

WzonkaLad

Ville Helin

COLLABORATORS

	<i>TITLE :</i> WzonkaLad		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Ville Helin	June 24, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

WzonkaLad

1.1 Minna-san! Ichiban yoi Gameboy emulatoru, Wzonka-Lad v0.83 to asonde kudasai!

Before starting...

Read me

Requirements

Copyrights and copying

Installing

Shareware announcement
Windows

Menu

Preferences

Colour editor

Sound preferences
Menu lists

10 Recent ROMs

10 Favourite ROMs
Binaries

The two executables

Tools (directory)
Programme Information

Controls
Rom images
Snapshots
Emulation
Working games
Sound emulation
 Misc information

The Author

Thanks to

Future

Registered users

The keyfile

Final words

History

1.2 Sound preferences window

The Sound Preferences window sliders:

AUDIO:	ON/OFF	(Turn all channels on/off)
CHNL 1:	ON/OFF	(Turn channel 1 on/off)
CHNL 2:	ON/OFF	(Turn channel 2 on/off)
CHNL 3:	ON/OFF	(Turn channel 3 on/off)
CHNL 4:	ON/OFF	(Turn channel 4 on/off)

And the only button:

Select the used AHI-mode. NOTE! You must select an AHI mode before playing the first time a game with sounds on. AHI-mode is naturally saved along with the preferences, by pressing the S-button on the

Preferences
window.

Select as high mixing rate as possible, because the higher you choose the better the music will sound. 9600 Hz will sound twice as good as 4410 Hz and so on!!!

1.3 The keyfile

The keyfile must be kept in the PROGDIR: or in the L: device. ↔
You can
gain a keyfile by
registering
.

With the keyfile you can use the
sound preferences
window to select the
preferred AHI output devices and settings. Without the keyfile the
window cannot be accessed and the sounds are not emulated.

You must not spread the keyfile as it is not a very nice thing to do.
Keep it to yourself!

1.4 Registered users

The following nice people have registered Wzonka-Lad and are waiting for
the keyfiles to be completed. Want to speed up the developement? Join
the lot! ;)

Hans Guijt
Hidden
Imran Ahmed
Jarkko Vatjus-Anttila
Josef Andersson
Lennart Johannesson
Luca Longone
Martin Blom
Morgan Johansson
Nik Racine
Niklas Jonsson
Patrik Alexandersson
Rodney Norton
Sami Niromaa
Sebastian Schlesinger
Simon Goodwin

Not very much, don't you think so? But thanks dudes for the support! ;)

1.5 Sound emulation

From version 0.80 and on sounds are supported, but only if a keyfile is
present. You can get yourself the sounds, aka a keyfile by registering. ;)

The emulation is not perfect, but due to the lack of good documents I
cannot enhance it much.

NOTE! Always check out <http://www.lysator.liu.se/~lcs/ahi.html> (AHI

homepage) for new updates! 060 (040, too?) users should get a bugfix to the Paula device from there (if Aminet v4 or older (not recommended) of AHI is used).

The quality of output isn't either that great, but that's because AHI doesn't support greater play back frequency than 262143 Hz, so I had to drop down the quality to achieve correct tones.

NOTE! It's recommended to keep the channel four shut down as the emulation for that channel is incomplete.

1.6 The two executables

Version 0.62 introduced two different executables:

FULL - This one offers a full GB Z80 emulation with all the CPU flags.
FAST - As the name indicated this one is faster, but lacks the emulation of H and N flags and the DAA command.

1.7 Shareware announcement - O-kane ga takusan hoshii n desu! ;)

During the long time of developement I've listened to user's requests and made most of them to come true. Now it's my time to ask you a favor.

Wzonka-Lad is shareware. By sending me 15US\$, 10GB£ or 70FIM (no other ← currencies are accepted) you'll become a registered user and will recieve a keyfile via email. Don's send any coins, I have no use for them, because the banks won't accept them. If you want your keyfile via snailmail then add 5US\$, 3GB£ or 20FIM for postages and a blank disk. By registering Wzonka-Lad you'll make me hurry with the coding and if enough of you register, I see no point in stopping emulator evelopements. ;) Want to see PPC asm coded emulators for A\BOX / PPC cards? 8D

I've also decided that sounds are only be available for registered users.

If I ever see a pirated version of Wzonka-Lad or a keyfile in public distribution, I will stop working. I've now used over five months on this one.

1.8 10 Recent Cartridges menu

With version 0.58 came this menu. It's only available via Menu window

The 10 recently loaded rom images are displayed on this menu. Selecting a name from the list will reload the cartridge.

NOTE! Only 15 characters of the file are saved with this list, so keep those names short. Note also that the data is loaded from the selected default rom image storage directory.

The list is saved on exit to the prefs file.

1.9 10 Favourite Cartridges menu

Version 0.61 came boasting with this menu in addition to the old 10 Recent Cartridges menu. This uses an external file, which is not modified by the emulator. This is also only accessible via

Menu window

.

Inside this menu you can place the 10 favourite games of yours. The names are in ASCII, located in favourites/favourites.list.

That file is loaded on every start up and the menu will be shown only if it is available. It must be located in PROGDIR:favourites/!!!

You can edit the file with your normal text editor.

NOTE! The instructions for editing are inside favourites/favourites.list!

1.10 The tools directory

```

prefs_to_cfg          - Converts
Wzonka-Lad
.prefs files to
  Virtual GameBoy .CFG files. SYNTAX:

prefs_to_cfg "[INPUT NAME]" [OUTPUT NAME] [ENTER]

```

NOTE! Background colours are also extracted as window colours to create a whole .CFG file.

```

gbs_to_sav           - Converts
Wzonka-Lad
.gbs files to
  Virtual GameBoy .SAV files. SYNTAX:

gbs_to_sav [INPUT NAME] [OUTPUT NAME] [ENTER]

```

NOTE! It's up to you to check out if the cartridge has got battery backed RAM. The best way to check this out is to run VGB with the desired rom image and look if it searching for .SAV file.

NOTE! This utility is made to extract battery RAM data from .GBS files to be used with VGB.

NOTE! Loader supports xpk packed files!

```
sav_to_gbs          - Converts Virtual Gameboy .SAV files to
Wzonka-Lad          .GBS files. SYNTAX:
                    sav_to_gbs [INPUT NAME] [OUTPUT NAME] [ENTER]
```

1.11 Copyrights

Wzonka-Lad
is copyrighted by Ville Helin 1996-1997. This programme is freely distributable if no payment or just a fee to cover the expences is taken from it. The fee shall not exceed 5US\$. If you have intensions to cash on this programme, then you must contact me first and we can discuss about it.

