Basilisk II for the PSP

Basilisk II is a multi-platform Mac II emulator whose code is released under the terms of the GPL v2. As such, it is available on many different platforms, now including the PSP. Features for the PSP version include:

- Emulates a Mac II series machine running OS 7.0.1 through 8.1, depending on the ROM used.
- Uses UAE CPU emulation, with new SoftFloat FPU emulation for better compatibility.
- The PSP memstick can be mounted on the Mac desktop (requires File Manager 1.2).
- Supports on-the-fly change of colors and resolution (requires Display Manager).
- Has stereo, 16-bit, 44kHz audio (requires Sound Manager 3.0).
- Supports emulated floppy and CDROM with removable media (no CD audio yet).
- Supports up to four hardfiles for use as fixed drives.
- UDP tunnel for AppleTalk networking across WIFI (no general networking yet).
- Emulates a Mac Extended ADB keyboard and mouse. Buttons can be remapped on-the-fly, and popular IR keyboards are supported on the Phat PSP.
- Supports extra memory and TV out on the Slim PSP.

The main Basilisk II website is located at http://basilisk.cebix.net/. This version of Basilisk II is based on the JIT version found at http://gwenole.beauchesne.info//en/projects/basilisk2. My thanks go to ChaosKnight for the earlier port of Basilisk. While virtually none of his code made it into this conversion (his conversion was of a much older version of Basilisk II), it was helpful to see how he handled certain things. Thanks also to John Hauser for his SoftFloat code, which greatly improves the accuracy of the FPU emulation. I'd also like the thank BenHur for intraFont, which I use in the user interface, and Dark_AleX for his wonder custom firmware, without which homebrew wouldn't be the same, and his TV library.

Basilisk II comes with ABSOLUTELY NO WARRANTY. This is free software, and you are welcome to redistribute it under the terms of the GNU General Public License.

Table of Contents

1. Installing Basilisk II for the PSP

Copy the BasiliskII folder in the archive to the GAME, GAME3XX, or GAME4XX folder in the PSP folder of your memstick. If you look at the folder, you'll see the following:

> **cdroms**
> **disks**
> **files**
> **graphics**
> **hardfiles**
> **imaps**
> **keymap**
> **roms**
> EBOOT.PBP
> dvemgr.prx
> pspirkeyb.ini

The **cdroms** folder is where you copy the bin/cue dumps of Mac CDROMs you wish to use with the emulation. These should be standard MODE1 ISO dumps, not raw dumps. The extension for CDROM images are normally ".bin", ".iso", or ".img".

The **disks** folder is where you copy floppy images you wish to use with the emulation. These are plain dumps of 1.44 MB high-density Mac or PC format microfloppy disks. PC format requires the appropriate Mac extension to read, such as MacLink (part of OS 8). All files in this folder should have an extension of ".dsk".

The **files** folder is mounted on the Mac desktop when enabled in the settings. Files in this folder should be in AppleDouble, hqx, and binhex format.

The **graphics** folder contains the images used by the danzeff on-screen keyboard.

The **hardfiles** folder contains the files that are used as fixed hard disks in the emulation. They can be virtually any size, but will generally be between 200 and 400 MB as a basic installation of OS8 takes about 120 MB. You can have any number of files in this directory, but only a maximum of four can be selected at one time. The extension of files in this folder should b ".hfv", but may also have no extension at all.

The **imaps** folder holds the input maps for remapping the PSP buttons into Mac input events. This will be explained later.

The **keymap** folder holds the keycode maps for IR keyboards.

The **roms** folder holds the Mac ROM images you might use with the emulation. You select one image in the emulation setup. They can have any file name, but a typical extension is ".rom".

EBOOT.PBP is the PSP executable for the emulator itself.

Dvemgr.prx is the TV support library, and needs to be present for TV out on the Slim. It is not needed

on a Phat PSP.

Pspirkeyb.ini is the initialization configuration file for IR keyboards with the PSP. It is set to the Palm IR keyboard. If you have a different IR keyboard, you will need to edit it with a text editor. The file has comments and it should be fairly self-explanatory.

Assuming you un-archived the BasiliskII folder successfully and copied it to the proper place in the PSP memstick, you should see something like this in the XMB:

Note: No Apple Macintosh ROMs or software of any sort is included with this program. You'll have to find them yourself. This emulator is useless without a ROM and MacOS.

2. Setting up Basilisk II

When you run Basilisk II, you'll get the graphic interface after a few seconds. It will appear as bellow:

This is the top menu of the interface. If you ever have a question about what buttons do what, look at the bottom of the screen. You'll notice the top level says to press the CIRCLE button to start the emulator. Do not do so until you have set up the emulator. Press UP or DOWN on the D-Pad to move to one of the sub-menus as seen here:

Note that **Graphics/Sound** is high-lighted when you press DOWN. Pressing DOWN again will move to the next sub-menu, high-lighting it in turn. Notice that the help text at the bottom of the screen tells you that pressing the CROSS button will make you go to the sub-menu that is currently high-lighted. We will now cover each one in turn.

2.1 The Graphics/Sound sub-menu

When you enter the **Graphics/Sound** sub-menu, you will see the following:

```
Screen Mode : 640x480
Color Depth : 256 (8 Bit)
Window Refresh Rate : 20 Hz

Sound : on


X = Hold to change Selection with D-Pad      O = Previous Menu
```
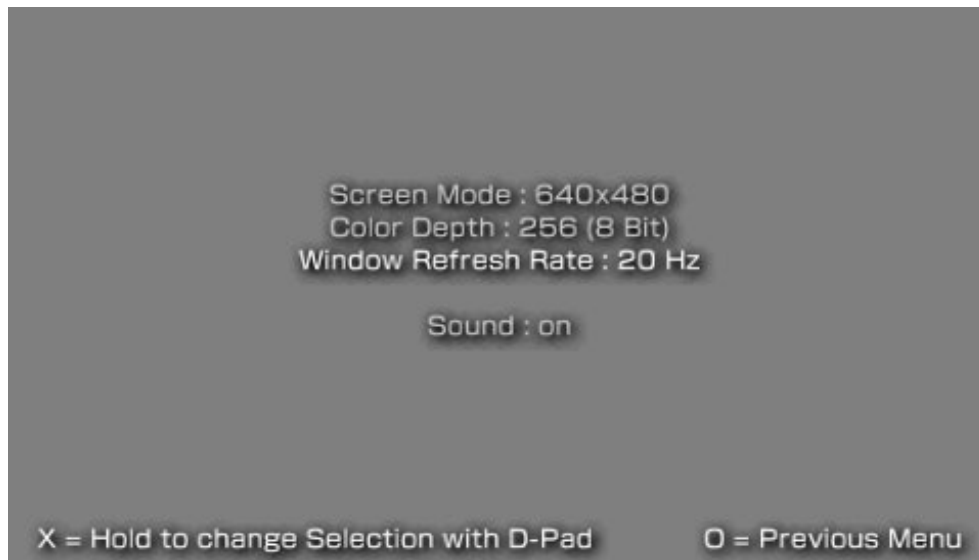
Again, press UP or DOWN to select a menu item.

The **Screen Mode** item allows you to set the resolution that the Mac starts out in when you start it up. The emulator gives the Mac five screen sizes: 512x384, 640x360, 640x480, 768x432, and 768x576. Note that the Mac screen, regardless of the resolution, will be scaled to fit the PSP screen (or TV if selected elsewhere). The higher the resolution, the more it will be scaled, making it harder to make out fine details. The 640x480 resolution is recommended, but if you have trouble reading text at that size, switch to 512x384. Screen sizes smaller than 512x384 will not be considered as that is the smallest resolution that Color QuickDraw can handle properly. You'll find that most Color Mac software is written toward 640x480. If you use Basilisk II on the LCD or an HDTV and you want the Mac to have the proper aspect ratio, use 640x360 or 768x432 as those are both 16:9 modes.

The **Color Depth** item would normally allow you to select the number of colors the Mac starts out in, but this doesn't work properly in Basilisk II. Just leave it at 256 colors.

The **Window Refresh Rate** is how often the PSP will update its display from the Mac screen. The value seen above, 20 Hz, means the PSP display is updated twenty times per second. Setting this higher makes the display smoother, but uses more time that could be spent emulating the Mac. Setting it lower makes the emulator faster, but the display becomes progressively more choppy as the value decreases. Twenty Hertz is recommended.

The **Sound** item is pretty simple: when set to on, the sound is enabled in the emulation. You will be able to get sound from applications that use the Sound Manager API as long as Sound Manager 3.0 or better is installed in the Mac OS. When it is set to off, you get no sound output at all. You might want that if you need the emulation to run as fast as possible, but some programs won't work without sound enabled (games in particular).

2.2 The Memory/Misc sub-menu

When you enter the **Memory/Misc** sub-menu, you will see the following:

The **MacOS RAM Size** menu item sets how much RAM the emulator is to devote to the Mac. On the Phat PSP, this is up to 12 MB. On the Slim PSP, you can get up to 40 MB. You normally want this as high as possible to give the Mac the most memory to use.

The **Mac Model ID** is used by the Mac to decide what software to install when installing the OS. You should set it to **Mac IIci** when you install OS 7.x, and **Quadra 900** when you install OS 8.x.

The **CPU Type** determines what member of the Motorola 68k family processors the emulator uses. The following selections are available: **68020**, **68020 + FPU**, **68030**, **68030 + FPU**, and **68040**. If you are installing OS 7.x, you should set it to **68030 + FPU**. If you are installing OS 8.x, you should set it to **68040**. Note that for best possible speed, you would set it to **68030 + FPU**. Certain extensions in OS 8.x, as well as certain applications, won't run unless it is set to **68040**. You might use one of the other settings if you have an application that doesn't work unless the CPU is one particular type.

The **ROM File** item shows which file has been selected to use with the emulation. When you press the CROSS button while this item is high-lighted, you are taken to the file requester. You will be presented with a list of all the files in the **roms** directory. Use the d-pad to move between the files (assuming you have more than one). Press CROSS to select a file, or CIRCLE to cancel without selecting a file.

When you have set all of the above, the display might look as follows:

MacOS RAM Size (MB) : 40
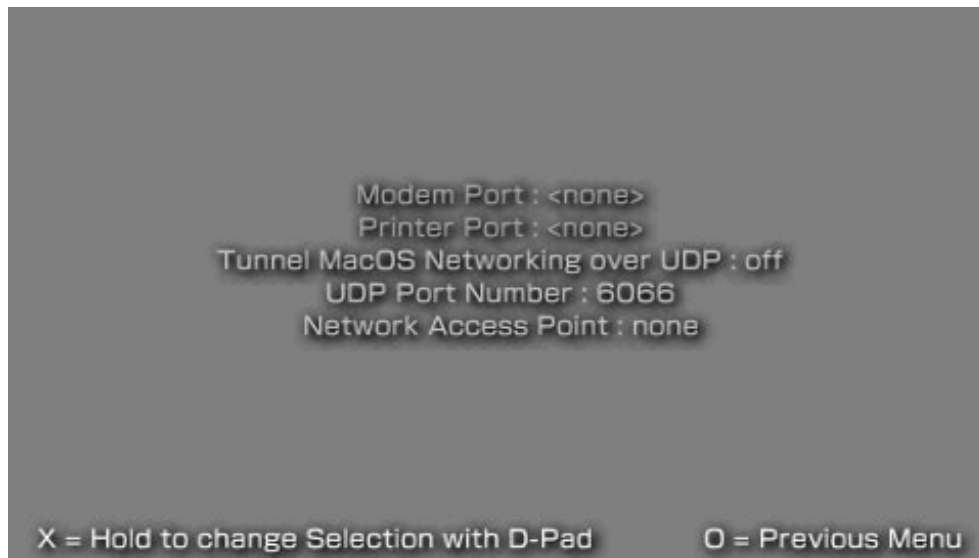Mac Model ID : Quadra 900 (MacOS 8.x)
CPU Type : 68040

ROM File : ms0:/PSP/GAME4XX/BasiliskII/roms/Quadra900.rom

2.3 The Serial/Network sub-menu

When you enter the **Serial/Network** sub-menu, you will see the following:


Currently, the **Modem Port** and **Printer Port** items are disabled. A future version of the emulator may allow you to select the IR port or Remote Serial port for these.

Tunnel MacOS Networking over UDP allows you to use Appletalk across the PSP WIFI when set to on. It does not enable access to the internet.

The default port for tunneling is **6066**, but you can change that with the **UDP Port Number** item.

If you have more than one wireless access point in the PSP's network configuration, you select which one the Mac should use via the **Network Access Point** item.

Set, it would appear as follows:
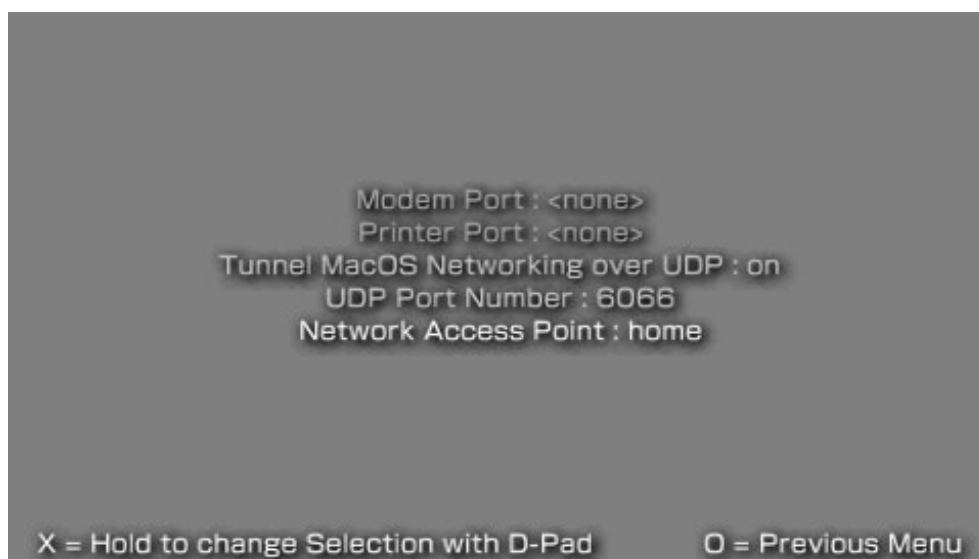
2.3 The Volumes sub-menu

When you enter the **Volumes** sub-menu, you will see the following:

```
                    Boot From : Any
                    PSP MemStick : on
                    Create Hardfile

                      Mac Volumes
File :
File :
File :
File :
CD-ROM :
Floppy Disk :


 X = Hold to change Selection with D-Pad        O = Previous Menu
```

The **Boot From** item has two settings: **Any** and **CDROM**.. The **CDROM** setting forces the emulation to try to boot from the CDROM before checking the hardfiles – or it should. This currently doesn't work. When set to **Any**, the first bootable device will be selected in the following order: the floppy, the hardfiles from top to bottom, and then the CDROM. You can currently only boot the CDROM if none of the selected hardfiles or floppy are bootable.

The **PSP Memstick** item enables the memstick to be mounted on the Mac desktop. This requires the File System 1.2 or better extension in the OS. That is present in most of the 7.5 versions, and in 7.6 and 8.x.

