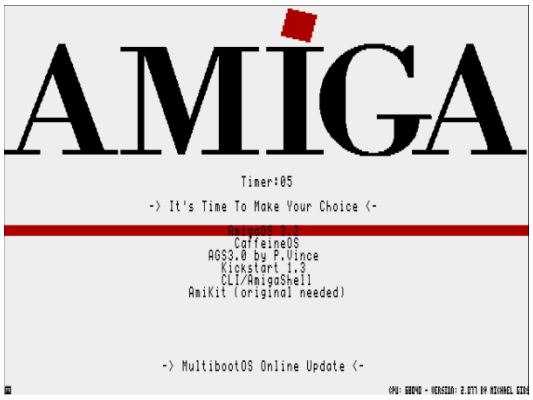
MultibootOS

Version 2.2 :: March 2026

MultibootOS *allows you to boot different Amiga distributions for the PiStorm with only one microSD Card, avoiding the use of extenders that are not recommended, or keeping the Amiga case open to swap SD cards.*



Requirements

MultibootOS requires an Amiga 500, 600*, 1200 or 2000 computer with the correct PiStorm, PiStorm16* or PiStorm32-lite version installed to run on real hardware, or WinUAE / FS-UAE to run under emulation.

*Whilst MultibootOS supports PiStorm16, the PiStorm16 is currently in early development and you should expect some stability issues with early firmware.

Please note that only **CaffeineOS** (by Capt. LeChuck) and **Amiga Game Selector** (by Paul Vince) distributions are included in this image as they are freely available to download, but you will need to supply your own copies of **AmigaOS 3.2** and/or **AmiKit** if you choose to use them as these are licensed products and not included in this image. You can purchase them from their official stores – links are at the end of this document.

MultibootOS, CaffeineOS and AGS are 100% free distributions. You should never have to pay money for them.

Note for existing MultibootOS users

MultibootOS version 2.2 includes **CaffeineOS** 9317, which is provided as a new image with multiple changes rather than an online update. It also includes **Amiga Game Selector** 3.0, which is also distributed as a new image and uses a different partition structure to the previous version.
As a result of these changes, you cannot update directly from **MultibootOS** 2.1.x to 2.2. Instead, you will need to write a new **MultibootOS** 2.2 image to your microSD card.
It is strongly recommended that you back up your existing **MultibootOS** microSD card first, so that you can copy across any data or customisations you previously made to the new image.

Changelog from version 2.1.x

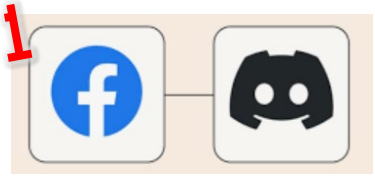
- Includes latest, full CaffeineOS 9317 by Capt LeChuck, with support for The Butcher (3.2.3)
- Includes latest Amiga Game Selector (AGS) 3.0a by Paul Vince with modifications and customisations to run on PiStorm Amigas in either RTG graphics cards or CRT-friendly RGB Amiga modes
- AmigaOS and CLI/AmigaShell can now connect to a network/the internet.*
- MultibootOS can now receive online updates if your Amiga is connected to the internet* (or using UAE/emulation)
- New Emu68 kernels (1.1 alpha) for FrameThrower support
- USB support in AmigaOS3.2 partition*
- Other optimizations and bug-fixes
- Online activation

* Raspberry Pi 4 or CM4 needed for network/USB on PiStorm. Raspberry Pi 3 or Pi Zero are not supported.

Downloading MultibootOS

From MultibootOS version 2.2 onwards, you must obtain a unique 5-character UserID to activate the software. Activation is free.

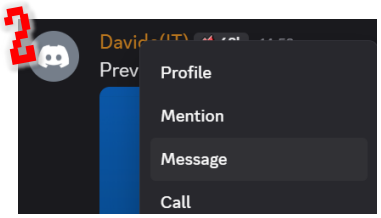
Do not share your UserID or your activated image with anyone else. Sharing may prevent your personalised MultibootOS image from receiving future updates.



