RetroArch Android (v0.9.8) - Cores Manual

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Contents

1 Introduction

Listed below are all the cores that RetroArch Android supports.

- SNES9x Next
  Used for: playing SNES games (Super Nintendo Entertainment System)
  Author(s): SNES9x team, OV2, Bearoso, zones, Squarepusher (fork)
  Recommended system requirements: ARM Cortex A9 multi-core device
  (and up)
  Extensions: "smc|fig|sfc|gd3|gd7|dx2|bsx|swc|zip|SMC|FIG|
  SFC|BSX|GD3|GD7|DX2|SWC|ZIP"

- VBA Next
  Used for: playing Game Boy Advance games
  Recommended system requirements: ARM Cortex A9 multi-core based
  device (and up)
  Author(s): Forgotten, VBA-M team, Squarepusher (fork)
  Extensions: "gba|GBA|zip|ZIP"

- FCEUmm
  Used for: playing NES games (Nintendo Entertainment System)
  Author(s): CaH4e3, original FCEU authors
  Extensions: "fds|FDS|zip|ZIP|nes|NES|unif|UNIF"

- NEStopia
  Used for: playing NES games (Nintendo Entertainment System)

Author(s): Marty
Extensions supported: "nes|NES|zip|ZIP|fds|FDS"

- Gambatte
  Used for: playing GameBoy / GameBoy Color games
  Author(s): Sinamas
  Extensions supported: "gb|gbc|dmg|zip|GB|GBC|DMG|ZIP"

- Final Burn Alpha
  Used for: playing arcade games
  Author(s): Dave, FBA Team (Barry Harris & co)
  Extensions supported: "zip|ZIP"

- Genesis Plus GX
  Used for: playing Sega Genesis / Master System / Game Gear / Sega CD
  games
  Author(s): Charles McDonald, ekeeke
  Extensions supported: "md|smd|bin|cue|gen|zip|MD|SMD|bin|iso|
  ISO|CUE|GEN|ZIP|sms|SMS|gg|GG|sg|SG"

- NX Engine
  Used for: playing Cave Story / Doukutsu Monogatari
  Author(s): Caitlin Shaw (rogueeve)
  Extensions supported: "exe|EXE|zip|ZIP"

- PCSX ReARMed
  Used for: playing PlayStation1 games
  Author(s): PCSX Team, Notaz, Exophase (GPU plugin)
  Extensions supported: "bin|cue|img|mdf|pbp|cbn"

- Prboom
  Used for: playing Doom, Doom 2, Ultimate Doom, Final Doom, and mods
  Author(s): Various
  Extensions supported: "WAD|wad|IWAD|iwad"

- Mednafen NGP
  Used for: playing Neo Geo Pocket Color games
  Author(s): Original Neopop authors, Ryphecha
  Extensions supported: "ngp|NGP|ngc|NGC|zip|ZIP"

- Mednafen WonderSwan
  Used for: playing WonderSwan / WonderSwan Color / WonderSwan Crystal games
  Author(s): Original Cygne authors, Ryphecha
  Extensions supported: "ws|WS|wsc|WSC|zip|ZIP"

- Mednafen Virtual Boy
  Used for: playing Virtual Boy games
  Author: Ryphecha
  Extensions supported: "vb|VB|vboy|VBOY|bin|BIN|zip|ZIP"

- Mednafen PC Engine
  Used for: playing PC Engine / Supergrafx 16 / PC Engine CD games
  Author: Ryphecha
  Extensions supported: "pce|PCE|sgx|SGX|cue|CUE|zip|ZIP"

We'll go over each of these.

1.1   SNES9x Next

Version: v1.52.3
Android performance: This emulator should run at fullspeed on an Android
device with a dual-core ARM Cortex A9-based CPU.

1.1.1   CHANGELOG

v1.52.3

- Fixed DKC2 graphics inaccuracies

- Fixed issue that could corrupt memory addresses over time - found while
  deiniting Super Mario Kart.

- Updated to use RGB565 as pixel format.

- Speed hacks for Final Fantasy III/VI - makes it fullspeed for Wii.

- Fixed Super Double Dragon input issue.

1.2   VBA Next

Version: v1.0.2
Android performance: This emulator needs at least a dual-core ARM Cortex
A9-based CPU and up.

1.2.1   CHANGELOG

v1.0.2

- Added Pokemon Emerald to built-in vbaover - fixes white screen

- Lessens RAM footprint - makes Mother 3 fit into memory on Wii.

- More consistent syncing.

- Updated to use RGB565 as pixel format.

1.3   FCEUmm

Version: 98.13 SVN
Android performance: This emulator has been tested to run at fullspeed on
an ARM Cortex A8 single-core CPU. Your mileage may vary on slower devices.

1.3.1 CHANGELOG

For 0.9.8 point release

- Upgraded to latest SVN (r134)

- Updated to use RGB565 as pixel format.

