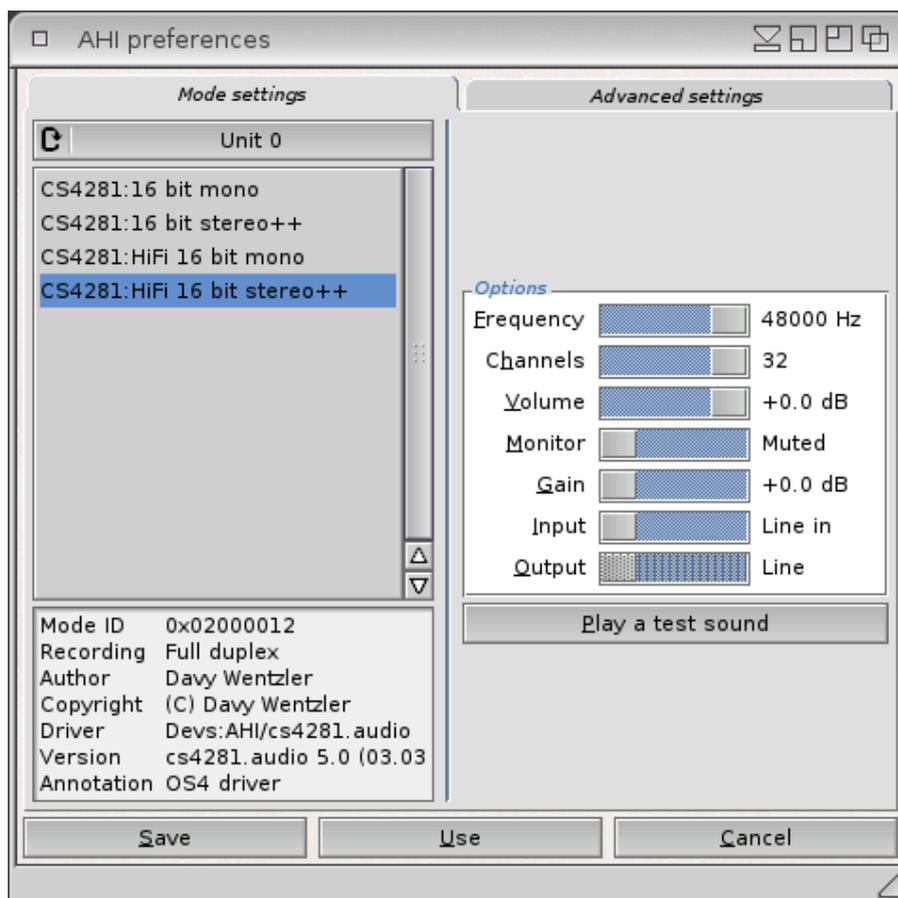


When all is done, please remove the AmigaOS 4.1 CD, turn off your computer and start it up again in order to launch AmigaOS 4.1 from your haddrive.

N.B. : When you start AmigaOS 4.1 for the first time from your harddrive, please start the AHI preferences and put the volume of each musical unit at the maximum level and use the ‘Unit 0 : HiFi 16 bit stereo ++’ option for the ‘musical unit’.



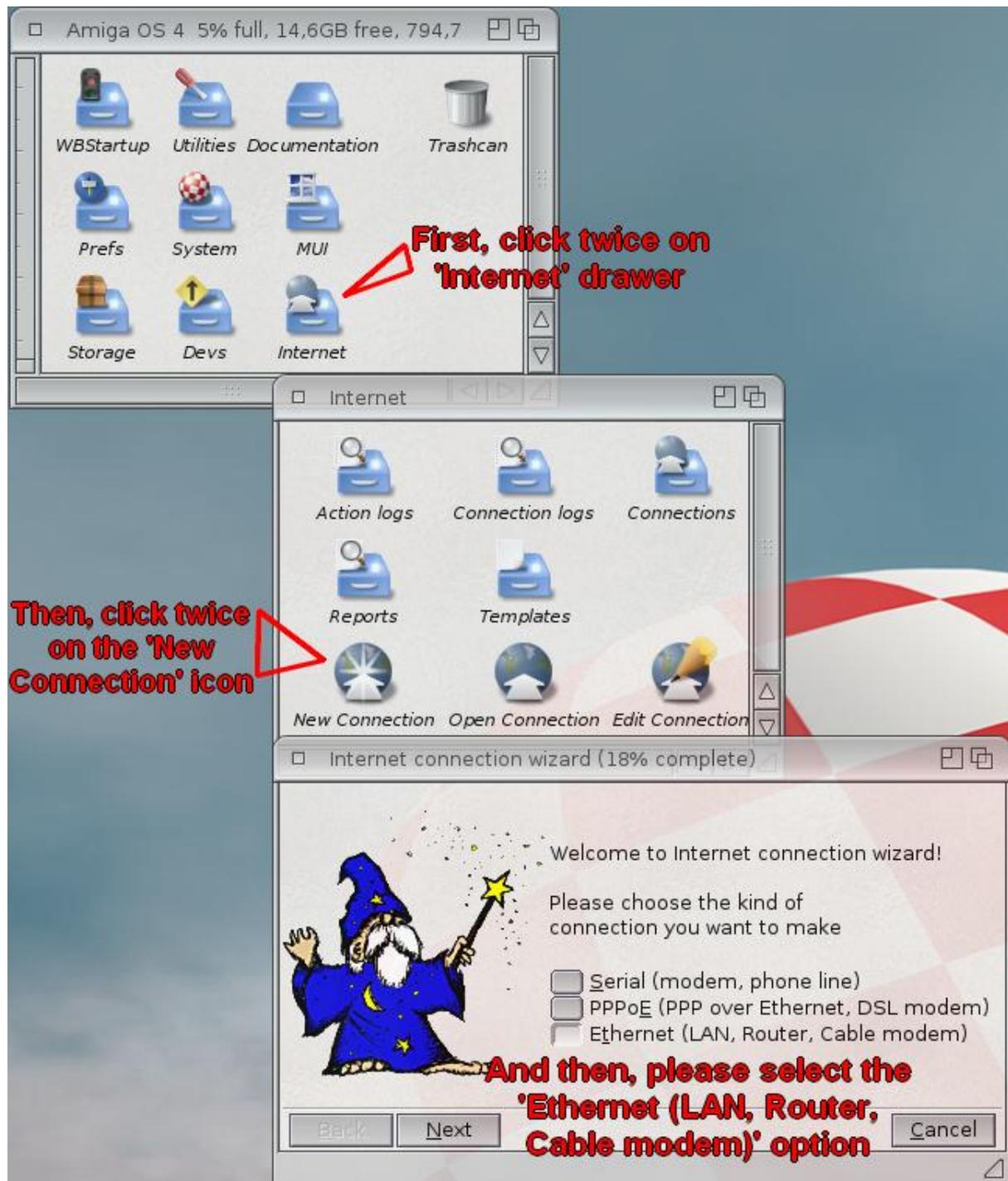
For the unit 0 à 3, please select the ‘CS4281:HiFi 16 bit stereo++’ mode.