Join the MultibootOS community
Join one of the following:

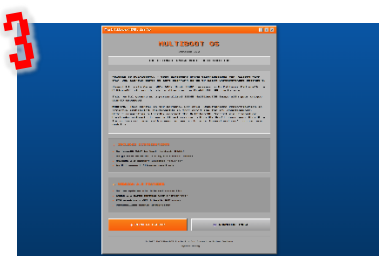
Discord
https://discord.gg/Exu6PaPY5m

Facebook
https://www.facebook.com/groups/359186333694761



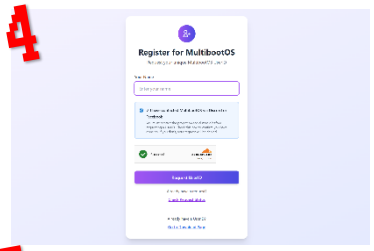
Send us a private message on Discord (Davide_IT/SGi) or Facebook (Davide Cutugno/Steve Gillott) stating that you are requesting a UserID and include your name that you are going to make the request with.

This helps the administrators process your request faster. Registration is not an automatic process.

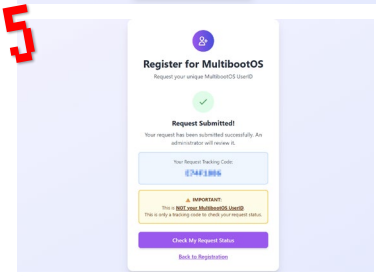


Open the website: https://multibootos.com

Click the **Request UserID** button at the bottom of the page.



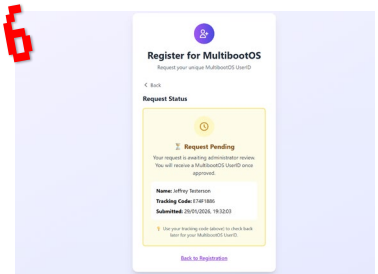
Enter your name into the text box. Please use the same name that you messaged us with, then check/tick the box to say you have contacted us via Discord or Facebook, then click the **Request UserID** button.



You will receive a **Request Tracking Code**.

This is **not** your MultibootOS UserID.

Write this code down. You will need it later to retrieve your UserID and download the image.



Your request must be manually reviewed by the MultibootOS administrators. **This is not instant.**

To check your status, click the Check My Request Status button or return to the Request UserID page.

You can check whether the request has been approved by clicking on the **Check My Request Status** button, or from the **Request UserID** button on the home page again.

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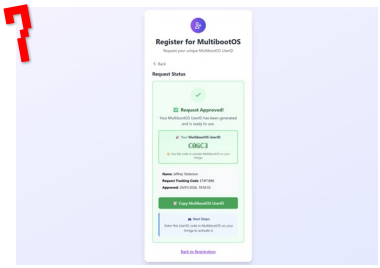
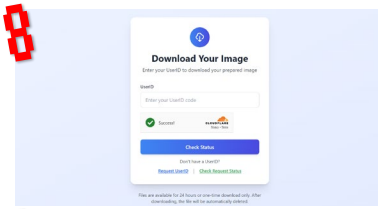


Once approved, you will be given a 5-character UserID.

Save this UserID. You will need it to activate MultibootOS.

8

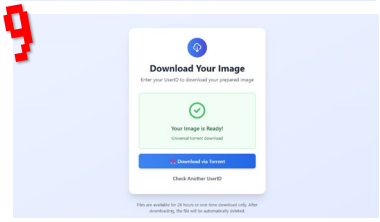


Download the image

Go to https://multibootos.com and click **Download Image**.

Enter your 5-character UserID and click the blue **Check Status** button.

9



Click on the **Download via Torrent** button to get the .torrent file

If you do not already have a torrent client installed, download and install one such as qBittorrent or Transmission. Open the .torrent file with the torrent client to begin the download.

If you have trouble downloading the image, please contact via Discord or Facebook for support.

7-Unzip the image

Download and install 7-zip for your operating system from https://www.7-zip.org/download.html

Double click the downloaded MultibootOS .7z file and click the Extract button on the toolbar to create the MultibootOS .img file you will need to write to the microSD card.

Make sure you have enough free space on your computer to extract the image fully.

Preparing the microSD Card to run on an Amiga

To run MultibootOS on a PiStorm Amiga, you will need a **128 GB microSD card**.

Write the MultibootOS image to the microSD card using one of the following tools.

Option 1. Hst Imager (Windows, macOS, Linux)
https://github.com/henrikstengaard/hst-imager

Click on **Releases** on the right side of the page to download the latest version for your operating system.

Option 2. Win32DiskImager (Windows only)
https://sourceforge.net/projects/win32diskimager/
Download and install the software.