None of the files shall not be altered or removed from the archive, and you may not disassemble or modify any of the files without my written permission. That's the law.

And if you are doing an article or a review of
Wzonka-Lad
then
please send me a copy of the magazine!

If Wzonka-Lad is put on a cd, then you must send me a copy of it.
Generally, if Wzonka-Lad is involved in something I must be told. ;)

Gameboy is naturally copyrighted by Nintendo. ;)

1.12 Installing

Installing the emulator would not be easier; Just click on the icon and Installer (tm) does the job for you.

Thanks to Lennart Johannesson (95lenjo@ostrabo.uddevalla.se) for the script. Without him we wouldn't have the option of automatic installation. ;) Cheers!

1.13 Read me before anything!

Starting from 09.06.1997 I'll be doing my military service which ↔
will
take about nine months of my time. During that time I can be reached via usual channels (aka email and snailmail), but I reckon we get every other weekend off and that's the average case, so don't expect

fast replies. Also the coding is put into freeze due to the same reason.

Version 0.61 combines the old and new interrupt routines to enhance the compability. Due to the fact I'm lacking good documents about the GB's interrupts and those freaking two bits (0 and 1) in \$ff41 the emulation is still quite sluggish.

It is deplorable that wonderful games like Gargoyle's Quest do not work, but don't e-mail me about it! I know it already!

Also ... uh... here's a list that you must not write me about:

- Free ROM images.
- Gfx-card driver (I'll do it if I can).
- WB-window (this is only reasonable to do on a gfx-board, so it'll come with the gfx-card support).
- Sprite priority is not emulated. Well, if it was it would drop the emulation speed down to almost VGB level. Really! ;)
- SEGA PAD mode makes something weird. Contact the library's author, it's not

my fault.

PS. If something seems to be wrong when first trying out a new version of

Wzonka-Lad
, delete the old prefs file first, before sending me
mail. If that doesn't help, then please write me a line or two.

It seems that many of you don't take these seriously (or even bother to read the docs). Take a look at the following quotes from Wzonka-Lad users' mails:

----- cut cut cut -----

* Shouldn't you do something about the close gadget on the main GB window as it doesn't work when the emulation is running. I know it would slow down if you had to keep checking the IDCMP messages so why not remove the close gadget from the GB screen window and just have a QUIT button on the tool-bar.

----- cut cut cut -----

If your mail is going to look like that, then please leave it unsend. ;) Try to come up with more useful ideas. That one wasn't quite bad, but think it over twice. ;)

----- cut cut cut -----

From nbrunori@bellsouth.net Sat Mar 22 12:22:16 1997
Date: Sat, 22 Mar 1997 02:47:23 -0400
From: Nino Brunori <nbrunori@bellsouth.net>
To: Ville Helin <vhelin@cc.hut.fi>
Subject: 0.58

Great emulator fix-up!
Much better than 0.57!

Crashes my system with a deadend alert!

Yea, better than AmiGameBoy.
Tried out the AmiGameGear yet?
Fast as hell, I played Sonic hedge-hog 2 on my 030/25 and
it was great, played at full speed.
Hey, maybe you should make an MSX emulator.
I'd like to see how fast you can get it to go!
ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha

NB

----- cut cut cut -----

If you are going this low then it's your own personal problem.

But do write about these things:

- Emulator bugs.
- Brilliant ideas (brilliant = exceptionally good).
- Current compability with your gfx-board (with system configuration).
- How much you like this emulator. ;) Or how little. 8D
- The ~three colours that are missing from the VGB colour support. Supported colours are yellow,
green,
brown,
black,
cyan,
red,
white,
pink,
blue,
dkcyan,
orange,
magenta,
dkmagenta,
dkcyan,
dkgreen,
dkred and
dkblue

Like the version number indicates, this is still a very new product.
So take it easy, I'll do what I can, but It can take some time.

1.14 Games working

You are provided with two games list.
One
is created by Patrik Alexandersson
and Lennart Johannesson with a little help from Nik Racine, and it covers the
games working with
Wzonka-Lad

v0.55.

The

other

one is made by Sampo Kytömäki (Ribbon/SuLPu) and it has all the information about games working/not working with

Wzonka-Lad

v0.56. This list is valid for v0.57, too.

Version 0.62 enhanced the compability a lot, so expect more games to work!

1.15 Games working with Wzonka-Lad v0.55

Game title:	Type:	Size:
ALIEN	ROM+MBC1	131,072
ASTERIX	ROM+MBC1	131,072
ASTEROIDS	ROM Only	32,768
AYAKASI NO SIRO	ROM+MBC2+BATTERY	65,536
ADVENTURE ISLAND	ROM+MBC1	131,072
ADDAMS FAMILY	???	131,072
ALIEN OLYMPICS	ROM+MBC1	131,072
ALLADIN	???	262,144
ALTERED SPACE	???	131,072
BARBIE GAME GIRL	ROM+MBC1	131,072
BASES LOADED GB	ROM+MBC1	131,072
BATMAN ROJ	ROM+MBC1	131,072
BATTLE SHIP	ROM+MBC1	66,048
BUBBLE BOBBLE	ROM+MBC1	131,072
BEETHOVEN	ROM+MBC1	131,072
BEST OF THE BEST	ROM+MBC1	262,144
BILL AND TED	ROM+MBC1	131,072
BIONIC-COMMANDO	ROM+MBC1	262,144
BLODIA	ROM+MBC1	65,536
BLADES OF STEEL	ROM+MBC1	131,072
BONK'S ADVENTURE	ROM+MBC1	262,144
BOXXLE2	ROM Only	32,768
BREAKTHRU!	ROM+MBC1	131,072
BUBBLE GHOST	ROM Only	32,768
BURAI FIGHTER DE	ROM+MBC1	65,536
BURNING PAPER	ROM+MBC1	131,072
BUGS BUNNY	???	65,536
CARD GAME	ROM+MBC1	65,536
CHOPLIFTER III	ROM+MBC1	131,072
CHOPLIFTER 2	ROM+MBC1	131,072
CHIKI RACE	???	262,144
CONTRA	ROM+MBC1	131,072
COOL SPOT	ROM+MBC1	131,072
CRASH DUMMIES	ROM+MBC1	131,072
CRYSTAL QUEST	ROM Only	32,768
CYRAID	ROM+MBC1	65,536
CAESARS PALACE	ROM+MBC1	131,072
DAEDALIAN OPUS	ROM Only	32,768