The Create Hardfile item is another sub-menu. It takes you to another menu list that appears as follows:

```
                    Size (MB) : 100
                    Create Hardfile
                  Create 1.4 MB Floppy




 X = Hold to change Selection with D-Pad        O = Previous Menu
```
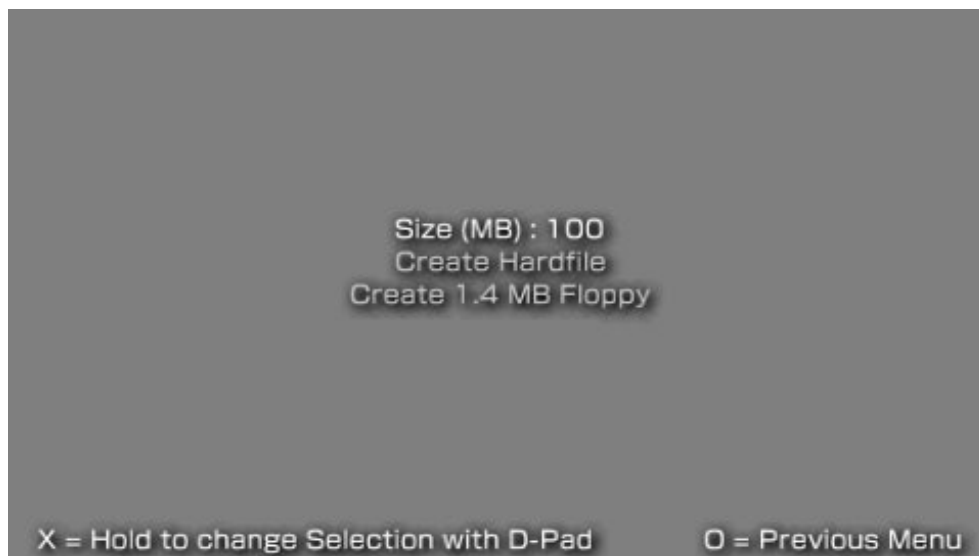
The **Size (MB)** item allows you to select between several preselected sizes suitable to the emulation, from 100 to 2000 mega-bytes. If you are going to install OS 8.x and some applications/games, 400 MB is recommended.

The **Create Hardfile** item pulls up the Sony OSK (on-screen keyboard) to allow you to enter a file name. It appears as follows:

The default file name is "hardfile0.hfv", but if you're making a second one, you could change the "0" to a "1", or give it some completely different name altogether. It is recommended that you leave the extension set to ".hfv". Press START to return the string. The hardfile will then be created at the size and with the name you selected. As the file is created, you will see:
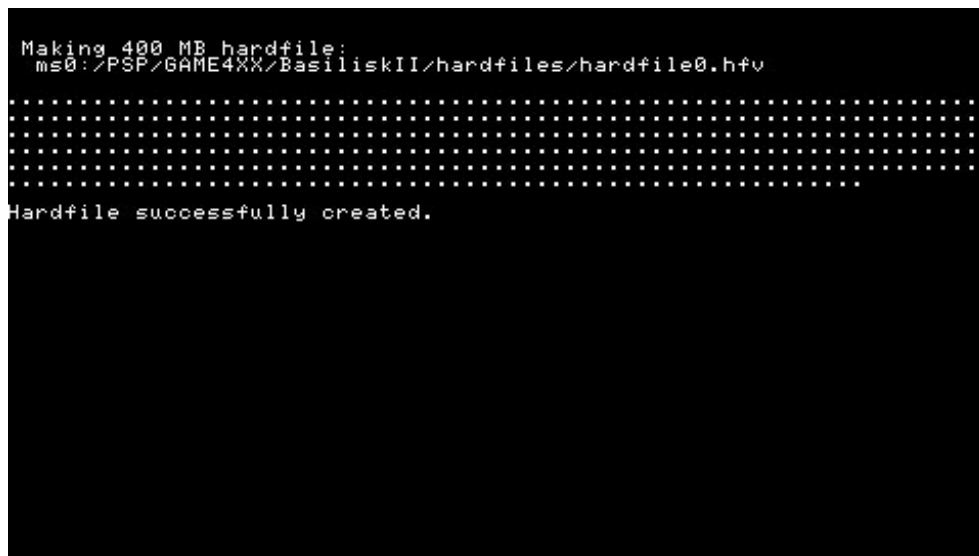
Each dot printed represents one mega-byte of the hardfile created. You will return to the **Create Hardfile** sub-menu when it is finished.

The **Create 1.4 MB Floppy** item is very similar to the **Create Hardfile** item. It will open the Sony OSK and ask you to enter a name. This is used to make a blank 1.4 MB file in the **disks** directory you

can use as a blank floppy disk in the Mac.

The remaining items in the **Volumes** sub-menu are file requestors for the files to serve as the hardfiles, CD-ROM, and floppy. Note than you do not need to select a CD-ROM or floppy – they can be inserted on-the-fly while the emulation is running. That will be covered later.

Assuming you have entered a bootable CD-ROM and a newly-created hardfile to install onto, you will see something like the following:

2.4 The PSP Specific Settings sub-menu

When you enter the **PSP Specific Settings**, you will see the following:

PSP CPU Clock Frequency : Default
PSP Video Output : LCD
PSP LCD Settings
Relaxed timing for 60 Hz IRQ : on

X = Hold to change Selection with D-Pad   O = Previous Menu
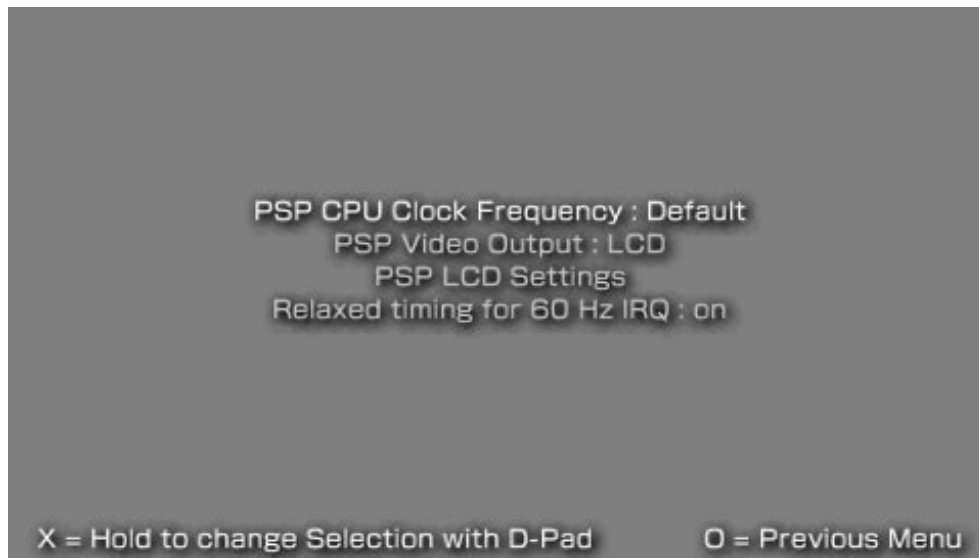
The **PSP CPU Clock Frequency** allows you to set how fast the PSP CPU runs while running the emulator. The **Default** setting leaves the clock at whatever speed you have the custom firmware set to use while running games. If you hold the CROSS button and press RIGHT or LEFT, you will see various speeds. Higher numbers are faster, while lower numbers are slower. For best speed, use the **333/166 MHz** setting.

The **PSP Video Output** item is forced to **LCD** only on the Phat PSP, or if the dvemgr.prx is missing on the Slim, or if a video cable is not plugged into the Slim. If you are on a Slim and the dvemgr.prx is present and a video cable is plugged into the Slim, you can change this item from **LCD** to **TV**. At the same time, the next item changes from **PSP LCD Settings** to **PSP TV Settings**.

The **PSP LCD Settings** sub-menu has only one item – **Display Aspect Ratio**, as seen here:

Display Aspect Ratio : 4:3

X = Hold to change Selection with D-Pad   O = Previous Menu

The 4:3 setting preserves the original Mac aspect ratio, displaying the Mac screen at a size of 364x272. This would look like this:

However, text is very hard to read at this aspect ratio, so it is not recommended. Instead, set it to 16:9 as seen here:

That sets the emulator to display the Mac screen using the full width of the LCD, 480x272, which appears like this:

This looks a little stretched, but makes text easier to read.

If you have a Slim connected to a TV, you'll want to set it to **TV**. The **PSP TV Settings** sub-menu then appears as follows:

Monitor Aspect Ratio : 4:3
Monitor uses Interlace : off
Display Aspect Ratio : 4:3
Draw in Overscan Region : off

X = Hold to change Selection with D-Pad   O = Previous Menu

The **Monitor Aspect Ratio** item selects whether the TV you have hooked the PSP to is an older standard TV (**4:3**), or an HDTV (**16:9**). If you have the composite cable, the **Monitor uses Interlace** item will always be set. If you have the component cable, you will have to set that yourself. Older HDTVs may require interlaced output, but most don't.

The **Display Aspect Ratio** sets whether the PSP tries to preserve the Mac aspect ratio (of 4:3) or not. If you are on an older 4:3 TV, leave this set to **4:3**. If you are on an HDTV and wish the display to fill the whole screen, change it to **16:9**.

The **Draw in Overscan Region** item is used to shrink the PSP display just a little on TV output so that the edges of the Mac screen are not covered by the edges of the TV itself. Older TVs generally have a large overscan area, so you'll want this set to **off**. If your new TV shows "edge-to-edge", set this to **on**

for a bit larger display. You'll just have to try various settings to see what looks best on your TV to you.

The last item In **PSP Specific Settings** is **Relaxed timing for 60 Hz IRQ**. This only affects how often the Mac 60 Hz timer is processed. With relaxed timing, it can drift a bit around 60 Hz. You normally want that as it puts less strain on the emulator.

2.5 The About Basilisk II... sub-menu

When you enter the **About Basilisk II...** sub-menu, you are presented with the following:

Basilisk II V1.1
by Christian Bauer et al.

Basilisk II comes with ABSOLUTELY NO WARRANTY.
This is free software, and you are welcome to redistribute it
under the terms of the GNU General Public License.

PSP conversion by Chilly Willy
Uses IntraFont by BenHur
and SoftFloat by John Hauser
TV-out support lib thanks to Dark_AleX

O = Previous Menu
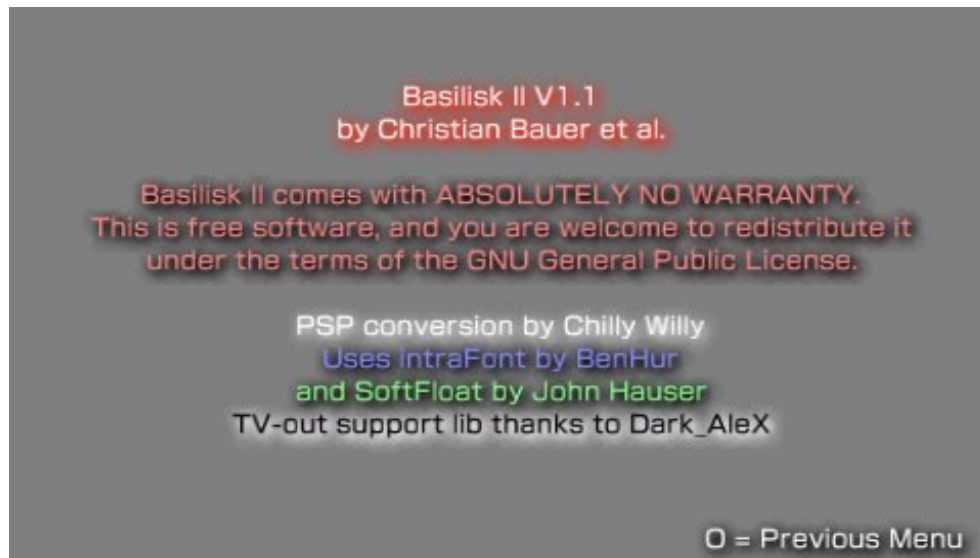
There is nothing to set here. It is merely for informational purposes only.

3. Installing MacOS

Assuming you set up the emulator options as given in the preceding sections of the guide, you are now ready to start the emulator!
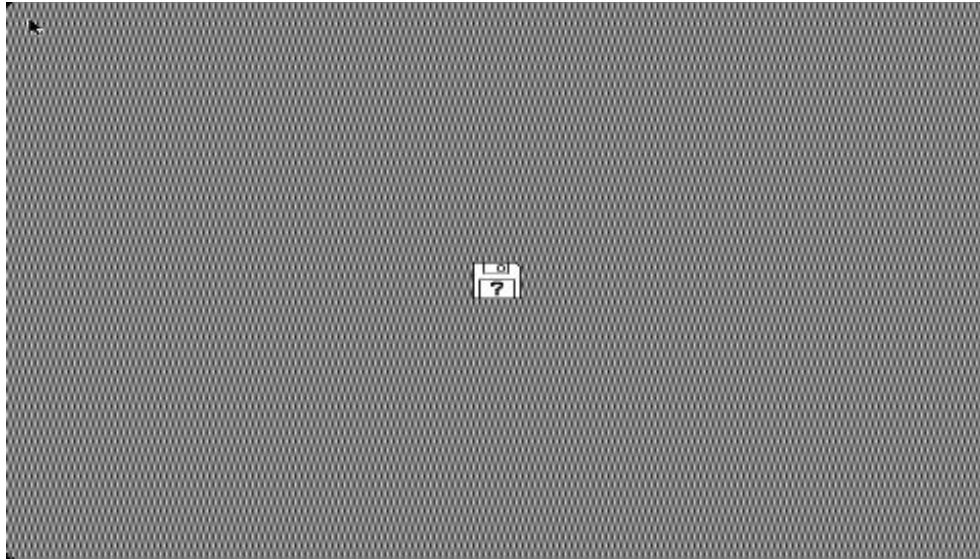
Um... did you perhaps forget to select a bootable floppy or CD-ROM? Well, we can correct that now. Press the SELECT button and a small menu will appear at the bottom of the display.
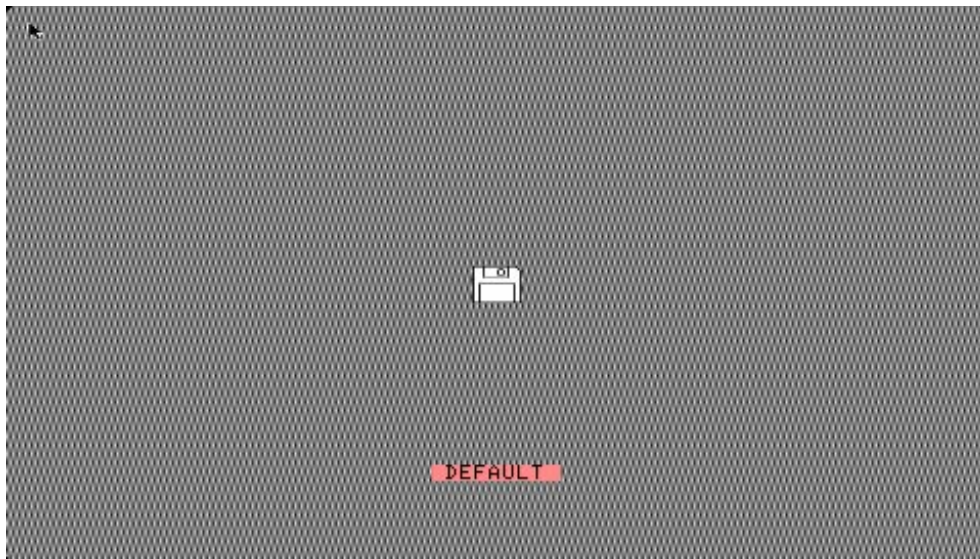
This is the imap/floppy/cdrom menu. Press UP or DOWN to select a file from the list, and press RIGHT or LEFT to change which list you're browsing. The lists are in order: the input map list, the floppy disk list, and the cdrom list. Only files in the proper directory are shown in the lists. Press RIGHT twice or LEFT once to get to the cdrom list, then press UP or DOWN until you get to the CD-ROM you wish to boot, like so:
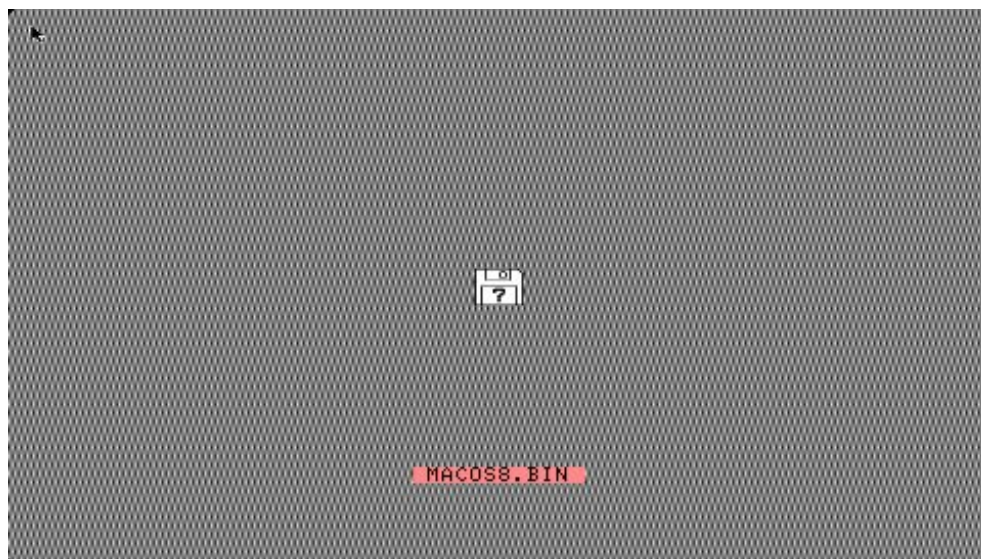
Press the CROSS button to select the file. In this case, it will insert the CD-ROM which will then boot (assuming it's a bootable CD-ROM). Press SELECT again to make the menu go away. You should see the standard Mac OS Welcome splash screen:

Which changes to:

Once the OS boots far enough, it will ask to format the blank hardfile you created and selected.
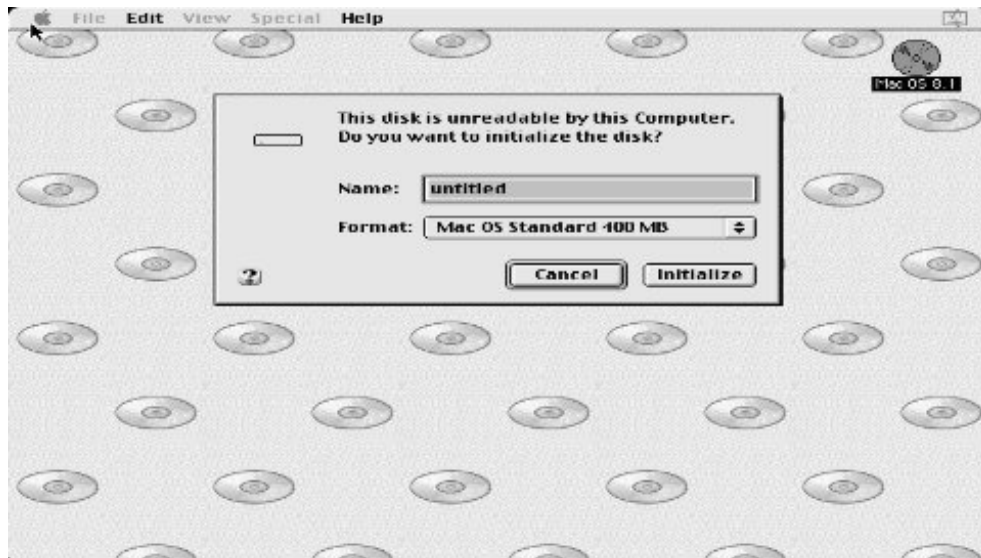
You can change the name of the drive using your IR keyboard (on a Phat with an IR keyboard) or using the danzeff OSK. Press START to get the danzeff OSK. While the danzeff OSK is up, pressing SELECT will change what qualifier key will be pressed along with the selected key. Pressing START again makes the danzeff OSK go away. Pressing RIGHT or LEFT moves the OSK to that side of the display.

If you aren't familiar with the danzeff OSK, you press UP for delete, DOWN for enter, and hold the analog stick in one of the eight directions and press one of the four right-hand buttons to generate a particular key. Hold the RTRIGGER for "shift", and press LTRIGGER to toggle between letters and numbers.
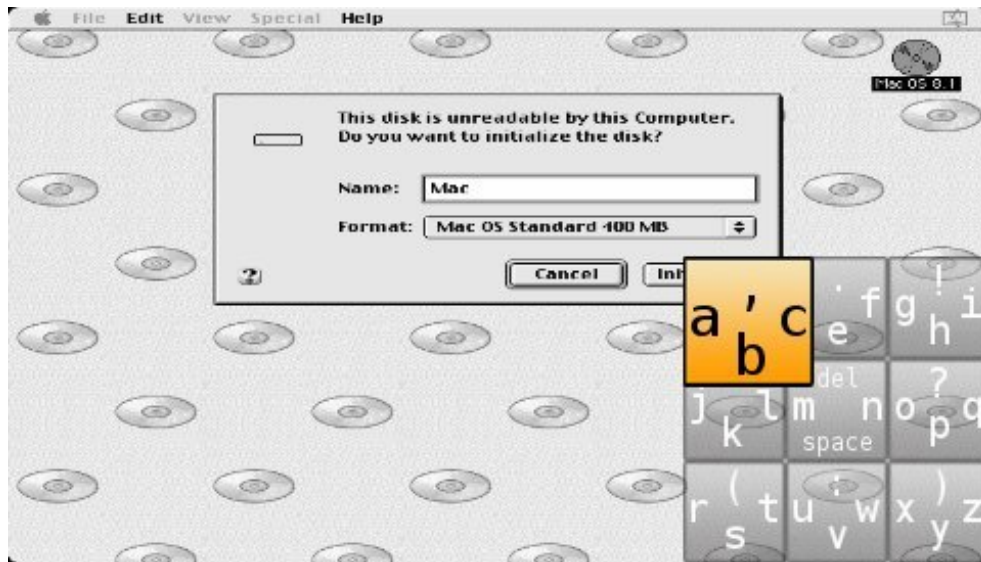
The Mac should "format" the hardfile very quickly. You'll then be presented with the Mac OS desktop:
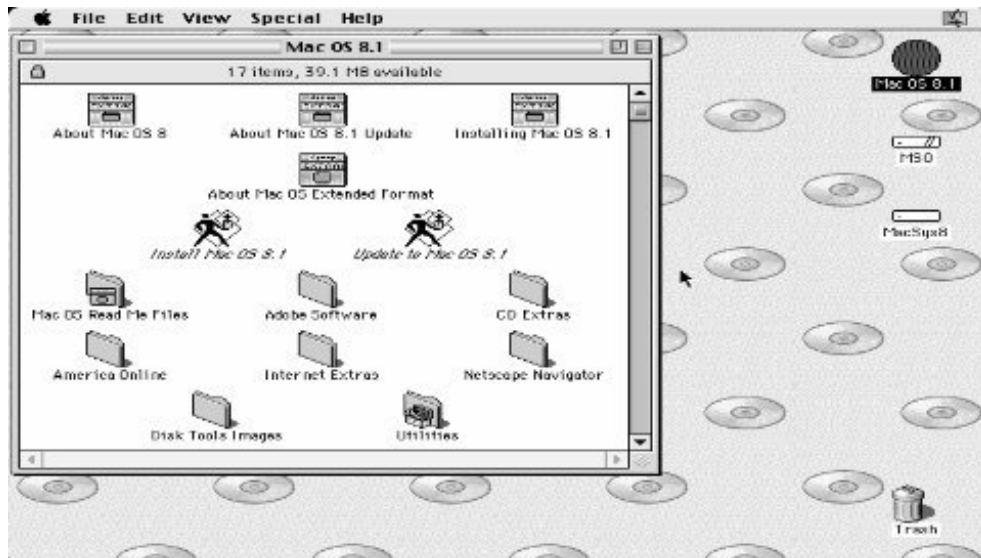
You'll notice the icon in the left-middle of the window says "*Install Mac OS 8.1*". Double-click it to do so. Let's take a moment to discuss the default mapping of the PSP controller buttons.

CROSS – mouse button
SQUARE – enter key
CIRCLE – command + w (Close Window)
TRIANGLE – command + q (Quit Application)
RTRIGGER – control key
LTRIGGER – option key
UP/DOWN/LEFT/RIGHT – corresponding cursor key
ANALOG STICK – mouse

What if your analog stick is broken? You can select an input map to map the directional pad to the mouse. Press SELECT, then press down to change "DEFAULT" to "dpad_mouse" imap. Press CROSS to select it, then press SELECT again to exit the menu. Now UP/DOWN/LEFT/RIGHT will move the

mouse around, and LTRIGGER will make the mouse move faster. All other buttons are the same as the default mapping above.

So now we've double-clicked "*Install Mac OS 8.1*".
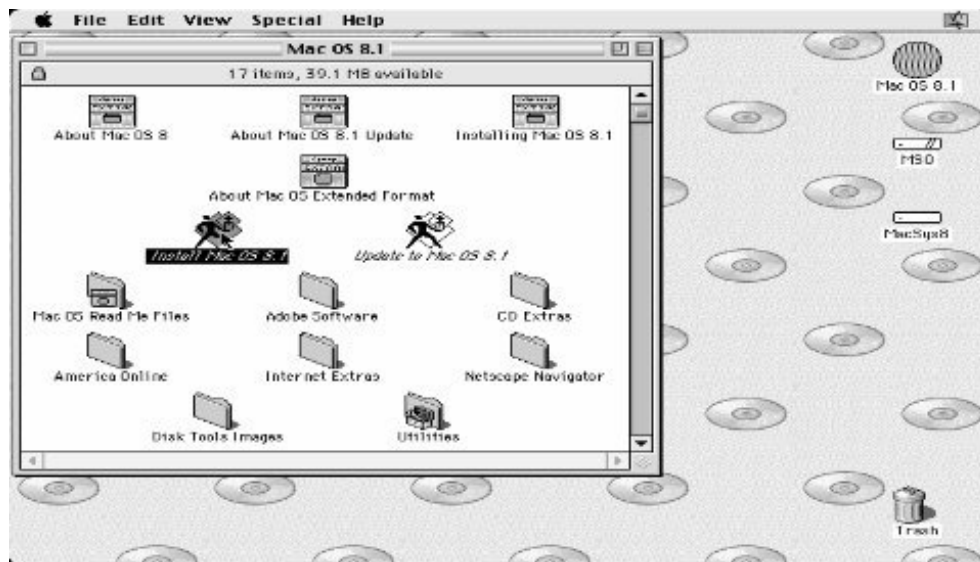
Just keep clicking SQUARE to get past all the initial windows.

File Help

Mac OS 8.1

17 items, 39.1 MB available

Mac OS 8.1 Install

Welcome

Welcome to the Mac OS 8.1 installation program. This program will guide you through the four steps necessary to install Mac OS 8.1.

1. Select a destination disk
2. Read important information
3. Respond to the software license agreement
4. Install software

Click Continue to begin the first step.

Go Back   Continue

File Help

Mac OS 8.1

17 items, 39.1 MB available

Mac OS 8.1 Install

Select Destination

Choose a disk to install the software on, then click Select.

Destination Disk: MacSys8

System software currently installed: None Installed
Available disk space: 397 MB
Approximate disk space required for basic installation: 120 MB

This disk has enough space for a basic installation.

☐ Perform Clean Installation

Go Back   Select

File Help

Mac OS 8.1

17 items, 39.1 MB available

Mac OS 8.1 Install

Important Information

Installing Mac OS 8.1

This document describes how to install Mac OS 8.1. It includes compatibility information, instructions for installing Mac OS 8.1, and basic installation troubleshooting. Updating your system using the downloaded Mac OS 8.1 Update image requires that you already have Mac OS 8.0 installed. If you are using the Mac OS 8.1 Reference CD, you may install onto Mac OS system versions 7.5 through 8.1.

Save...   Print...   Go Back   Continue

You'll have to move the mouse and click CROSS to get past this one.
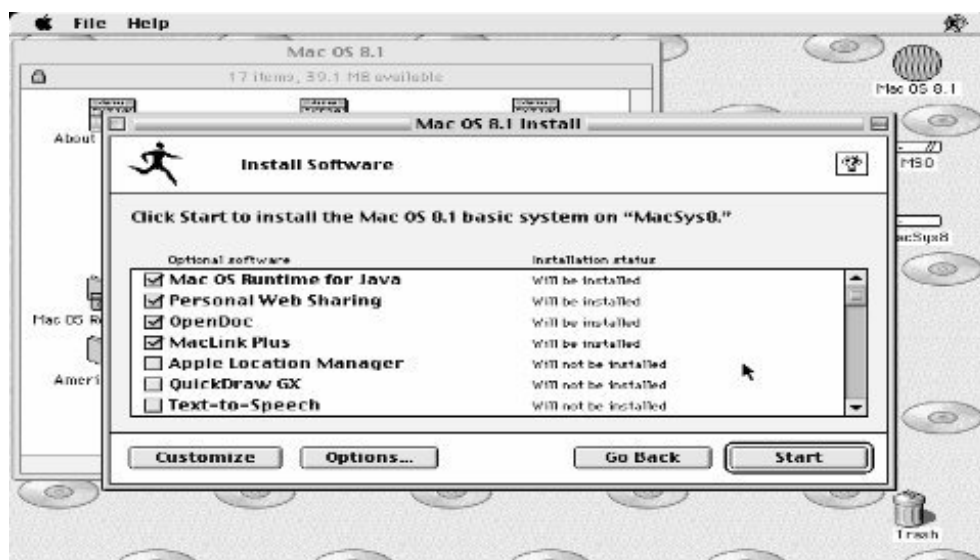
Select everything but QuickDraw GX (that's only for printing).
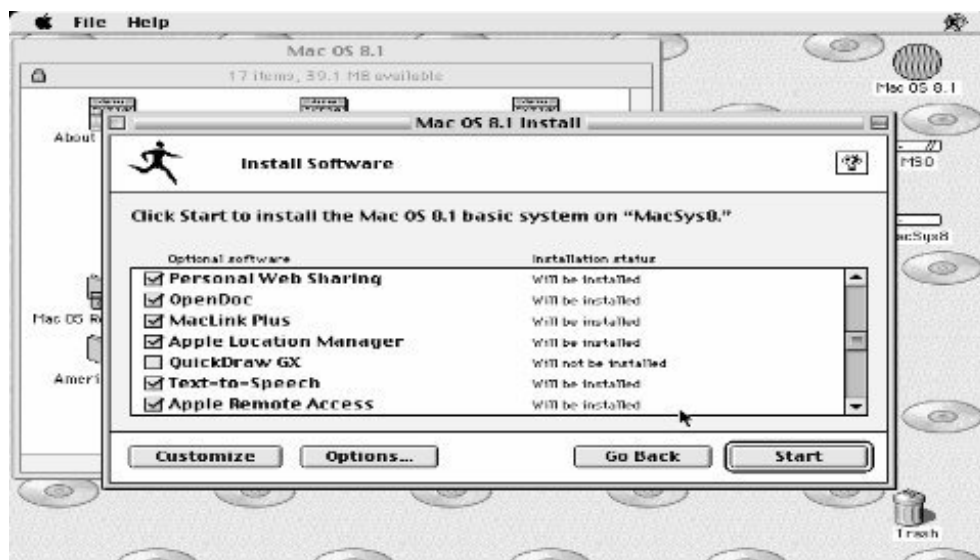
And then click **Start** or press SQUARE to start the installation.
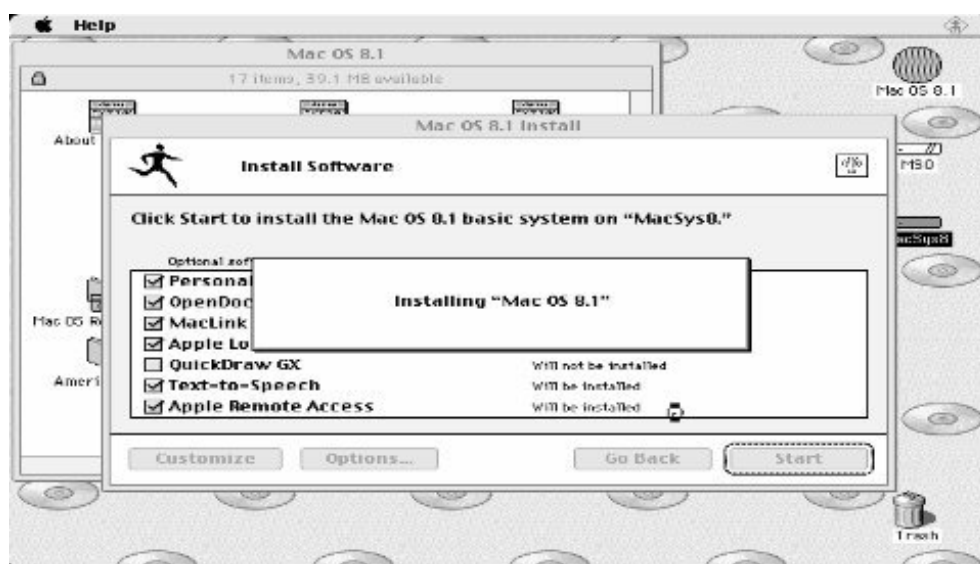
Okay, time to go eat dinner... seriously. I don't know if you've ever installed Mac OS 8.1 on a Mac II series computer, but it takes a while. This took me nearly one and a half hours on my PSP. If you watch, you'll be treated to fascinating screens like these:

Screenshot 1:

Help

Mac OS 8.1

17 items, 39.1 MB available

About

Mac OS 8.1 Install

Mac OS 8.1

MSO

Reading from:

Click St

Mac OS 8

MacSys8

Installing onto the disk "MacSys8"

Mac OS R

Moving fonts to Fonts folder...

Ameri

Cancel

Customize   Options...   Go Back   Start

Trash

Screenshot 2:

Help

Mac OS 8.1

17 items, 39.1 MB available

About

Mac OS 8.1 Install

Mac OS 8.1

MSO

Reading from:

Click St

Mac OS 8

acSys8

Installing onto the disk "MacSys8"

Mac OS R

Reading Text Encodings: Chinese Encodings

Ameri

Cancel

Customize   Options...   Go Back   Start

Trash

Screenshot 3:

Help

Mac OS 8.1

17 items, 39.1 MB available

About

Mac OS 8.1 Install

Mac OS 8.1

MSO

Reading from:

Click St

acSys8

Intern...tsk 4   Intern...tsk 5   Intern...tsk 6

Info Center

Installing onto the disk "MacSys8"

Mac OS R

Reading TOOL228.GIF

Ameri

Cancel

Customize   Options...   Go Back   Start

Trash

Eventually, it finishes...

and Mac OS 8.1 is installed! So now we shut down the Mac so we can get rid of the CD-ROM (you can't unmount a CD-ROM you booted from).
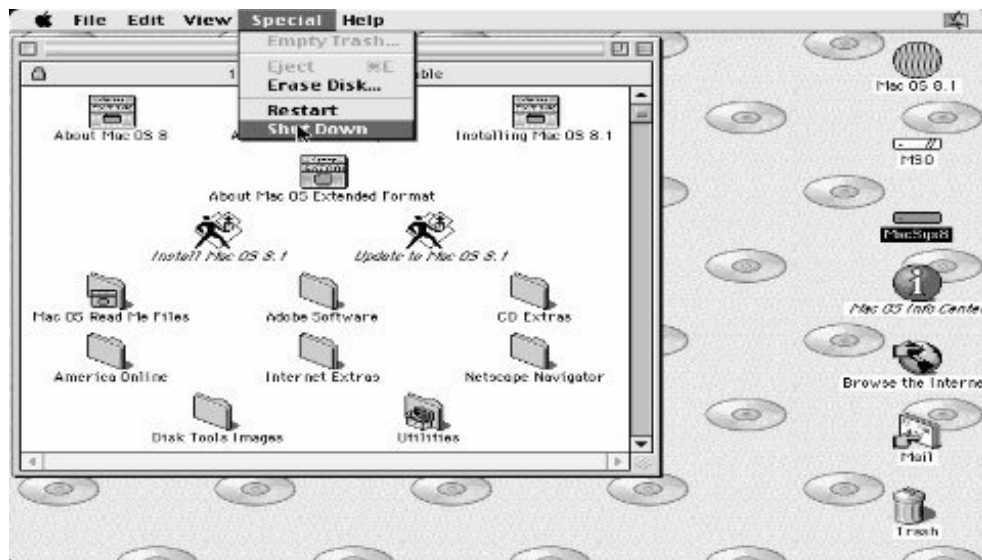
4. Setting up MacOS

So we remove the CD-ROM from the Volumes sub-menu by selecting it, and then exiting out of the file requester using the CIRCLE button.

Now we boot the Mac again.

When you are almost to the desktop, Finder will first rebuild the desktop files on the hard drives.

The first time you boot, you also get the Mac OS Setup Assistant.
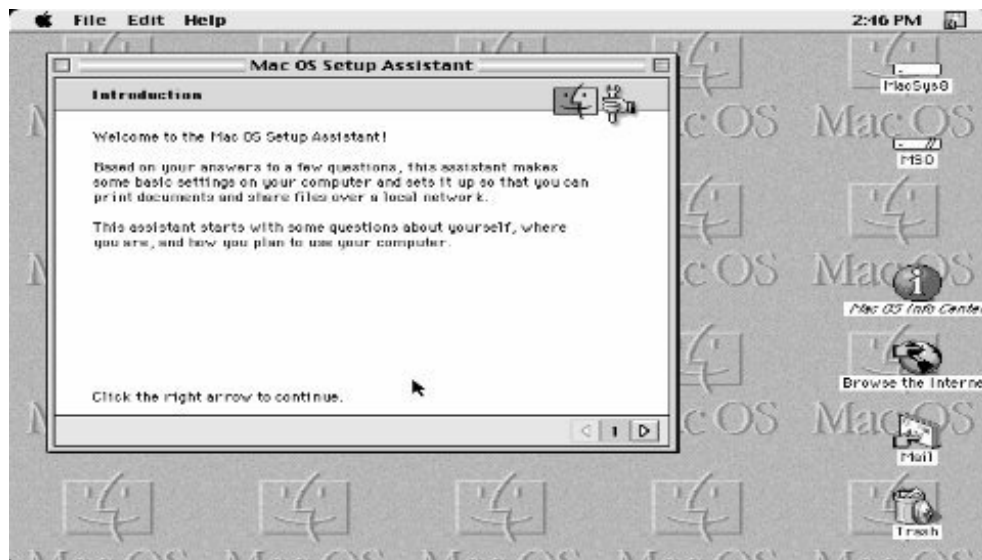
Don't try to use it. It doesn't work on Basilisk II. Just quit (using the TRIANGLE button). Don't try to click the right arrow. If you do, you'll crash the PSP. Then the next time you boot the Mac you'll see:

Isn't this supposed to be a COLOR Mac emulation?!? The Mac initially defaults to sixteen color gray-scale for the display. Basilisk II doesn't override that properly. You'll have to use the Mac's control panels for that.
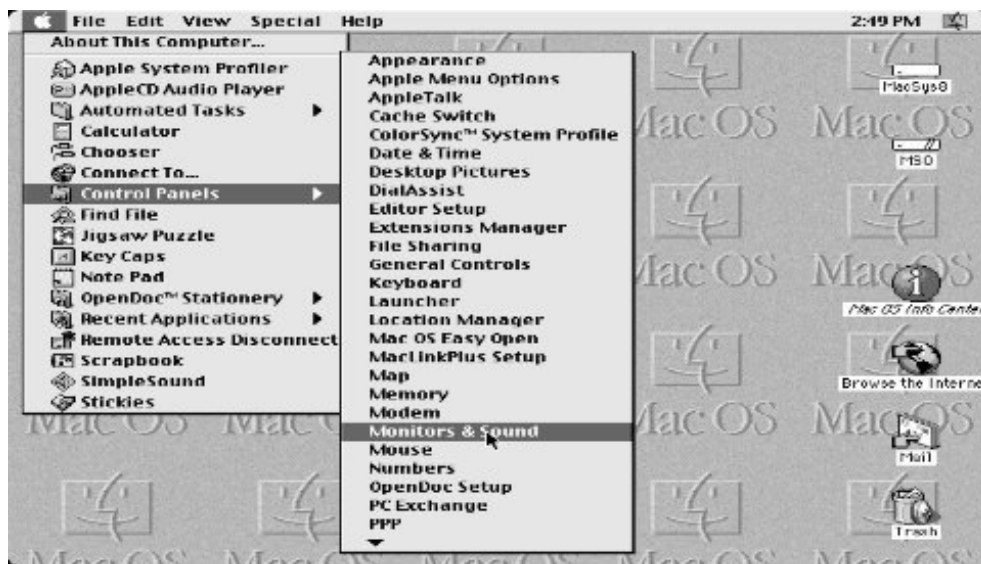
Select the **Monitors & Sound** control panel as above.
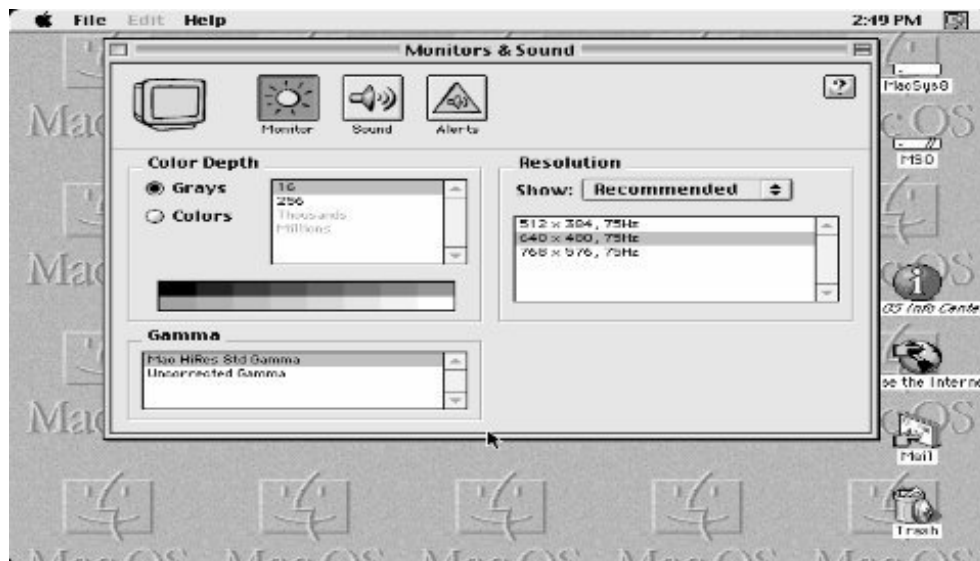
See? Told you we were in sixteen color gray-scale. Let's change that to color...
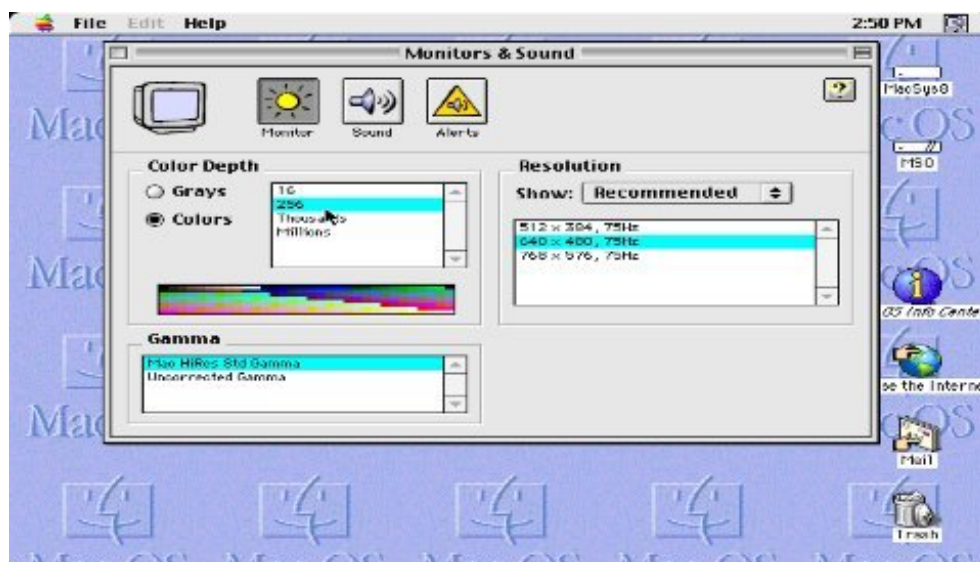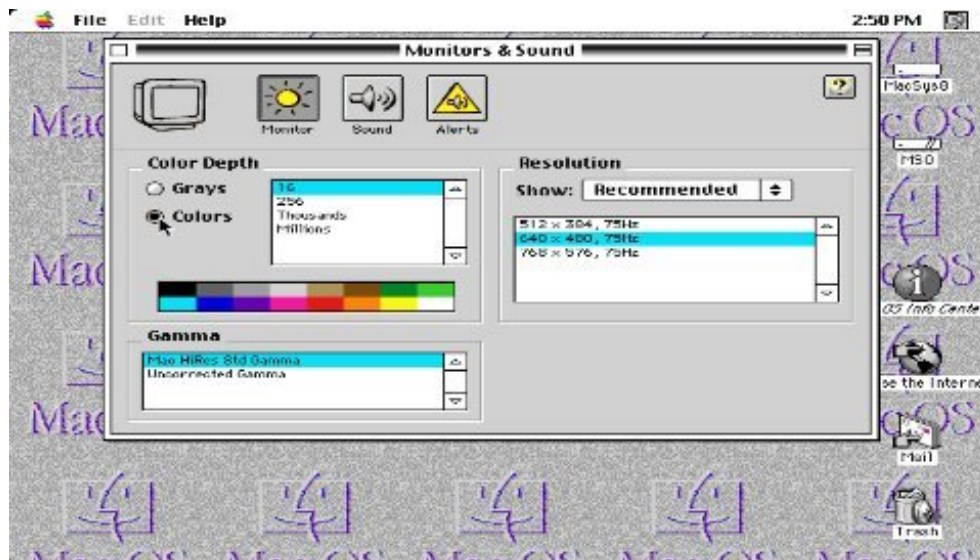
Look at Thousands mode a moment:
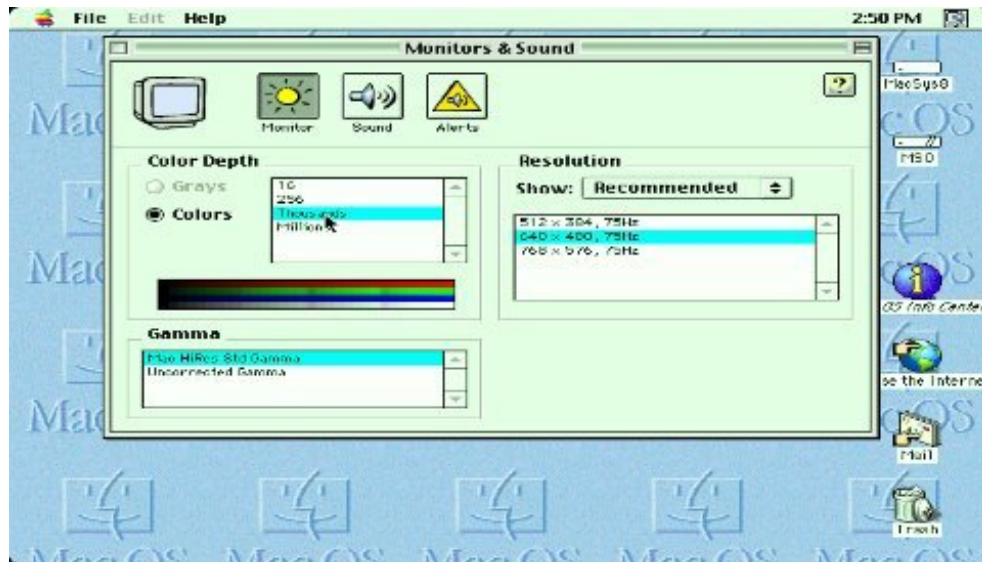
See how green and white look a little funny? That's a side effect of the refresh routine for thousands. I do a two-pass blit that converts the colors from Mac format to PSP format. It has trouble with the gamma correction, so turn it off.
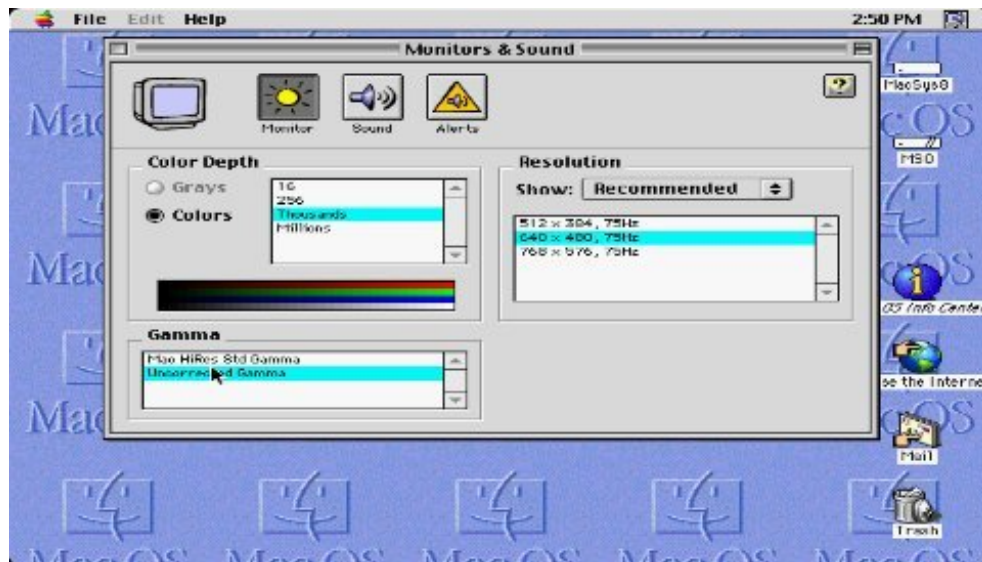
Much better! This only occurs in Thousands mode because of the special blit. Millions doesn't have that trouble.
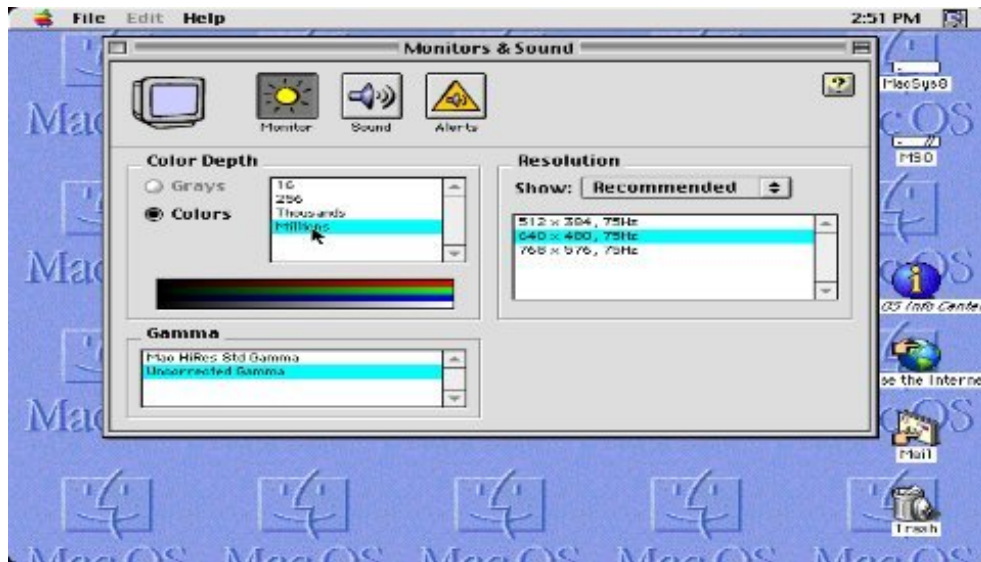
Go back to 256 colors. You only need Thousands or Millions mode if you're doing work on pictures. Most games in particular want 256 colors. It's also the fastest mode to run in. You'll notice on the right the list of resolutions – you can change that if you want, but I recommend leaving it at 640x480.