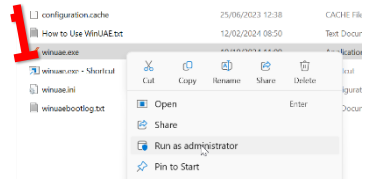
After installing one of the tools:

1. Insert the microSD card into your computer.
2. Open the imaging program.
3. Select the MultibootOS image file you extracted.
4. Select the correct microSD card as the target device.
5. Start the write process and wait for it to complete.

Warning
Writing the image will erase all data on the microSD card. Ensure you have selected the correct device before proceeding.

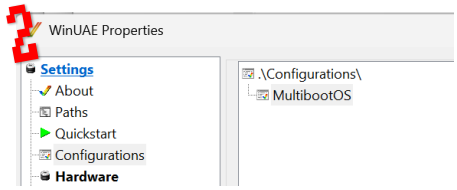
Running MultibootOS on emulation

Using a physical microSD card

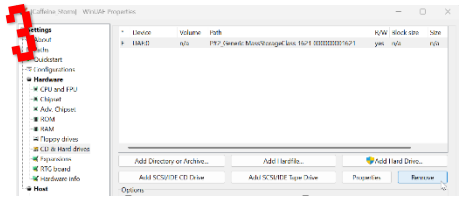


You can run WinUAE as an Administrator from the FAT32 partition (EMU68) by navigating to **USER → WinUAE → WinUaexec** folder, then right click on winuae.exe and choose **Run as administrator** from the menu.

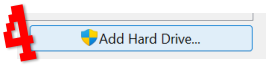
You must run WinUAE as an administrator to be able to access the disk.



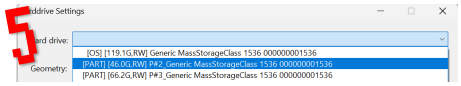
Choose the MultibootOS configuration in the Configurations setting, and click the **Load** button.



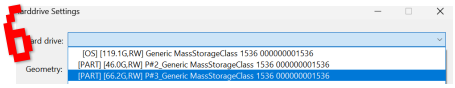
Then go to the CD & Hard drives menu option under hardware.
Select the UAE:0 device in the list and then click **Remove** to delete the disk that is already there.



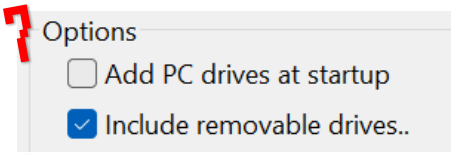
Click the **Add Hard Drive…** button



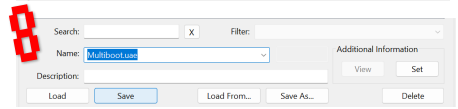
Locate your microSD card in the list. It should be around 119.1GB.
Select the first [PART] disk which is 46.0G
Then click Add hard drive



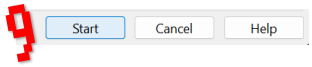
Repeat **Add Hard Drive…** to add the second [PART] disk which is 66.2G
Click Add hard drive



Make sure the "**Include removable drives**" option is checked/selected on the CD & Hard Drives options.
This allows WinUAE to access the **EMU68:** FAT32 partition as well.



Go back to Settings → Configuration in the menu on the left and click Save. This will save your SD card settings.



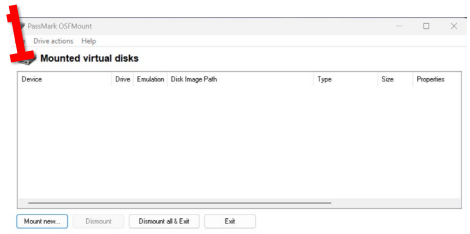
Click **Start**.
In the future, you can load the saved MultibootOS configuration file to start WinUAE with.

Using the image directly without writing to an SD card

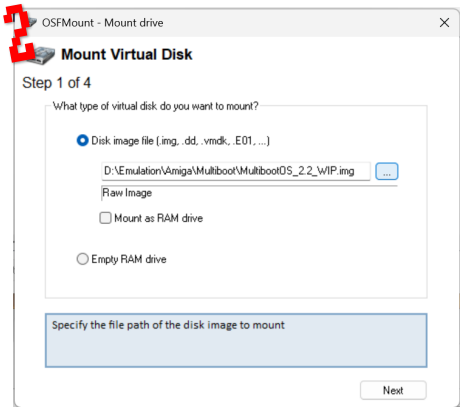
Unpack or extract the MultibootOS image that you downloaded to get the .img file. This method will not work if you haven't unpacked or extracted the image, and it remains in the .7z compressed file you downloaded.