Internet connection configuration

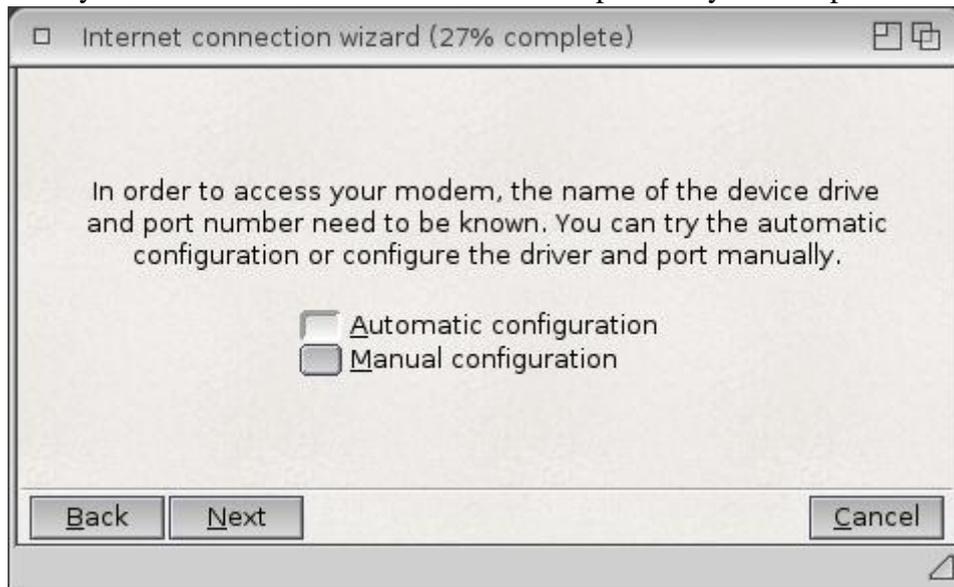
In order to have an Internet access, just click twice on the 'New Connection' icon which is located in the 'Internet' drawer of your 'Amiga OS 4' partition.

We will only explain the LAN connexion with an available DSL router.

