

MAME - Compilingscript V2.3a

by
Mucci

Logo created by JackC

© 2016 by Mucci



Contents

Introduction.....	3
Chapter 1: Installing.....	4
Chapter 2: How to handle the script.....	16
Chapter 3: Using the script.....	17
Chapter 4: Troubleshooting.....	26
Example of a compiling error message:.....	26
Problem: I can not change the parameter “(A) Architecture”!.....	28
Problem: I got this “warning messages” after an update.....	28



Introduction

I have written this script for my own to compile MAME in an easy way. I'm doing that each day to have a fresh MAME executable with all the latest submitted changes. This documents describes how to install the compiling tools from MAMEdev and how to use my script for doing the hole compiling task. I have tested it as good as possible and using it on my own every day. But I can not guarantee that it runs all the time without problems nor that it is “bug-free”. If you have suggestion or other comments please feel to send a mail to mucci@mameguide.info.

Please do NOT download this script from other locations than <http://www.mameguide.info> ;-)

There exists more compiling scripts at <http://www.mameguide.info>
All scripts can be used in the same environment within the same folder structure. Each script uses their own folder for the source and for storing the compiled executables.

This script is written by me and is not from the official MAMEdev team. Please do not contact them when you have questions/comments/complains/ >> send ME a mail.



Chapter 1: Installing

Download the MAMEdev compiling tools from their site <http://mamedev.com/tools/> (its not included in my zip-file).

Tools for building MAME on Windows

MAME Build Tools

Introduction

The MAME development environment for Windows consists of the GCC compiler (by way of MinGW), and the MSYS2 (POSIX/Unix compatibility layer), plus various utilities such as Python and Git. It is available as a prepackaged installer, or can be assembled from upstream components.

Source control is handled by github (<https://github.com/mamedev/mame.git>), so you'll need to check out a copy. Various modules are disabled by default, such as the MAME interactive debugger, but can be enabled through arguments when building and may require additional MSYS2 packages to be installed.

Installation and building

Downloads

- Windows 64-bit (x64) - [msys64-2016-02-16.exe](#)
- Windows 32-bit (x86) - [msys32-2016-02-16.exe](#)
- Dual 32-bit/64-bit - [msys64-32-2016-02-16.exe](#) (If you have 64-bit Windows but wish to build for both 32-bit and 64-bit. To switch between different mingw versions use [config32.bat](#) and [config64.bat](#))

Installation

If you are installing it in a location other than the default (c:\msys64 or c:\msys32), after you unpack double-click : [autorebase.bat](#)

To open a non-posix shell there are two batch files: [win32env.bat](#) for regular windows console, and [win32con.bat](#) for fancy looking conemu console.

Important thing is to setup your git environment first

```
git config --global core.autocrlf true
```

www.mameguide.info

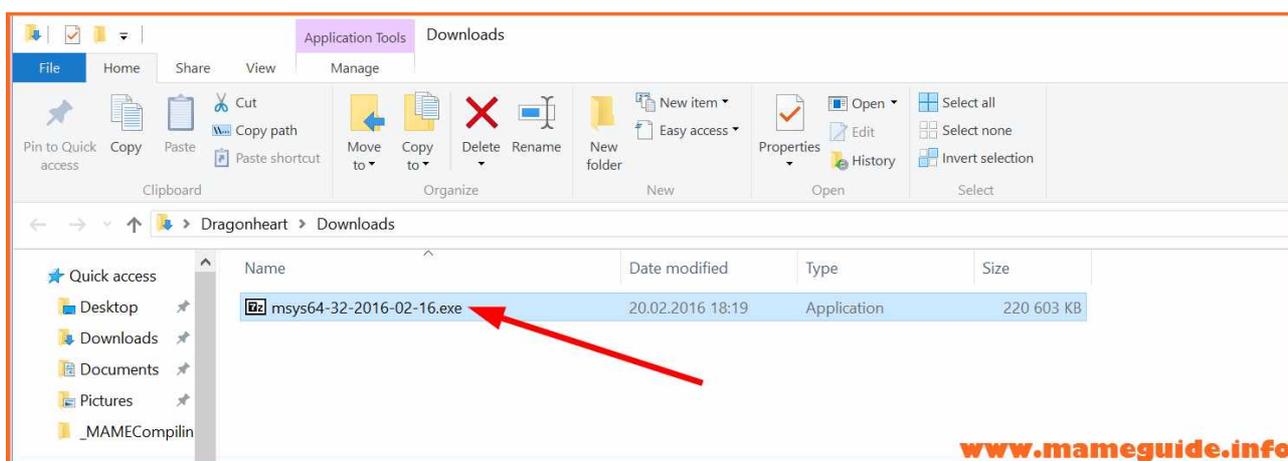
Choose the right package to download:

- If you are on a x86 Windows you should choose the x86 zip-file
- If you are on a x64 Windows you should choose the x64 zip-file or the x86/x64 zip-file. I would suggest in that case that you download the x86/x64 package. With this you are able to compile also a x86 MAME executable.