DAFFY DUCK	ROM+MBC1	131,072
DOUBLE DRAGON	ROM+MBC1	131,072
DOUBLE DRIBBLE	ROM+MBC1	131,072
DEFENDER/JOUST	ROM+MBC1	131,072
DESERT STRIKE	ROM+MBC1	262,144
DICK TRACY	ROM+MBC1	131,072
DIRTY RACING	???	262,144
DUNGEON LAND	???	131,072
DLAIR LEGEND UK0	ROM+MBC1	131,072
DRAGON SLAYER 1	ROM Only	32,768
DR FRANKEN	ROM+MBC1	131,072
DR.MARIO	ROM Only	32,768
EARTHWORM JIM	ROM+MBC1	262,144
EMPIRE STRIKES	ROM+MBC1	131,072
F15 STRIKE EAGLE	ROM+MBC1	131,072
F1 SUPER DRIVING	ROM+MBC1	262,144
F1 BOY	ROM+MBC1	65,536
FELIX THE CAT	ROM+MBC1	131,072
THE FIDGETTS	ROM+MBC1	262,144
FIFA SOCCER 96	ROM+MBC1	524,288
FIGHBIRD GB	ROM+MBC1	131,072
FINAL REVERSE	ROM+MBC1	65,536
FLINTSTONES	ROM+MBC1	131,072
THE FLINTSTONES	ROM+MBC1	262,144
FAMILYJOCKEY	ROM+MBC1	131,072
FORTIFIED ZONE2	ROM+MBC1	131,072
FUNNY FIELD	ROM+MBC1	65,536
NETTOUGAROU2	ROM+MBC1	524,288
FORTIFIED ZONE2	ROM+MBC1	131,072
GALAGA&GALAXIAN	ROM+MBC1	131,072
GAME&WATCH	ROM+MBC1	131,072
GB GARMS 1	ROM+MBC1	131,072
GAUNTLET II	ROM+MBC1	270,336
GB NEW SD GUNDAM	ROM+MBC1	262,144
GENERATIONS	ROM+MBC1	131,072
GODZILLA	ROM+MBC1	131,072
GRADIUS	ROM+MBC1	262,144
GREMLINS 2	ROM+MBC1	131,072
VATTLE GIUCE	ROM+MBC1	131,072
HATRIS	ROM+MBC1	65,536
HEAD ON	ROM+MBC1	65,536
HOME ALONE	ROM+MBC1	131,072
THE HUMANS	ROM+MBC1	262,144
HYPERLODERUNNER	ROM Only	32,768
HYPER DUNK	ROM+MBC1	131,072
INDIANA JONES 3	ROM+MBC1	131,072
JURASSIC PARK	ROM+MBC1	262,144
JURASSIC PARK II	ROM+MBC1	262,144
KID ICARUS	ROM+MBC1	131,072
KESAMARU	ROM+MBC1	65,536
KINGOFTHEZOO	ROM+MBC1	65,536
KIRBY'S PINBALL	ROM+MBC2+BATTERY	262,144
KLAX	ROM Only	32,768
KWIRK	ROM Only	32,768
LAST BIBLE2	ROM+MBC1+RAM+BATTERY	262,144
THE LION KING	ROM+MBC1	524,288
LOCK'N CHASE	ROM+MBC1	65,536

LOLO	ROM+MBC1	131,072
SD LUPIN THE 3RD	ROM+MBC1	65,536
MARIO & YOSHI	ROM+MBC1	65,536
MAGNETIC SOCCER	ROM+MBC1	131,072
MANSELL	ROM+MBC1	131,072
MARU'S MISSION	ROM+MBC1	131,072
MEGA MAN 2	ROM+MBC1	262,144
MEGAMAN4	ROM+MBC1	524,288
METROID2	ROM+MBC1+RAM+BATTERY	262,144
MICKEYS CHASE	ROM+MBC1	131,072
MICRO MACHINES	ROM+MBC1	524,288
MINER 2049ER	ROM+MBC1	65,536
POWER RANGERS	ROM+MBC1	262,144
LUCKY MONKEY	ROM+MBC1	65,536
MONOPOLY	ROM+MBC1	262,144
MONSTERTRUCK	ROM+MBC1	65,536
MR NUTZ	ROM+MBC1	262,144
NAVY BLUE 90	ROM+MBC1	131,072
NAVY SEALS	ROM+MBC1	131,072
NFL QB CLUB 96	ROM+MBC1	262,144
ONI	ROM+MBC2+BATTERY	131,072
ON THE TILES	ROM+MBC1	131,072
OTHELLO	ROM Only	32,768
GB SUPERBIKKURI1	ROM+MBC1	262,144
OUT OF GAS	ROM+MBC1	131,072
PAC-MAN	ROM+MBC1	65,536
PAINTERMOMOPIE	ROM+MBC1	65,536
PARASOL STARS	ROM+MBC1	131,072
PARODIUS DA!	ROM+MBC1	262,144
PEETAN	ROM+MBC1	131,072
GB KUREYON SHIN4	ROM+MBC1	131,072
PENGUINKUNWARSVS	ROM+MBC1	65,536
PENGUIN LAND	ROM Only	32,768
PERSONAL ORGANIZ	ROM+MBC1+RAM+BATTERY	65,536
PINBALL	ROM+MBC1	65,536
PRINCE OF PERSIA	ROM+MBC1	131,072
POPEYE 2	ROM+MBC1	131,072
POP UP	ROM Only	32,768
POWER MISSION	ROM+MBC1	131,072
PREHISTORIK MAN	ROM+MBC1	131,072
GB POWER MOVIE	ROM+MBC1	262,144
PUZZNIC	ROM+MBC1	65,536
Q*BERT II	ROM+MBC1	65,536
RED OCTOBER	ROM+MBC1	131,072
RUBBLE SAVER 2	ROM+MBC1	65,536
SAILORMOON R	ROM+MBC1	262,144
SIDE POCKET	ROM+MBC1	65,536
SIMPSONS 2	ROM+MBC1	131,072
SIMPSONS3	ROM+MBC1	131,072
SNEAKY SNAKES	ROM+MBC1	131,072
SNOOPY	ROM+MBC1	65,536
SOCCER MANIA	ROM+MBC1	65,536
SPIDER-MAN 3 DMG	ROM+MBC1	131,072
SPIDERMAN XMEN	ROM+MBC1	131,072
NETTOU SAMURAI	ROM+MBC1	524,288
STAR WARS	ROM+MBC1	131,072
TAIL GATOR	ROM+MBC1	65,536

TENNIS	ROM Only	32,768
TERMINATOR 2	ROM+MBC1	131,072
TETRIS	ROM Only	32,768
TETRIS2	ROM+MBC1	131,072
TETRIS FLASH	ROM+MBC1	131,072
TMHT BACK FROM S	ROM+MBC1	262,144
TMNT3	ROM+MBC1	131,072
TOPRANKTENNIS	ROM+MBC2+BATTERY	262,144
TOUR DE THRASH	ROM+MBC1	131,072
TRUMP BOY	ROM Only	32,768
THE PUNISHER	???	131,072
NETTOU TOSHINDEN	ROM+MBC1	524,288
VOLLEY FIRE	ROM Only	32,768
WARIO BLAST	ROM+MBC1	262,144
WINTER OLYMPICS	ROM+MBC1	131,072
ZELDA	ROM+MBC1+RAM+BATTERY	524,288
ZOIDS J1	ROM+MBC1	65,536

1.16 Game compability list for Wzonka-Lad v0.56

Y = Works with Wzonka-Lad v0.56

YS = Works with Wzonka-Lad v0.56, but the sprites are screwed up.