Now let's change that ugly background pattern.
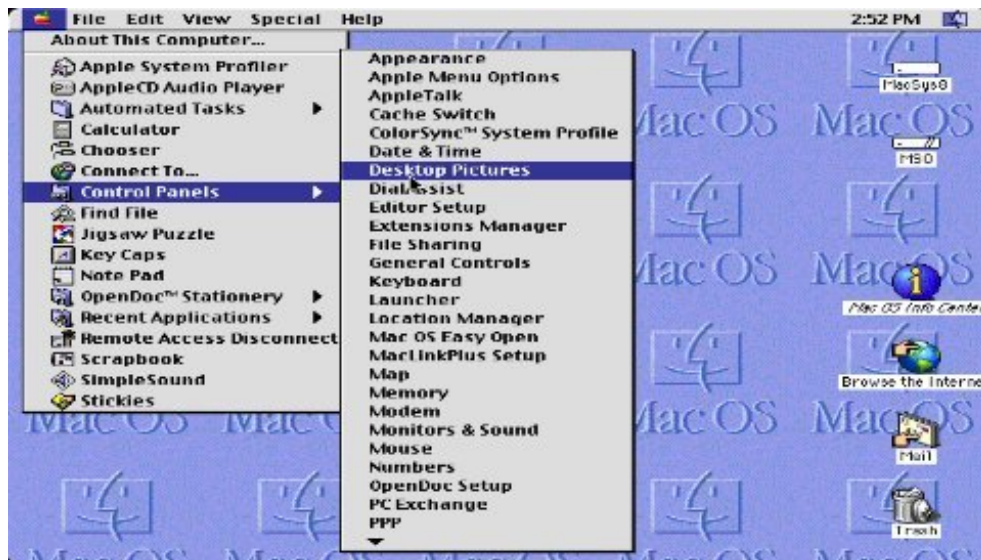
Go to the **Desktop Pictures** control panel. You'll get a chance to chose from many different patterns. I recommend the Bumpy Blue.
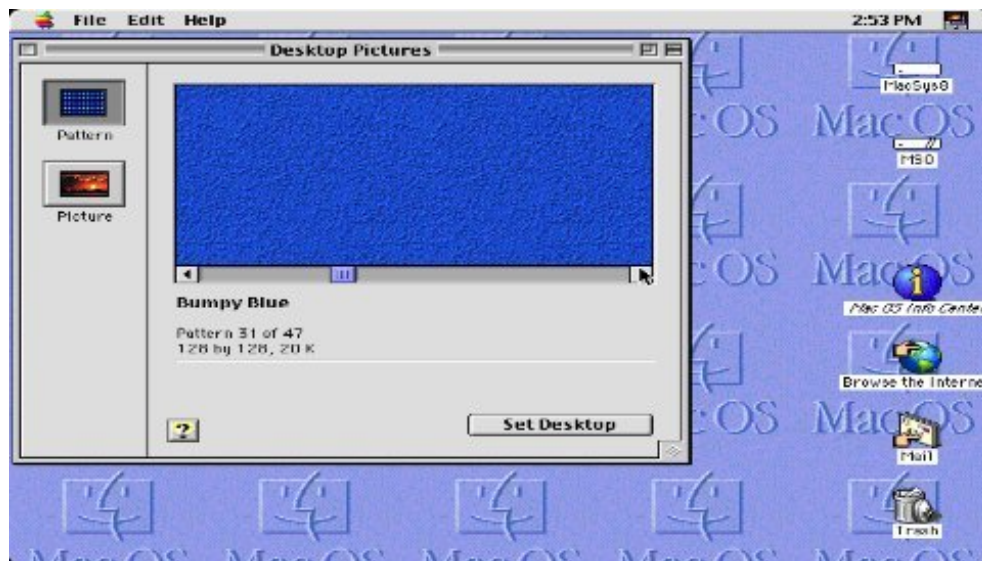
Click **Set Desktop** to make that the selected pattern.
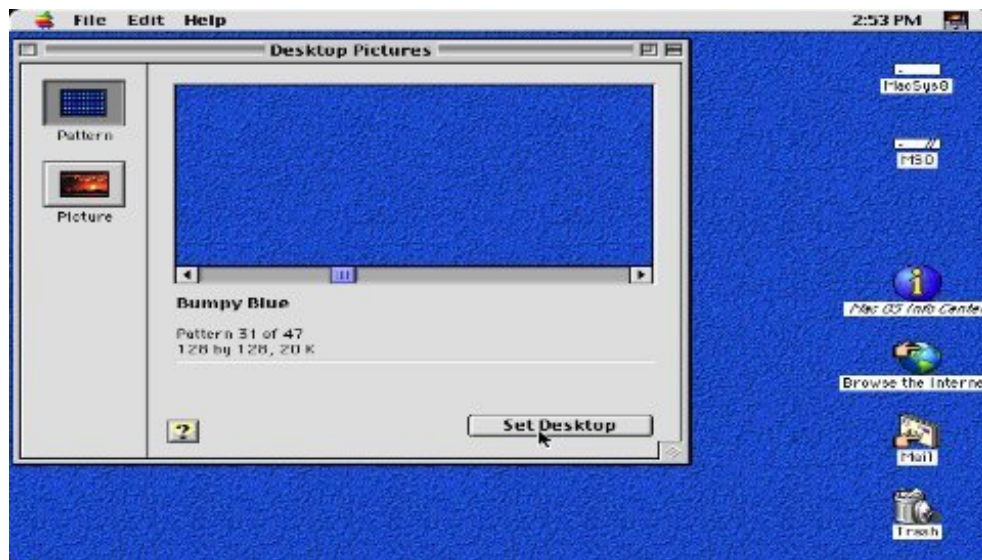
You could also select a picture to use as the background, but I don't recommend it.

You've probably noticed the clock in the upper right corner. If you click on it, you get the date as well.
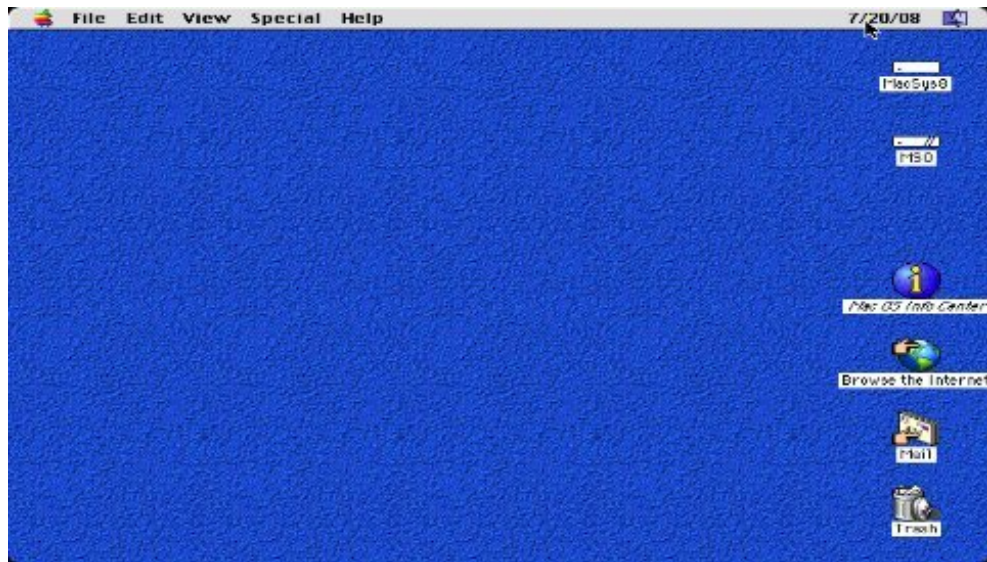
The time and date are set automatically from the PSP's clock when you start the emulator. You never need worry about ever setting this on the Mac side. If you click the Happy Mac in the far top right, you get the Finder menu. That allows you to do things like Hide Finder or running applications, or switch between running applications and Finder.
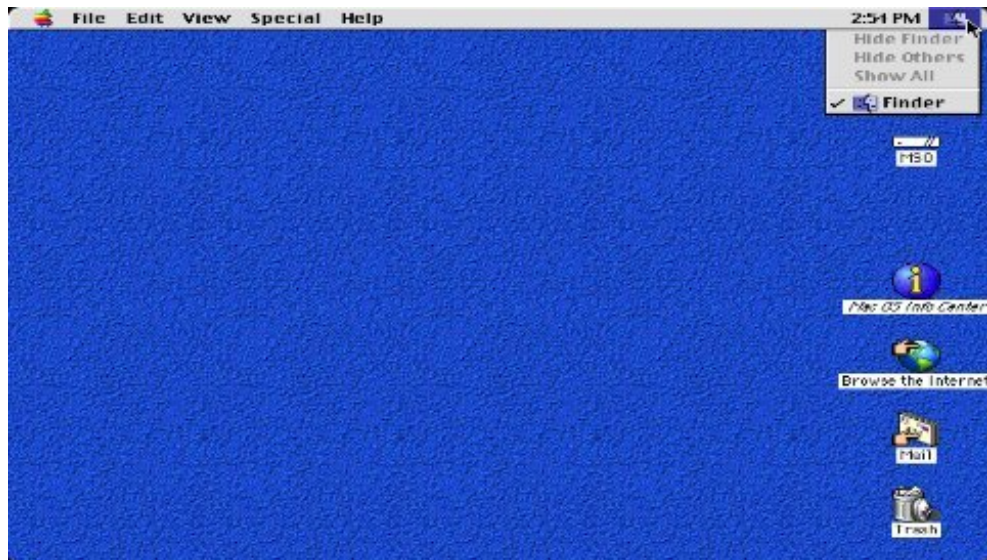
5. Installing from the memstick

Now you've shut down the Mac, and copied some files across the USB to the **files** directory inside the BasiliskII directory. We start back up.