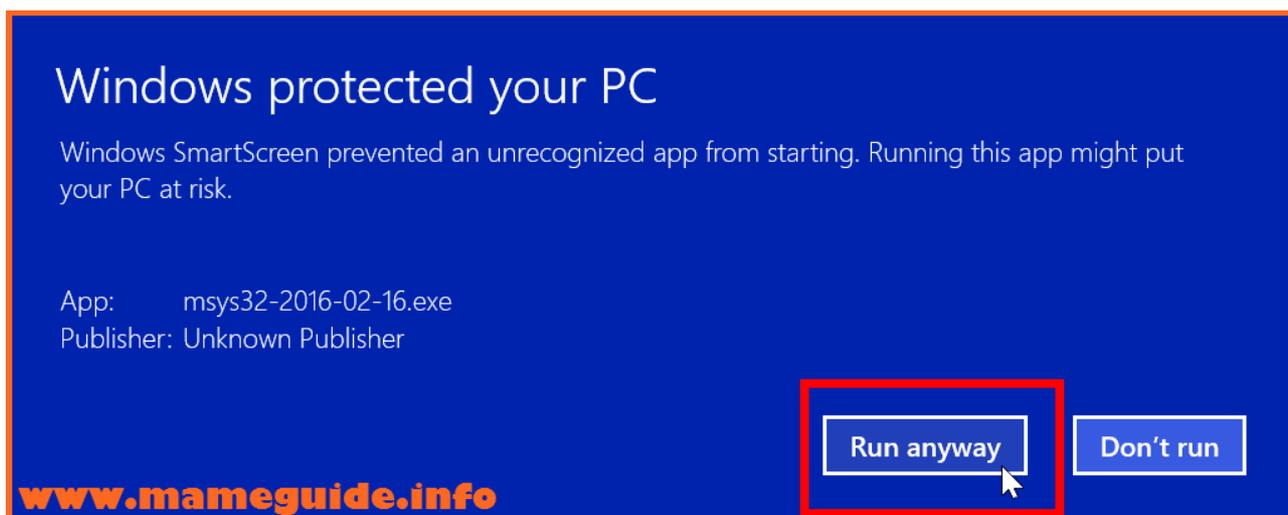
I have tested my script with all three packages. It should detect your OS version and let you compile only the version it does support.



We have downloaded, in our example, the x86/x64 package. Maybe it has been updated in the meantime on the server, download the file that is available on the web-page. My script does each time when you are updating the local source folder also looks for new tool updates as well and download/install them too.

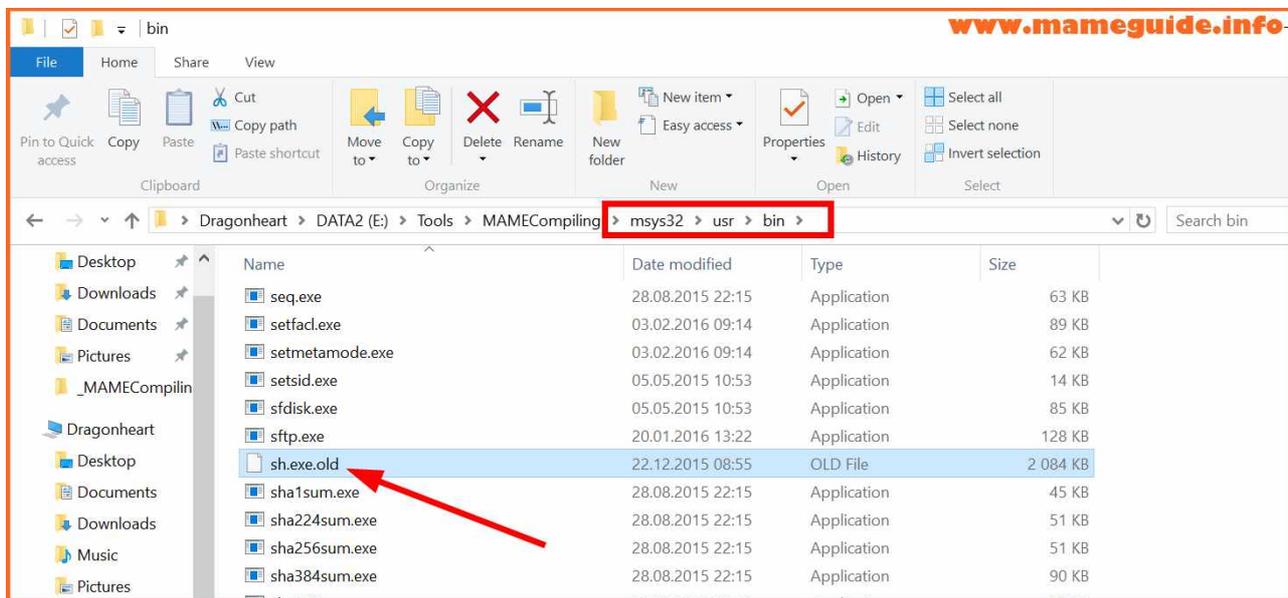


Double click the file and when you see a warning click “run anyway”
(Windows 10)