144 = Works with Wzonka-Lad v0.56, but only with refresh mode 144/144.

N = Doesn't work with Wzonka-Lad v0.56

Game Title:	Manufactured:	Year:	Type:	Size:	Notes:
ADVENTURE ISLAND	Hudson Soft	1991	ROM+MBC1	131072	Y
AFTER BURST	NCS	1990	ROM+MBC1	65536	Y
ALADDIN	Nintendo	1994	ROM+MBC1	262144	Y
ALIEN 3	LJN	1992	ROM+MBC1	131072	Y
Alien Olympics	Nintendo	19?		131072	Y
ALIEN V PREDATOR	Activision?	1993		131072	Y
ALLEY WAY	Nintendo	1989	ROM ONLY	32768	N
ALTERED SPACE	Imagesoft	1991	ROM+MBC1	131072	Y
ASTEROIDS	Accolade	19?	ROM ONLY	32768	Y
Balloon Kid	Nintendo	1990		131072	Y
BASEBALL	Nintendo	1989		65536	N
BASES LOADED GB	Jaleco	1990	ROM+MBC1	131072	Y
BATMAN FOREVER	Nintendo	1995	ROM+MBC1	262144	N
BEETLEJUICE	LJN	1991	ROM+MBC1	131072	Y
BILL AND TED	LJN	1990	ROM+MBC1	131072	Y
Blaster Master Boy	Nintendo	1991		131072	Y
Blues Brothers	Titus	1991		131072	Y
BOMB JACK	Infogrames?	1992	ROM ONLY	32769	Y
BOULDER DASH	Broderbund?	1990	ROM+MBC1	65536	Y
BREAKTHRU!	Spectrum Holobyte	1994	ROM+MBC1	131072	Y
BUBBLE BOBBLE	Taito	1990	ROM+MBC1	131072	Y
BUBBLE BOBBLE 2	Taito	1993	ROM+MBC1	131073	YS
BUBBLE BOBBLE JR	Taito	1993	ROM+MBC1	131072	YS
Bugs Bunny	Kemco	1990		65536	Y
CAESARS PALACE	Virgin	1990	ROM+MBC1	131072	Y
CASTLEVANIA2 BEL	Konami	1991	ROM+MBC1	131072	N
Chuhk Rock	Imagesoft	1993		131072	Y
CLIFFHANGER	Imagesoft	19?	ROM+MBC1	131072	Y

COOL SPOT	Virgin	1994	ROM+MBC1	131072	Y
CRASH DUMMIES	LJN	1992	ROM+MBC1	131072	N
DESERT STRIKE	Nintendo	1994	ROM+MBC1	262656	Y
DONKEY KONG	Nintendo	1995	ROM+MBC1+RAM+BATTERY	524288	Y
DONKEYKONGLAND95	Nintendo	1995	ROM+MBC1+RAM+BATTERY	524288	N
Double Dragon	Technos Japan	19?		131072	Y
DOUBLE DRAGON 2	Acclaim	1991	ROM+MBC1	131072	Y
DR.MARIO	Nintendo	1990	ROM ONLY	32768	Y
DUCK TALES	Capcom	19?	ROM+MBC1	65536	N
DUNGEONLAND	Enix?	1992	ROM+MBC1+RAM+BATTERY	131072	Y
Earth Worm Jim	Nintendo	1995	ROM+MBC1	262144	Y
EMPIRE STRIKES	Capcom	19?	ROM+MBC1	131072	Y
ESPARKS	Unkown	1992	ROM+MBC1	131072	Y
FLRACE	Nintendo	1990	ROM+MBC2+BATTERY	131072	Y
FIFA SOCCER 96	Nintendo	1995	ROM+MBC1	524288	Y
final fantasy	SquareSoft	1989	ROM+MBC2+BATTERY	131072	Y
final fantasy 2	SquareSoft	1991	ROM+MBC1+RAM+BATTERY	262144	N
final fantasy 3	SquareSoft	1993	ROM+MBC1+RAM+BATTERY	262144	N
FISH DUDE	Sofel	1991	ROM+MBC1	65536	Y
Flint Stones	Taito	1992		131072	Y
FOOTBALL INT'L	Unkown	19?	ROM+MBC1	131072	Y
GALAGA&GALAXIAN	Nintendo	1995	ROM+MBC1	131072	Y
GARGOYLE'S	Capcom	1995	ROM+MBC1	131072	N
GAUNTLET II	Bitmap Brothers	1990	ROM+MBC1	262144	Y
GB BASKETBALL	Imagineer	1992	ROM+MBC1	131072	N
GO GO TANK	Unkown	1990	ROM+MBC1	65536	Y
GOLF CLASSIC	Nintendo	1993	ROM+MBC1	262144	Y
HATRIS	Bullet-Proof Software	1990	ROM+MBC1	65536	Y
HEIANKYO ALIEN	Meldac?	1989		32768	Y
Hudson Hawk	Imagesoft	1991		131072	N
HYPERLODERUNNER	Unkown	1989	ROM ONLY	32768	Y
INDIANA JONES 3	Unkown	1993	ROM+MBC1	131072	Y
JUNGLE BOOK	Virgin	1994	ROM+MBC1	131072	Y
Jungle Strike	Nintendo	1994		262144	Y
JURASSIC PARK	Ocean	1993	ROM+MBC1	270336	Y
JURASSIC PARK II	Nintendo	199?	ROM+MBC1	262144	Y
Killer Instinct	Nintendo	1995		524288	N
King Kong	Nintendo	1994		524288	Y
Kipry's Pinball	Nintendo	1993		262144	Y
KIRBY 2	Nintendo	199?	ROM+MBC1+RAM+BATTERY	524288	N
KIRBY DREAM LAND	Nintendo	1992	ROM+MBC1	262144	Y
KONAMIC SPORTS	Palcom/Ultra	19?	ROM+MBC1	131072	N
Krusty	Acclaim	19?		131072	Y
LAWNMOWER MAN	Unkown	199	ROM+MBC1	131072	N
LEMMINGS	Ocean	1991	ROM+MBC1	131072	Y
LEMMINGS 2	Nintendo	1994	ROM+MBC1	524288	Y
LOONEY TUNES	SunSoft	1992	ROM+MBC1	131072	Y
lucle	Vic Tokai	1994		524288	Y
MADDEN 96	Nintedo	1995		524288	N
MARBLE MADNESS	Bitmap Brothers	19?	ROM+MBC1	262144	Y
Mario&Yoshi	Nintendo	1992	ROM+MBC1	65538	Y
MC Donald Land	Ocean	19?		131072	Y
MEGAMAN	Capcom	1991		262144	Y
MEGAMAN 2	Nintendo	1992		262144	Y
MEGAMAN 3	Capcom	19?	ROM+MBC1	262144	N
MEGAMAN 4	Nintendo	1993		524288	Y
METROID 2	Nintendo	1991	ROM+MBC1+RAM+BATTERY	262144	Y