1.4 NEStopia

Version: 1.44
Android performance: This emulator has been tested to run at fullspeed on an ARM Cortex A8 single-core CPU. Your mileage may vary on slower devices.

1.4.1 NOTES

- There might still be an audio desync that happens at the half hour mark. Ever since NEStopia 1.36 some kind of APU bug has been inadvertently introduced. We will be researching this.

1.4.2 CHANGELOG

For 0.9.8 point release

- New port

1.5 Gambatte

Version: 0.50
Android performance: This emulator has been tested to run at fullspeed on an ARM Cortex A8 single-core CPU. Your mileage may vary on slower devices.

1.5.1 CHANGELOG

For 0.9.8 point release

- Now makes use of GBC BIOS color palettes.

- Can also make use of custom color palettes.

- Updated to use RGBX8888 as pixel format.

1.6 Final Burn Alpha

Version: 0.2.97.28
Android performance: Performance varies based on the game you're trying to play. Systems like CPS2 and Neogeo have been tested to run at fullspeed on an ARM Cortex A8 single-core CPU. CPS3 needs a dual-core ARM Cortex A9-based CPU for fullspeed gameplay. Your mileage may vary on slower devices.

1.6.1 NOTES

- Some games might be stuck in Service mode right now on big-endian systems (ie. PS3/360/Wii). Some games that come to mind are Psikyo SH2 games and Taito games like Darius 2. We will be trying to fix this issue soon and release a point update for it.

- Button combos ingame:

- RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Select = Service Menu button
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Start = Diagnostic button
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Left = Reset button
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Right = DIP A Pressed
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Up = DIP B Pressed
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Down = Test Pressed

- Savestates are hooked up but games can't have their 'state restored' after unloading the game and loading it again.

- If you want to play Warzard or Red Earth and you happen to get a 'No CD-ROM drive' message - do the 'Reset' combo (see above) - it should work then.

1.6.2 CHANGELOG

For 0.9.8 point release

- Upgraded to 0.2.97.28.

- Controls have been revised - most of the controls should now be properly hooked up.

- Button combos have been changed -
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Select = Service Menu button
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Start = Diagnostic button
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Left = Reset button
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Right = DIP A Pressed
  RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Up = DIP B Pressed

RetroPad L2 + RetroPad R2 + RetroPad L + RetroPad R + Down = Test Pressed

- Uses RGBX8888 as a color format for Psikyo SH2 games and RGB565 for everything else.

1.7 Genesis Plus GX

Version: 1.7.3
Android performance: This emulator has been tested to run regular Genesis and Sega CD games at fullspeed on an ARM Cortex A8 single-core CPU. Virtua Racing runs at half realtime speed on the same hardware and thus needs better system requirements. Your mileage may vary on slower devices.

1.7.1 NOTES

- FOR ANDROID: To play Sega CD/Mega CD games, you will need Sega CD BIOS files in the same directory as the game you want to play. They should be named as follows: bios_CD_E.bin (for EU BIOS), bios_CD_U.bin (for US BIOS), bios_CD_J.bin (for Japanese BIOS)

- FOR EVERYTHING ELSE: To play Sega CD/Mega CD games, you will need Sega CD BIOS files in the same directory as the game you want to play. They should be named as follows: bios_CD_E.bin (for EU BIOS), bios_CD_U.bin (for US BIOS), bios_CD_J.bin (for Japanese BIOS).

1.7.2 CHANGELOG

For 0.9.8 point release

- Upgraded to 1.7.3 (might report 1.7.1 but is really 1.7.3).

- Updated to use RGB565.

1.8 NX Engine

Version: 1.0.4
Android performance: This game has been tested to run at fullspeed on an ARM Cortex A8 single-core CPU. Sound syncing however is currently not correct. Your mileage may vary on slower devices.

1.8.1 HOW TO USE

You need to copy all the 'datafiles' directory in the repository over. Start the core with doukutsu.exe - it should properly extract the needed archives from the EXE on initial boot. From there on it will use those extracted asset files.

1.8.2 NOTES

- NXEngine is not released yet on consoles because it is currently a total glitch fest on all consoles (Xbox 1/360/PS3/Wii). It thus seems that the issues are not endian-related. The only platforms on which it runs fine seem to be PC and Android right now. Will need to research what is up here.

- Savestates are not hooked up - therefore rewind is also not possible.

1.8.3 CHANGELOG

For 0.9.8 point release

- Upgraded to 1.0.4.

- Did major changes to path handling code and got rid of the hardcoded paths - should now handle paths correctly on _WIN32 targets.

- Fixed save files not working.

- Updated to use RGB565.

1.9 PCSX ReARMed

Version: r18
Android performance: This emulator has been tested to run most games at fullspeed on an ARM Cortex A8 single-core CPU. Higher-resolution interlaced games like Tekken 3 and Tobal 2 require higher system specs (Cortex A9 and up). Your mileage may vary on slower devices.

