Win64 BETA 2 Contents

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Thank you for trying the Win64 emulator.

This is Beta software. It still has (many) problems
Beta details

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Explaining the Win64 settings(to come)

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Win64 History & Thanks to

What is the Win64 Emulator

Sometime around 1982, Commodore Business Machines released the Commodore 64 computer (here after referred to as the C64).   At the time this computer was very powerful for the home user and available at a very reasonable price.   Well, the C64 took the market by storm and sold in millions around the world.   They were still for sale as late as 1994.

Then followed the software for the C64 in equally large quantities.   Many great games came out.   If you had a C64 you may remember some games that you loved.   Most of these games are now available for free over the Internet.   Some of the copyright holders have given up their copyright so long as the programs are not sold.   Many of the companies are now out of business.   What all this means is that there are many excellent games out there if only you can use them.

The Win64 Emulator is a program that lets you run those C64 programs on your PC.   Win64 tries to closely simulate an actual C64 system.   The emulator also brings some convenience and speed to tasks on the C64.

Win64 is there for you to use and enjoy ,,,,,,, Have Fun.

How Do I load Programs

Commodore 64 programs have been transferred form their original tapes and disks and are now stored in files.

Here are the file types currently supported by Win64

.D64   Files, these files are an exact copy of a C64 Disk.
.T64   Files, these are about the same as a C64 tape
.C64   Files, this is just a C64 program.
.P00   Files, this is much like a .C64 file with a header.

Coming soon:
.mdf files   Files designed to make loading programs and setting up the emulator easier.

Loading Programs

Currently .p00, .t64 & .c64 files can only be loaded using DMA this works with all files except multipart loaders.

To load one of these files select Load or Load & Run from the file men and select the file you want to run.

Loading .d64 files
To load a .d64 file go to the disk window and push the change disk button.   Next select the disk image you want to use and press ok.   Choose the file you want and press either Load or Run. Alternatively you can load it from the keyboard using the C64 commands
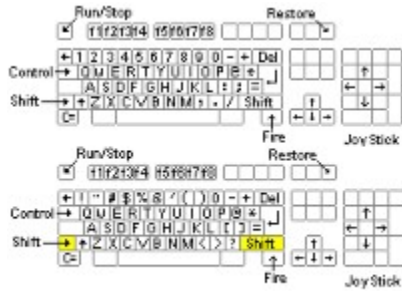
Commodore command
LOADFILENAME,8,1
you can also use a wild card like
LOADFILE*,8,1

Mapping the Keyboards

The Keyboard layout of Win64 closely matches the original C64 keyboard.

The picture below shows a PC keyboard with the C64 layout mapped on to it. The second picture shows the keyboard with the shift key pressed.

You may like to Print this page.

Where can I get programs for Win64?

Check comp.emulators.cbm for where to get software. An the latest information. Somebody there will be more than happy to help you.   Also check out the FAQ, although, as of this writing, it contains no specific information about Win64 much is very relevant.

If you have access to the web be sure to check out

http://www.gold.net/users/ez11/

This excellent page has been put together by Anthony Richardson who has agreed to let his site be the home of Win64 you should find the latest version of Win64 here and be able to get some new games for it. Any new information should also be available here.

C64 programs are readily available from several ftp sites.

Some good 64 sites
These sites have closed they may or may not reopen.

Lennon
lennon.engr.wisc.edu

Frodo
158.36.33.4

Look in the /pub/c64 directories.

When Win64 is complete it will be available on CD-ROM and include about 300 meg of C=64 software ready to use.

Also look for C64 web pages on www.yahoo.com
many of these contain selected C64 programs in either D64 or T64 formats.

History & Thanks

The seed for Win64 was planted at about 10:30am GMT time April 22 1995 when I saw a copy of PC home in a local newsagent, not a magazine that I normally buy, but that claimed to have an emulator that ran C64 games with the 600mb of other junk on the cover CD. I brought it right away, I used to love my 64 but sold it in 1987 to get a flash new Commodore Amiga 1000. Now I make my living programming Windows NT and really had nothing to do with the C64 at all.

Quickly I took the magazine home and anxiously inserted the CD and loaded the emulator. Wow! it was just like a C64 on the PC, even if did only run for 10 minutes. There were also some C64 games on the CD which I played. I loved it, It took me right back to my old days. I had the cheque book ready. Unfortunately, while looking for where to send the money I found the price, $70 US dollars plus postage! Outraged, I put the cheque book away saying Ill write one my self for less than that, and it will run on Windows so I can use it with all my other programs, and so began Win64.

The following Monday I started searching the net (as in inter) for everything I could find out about the C64.   I never really programmed the one I had (well a couple of boring games in basic that I originally wrote on the VIC20) because I was always too busy either playing games on it or on some BBS talking at huge 300baud.   Over the next couple of days I amassed about every technical document on the net that there is to do with the C64. But It really wasnt enough, I needed some basic Information about the C64 - I needed a programmers reference.   Finding one proved not exactly easy but not too hard.   I also brought a C128 to use as the benchmark for the emulation (they have a nicer keyboard than the C64s had)

Over the next months Win64 started taking shape in my spare time, it went down a couple of wrong roads but I think in the end it has come through okay.   There is still much much more that needs to be done. This I will do as time allows.

Win64 is written in a combination of assembler C & C++   most of the actual emulation code is assembler, the remaining non speed critical code is in C the Windows stuff is C++.

Thanks To

These people have helped me knowing or unknowingly along my way

Marko Mäkelä & John West
For their document on 64 emulators.

Everyone that has written for C= Hacking magazine.

Joko Valta
For making the source to X64 available and answering a couple of questions.

Bruce McFarling
For his input of the workings of the overflow flag

Anthony Richardson
For giving Win64 a home.

Everyone else that has helped me along the way.

Ralph Mason
16 October 1995

Beta details

Beta 2 details

This release follows hot on the heals to the first beta to fix a few largish problems.

problems fixed.

1 Speed - speed is now regulated depenging on the processor you are running on. The faster your processor the more FPS youll get.
2 Interupts - there was a bug causing video interputs to occur wether you wanted them or not.
3 Disk access.   The disk emulation didnt work with long filenames.

Beta 1 Stuff

This is the first release of Win64.   Ive havent been doing much on it for a couple of months now so I figure if I get it out there I can get some feed back and do a bit more.

The Beta Competition.

Im having problems tracking down all the bugs in Win64. There are many that are difficult to find especially if your not a C64 programmer. If you are one, you may be able to spot bugs or see where code is going wrong using the tracer.   With this release I am mainly interested in processor & memory emulation bugs. And so I offer a finders fee.   For the first person that finds each genuine bug in the 6502 processor (well 6510 but theyre the same)   emulation or memory accessing your get a free copy of the completed software.   Not much I know, as the release version may well be free!, but better than nothing.   I will also mention your name in the credits somewhere.

Note: Some of those undocumented and unreliable op codes do not work at all. I already know this.

email me at ralph.mason@liffe.com

Planned for future releases

Proper 1541 emulation using the 1541 roms and the 6502 code.
Borders
Full Interrupt support and timers
All graphics effects.
Analog and digital joystick support.
Loading 64 apps from the file manager etc
A new file format to support   a Games machine version.