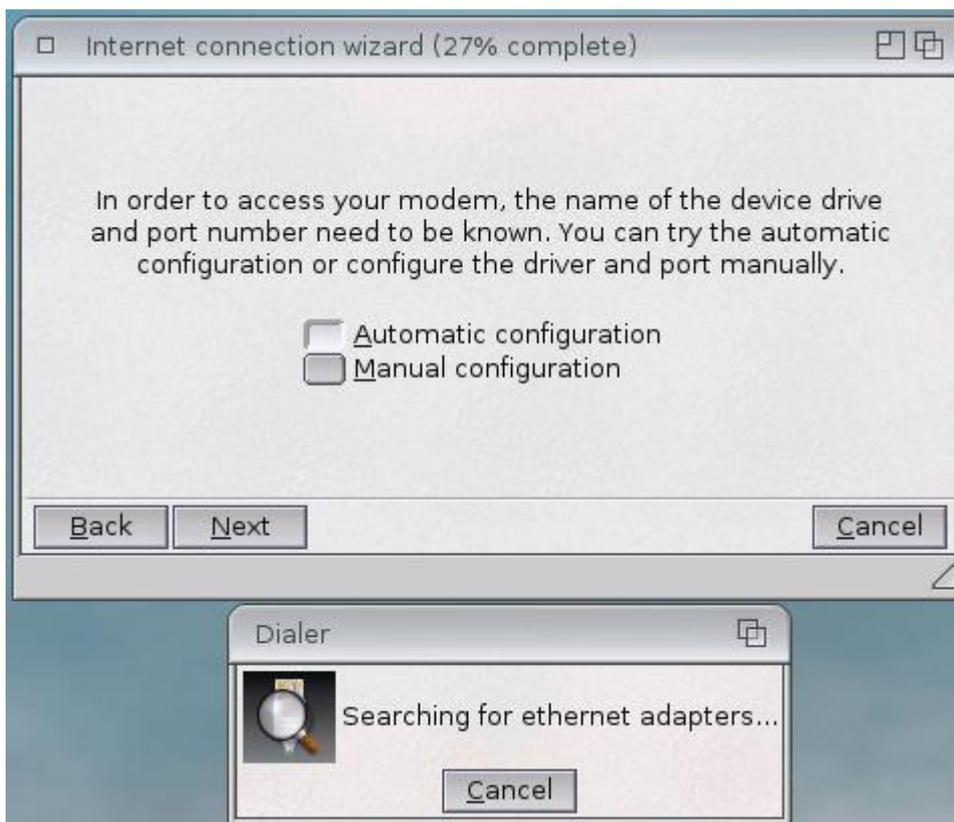


Here, just select the 'Ethernet (LAN, Router, Cable modem)' option and click on the 'Next button'.

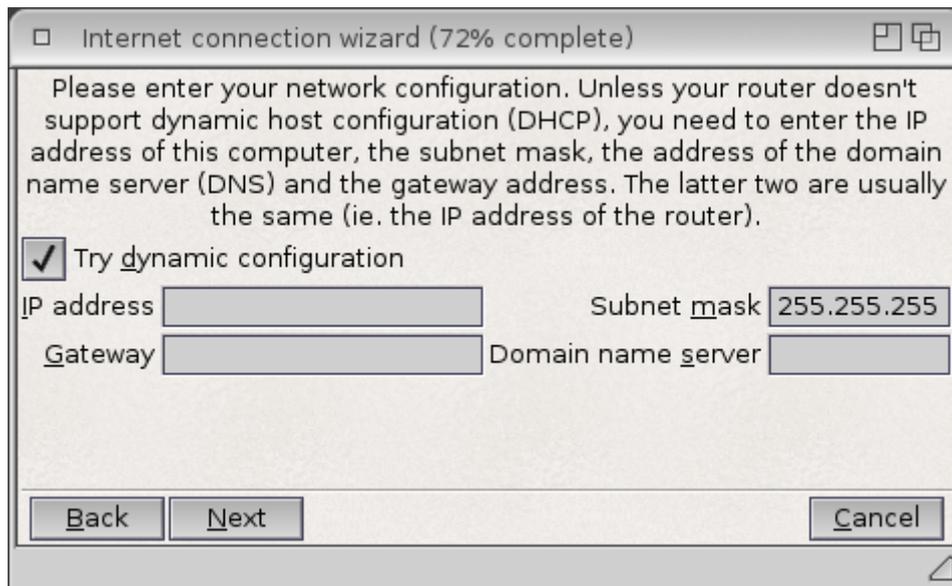
Here, select the 'Automatic configuration' and click on the 'Next' button in order that the wizard utility searches for the available network adapters on your computer.



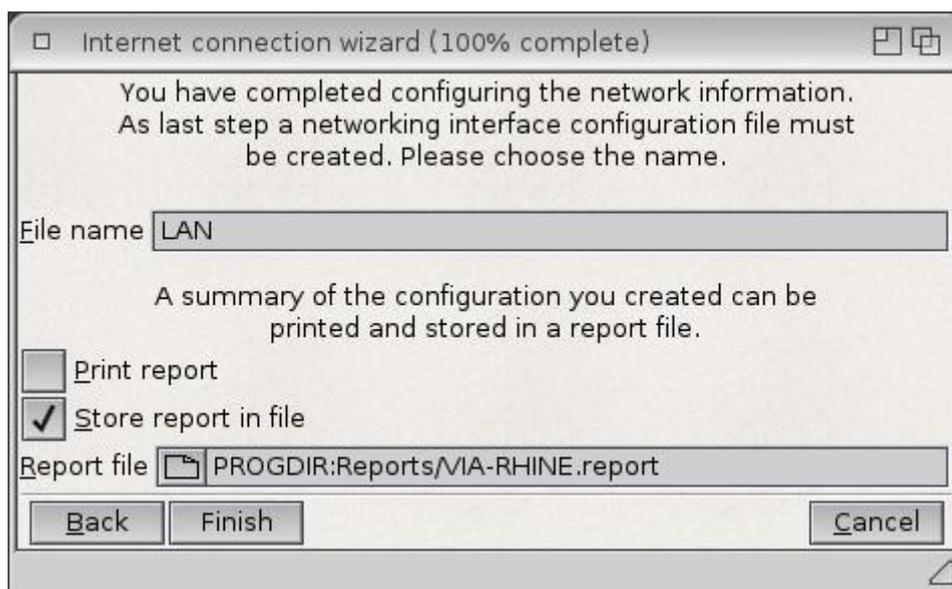
In the following window, you just should have to click on the 'Next' button. The wizard should automatically select the correct network adapter.