MICRO MACHINES	Ocean	19?	ROM+MBC1	524288	Y
Mortal Kombat	Acclaim	1993		262144	N
Mortal Kombat 2	Nintendo	1994		262144	Y
MORTAL KOMBAT 3	Nintendo	1995	ROM+MBC1	524288	144
MOTOCROSSMANIACS	Konami	19?	ROM ONLY	32768	N
MR-NUTZ	Nintendo	19?		262144	Y
NBA JAM TE	Nintendo	1995	ROM+MBC1	524288	144
Nemesis II	Konami	1990	ROM+MBC1	262144	Y
Nettougarau 2	Nintendo	1994		524288	Y
NEW CHESSMASTER	Park Place?	1992	ROM+MBC1	65536	Y
NFL QB CLUB 96	Nintendo	1995	ROM+MBC1	262144	Y
NHL HOCKEY 95	Nintendo	1995	ROM+MBC1	524288	N
OTHELLO	Kawada	1990	ROM ONLY	32768	Y
Pac-In-Time	Nintendo	19?		262144	N
PAC-MAN	Namcot	1991		65536	Y
paperboy	Bitmap Brothers	1990		65536	Y
PARODIUS DA!	Konami	1991		262144	Y
PINBALL	HAL	19?		65536	Y
Pinball Mania	Nintendo	19?		262144	Y
Pocahontas	Nintendo	1996		524288	Y
Popeye	Activision?	19?		262144	Y
Primal Rage	Nintendo	1995		262144	144
Prince of Persia	Virgin	1991		131072	Y
RANMA 1/2	Banaresto	1990		65536	144
Rtype 2	Irem	1992		121072	YS
Sailor Moon	Angel?	1994		262144	Y
Shikinjoy	Unkown	1991		65536	Y
SIMPSON 2	Acclaim	1992		131072	Y
SMURFS	Nintendo	1994		131072	N
Snoopy	Kemco	1990		65536	Y
Solar Striker	Nintendo	1989		65536	Y
STARTREK	Ultra Software	1991		131072	N
STARWARS	Capcom	1992		131072	Y
Street Fighter 2	Nintendo	1995		524288	N
Super Kick Off	Imagineer	19?		131072	Y
SUPER MARIOLAND	Nintendo	1989	ROM+MBC1	65536	Y
Super Marioland 2	Nintendo	1992	ROM+MBC1+RAM+BATTERY	524288	N
SUPER MARIOLAND 3	Nintendo	1993	ROM+MBC1+RAM+BATTERY	524288	N
Super Offroad	Tradewest	1992		131072	Y
SUPER RC PRO-AM	Nintendo	1991		131072	N
TENNIS	Nintendo	1989		32768	Y
tetris	Nintendo	1989		32768	Y
TETRIS 2	Nintend	1993		131072	Y
TETRIS Flash	Nintendo	1993		131072	Y
THE HUMANS	Gametek	1992	ROM+MBC1	270336	Y
THE LION KING	Nintendo	1994	ROM+MBC1	524288	Y
TMNT 3 (Turtles)	Konami	1993		131072	Y
TMNT FOOT CLAN	Palcom/Ultra	1990	ROM+MBC1	131072	Y
TOP Rank Tennis	Nintendo	1993		262144	Y
Tour De Trash	Unkown	1991		131072	Y
True Lies	Nintendo	1994		262144	N
Versus Hero	Banaresto	1992		131072	Y
Wario Blast	Nintendo	1994		262144	Y
WORMS	Nintendo	1995		262144	N
Yoshi's Cookie	Nintendo	1993		131072	N
ZELDA	Nintendo	1993		524288	Y

Zoids

Tomy

1990

65536 Y

1.17 Requirements

Real Requirements:

- An Amiga computer (OSC/ECS/AGA, all will do fine). Though AGA will give you the 24-bit palette to play with and a h/w mode to boost the graphics.
- mc68020+
- Little memory = ~3MB's (FAST memory speeds things up remarkably ;)
- A lot of patience, because this is a very alpha beta gamma delta uh... sigma release 8D
- reqtools.library v38+ for loading the rom images and other disk related activity.
- wzonka.font for the screen (zapot or topaz fonts will do it if wzonka font isn't found, but the view is optimized for wzonka font).
- OS3.0 (OS3.0 routines are used!).
- AHI sound system installed, any version of this will do fine, but the newer the better. Only used in the registered version of
Wzonka-Lad

Things good to have:

- A cd32 compatible joypad (a very, very, very good thing to have).
- lowlevel.library for the joypad routines (not required by the keyboard handler).
- controlpad.library if you are using a Sega controlpad alternatively.
NOTE! You need an CP-1 CONTROL PAD ADAPTER to utilize all the buttons.
Get ControlPad.lha from Aminet for more details.
- A fast processor (030/~40 MHz should guarantee enjoyable playability in all graphics modes, I guess). At least my 030/50 plays most of the games in full speed.
- xpkmaster.library and some good sub libraries to pack the rom images and ram snapshots with.
- NewIcons system to see the excellent Wzonka-Lad newicon icons!

1.18 Snapshots

From version 0.51
Wzonka-Lad

has allowed you to save and load ram snapshots.
That means that you can always save your positions even though the cartridge didn't have its own battery to backup the datas.

Version 0.52 introduced the use of xpk packer libraries to pack your snapshots. Just choose from the preferences window the library you wish to use. All the snapshots are packed with best possible efficiency with the selected sub library.

Version 0.53 fixed some bad bugs in the emulation and I had to add a new byte to the save file, so it can happen that snapshot saved before v0.53 do not work with v0.53+, but there's no way I can fix this.