Much better in color. Now we double-click the MS0 icon on the right to look inside the memstick.
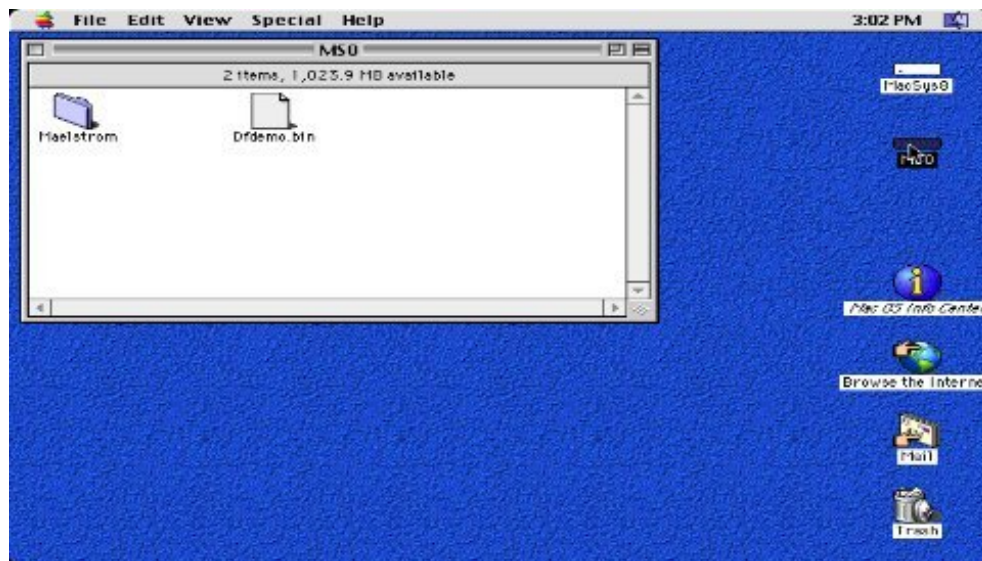
Seems I copied over a shareware game and a demo (Dark Forces). Let's make a directory on the hardfile for our games. Open the main hardfile and then stretch the window bigger by grabbing the bottom right corner with the mouse and dragging it.
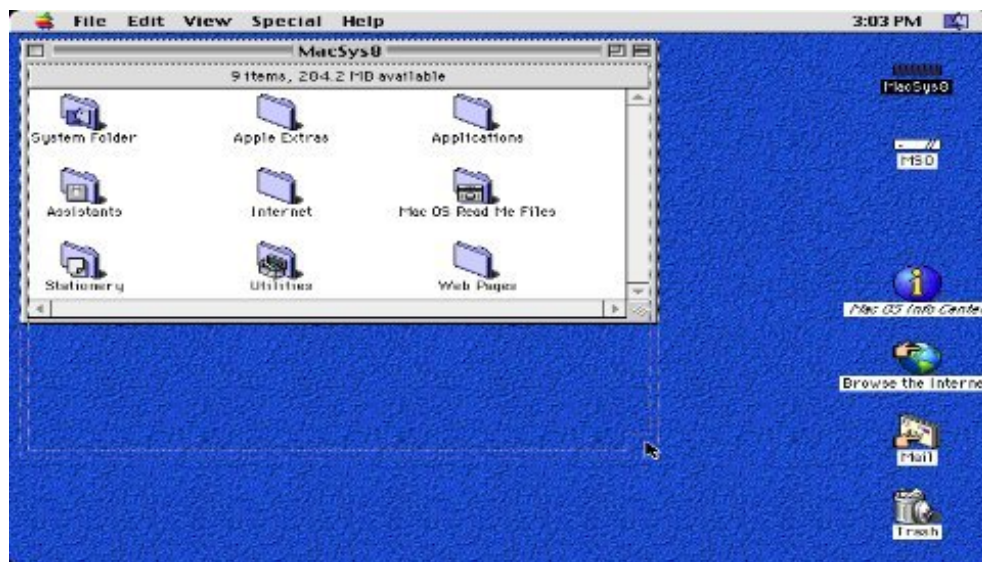
Select **New Folder** from the **File** menu.
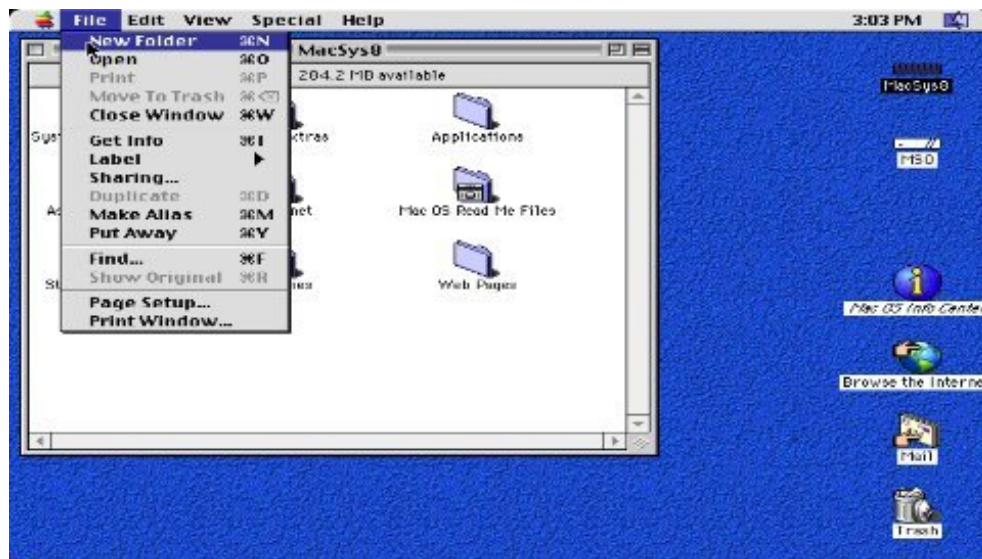
Use the danzeff OSK to change the name to "Games".
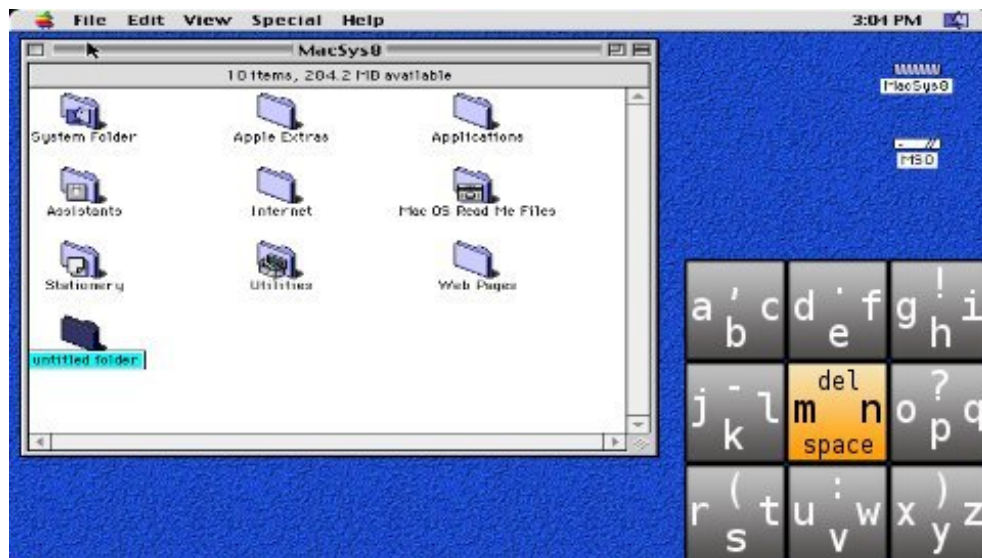
Now you can always just leave the window the way it is, or you can click the control on the top right of the window to resize it to just fit all the icons.
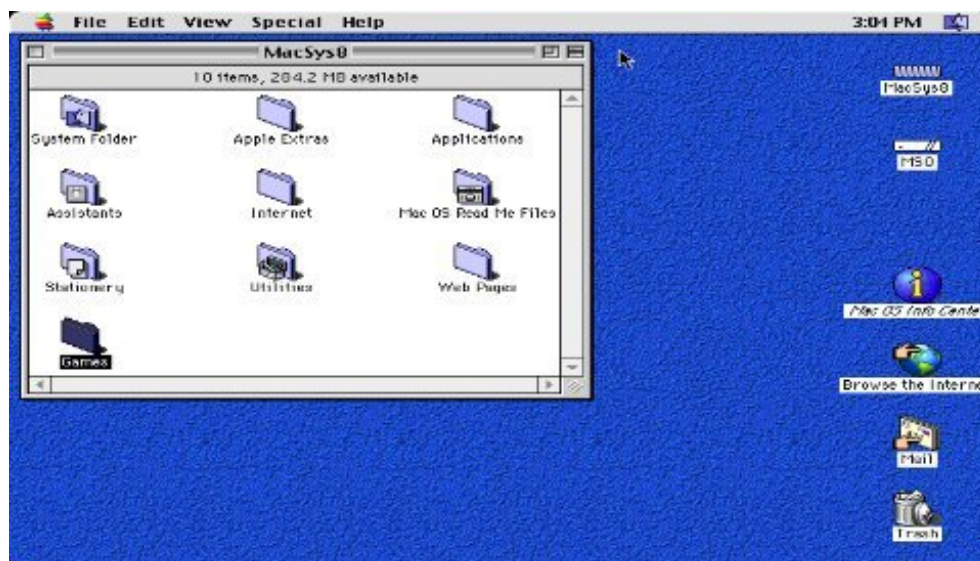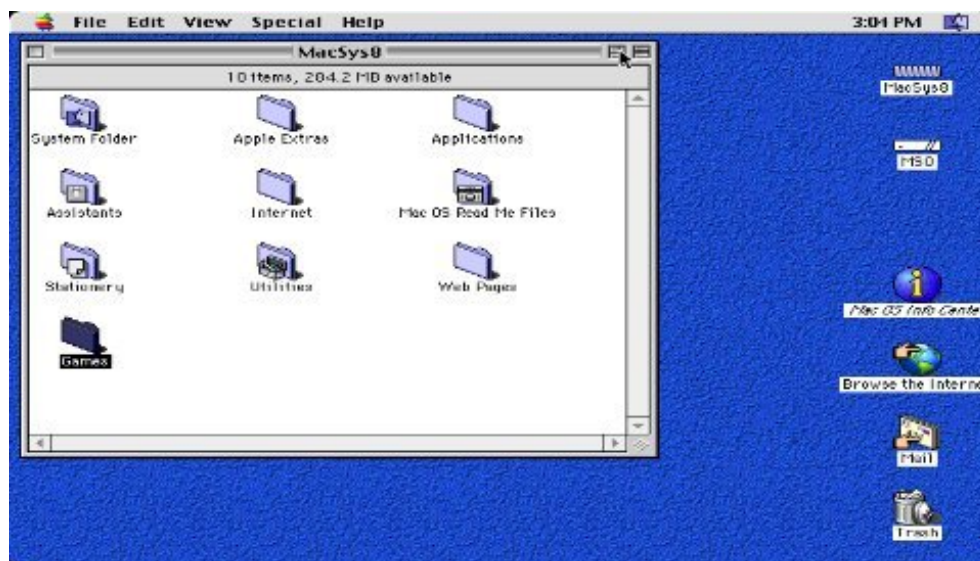
Now let's go back and open that Maelstrom folder on the memstick.

We find an installer. Let's double click it.
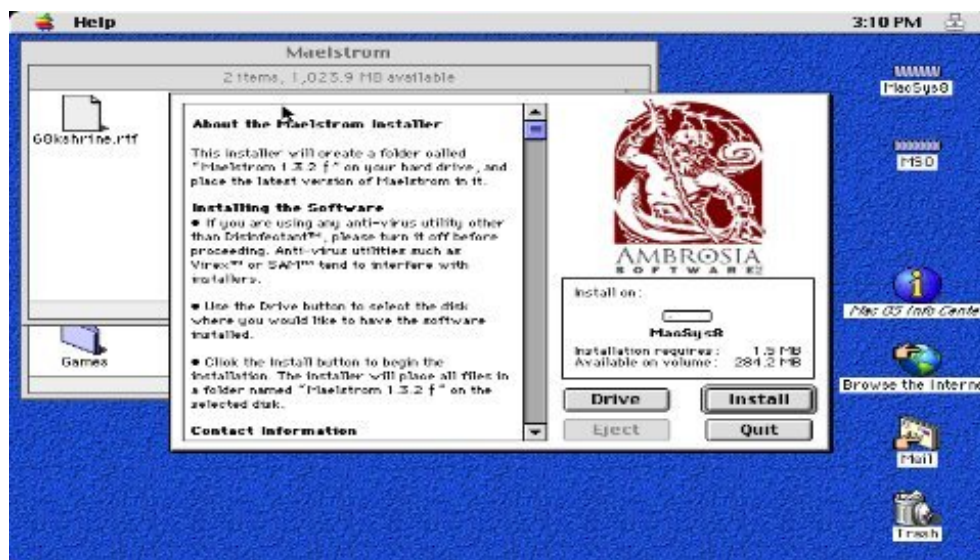
Make sure the main hardfile is selected and click **Install**. Note that this installer doesn't let you select a destination folder, just a drive. Move the folder after it's done installing.

Okay, now open the **Games** folder, then open the **Maelstrom** folder inside it.
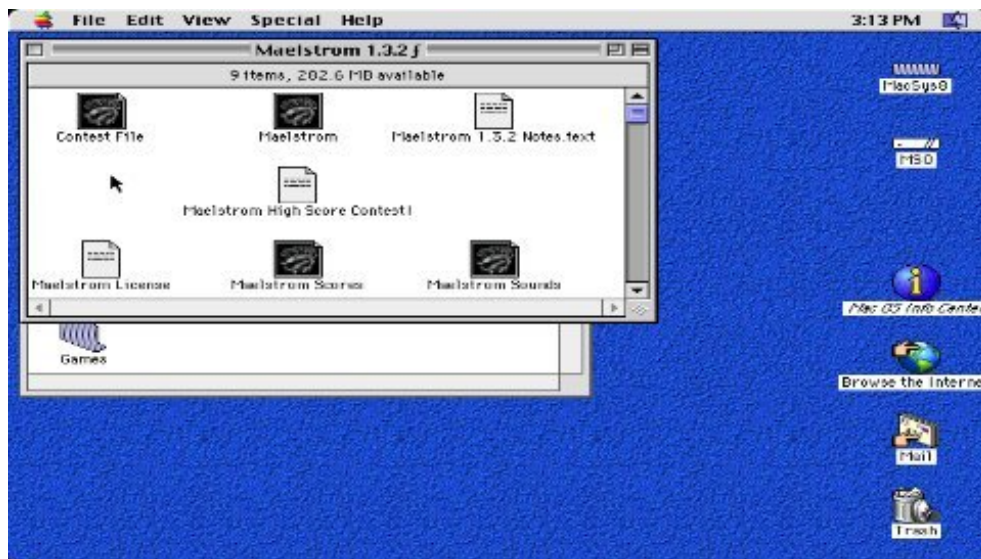
Now double-click the Maelstrom icon in the top middle of the window.

This game is nice... it tells you what all the controls are right at the start screen. Many make you hunt for a preferences menu. You know, while playing around with the imap/floppy/cdrom menu, I seem to remember seeing the word "Maelstrom". Let's press SELECT and DOWN a couple times.

Press CROSS to select it. Now we have our buttons mapped to play the game! Press SELECT to exit the menu.