Then, assuming you have a DHCP server (integrated in the router), you just have to check the 'Try dynamic configuration' box and click on the 'Next' button.



Then, just name your connexion. We have chosen 'LAN'.



Here you just have to click on the 'Finish' button to terminate the process.

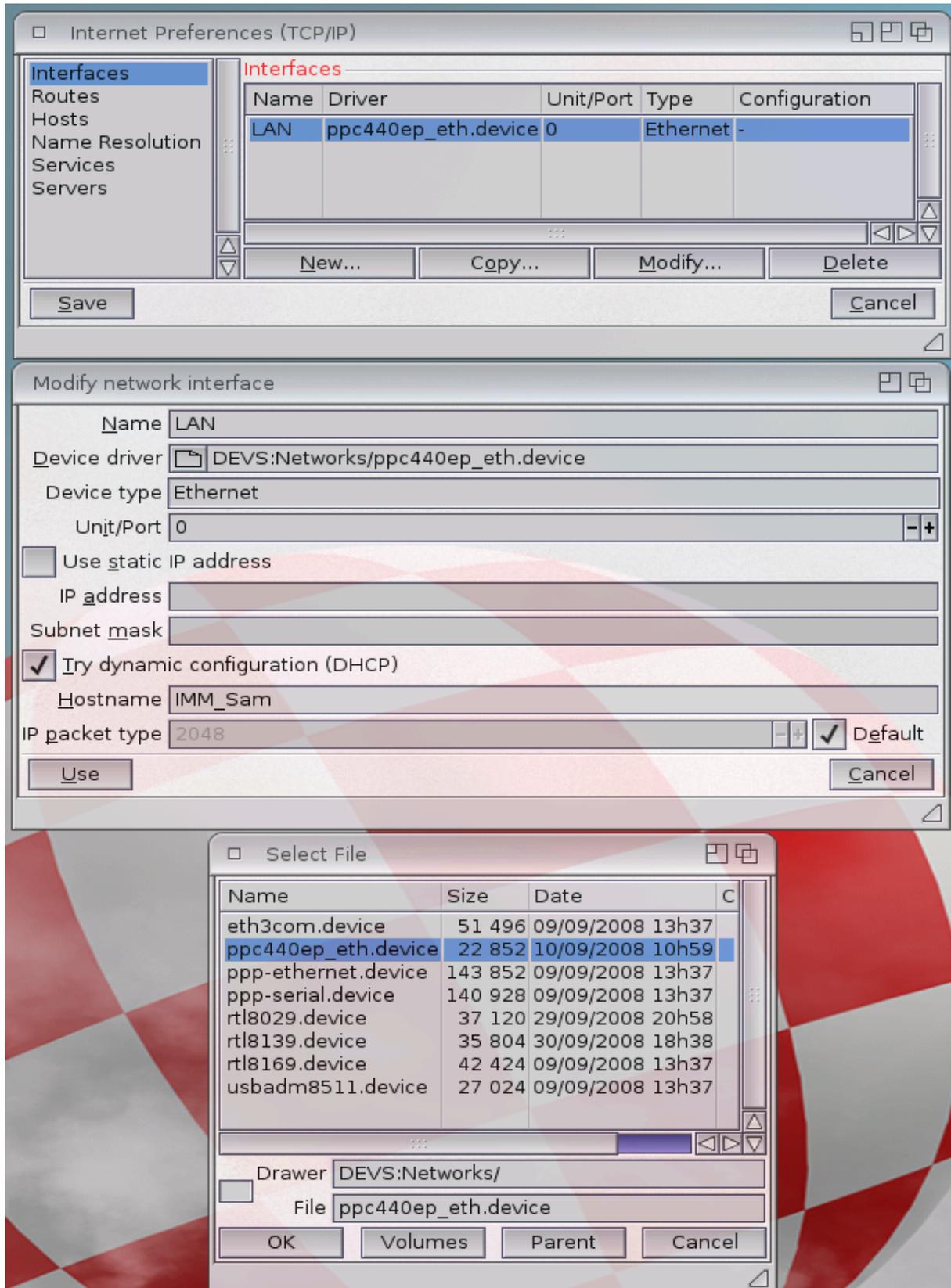


When you have clicked on the 'Okay' button, just launch IBrowse or OWB for example in order to verify your Internet connexion is active and correctly configured.

If it's not the case, please follow the instructions below.

Here, the goal is to modify manually the previous configuration, and to specify one parameter for 'Tunenet' application.