I modified the GBS file format a little with version 0.54. If older ram snapshots refuse to work, you could help a lot by clearing the first four bytes of the GBS file. Remember to unpack them first before editing! ;)

Please make the files end to .GBS to indicate that the format really is

Wzonka-Lad
's own snapshot format.

1.19 Controls

The keyboard:

left shift	= b
left alt	= a
right shift	= start
right alt	= select
cursor keys	= joypad
p / esc	= pauses the emulator (same as pressing the pause icon.)

CD\$^3\$\$^2\$ joypad:

yellow	= start
green	= select
blue	= a
red	= b
pause	= pauses the emulator (same as pressing the pause icon.)

Joystick:

fire	= a
left shift	= b
right shift	= start
right alt	= select
p / esc	= pauses the emulator (same as pressing the pause icon.)

Sega 4 button joypad:

```
a      = a
b      = b
c      = select
start  = start
```

```
p / esc (from keyboard) = pauses the emulator
                        (same as pressing
                        the pause icon.)
```

Sega 2 button joypad:

```
fire 1      = a
fire 2      = b
right shift = start
right alt   = select
```

```
p / esc (from keyboard) = pauses the emulator
                        (same as pressing
                        the pause icon.)
```

1.20 Menu window

Menu bar buttons (from left to right):

- Reset the emulator, start again the loaded cartridge.
- Load a new cartridge (you can also load a cartridge by supplying the name in the command line, ie. "> Wzonka-Lad games/EXPLODE.GB").
- Run the cartridge.
- Pause the execution.

- Info window open / close.
- About window open / close.
- Preferences window open / close.

- Save ram snapshot.
- Load ram snapshot.

1.21 Preferences window

Preferences window buttons info:

With version 0.52 came a separate configuration window. In it there are slidebars to do the following things:

- Select the amount of frames to skip (ALL means that no graphics will be outputted, good for music listening on slower machines).
- Select the used display mode.

- Select the method for refreshing
 - .
- Select the used xpk library for ram snapshot packing.
- Select the controller type.
- Toggle backdrop on / off.
- Toggle debug window on / off.
- S - button : Save the preferences to the ENVARC: device.
- Monitor - button : Select a new screenmode.
- Bars - button : Open colour editor window.
- Note - button : Open sound preferences window (not functional in this version).

1.22 Render - slider

There are three modes to choose from:

- WIN+SCREEN - Uses the window on Wzonka-Lad's screen.
- SCREEN - Opens a custom 16 colour screen to enhance the output speed.
- AGA H/W - Fastest of the three modes, this one bangs directly the hardware, which is something that the others do not do. Like the name suggests, AGA H/W mode is only available on AGA equipped computers. Use at your own risk!

1.23 Colour editor window

With colour editor window you can edit the background and sprite colours to match your fancy. The buttons:

- C - slider : Select the colour to edit.
- R - slider : Alter the amount of red in that colour.
- G - slider : green .
- B - slider : blue .

The buttons from left to right:

- IP - button : Interpolate the values between colours zero and three.
 - L - button : Load colours from a preferences file.
 - CR - button : Reset the colours to match the default palette.
 - S - button : Save the colours of the active cartridge. If there's no cartridge loaded, then this button will be shadowed.
-

Pressing the S - button will create a file named GAME.prefs, where GAME is replaced by the name of the rom image used (e.g. ZELDA.prefs for ZELDA.GB). This file is saved in the prefs - directory. NOTE! Preferences file inherits the cartridges real name, not the file name to indentify the master rom correctly.

NOTE! Pressing this button will also save the current FRMSKIP, RENDER and REFRESH values.

This way you can have different names for the same cartridge and the emulator can still indentify the preferences file.

Next time the same cartridge gets loaded the colours are recalled.

Universal colours are saved along with the preferences by pressing the S - button on the prefs window, but if you wish to save the current colours to the loaded cartridge, then you must press the S - button on this window.

NOTE! While editing colours, look at the screen to see the effect. The four boxes at the bottom of colour editor window represent the current colours, but they are often changed by the game rom. So don't be bewildered if the four colour box doesn't show the colour morphing correctly.

NOTE! When you load a new rom image and the emulator cannot find its preferences file the default colours will be used.

1.24 Refresh - slider

There are three modes to choose from:

- 144/144 - Some games wait for a particular scanline to appear and poke new values to the gfx registers causing the graphics to alter while the screen is being refreshed. This mode forces the emulator to draw one scanline at a time, like the Gameboy's h/w does it. Therefore 144/144 mode is the slowest of them all, but if games have problems with graphics with the other two modes then this is the remedy.
- 1/144 VBR - Waits until the VBR IRQ gets executed and draws the screen. Problems with scrolling can be somewhat cured with this mode, but doesn't offer the compability the 144/144 gives.
- 1/144 LAST - Waits even longer than the 1/144 VRB mode, all the way until it's time to start from scanline zero and draws the screen in a big flash like the VBR mode does. Many games seem to work with this mode, so it's advisable to try out this option before the two others.

1.25 Rom images

You can load your own rom images assuming that you have some ;) I recommend those shipped with the Virtual Gameboy, because almost all of them run without any problems 8D

From version 0.52 and on it has been possible to load xpk packed cartridges. If you use this feature, you should have xpkmaster.library located in the LIBS: device and the xpk sub library you used for packing in LIBS:compressors/ drawer. The same goes for saving xpk packed GBS files.

Tictactoe:

Made by Norman Nithman. I got his permission to use the rom image. Thanks, Norman. ;)

1.26 Emulation

Not very far from perfect. ;) There are two things that are not done ←
in the graphics emulation. Sprites to h/w window priority and colour changes on a scanline basis are left out for your's sake. They would eat up too much resources.

It's a real Gameboy emulation this time, no fakes here! ;)

Runs a lot faster than the medicore unix-port Virtual Gameboy, which is though a far better emulator in the terms of compability.

Here is some misc
information
about the emulator programme.

1.27 Things to do

Old and non emulation related ideas:

- A list of background patterns (unique colours & images) to choose from.
- Perhaps a background image editor.

Very imminent things:

- Enhance the sound quality.
 - NTSC AGA mode.
 - More compability.
 - Add a slider to select the accuracy of interrupt emulation.
 - GameGenie support (I've got the material to do this, but I'm just lacking the time to implement it).
 - Less flicker in SCR+WIN mode.
 - Convert the GUI to use the gadtools.library.
-

Deadline:

Deadline for Wzonka-Lad will be 08.06.1997, because the next day I'll be serving in the army for the next nine (or more) months. After that day Wzonka-Lad will still be developed, but the speed will slow down dramatically.