RIGHT/LEFT - turn ship
CROSS - fire
SQUARE - shields
CIRCLE - thrusters
TRIANGLE - start playing
RTRIGGER - pause
LTRIGGER - abort game

Press TRIANGLE and play a few rounds.

When you're back on the Maelstrom screen, press SELECT and select the "DEFAULT" imap to go back to the default input button mapping.

Press CROSS, then SELECT. You can now quit back to Finder by pressing TRIANGLE.

I seem to remember there was a bin file with the Dark Forces demo on it in the memstick... wish we had StuffIt Expander to handle it. Wait a moment... check out the Aladdin folder in the Internet Utilities folder in the Internet folder in the main drive.

Gee! They thought of everything... except telling you where it was. Open that folder and make an alias of StuffIt Expander. Don't know how? Here's where that control key comes in handy (the RTRIGGER, if you remember). Hover the mouse over the icon and press RTRIGGER – see that little rectangle that appears by the mouse pointer?
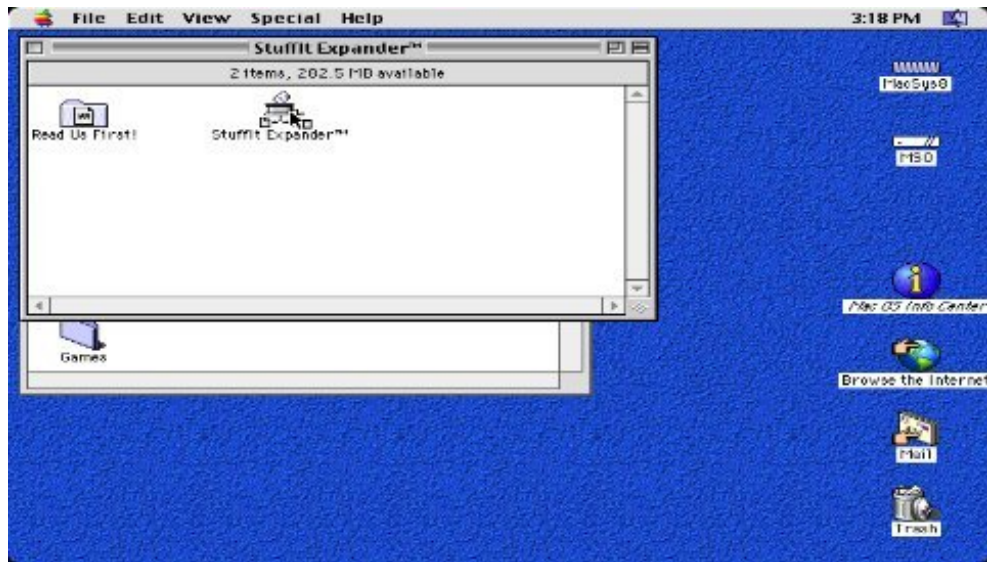
That means there's a contextual menu. While holding RTRIGGER, tap CROSS to pull up the menu.
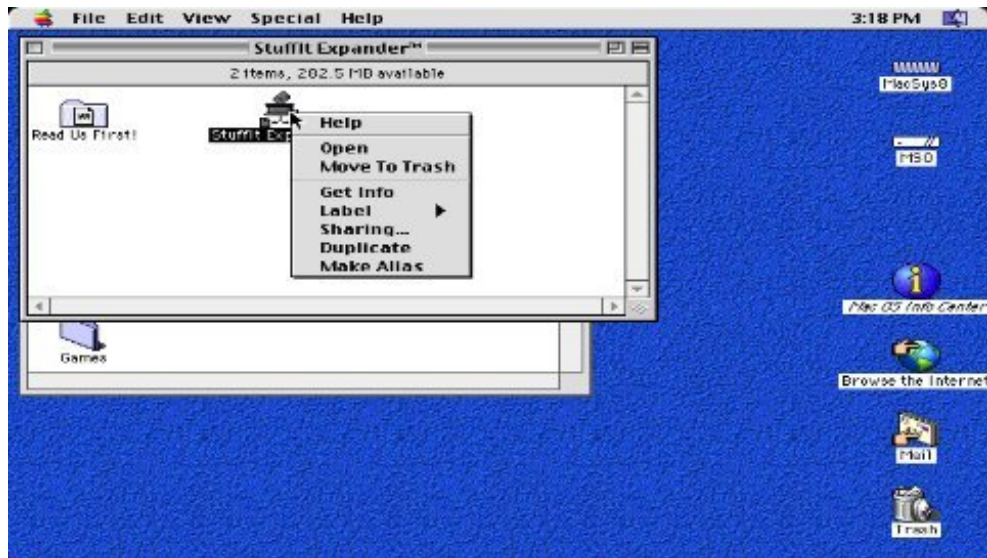
You'll notice that Make Alias is the last entry in the menu. Select that and you'll get an alias. It's not a copy of the file, just something that refers back to the original. Drag it onto the desktop and you'll have a quick way of getting to StuffIt Expander.
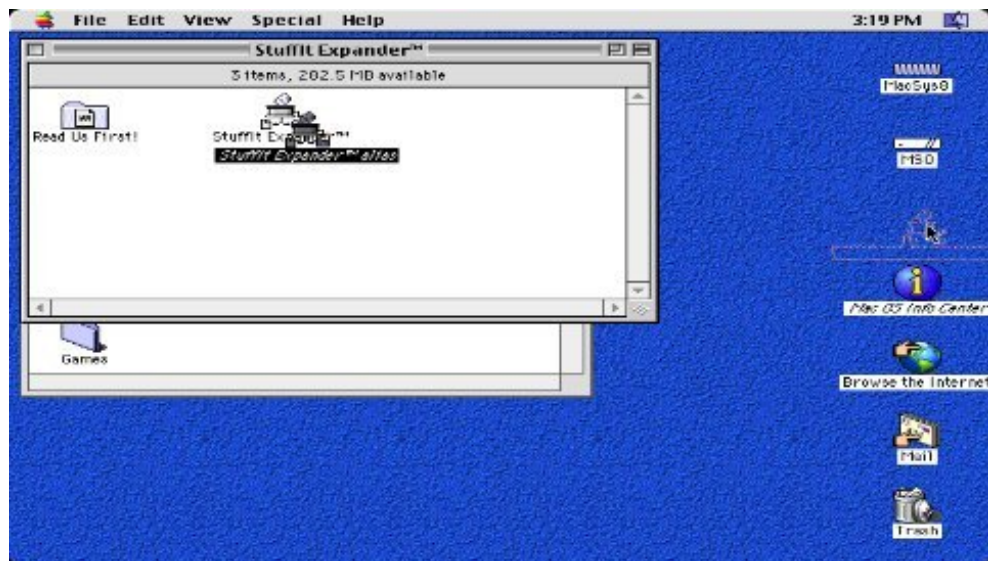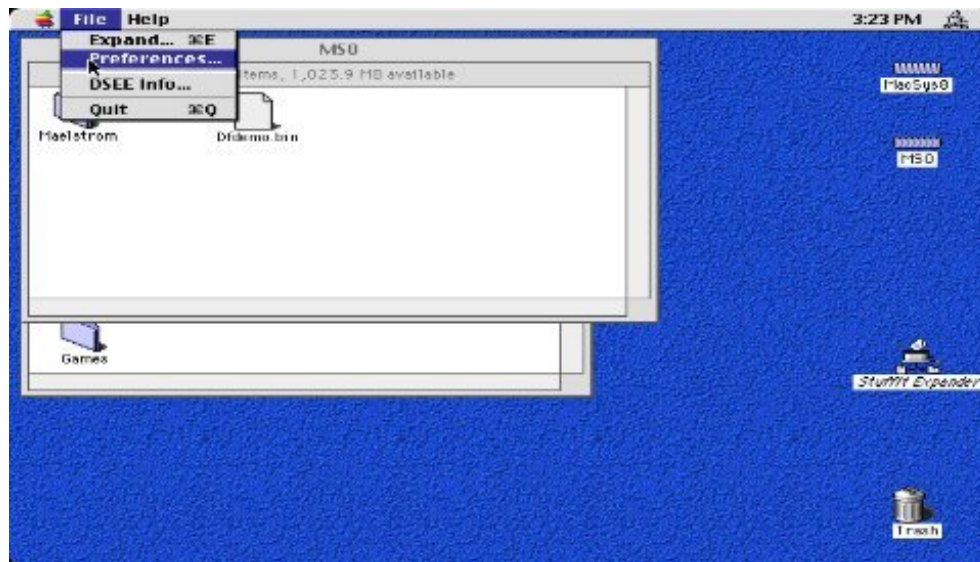
Click on the desktop, then select Clean Up in the View menu to straighten the icons on the desktop.
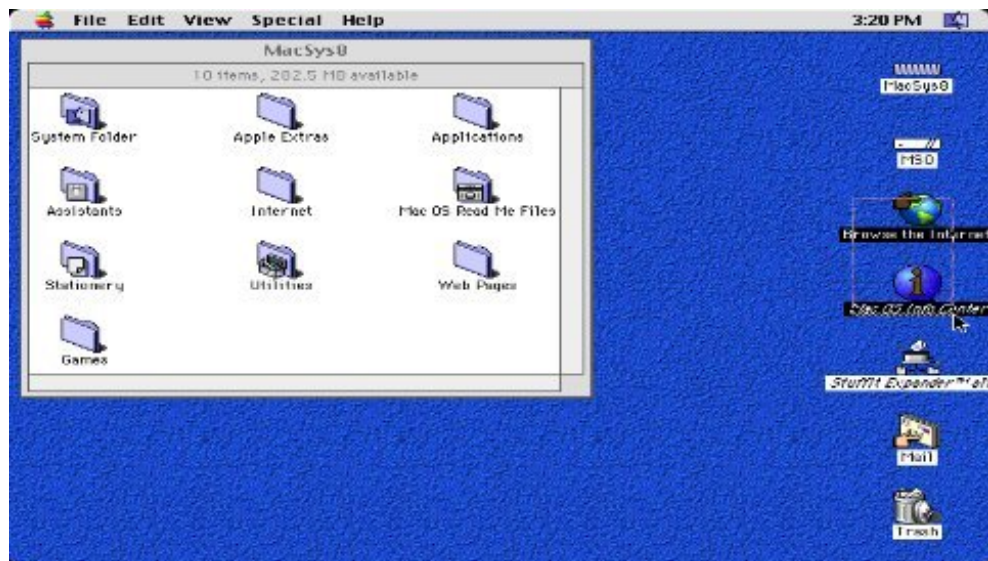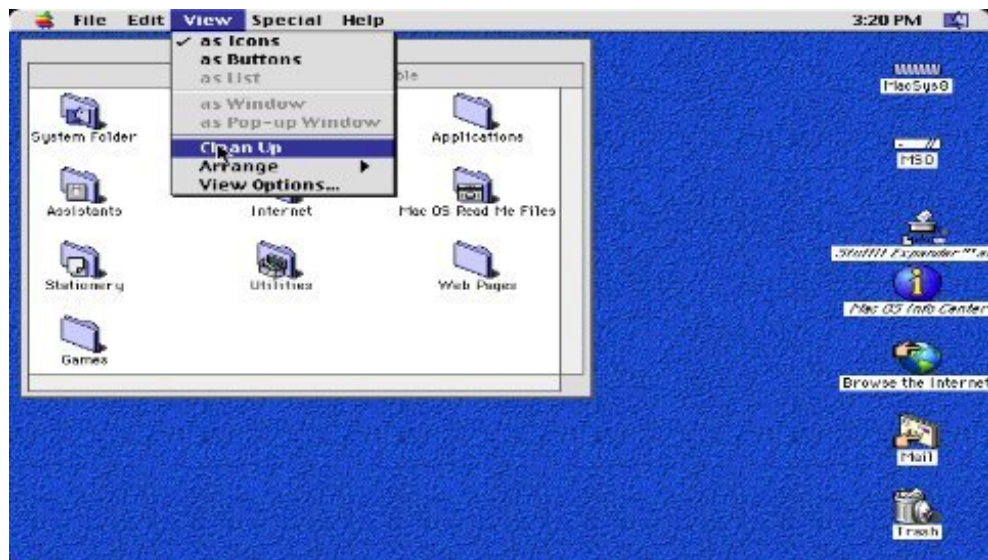
While we're at it, let's toss those extra icons on the desktop into the trash, then empty it.
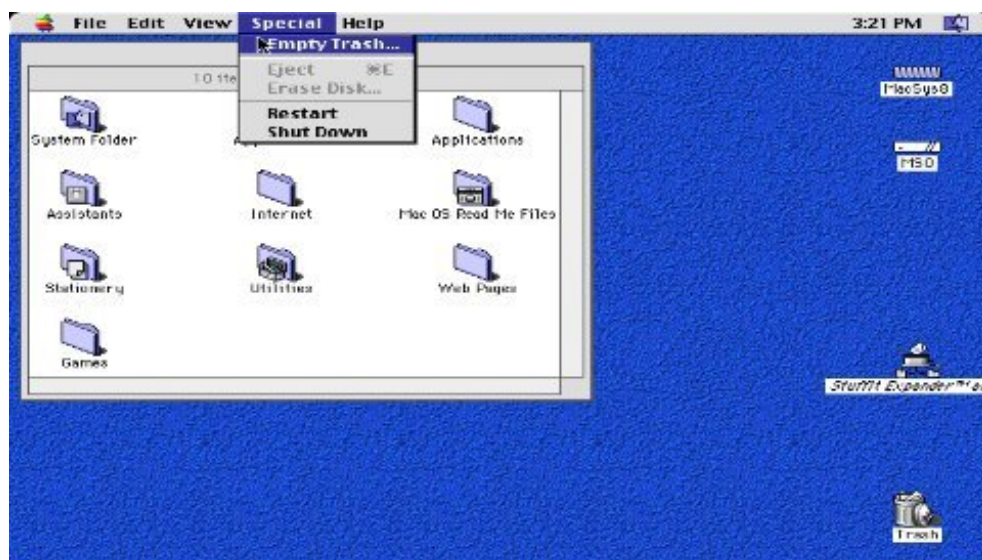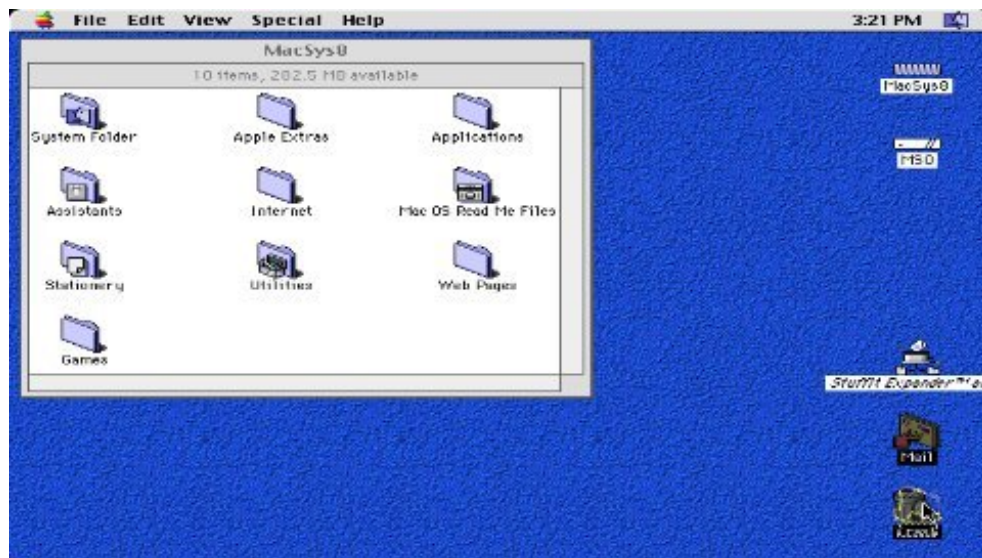
That's better! Now let's set one preference in StuffIt Expander first. Double-click the alias, and then select **Preferences** from the **File** menu.
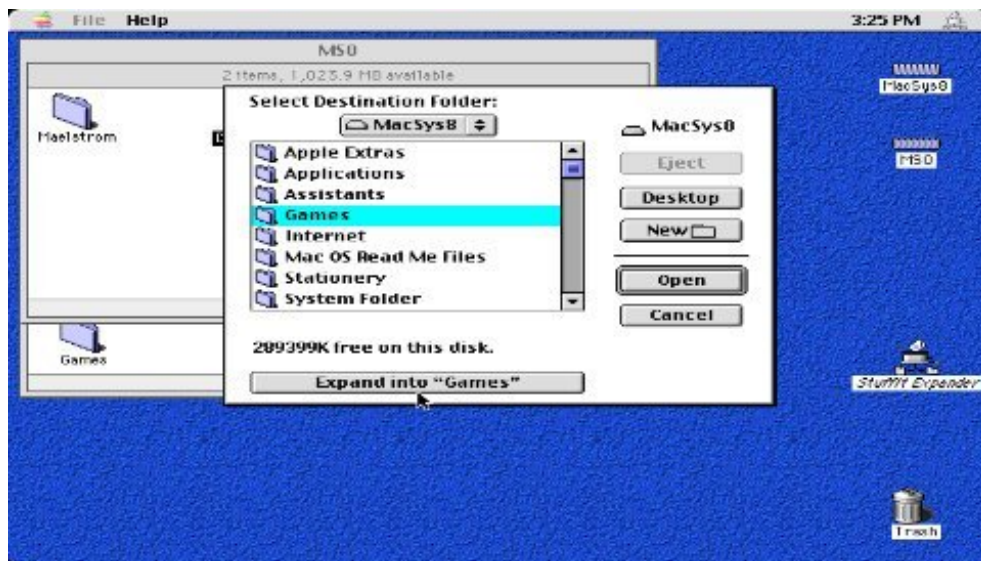