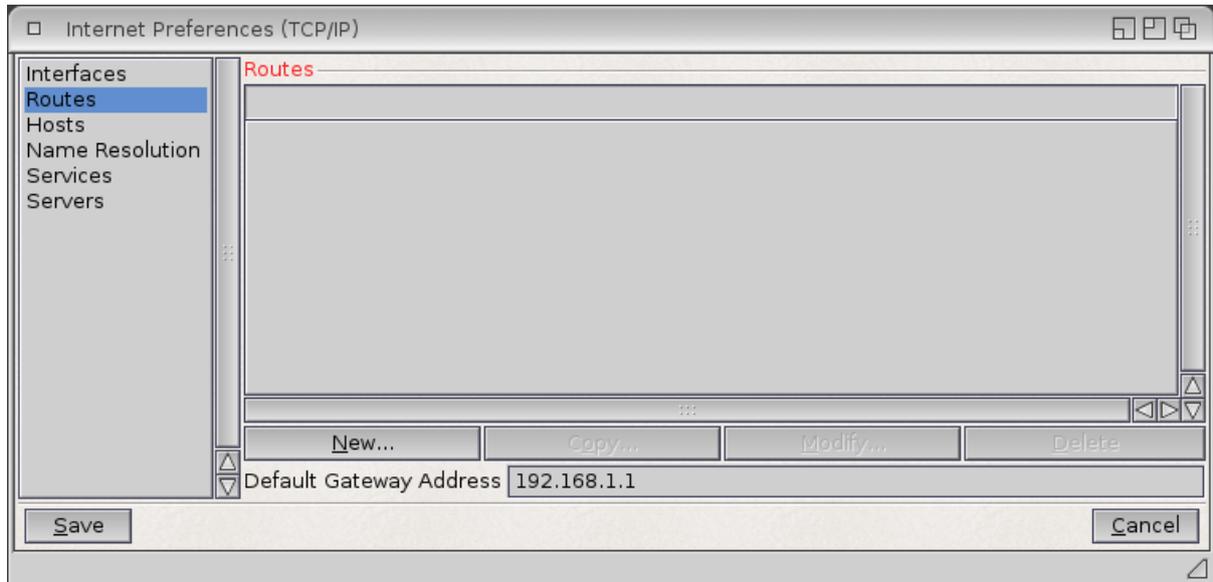
For that, click on the 'Internet' icon located in the 'Prefs' drawer of your 'Amiga OS 4.1' partition.



In the 'Interfaces' section, click on the 'Modify...' button and then, on the file selection button at the right of the 'Pilote du périphérique' line. Please select here the 'ppc440ep_eth.device' file from the list and click on the 'Ok' button.

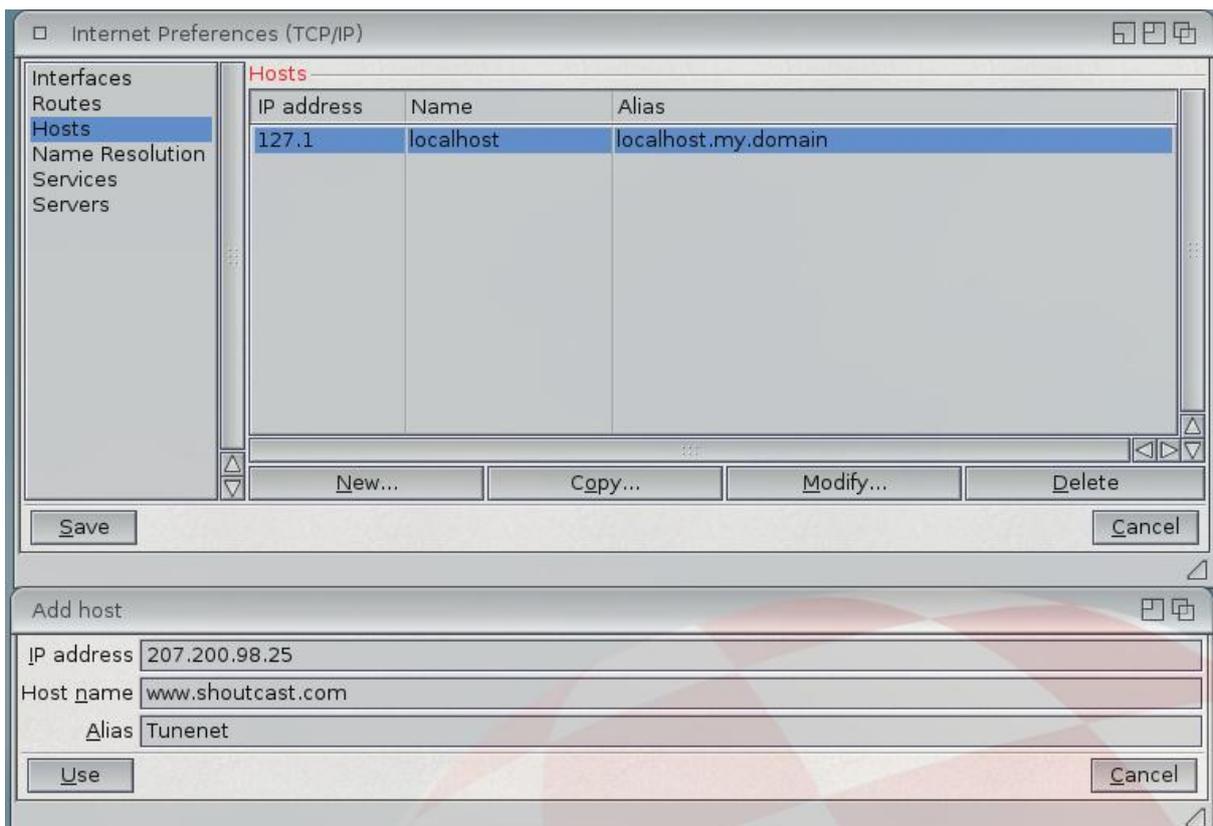
For more facility, check the 'Try dynamic configuration (DHCP)' box in order to get an automatic IP address for your computer given by your router.