1.9.1 NOTES

- PCSX ReARMed supports the loading of EBOOT (pbp) files as well.

- Although PCSX ReARMed comes with built-in HLE BIOS code, you're recommended to still put BIOS files in the system directory (on Android there is no 'system directory', so instead you put the BIOS files in the same directory as the image you're trying to load). Some of the BIOS files used are: scph1001.bin, scph5500.bin, scph5501.bin, scph5502.bin, scph7502.bin.

- If an image might not load correctly, try it with and without BIOS files in the 'system directory' (read above note about 'system directory' as well).

- This is an ARM architecture-centric port right now - it is not of much use on other architectures and therefore consoles.

1.9.2 CHANGELOG

For 0.9.8 point release

- New port.

1.10 Prboom

Version: 2.5.0
Android performance: This game engine has been tested to run most games at fullspeed on an ARM Cortex A8 single-core CPU. Your mileage may vary on slower devices.

1.10.1 NOTES

- You need to have prboom.wad in the same directory as the Doom WAD file you're going to load.

- Savestates are currently not hooked up, and therefore rewind is not possible.

- Re-entrancy does not work correctly yet - don't try to load a second WAD file. Instead, exit prboom first and then launch it again (only applies to consoles).

- This is the only Doom port in existence right now where you have the option to play at variable framerates. The option exists to play at 35, 40, 50 and 60fps. Doom originally ran at 35fps due to performance reasons and the slow CPUs available at the time.

1.10.2 CHANGELOG

For 0.9.8 point release

- Now uses RGB565 as pixel format.

1.10.3 SOUNDTRACK LIST

Prboom supports MP3 soundtracks. The files must be in the same directory as the WAD file and should be correctly named.

DOOM 1
e1m1.mp3
e1m2.mp3
e1m3.mp3
e1m4.mp3
e1m5.mp3
e1m6.mp3

e1m7.mp3
e1m8.mp3
e1m9.mp3
e2m1.mp3
e2m2.mp3
e2m3.mp3
e2m4.mp3
e2m5.mp3
e2m6.mp3
e2m7.mp3
e2m8.mp3
e2m9.mp3
e3m1.mp3
e3m2.mp3
e3m3.mp3
e3m4.mp3
e3m5.mp3
e3m6.mp3
e3m7.mp3
e3m8.mp3
intermid1.mp3
intro.mp3
bunny.mp3
victor.mp3

DOOM 2
stalks.mp3
runnin.mp3
countd.mp3
betwee.mp3
doom.mp3
the_da.mp3
shawn.mp3
ddtblu.mp3
in_cit.mp3
dead.mp3
romero.mp3
messag.mp3
ampie.mp3
tense.mp3
openin.mp3
evil.mp3
ultima.mp3
read_m.mp3
dm2ttl.mp3

dm2int.mp3

1.11   Mednafen NGP

Version: 0.9.28
Android performance: This emulator has been tested to run at fullspeed on an ARM Cortex A8 single-core CPU. Your mileage may vary on slower devices.

1.11.1   CHANGELOG

For 0.9.8 point release

- New port.

1.12   Mednafen Wonderswan

Version: 0.9.28
Android performance: This emulator has been tested to run at fullspeed on an ARM Cortex A8 single-core CPU. Your mileage may vary on slower devices.

1.12.1   NOTES

- The music is incorrect on Xbox 360. This seems to be a 360-specific bug.

- Because Wonderswan has a 75Hz refresh rate, V-sync is specifically disabled for this core so that the framerate and sound is as it should be - that's why you might notice some negligible tearing.

1.12.2   CHANGELOG

For 0.9.8 point release

- Upgraded to 0.9.28 version.

- Fixes save file issues on MSVC-based consoles (Xbox 1/360).

- Now uses RGB565 as a pixel format.

1.13   Mednafen Virtual Boy

Version: 0.9.28
Android performance: You will need at least a Cortex A9 CPU and/or higher for this.

1.13.1   NOTES

- This is not released yet for Xbox 1 and 360 because there are numerous game compatibility-breaking issues right now.

1.13.2 CHANGELOG

For 0.9.8 point release

- New port.

1.14 Mednafen PC Engine

Version: 0.9.28
Android performance: This emulator has been tested to run at fullspeed on an ARM Cortex A8 single-core CPU. Your mileage may vary on slower devices.

1.14.1 NOTES

- FOR ANDROID USERS: You will need a BIOS file called 'syscard3.pce' placed in the same directory as the ISO/CUE you want to play to be able to play PC Engine CD games.

- FOR ANYBODY ELSE: You will need a BIOS file called 'syscard3.pce' in your system directory in order to be able to play PC Engine CD games.

1.14.2 CHANGELOG

For 0.9.8 point release

- Upgraded to 0.9.28.

- Fixes save file issues on MSVC-based consoles (Xbox 1/360).

- Updated to use RGB565 as pixel format.

2 About Us

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