Click on **Destination** on the left, then click the **Ask** radio control.
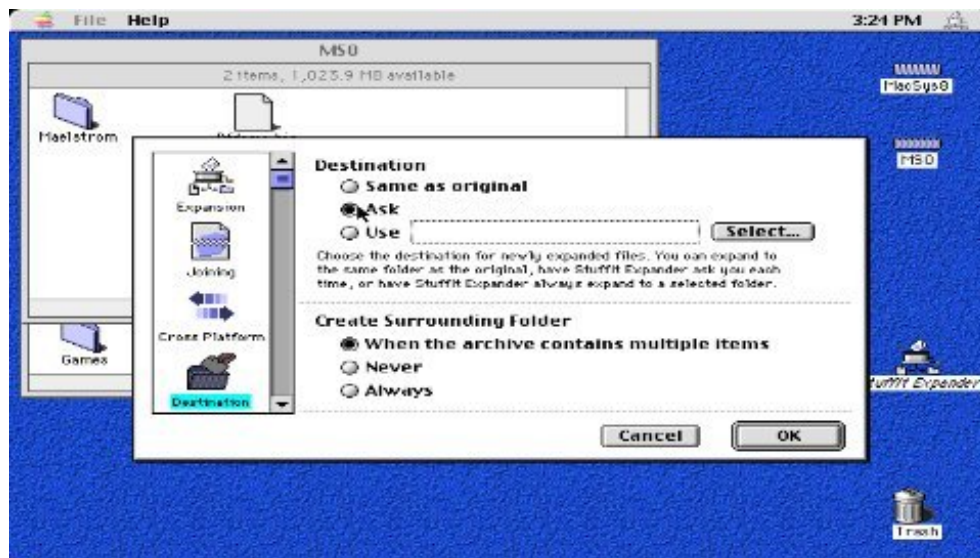
Now drag the Dark Forces demo bin file from the memstick and drop it on the StuffIt Expander alias on the desktop.
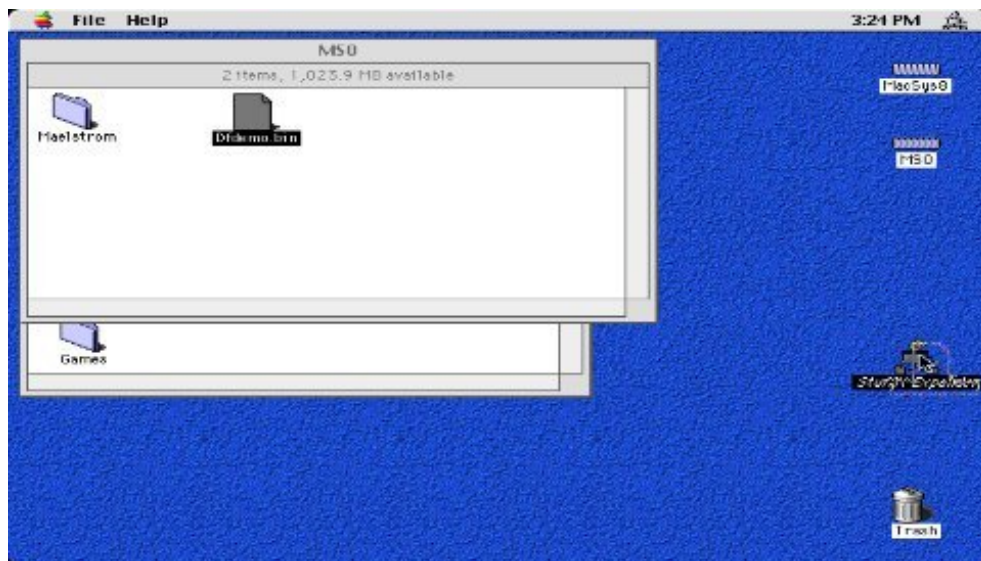
Now we get the StuffIt Expander dialog box asking where we want to save the decoded file to. Select the **Games** folder on the main hardfile.

Now go open the **Games** folder. You'll notice a file called DarkForcesDemo.smi. SMI is a common extension you'll see for old 68k stuff. It means Self-Mounting Image – it's a disk image that mounts on the desktop when you double-click it. Do so.
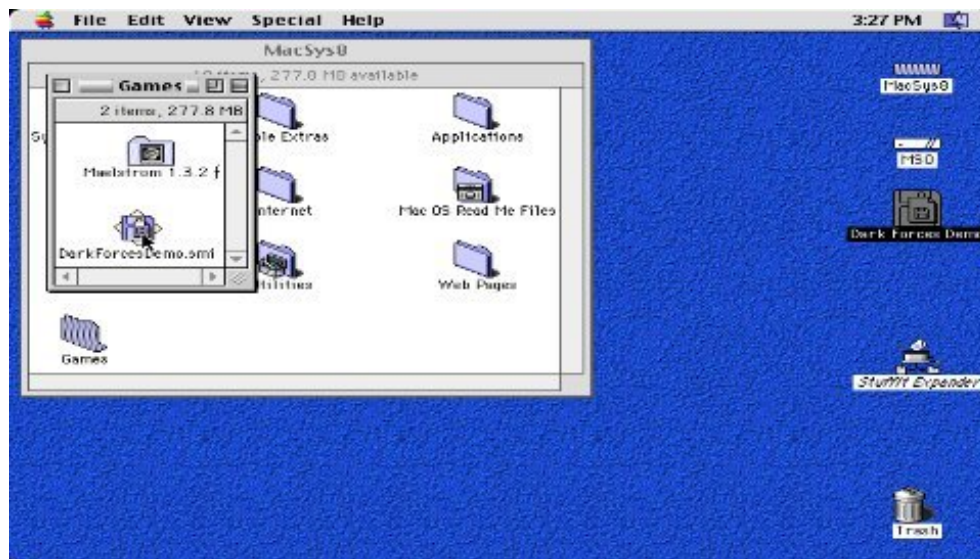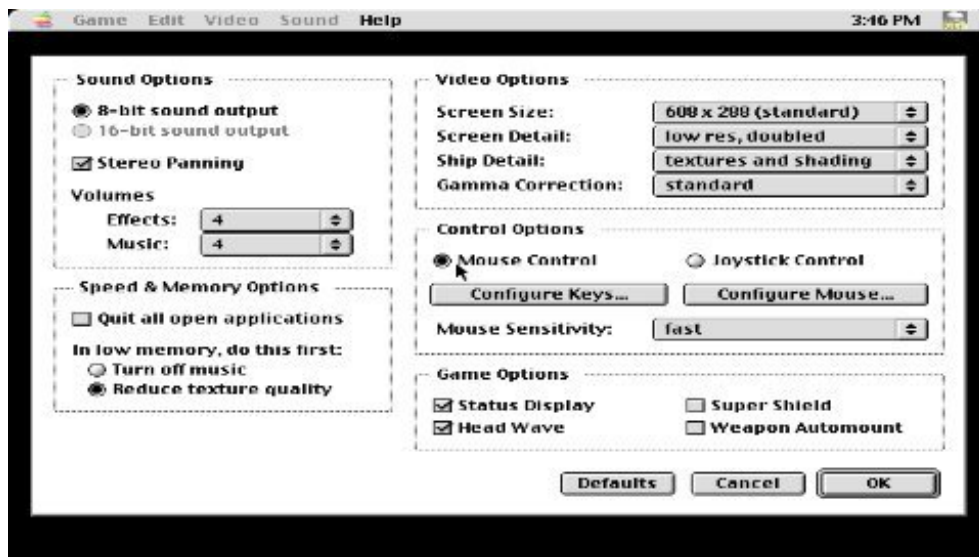
Now open the disk image. Then double-click the demo icon.
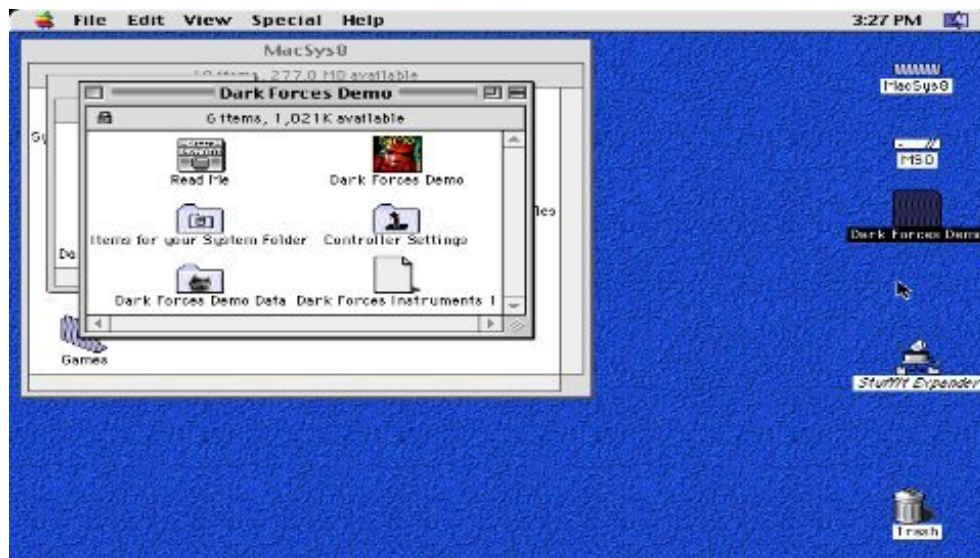
Whoa! A 68030 is pretty slow running Dark Forces... let's change some settings. Better press CMD+p.
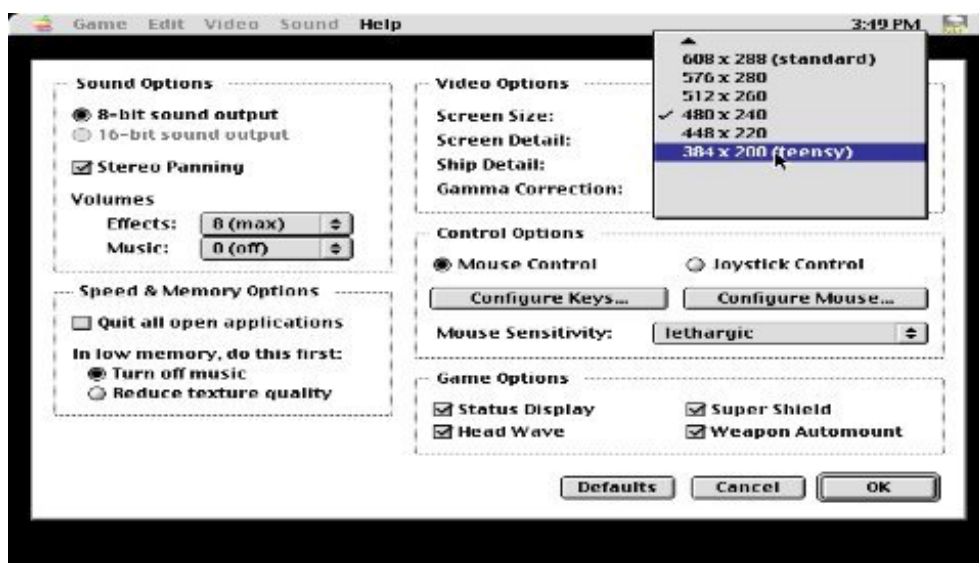
Forgot how? Press START to get the danzeff OSK, press SELECT to set the qualifier to CMD, then hold the analog stick and press the proper button for "p".

Turn off the music. That's a big time-waster on Dark Forces as they use QuickTime to play the MIDI tracks.
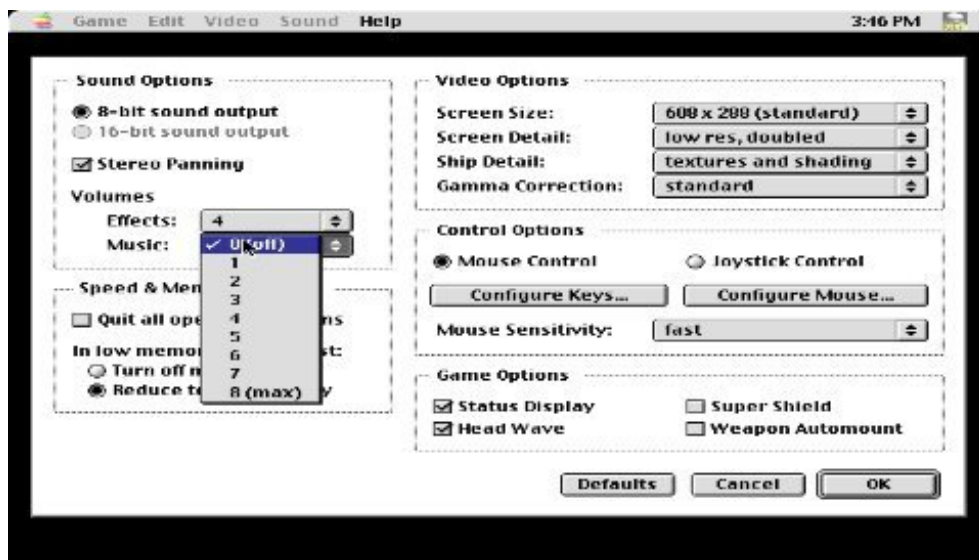
Let's also change the screen size.

Well, it's a bit small, but it seems to be running pretty good for being an emulator of a Mac on a PSP.

Press TRIANGLE to quit... and that's all there is to it! See? Easy as pie.