Then click on the 'Use' button and select the 'Routes' line in the first window.

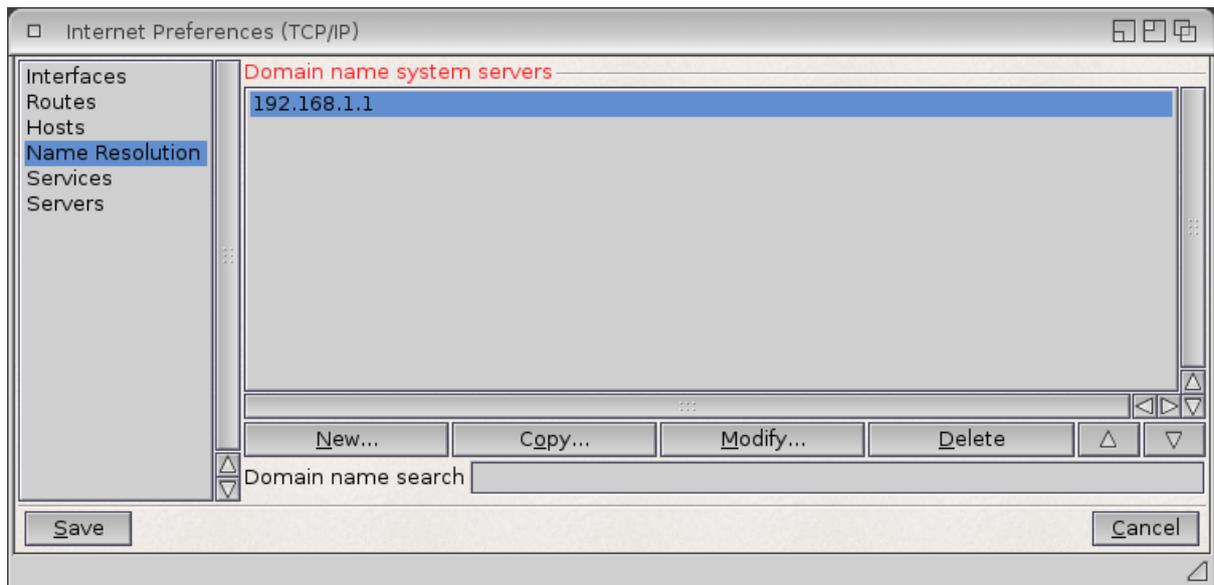


Here, just check that the case 'Default Gateway Address' has the correct IP address of your router.

Then, click on the 'Host' section and then, on the 'New' button in order to add a new host which will give you access to the Internet radios through 'Tunenet' software.



The IP address to type is **207.200.98.25**, the host name is '**www.shoutcast.com**', for the alias, we suggest 'Tunenet'.



Then, click on the 'Name Resolution' line just in order to verify that the domain name system server has the correct IP address of your router.

Finally, click on the 'Save' button and let AmigaOS 4 disabling and reeabling your Internet connexion.

Now, you should have access to Internet !

N.B. : For those who have not an available network connexion, AmigaOS 4.1 will take a longer time to start. In order to avoid this problem, there is a little trick :

- Edit your 'startup-sequence' file located in the 'S' drawer a the root of your 'Amiga OS 4' partition with 'Notepad' software,
- Locate the line where the 'C:AddInterface' command appears and at the beginning of the line, just type 'Run >NIL:' in order to get the following line :

```
Run >NIL: C:AddNetInterface QUIET DEVS:NetInterfaces/~(#?.info)
```

Commodities to be placed in your 'WBStartup' drawer In order to facilitate the Workbench use

As you have noticed it, the Workbench is missing some commodities which can be very usefull.

Here we'll advise you some nice tools, like :

- 'ClickToFront' : this tool lets you cycling the windows forwards, you just have to double-click on a window to bring it to the front of the others ; this tool is located in the 'Commodities' drawer which is located in the 'Utilities' drawer of your 'Amiga OS 4' partition,

- 'ContextMenus' : this tool brings a contextual menu when you right click on an empty space of the Workbench from where you can have easy access to your AmigaOS 4 settings and some other tools ; this tool is located in the 'Commodities' drawer which is located in the 'Utilities' drawer of your 'Amiga OS 4' partition,

- 'AutoUpdateWB' : this tools gives you a realtime refresh of the opened Workbench drawers ; you can download this tool at the following Internet address :
<http://os4depot.net/share/utility/workbench/autoupdatewb.lha>

- 'Filer' : this tool allows you to open some listers for managing your files easier like it was done with the 'Directory Opus Magellan' software ; you can download this tool at the following Internet address :
<http://os4depot.net/share/utility/filetool/filer.lha>