Download **PassMark OSFMount** from https://www.osforensics.com/tools/mount-disk-images.html then install.

You will need to follow these steps every time if you wish to use the MultibootOS image file instead of a physical SD card.

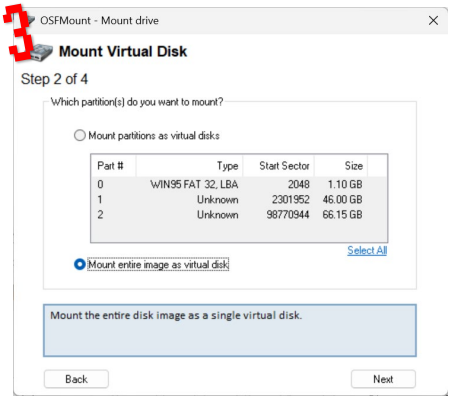


Start OSFMount and click the "**Mount new…**" button in the bottom left corner.



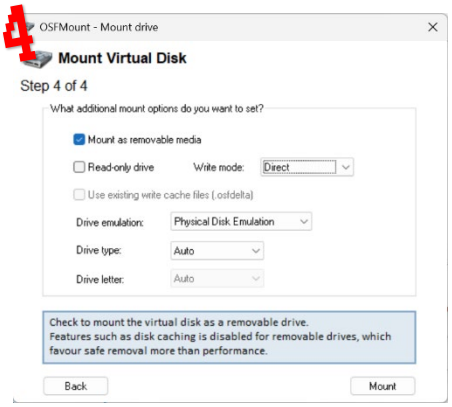
In Step 1, select Disk image file and click the **three dots button** to bring up the file requester.
Choose the MultibootOS image that you downloaded and unpacked.
It should be detected as a "Raw Image".

Click **Next**.

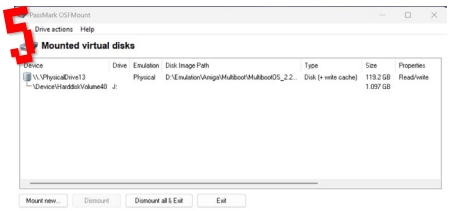


In Step 2, click the radio button next to "**Mount entire image as virtual disk**" to change to mounting the entire disk image as a single virtual disk.

Click **Next**.

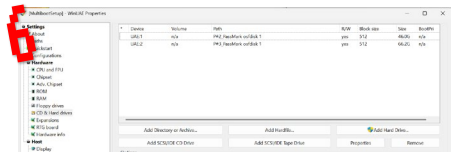


In Step 4, check **Mount as removable media**, and uncheck **Read-only drive**, so it is clear.
Set the Write mode to "Direct" which will modify the image when you make changes.
If you choose Write cache, the original image is not modified, so you can always return to a working image by removing the .osfdelta write cache files.
If you have used this method previously, check the "**Use existing write cache files**" to return to the state you left the image in.
Set Drive emulation to **Physical Disk Emulation**, and Drive type to **Auto**.
Click **Mount**.

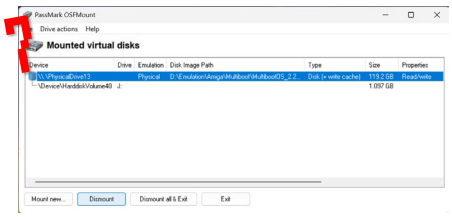


You should see the device appear in OSFMount's list, and the EMU68: FAT32 partition may appear on your desktop.

Follow the instructions for **Using a physical microSD card** above, to run WinUAE as an administrator.



However, as you are not adding a physical card, you will need to add **P#2_PassMark osfdisk 1** and **P#3_PassMark ofsdisk 1** instead to your CD & Hard drives settings in WinUAE in step 5 of the **Using a physical microSD card** instructions above.



When you have finished you will need to go back to PassMark OSFMount to:
(Optional) If you have made changes you wish to make permanent and you were using the write cache, click on the **Drive actions** menu and choose "**Save to image file…**" to create a new image. Use this new image in the future.
(Required) **You must dismount the image** by selecting the image from the list and clicking the **Dismount** button at the bottom.