The deadline is long gone, but Wzonka-Lad is still being developed, as you can see from the history script.

1.28 Information

- Opens a 320x256x5 screen. Very reliable, multitasking and colourful ;) The SCREEN screen driver will use a depth of four planes to speed up graphical operations.
- 100% assembler code.
- Assembled by PhxAss MC680x0/68851/6888x Macro Assembler v4.36 Copyright 1991-97 by Frank Wille. Thanks Frank!
- Uses Sega ControlPad Library, Copyright ©1995 by Joseph Carlson and Randall Richards <xrichard@csu.fullerton.edu>.
- 020 / 32bit instructions used. Very little additional memory access while doing the z80 emulation (With FAST executable the amount of memory access is divided about by five).
- Selectable quality of GB Z80 emulation.
- NOTE! Don't load something that isn't a rom image, because I haven't done the code to check the cartridge's validity. It won't guru, though, but be careful!

1.29 Thanks to

- Jarkko Vatjus-Anttila for great help, succestions, information, ↔ source codes and for being such a nice geezer ;) Without him this emulator would look much more boring (Check out BFBPlayer, Marbles and SinED in Aminet!!!).
 - Big thanks to Marcel de Kogel (Author of VGB-DOS) for the great help with the sounds!!! Thanks!!! Without him the sounds were much grainier. Cheerio Marcel!!!
 - Marat Fayzyllin for the most valuable information 8D He's one of the three guys who helped me through the developement and stayed calm, though my mails filled his account's hd-space ;) VGB inspired me to do

Wzonka-Lad
!
 - Chaos-Knight for the documents.
 - Hans Guijt, the author of 100% asm fMSX, for z80 example codes, information and source codes. Without him this emulator would not exist. Brilliant, Hans! Good work with the fMSX!
 - Morgan Johansson [orbit / giants] for (his everstopping whining about when
-

- the emulator is ready ;) Check out this dude! He's making a NES emulator!!!
(A\NES <http://home2.swipnet.se/~w-28134/ANES/>).
- Brothers Sandgren for their help with os-code and graphics.
 - Luca Longone for his marvellous newicons!
 - Lennart Johannesson for the installer script!
 - Paul Barker for beta testing and excellent ideas!
 - Jon Åslund for the magic-wb drawer icon.
 - Jeff Frohwein for his brilliant GameBoy homepage and the variety of documents available there. Keep that robot rolling!
 - Sampo Kytömäki for VGB preference files and info!
 - And all the others for encouraging me to continue the work. Cheers!
 - Sebastian Schlesinger who sold me his old Blizzard IV card! ;)
 - Special hidden secret thanks to an anonymous individual! ;) Thanks! 8D

1.30 The author

I'm happily living here in Finland. Age is 19 and I'm studying computer science at the Helsinki University of Technology.
After the school I'll be a lot older and Master of Technology. =D

Hardware used for developement: A1200/030/50MHz (+FPU) + 16MB'S OF FAST
+ 400MB HD + CD\$^3\$S\$^2\$ JOYPAD + "DRACULA X" -
AUDIO CD ;)

NOTE! NUMEROUS URUSEI YATSURA, SLAYERS,
RANMA ½, BAKURETSU HUNTERS, TENCHI MUYO,
ARMITAGE III, VAMPIRE PRINCESS MIYU, Y'S,
PHANTOM QUEST CORPORATION, RECORD OF
LODOSS WAR, MARMALADE BOY, PRETTY SAMMY,
ALL PURPOSE CULTURAL CAT GIRL NUKU-NUKU,
DIRTY PAIR FLASH (I&II), MAZE, AH!
MEGAMI SAMA, EL-HAZARD, LUPIN III AND KO
CENTURY BEAST (I&II) EPISODES WERE WATCHED
DURING THE TIME WHICH SHOULD HAVE BEEN USED
ON CODING. ;)

I'VE ALSO SPENT LOTS OF TIME LISTENING TO MY
COLLECTION OF ANIME AUDIO MP2'S (PLUS NOW
SOME MP3'S), WHICH I HAVE NOW ABOUT 297MB'S!
(AND HOW BIG WAS MY HD...?) ;)

e-mail: vhelin@cc.hut.fi (Ville Helin)

snail-mail: Ville Helin
Suomenlinna c54 b14
00190 Helsinki
Finland

www: <http://www.hut.fi/~vhelin> (The page with information about Wzonka-Lad
and other ~normal stuff).

<http://www.niksula.cs.hut.fi/~tursas> (This is for people capable
of reading Finnish. Take a
look at my school related

home page ;).

1.31 Final Words

If you think you could improve on some parts of the program, then let me know.

Help wanted: ;)

If anyone has very good information about GB's sounds, well, I could use some help here ;)

And if you confess you are hiding some good interrupt documents, I won't punish you, but please send them to me! ;)

1.32 Wzonka-Lad

So, where does this silly name come from? Many have guessed that Wzonka stands for Game and Lad for Boy in finnish, but that's not it! Wzonka-Lad is the first name that came into my mind when it was time to choose a title for this emulator. I often like to name things like this, though it sounds as an act of lunacy ;) Anyway, it's much better than something like "MagiGB", "GoggleBoy" or "AmiGameBoy", well not better than GoggleBoy, but anyway. ;)

1.33 History

v0.83 (10-Aug-97)

Fixed few audio bugs and a one bigger interrupt bug. Fixed a tiny controller emulation bug, now eg. Rolan's Curse 2 works *much* better. Speeded up the audio routines once again.

v0.82 (27-Jul-97)

Optimized the sound emulation routines. Fixed few small sound bugs. Fixed a fatal interrupt bug causing timer interrupts to occur five times slower than normal. Super Mario 1 and Mega Man 2 among the others sound much better now...

v0.81 (21-Jun-97)

Enhanced the sound emulation, fixed some sound and interrupt bugs. Now the selected mixing frequency for sound is used and saved along with the preferences. The frequency was always 4410, but now selecting something bigger will enhance the sound quality very much. The games will sound *much* better now!

v0.80 (08-Jun-97)

Greatly improved the speed of GB's memory handling, but the emulator needs now 256kB's more memory. Fixed a rare ROM bank switcher bug. The AGA modes do not steal the system's VBR interrupt, now only hooking is used, so better multitasking is achieved. Added a new FRAME SKIP value - ALL

(no graphics are displayed). Lennart updated the installer script. Speeded up the DAA command emulation (in FULL executable). Fixed the .prefs to .cfg converter version number. Added a .gbs to .sav and .sav to .gbs file converters. Sounds (and the keyfiles) are now supported. Added a special Sound Preferences window for registered users to use.