Finally, in order to be able to use your mouse wheel for scrolling your different pannels in the 'AmiDock' bar, please edit your 'startup-sequence' file (located in the 'S' drawer of your AmigaOS 4 partition) with 'Notepad' software in order to modify the line where the 'IPrefs' command is located, and type the following line instead :

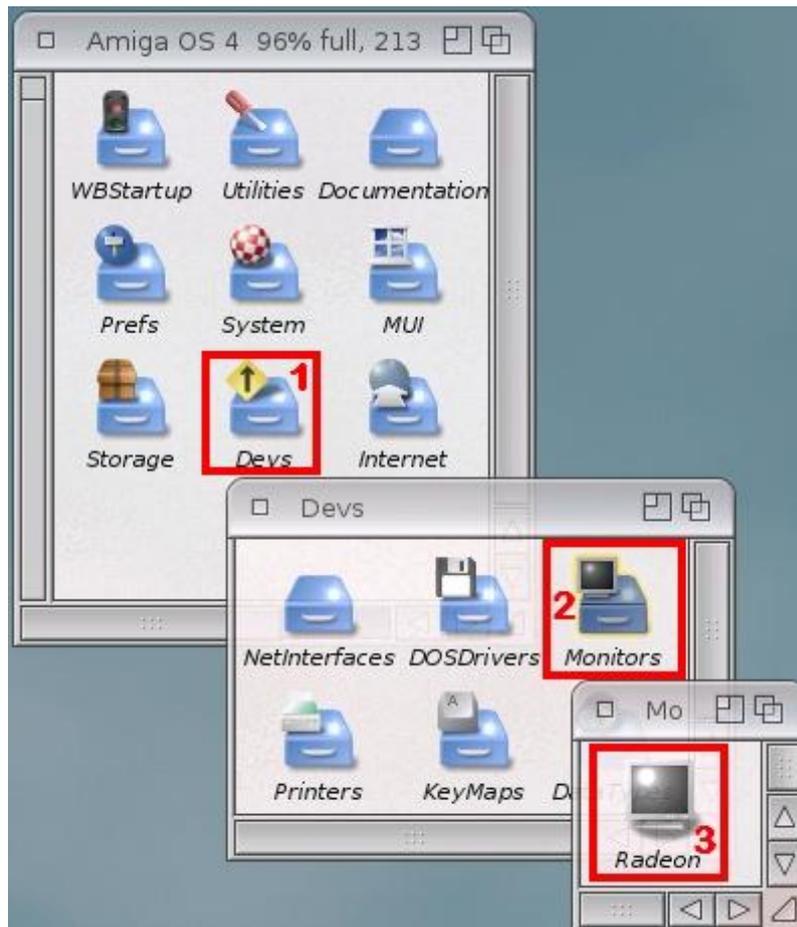
```
C:IPrefs NEWMOUSE
```

Display configuration

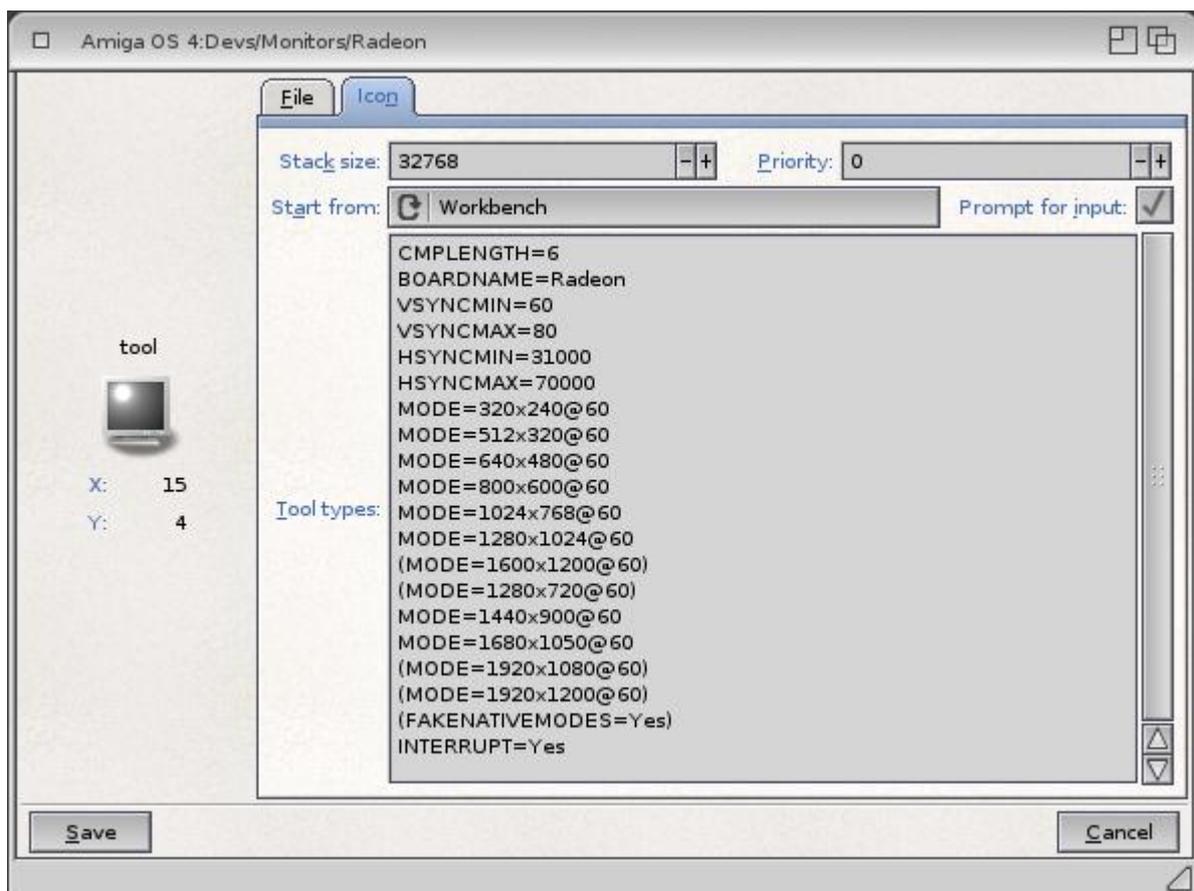
Here, there is just a few things to know.