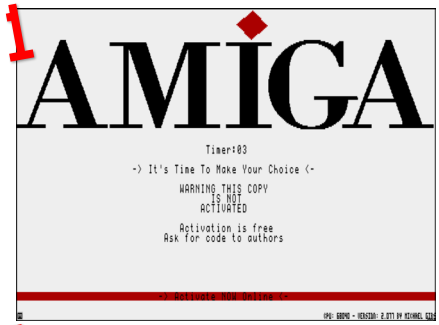
Starting MultibootOS for the first time

Transfer the microSD card to the Raspberry Pi connected to your Pistorm and start the Amiga. If using emulation, load the MultibootOS configuration in UAE's Settings → Configuration menu and click Start.

The following screen will appear after a few seconds on the CRT / RGB output of the Amiga only. If you are running on an emulator, it will appear in the emulator window. MultibootOS will pause here until you press **ENTER** on the keyboard.

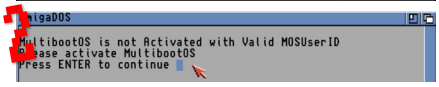
This welcome screen is only shown the first time you load MultibootOS, or when you update to a newer version.

Activating MultibootOS

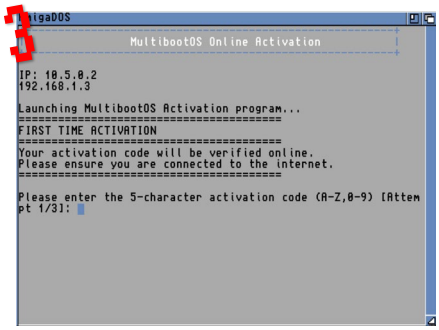


If MultibootOS is not yet activated, you will see this screen.

Select the option at the bottom by using the **up** and **down** arrow keys and then press **RETURN** on the keyboard to launch.



Press **ENTER** to go online and launch the activation program. You will need your 5-character UserID from earlier.



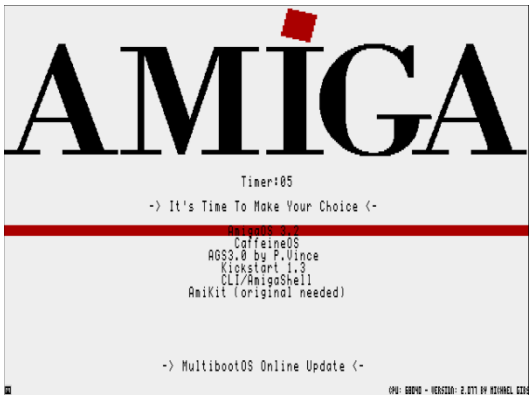
Follow the instructions on the screen.

If you are using a **PiStorm Amiga**, choose to connect to the network with WiFi (where you will be asked to enter your SSID and WiFi password) or Ethernet (only available with Raspberry Pi 4 or CM).

If you are using **Emulation**, UAE will automatically connect to the internet.

Enter your 5-character UserID when prompted, and MultibootOS will activate and then restart. When it has restarted, you will have a fully functional MultibootOS system!

Amiga Boot Selector



Use the **up** and **down** arrow keys to select one of the options, then press **RETURN** on the keyboard to launch.

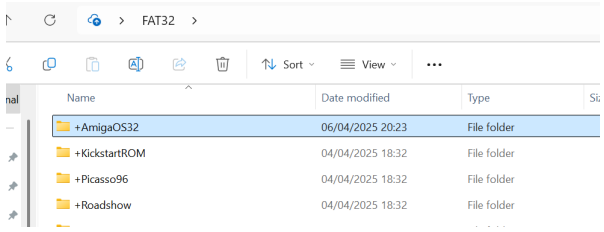
A timer counts down from 5 seconds. When it reaches 0, it will automatically launch the last selected option. The timer can be interrupted and paused by pressing an arrow key whilst it is counting down.

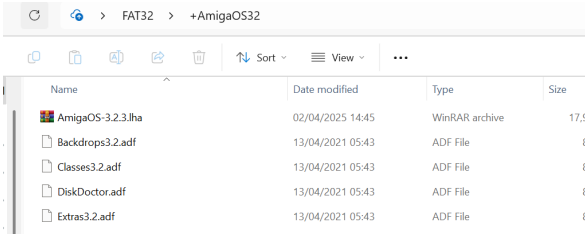
At the bottom of the menu you can now connect your PiStorm to the internet and check for updates to MultibootOS from the Amiga Boot Selector menu.