v0.64 (01-May-97)

A "Happy Wappu To Everyone" release. ;) Fixed a sprite flipping bug (a bug due to fast optimizing). Fixed a bug in SCREEN mode graphic emulation style change, so no more trashed output.

v0.63 (27-Apr-97)

Removed lowlevel.library from the archive due to copyright reasons. Now the screenmode is fetched again from the preferences (I blew it up in the previous version). Emulation can now also paused by pressing esc. Speeded up 144/144 and 1/144 modes (WIN+SCR & SCREEN) a little. Tweaked the AGA modes, too.

v0.62 (12-Apr-97)

Added crippled GB Z80 emulation executable for those who want more speed. Now ZELDA, SUPER MARIO 2 and FISHDUDE among others don't suffer from the counter reset! Fixed one corrupted word from the sprite x flipping table, so sprites should look better now. Added a new menu - 10 Favourite Games! Read the docs for more info. Added colour reset button to the colour editor window.

v0.61 (05-Apr-97)

You can now load a rom image by supplying the name in the commandline. Combined and enhanced the interrupt routines from versions 0.59 and 0.60. Optimized the cpu emulation.

v0.60 (02-Apr-97)

Now the default icons have OS2.0 look if NewIcons system is not used. Added support for 2 button Sega joypad and a normal joystick. Rewrote the input routines and enhanced the OS code sections a lot. Speeded up the emulation, and rewrote the interrupt part, which may affect some games. Enhanced the z80 emulation code. Now FRMSKIP, RENDER and REFRESH values are saved with the cartridge independent colour preferences. Wzonka-Lad is now shareware.

v0.59 (22-Mar-97)

A fast loader fix and bug removals executed. AGA 1/144 modes have now the limit of 50fps (not tested). ;)

v0.58 (21-Mar-97)

Fixed an AGA 1/144 mode sprite masking bug. Added Sega controller pad support and enhanced the controller autodetection. Added a 10 Recent Cartridges menu. Speeded up AGA 1/144 modes and added the missing h/w window emulation. Keyboard handler is finally fully coded for every screen mode. Fixed a possible font allocator bug, and the version strings (both executables and guide) plus some rare gui bugs.

v0.57 (02-Mar-97)

Added automatic window activation in KEYBOARD mode. Now the CARTRIDGE, PREFS and GBS paths from the file requesters are saved along with the universal prefs. Colour loader defaults to prefs directory. Added close gadgets to the CARTRIDGE INFO, PREFERENCES, ABOUT and COLOUR EDITOR windows.

Changed the background pattern image. ;) Added p-key pausing to KEYBOARD controller. Fixed a bug in NONE xpk library GBS saver. The colour editor now accepts VGB CFG files. Added a colour prefs to VGB.CFG file converter executable. The COLOUR EDITOR and PREFERENCES window gadgets are shadowed when the emulator is running. Luca Longone fixed the drawer icons! (Which I accidentally messed up). ;) Lennart Johannesson updated the installer script. Speeded up all graphics modes a little. Now the screens use the SA_AutoScroll tagitem. Moved S:WzonkaLad.prefs to ENVARC:Wzonka-Lad.prefs by request. Added AGA (unfinished) screen drivers.

v0.56 (03-Feb-97)

Added a new screen driver and introduced a new graphics emulation mode. Added reset button to the menu bar. Added colour editor window and possibility to save colours universally and cartridge independently. The SCREEN screen driver now inherits the main screen's ID. The SCREEN screen driver now works correctly with all modes. Joypad's pause button is now utilized. Removed window's priority over the sprites, because many games were suffering from invisible sprites on the window. Echo RAM emulation added. Added automatic screen to front popper in SCREEN + JOYPAD mode.

v0.55 (18-Jan-97)

Added window position saving with preferences. Added installer script by Lennart Johannesson! Thanks! Fixed screenmode requester cancel button bugs. Reordered the keys once again (!). This time they work perfectly on an A1200 (10hrs of testing accomplished). The 1st Aminet release.

v0.54 (15-Jan-97)

Compatibility boost release. Interrupt emulation and z80 bugs fixed. Once again reordered the keys to avoid A1200 keyboard bug. Fixed a sprite priority bug. Added a screenmode requester. Modified the GBS file format!

v0.53 (10-Jan-97)

Fixed a debug window update bug. Fixed some major z80 and h/w emulation bugs. "Zelda is working!" - release ;)

v0.52 (08-Jan-97)

Fixed some z80 bugs. Added new icons by Luca Longone. Reordered the keys and buttons to enhance the emulation ;) Fixed a GBS loader bug. Added xpk cartridge and GBS packing/unpacking support. Speeded up debug and cartridge info windows output. Visuals changed a bit, due to the addition of a preferences window. Fixed a bug which could cause a crash on exit. Added a primitive preferences saver. Added frame skipper.

v0.51 (03-Jan-97)

Speeded up the z80 emulation. Added icons by Rickard Sandgren to the icons directory. Switched from Asmone to PhxAss, because the bug I encountered in Asmone wasn't funny. Boo! Added ram bank switching. Now the requester recalls its path. The emulator can be launched from wb. Drew myself a newicon. ;) Fixed some misc user interface bugs. Added ram snapshot loader and saver.

v0.50 (30-Dec-96)

Implemented the code for bank switching with look up table. Multibank games speed up! Fixed some more z80 bugs. Now uses OpenWindowTags and supports the 3d look mode, so there is no need for MultiCX anymore ;) Thanks to Johan Sandgren for this fix! Fix for the new button looks goes

for Johan's brother, Rickard! (Though I did not do all the modifications he suggested). Anyway, great support! ;)

v0.49 (28-Dec-96)

Fixed a sprite palette bug (Reported by Morgan Johansson).
Now requires 1 MB more memory for the bank switching table, which isn't yet in use. Fixed some bugs and speeded up the z80 emulation.

v0.48 (26-Dec-96)

Added emulation for sprite colours, and an amigaguide version of the documents.

v0.47 (25-Dec-96)

Rewrote the gfx routines. Now faster (much faster on slower machines) and better ←

Added emulation for sprite x and y flippings.

v0.46 (15-Dec-96)

Added emulation for the gameboy h/w window.

v0.45 (11-Dec-96)

Fixed some bugs and added the keyboard controller!

v0.44 (06-Nov-96)

Now you can load rom images by the power of reqtools.library (assuming that you have it). ;) Added some more things to the debug window and made the emulator behave better.

v0.43 (30-Oct-96)

Added a little debug window. Modified the z80 emulation. Now faster and safer. Made the other windows nicer ;) Found irritating bugs... ;(

v0.42 (20-Oct-96)

The first public release.