On the contrary of all AmigaOS release, AmigaOS 4.1 doesn't use the Picasso96 preferences program to set the available resolution you will use.

For configuring your display, just double-click on your 'Amiga OS 4' drawer, then on your 'Devs' drawer, and then on the 'Monitors' drawer.



After that, simply select the Radeon's icon and make a right click on it. Please choose here the 'Information' option in order to display its tooltypes.



Here, just add the resolution you want to use for your workbench like it is displayed on the picture above.

For example, for a 1440 x 900 resolution, just add a line in the tooltypes and type the following line :

```
MODE=1440x900@60
```

Then click on the 'Save' button and reboot your AmigaOS 4 for activating this new resolution in the ScreenMode preferences.

For informations, there can be two problems with the display on Sam440EP board and Radeon 9250 PCI board :

- If you have some black vertical lines on your workbench or some strange things displayed, please try connecting your monitor on the DVI port directly without using a DVI to VGA adapter (if your monitor has some DVI port of course),

- If your display becomes totally black after 5 or 10 minutes for example, please add in the tooltypes of the Radeon's icon '+RB' at the end of the line of the resolution used ('MODE=1440x900@60+RB'), and if it's not better, try to add '-RB' ('MODE=1440x900@60-RB').

N.B. : please put the frequencies used by your monitor in the first fourth lines of the tooltypes and please also use the good vertical frequency ('@60'). **We can't be responsible of any damage on your monitor if you don't use the right frequencies !**

Registration and Updates

In order to have the latest system's files, we strongly advise registering your AmigaOS 4.1 software on the Hyperion Entertainment website : <http://www.hyperion-entertainment.biz>

For that, you have to create an account if you haven't one yet : just click on the "new user?" link and follow the instructions. When you are registered, click on the "register product" link and select the "AmigaOS 4.1 for Sam440EP" option. Here, you must accept the licence conditions use and then, you'll just have to type your AmigaOS 4.1 serial number (which is on the CD box).

Now, you can download the updates for your AmigaOS 4.1. For that, just go to the "Downloads" part, then to the "AmigaOS 4.1 Updates" and finally to the "AmigaOS 4.1 for Sam" section for downloading the files for your system. Just decompress it and click on their installation icon.

Your AmigaOS system is now up to date.

**Little usefull informations if your system
does not start from your harddrive.**

If your Sam doesn't want to start after doing all the installation, perhaps it will be necessary to set some variables in U-Boot to help it to have a better recognition of the connected hardware.

The first thing to consider is to connect the harddrive on the J20 connector of the motherboard and the optical drive on the J23 connector. It's advised in order to have a stable system.

Then, in U-Boot, in order to let it knowing which hardware is connected, type the following commands :

```
sete sii3114ide_conf 1002
sete sii3114ide_xfer G000
save
```

The first command (sete sii3114ide_conf 1002) will tell to U-Boot that there is an harddrive connected to the first Serial ATA port (J20) and an optical drive connected to the fourth Serial ATA port (J23).

The second command (sete sii3114ide_xfer G000) force U-Boot using the maximal DMA mode for the harddrive transfert (G) and the automatique best PIO mode for the 3 others peripherals (000).

At the end, the last command (save) will simply save these variables in U-Boot.

In some cases, the harddrive is not recognized as one of the boot devices. In order to force U-Boot to start from the harddrive if there is no CD / DVD in the optical drive, please type the following command :

```
sete boot2 s4sii
save
```

After doing all this steps, you should be able to start your AmigaOS 4.1 system from your harddrive.

Some useful links :

AMedia Computer France : <http://www.amedia-computer.com>

ACube Systems : <http://www.acube-systems.biz>

Hyperion Entertainment : <http://os4.hyperion-entertainment.biz>

OS4 Depot for many OS4 native applications : <http://www.os4depot.net>

Obligement french website for many articles on Amiga : <http://obligement.free.fr>

Amiga Impact excellent french website for news about Amiga : <http://www.amigaimpact.org>

**Thanks to Hyperion Entertainment doing this release
for this new available hardware
realized through ACube Systems conviction !**

Faranheit @ 2013