AmigaOS 3.2

AmigaOS3.2 is a licensed product and is not included as part of the **MultibootOS** image, but you can easily and quickly install it to **MultibootOS** provided you own a copy of the ADF files and ROMs from the AmigaOS3.2 CD which can be purchased from Amiga distributors and resellers.

To get the update archives for AmigaOS 3.2.2.1 or 3.2.3, you will need to both register a user account, and then register your AmigaOS 3.2 CD registration key on the Hyperion Entertainment website.





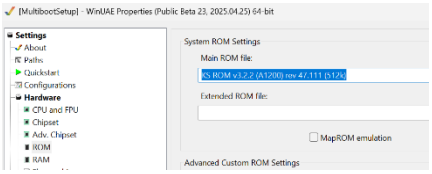
First, copy all the AmigaOS 3.2 **ADF** files from the **ADF** folder on the **AmigaOS3.2 CD** to the **+AmigaOS32** folder on **the FAT32 partition** (EMU68) of the microSD card. Then copy either the **hotfix3.2.2.1.lha** update archive (no other 3.2.2 update archives are needed), or the **AmigaOS-3.2.3.lha** update to the same +AmigaOS32 folder on the FAT32 partition (EMU68).

Insert the microSD card into the Amiga, select AmigaOS 3.2 option from the boot selector and follow the instructions on-screen. AmigaOS 3.2 will install and configure itself automatically, and will prompt you to reboot when it has finished. It will then launch into Workbench 3.2, configured for Pistorm's RTG graphics mode.

After AmigaOS 3.2 has been installed, when running on a Pistorm Amiga, Multiboot will reconfigure automatically to select the AmigaOS 3.2 ROM and launch AmigaOS 3.2 if you select this option.

From MultibootOS 2.2 onwards, the AmigaOS partition includes the option to go online. Click on the Network menu, and choose Online (WiFi) or Online (Ethernet) using the Roadshow Demo. Please see the section "Roadshow (Demo) – Network connectivity" at the end of this document to find out more about the time restriction for the demo, and how to update to the full version.

If running under emulation, you will need to manually change the configuration of UAE to use the AmigaOS 3.2 ROM that was installed.



Under settings, choose Hardware → ROM and locate the A1200.47.111.rom (for OS 3.2.2.1) or A1200.47.115.rom (for OS 3.2.3) which can be found on the FAT32 partition (EMU68) in the ROMS folder.

Adding your own custom AmigaOS3.2 image

If you already have your own AmigaOS 3.2 image that you wish to add to MultibootOS, please run the AmigaOS3.2 installation script first to ensure that the **ROM** is placed in the correct folder and that the `config.txt` files on the `EMU68:` FAT32 partition are configured correctly for MultibootOS to boot into the AmigaOS partition.

Once installed, you can overwrite the AmigaOS files on the `ADH1:` partition with your own AmigaOS 3.2 installation. The easiest way to copy your AmigaOS files is by using an emulator. Mount your existing AmigaOS installation as an additional hard disk or hardfile in the emulator settings, then start MultibootOS and use the Directory Opus file manager from the **CLI/AmigaShell** menu option by typing `dopus` at the CLI prompt.

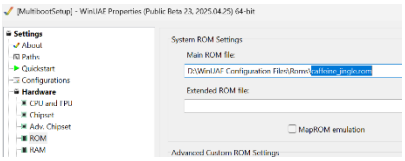
We recommend keeping the `startup-sequence` provided by the installation script intact and applying your own modifications to it rather than replacing it.

Please note that we cannot support or guarantee future updates for custom AmigaOS 3.2 images in MultibootOS if you overwrite the standard installation provided by the installer script with your own custom installation.

CaffeineOS

When running on a Pistorm Amiga, Multiboot will reconfigure automatically to select the CaffeineOS ROM and launch CaffeineOS if you select this option.

If running under emulation, you will need to manually change the configuration of UAE to use the **caffeine_jingle.rom**

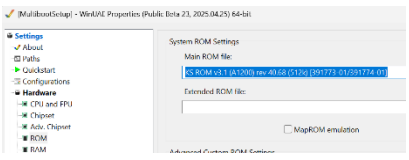


Under settings, choose Hardware → ROM and locate the caffeine_jingle.rom which can be found on the FAT32 partition (`EMU68`) in the ROMS folder.

AGS3.0 by P.Vince

When running on a Pistorm Amiga, Multiboot will reconfigure automatically to select the Kickstart 3.1 ROM and launch AGS3.0 if you select this option.

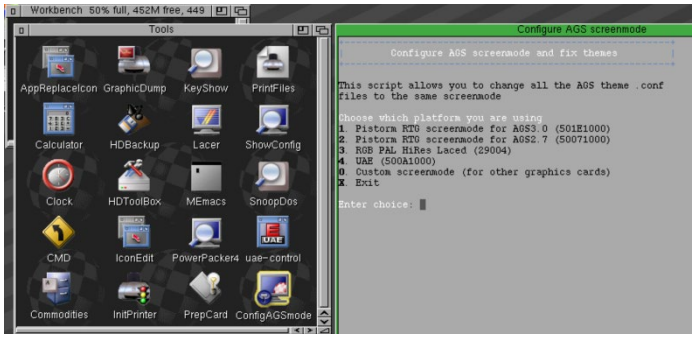
If running under emulation, you will need to manually change the configuration of UAE to use the **ks31a1200.rom**



Under settings, choose Hardware → ROM and locate ks31a1200.rom which can be found on the FAT32 partition (EMU68) in the ROMS folder.

The launcher for AGS will automatically configure itself when launched to use the correct screenmodes for either Pistorm or emulation. AGS on Pistorm has a default of using the Pistorm's RTG graphics mode for AGS. You may have to switch between the RTG HDMI output from the Pi and the Amiga's RGB (CRT) output to play the games.

If you wish to use the RGB mode exclusively on Pistorm, you will need to go to the AGS Workbench (press ESC on the keyboard when in the AGS menu screen) and then open up the AGS_Workbench drive icon, then Tools, and then ConfigAGSmode.



Choose option 3 to configure AGS for RGB PAL HiRes Laced, wait for the theme .conf files to be configured with the correct screen mode and then reboot.

You can also use this tool to switch back to the default Pistorm RTG modes, or if you have another RTG graphics card in your Amiga, you can select 0 – custom screenmode and enter the correct screenmode for your card. You will also need to configure Workbench's screenmode manually using the tool within the Prefs folder in Workbench.

If you add any additional themes to AGS, you can also use this tool to correct the screenmode in the .conf files.

Kickstart 1.3

The Kickstart 1.3 degrader will only run on a Pistorm Amiga. Follow the instructions on screen and when the Kickstart 1.3 screen appears, you can insert a floppy disk.

CLI/AmigaShell

This option is for advanced users only and provides the command line interface (CLI) or AmigaShell, for basic file management.

Typing **dopus** into the AmigaShell will bring up the Directory Opus file manager.

Typing **configagsmode** into the AmigaShell will allow you to run the configure AGS screenmode tool without needing to go into AGS. This is useful if you have selected an incorrect screenmode previously and need to reset it back.

With MultibootOS 2.2 you can now connect to a network. Type **online** to connect, and a menu will appear asking you to choose between WiFi using the PiStorm's wifipi driver, or Ethernet, using the PiStorm's GENET driver. GENET is only available if you are using a Raspberry Pi 4 or Computer Module. You must manually disconnect from the network once you are finished by using the command **offline**. You can configure an SMB Network Share using **configSMB** and **mountSMB/unmountSMB** commands.

AmiKit

Two empty partitions called AK0: and AK1: are provided for AmiKit, but AmiKit itself is not provided. You will need to copy the contents of your own AmiKit AK0: and AK1: partitions into the empty partitions on the MultibootOS microSD card.

AmiKit for Pistorm can be purchased from https://www.amikit.amiga.sk/pistorm

It's easiest to copy the AmiKit files using an emulator, using the Directory Opus file manager. Mount your existing AmiKit installation as an additional hard disk or hardfile in the emulator settings, then start MultibootOS and use the Directory Opus file manager from the **CLI/AmigaShell** menu option by typing `dopus` at the CLI prompt.

MultibootOS Online Update

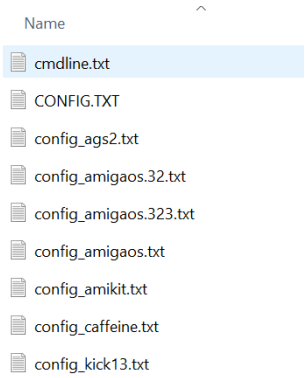
Updates to MultibootOS can now be downloaded and applied directly from the Amiga. Select the option at the bottom of the Amiga Boot Selector menu.

If you are using a **PiStorm Amiga**, choose to connect to the network with option 1 - WiFi (where you will be asked to enter your SSID and WiFi password) or option 2 - Ethernet (only available with Raspberry Pi 4 or CM). To change a previously configured WiFi SSID, use option 3 in the menu. If you are using **Emulation**, UAE will automatically connect to the internet and you will not see the menu.

MultibootOS will check for newer versions of the Update Checker and for MultibootOS. If an update is found, please follow the instructions on-screen to update.

There is also a Workbench tool to update MultibootOS that you can find on the workbenches of CaffeineOS and AmigaOS (unless you overwrite it with your own installation image).

CONFIG.TXT



Within the FAT32 Partition (EMU68) you will see several config.txt files. Any custom changes you need to make to the Pistorm configuration needs to be saved in the respective config_{distro}.txt file and not CONFIG.TXT as this gets overwritten when you select a new option from the Boot Selector menu. To edit the Pistorm configuration for the CaffeineOS distro, edit config_caffeine.txt

The configuration file is well documented with comments. For example, to force 1920x1080 resolution on 4k monitors, edit the config_{distro}.txt and look for the following lines:

```
# For forced 1920x1080 resolution, uncomment these two lines:
#hdmi_group=2
#hdmi_mode=82
```

Then remove the # at the beginning of the lines as follows and then save the file.

```
# For forced 1920x1080 resolution, uncomment these two lines:
hdmi_group=2
hdmi_mode=82
```

Roadshow (Demo) – Network connectivity

AmigaOS, the CLI/AmigaShell and the Online Updater from the Amiga Boot Selector menu use the Roadshow demo to connect to the network/internet using PiStorm's wifipi or GENET devices. The demo gives you up to 15 minutes of connectivity before it disconnects and you need to reboot your Amiga. To avoid this restriction, you must purchase the full version of Roadshow from https://www.amigashop.org/product_info.php?cPath=2_34&products_id=200

Unpack the full Roadshow archive to RAM:

```
C:LhA -a -q x USERFAT:Roadshow/Roadshow.lha RAM:
C:LhA -a -q x RAM:Roadshow-1.15.lha RAM:
```

Then copy the bsdsocket.library file from `RAM:Roadshow-1.15/Workbench/Libs` to the `Libs` folder on `ADH0:` (ABS), `ADH1:` (AmigaOS) and `SDH0:` (CaffeineOS).

Framethrower Support

Framethrower support for MultibootOS is included, but experimental whilst Framethrower is still under development.

The following Emu68 kernels are included with MultibootOS:

- Emu68 1.0.7 PiStorm32
- Emu68-PiStorm 1.0.7 (Classic)
- PiStorm16/32 1.1.0 Alpha.1(Candidate) git 1-03-2026
- PiStorm Classic Alpha(Candidate) git 1-03-2026 -Fixes GURU on boot (framethrower related)

To **ENABLE** the FrameThrower BOOT to CLI in the menu, then launch `FrameThrowerSelector` by typing it, it will automatically activate on all config.txt files and **will switch all Kernels to Alpha** and copy the new VideoCore 1.5 to relative locations, to **DISABLE** it just run again the Selector. You can even tweak the parameters for it on various config.txt all of them will be retained by the Selector.

Note: If you don't use Framethrower, it is recommended to use Emu68 1.0.7 as games are much better tested in this environment.

Acknowledgements

PiStorm32 an accelerator for the Amiga created by Claude Schwarz. https://github.com/captain-amygdala/pistorm
Emu68 is written by Michel Schultz. https://github.com/michalsc/Emu68
CaffeineOS is compiled by Capt LeChuck. https://caffeineos.neocities.org/
Amiga Game Selector is by Paul Vince. https://www.amigagameselector.co.uk/
AmiKit is compiled by Ján Zahurančík & Contributors. https://www.amikit.amiga.sk/
AmigaOS 3.2 © Hyperion Entertainment CVBA. https://www.hyperion-entertainment.com/

MultibootOS is written and maintained by Davide Cutugno, with contributions by Steve Gillott