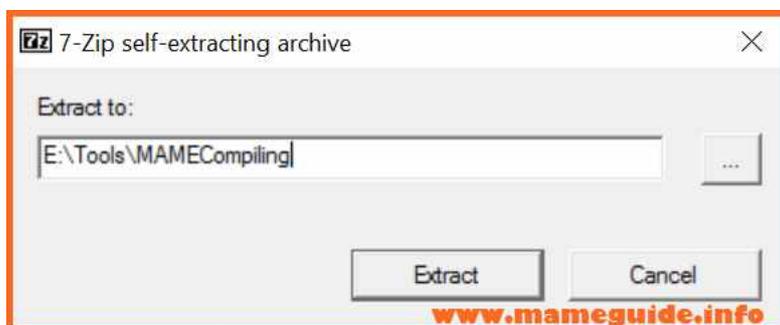




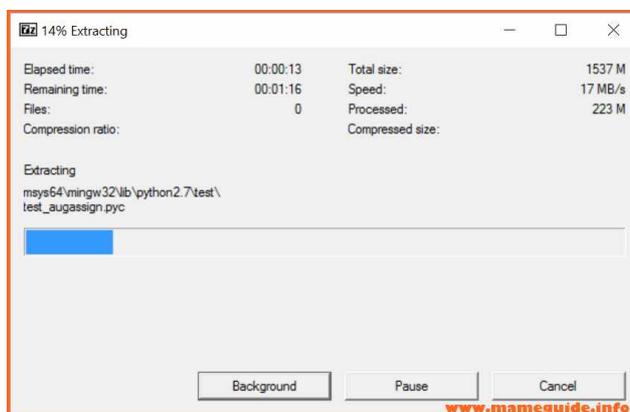
Note: If you are extracting the x86 package please note/check that this file has to be renamed from “sh.exe.old” to “sh.exe” after the extraction.



After double clicking the package-exe extract it to an empty folder.

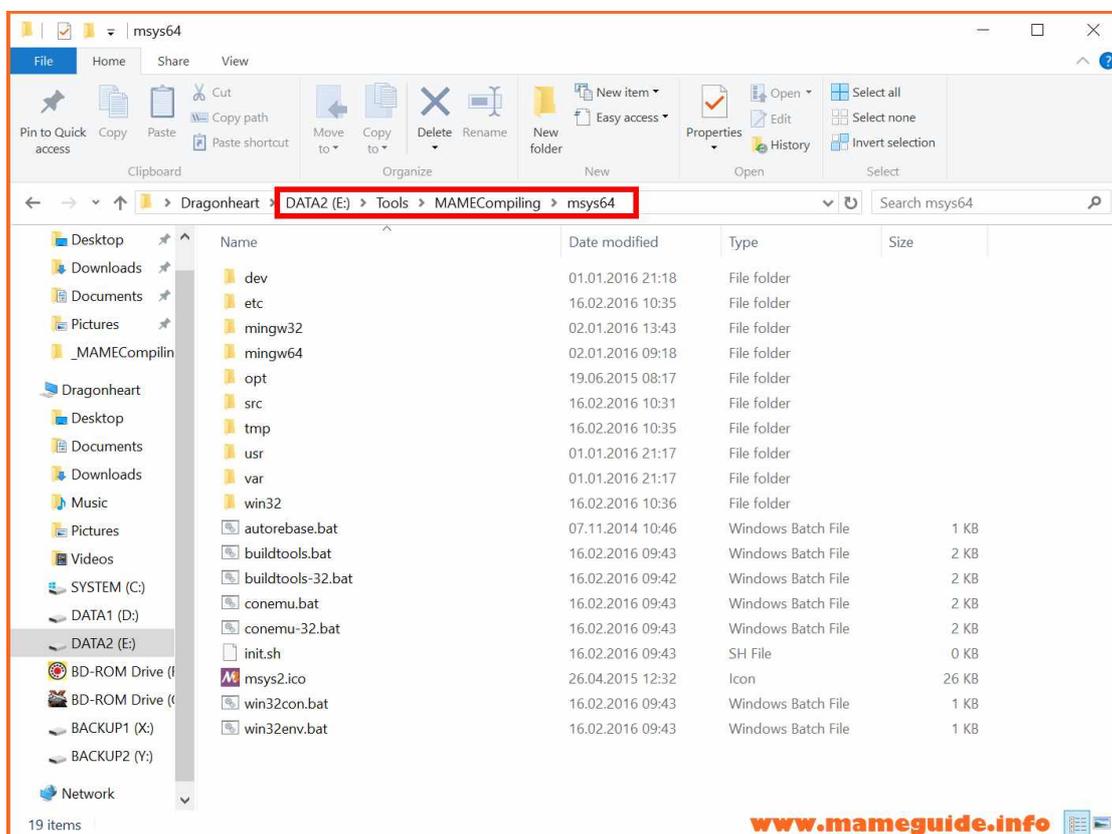


The extraction could takes some minutes



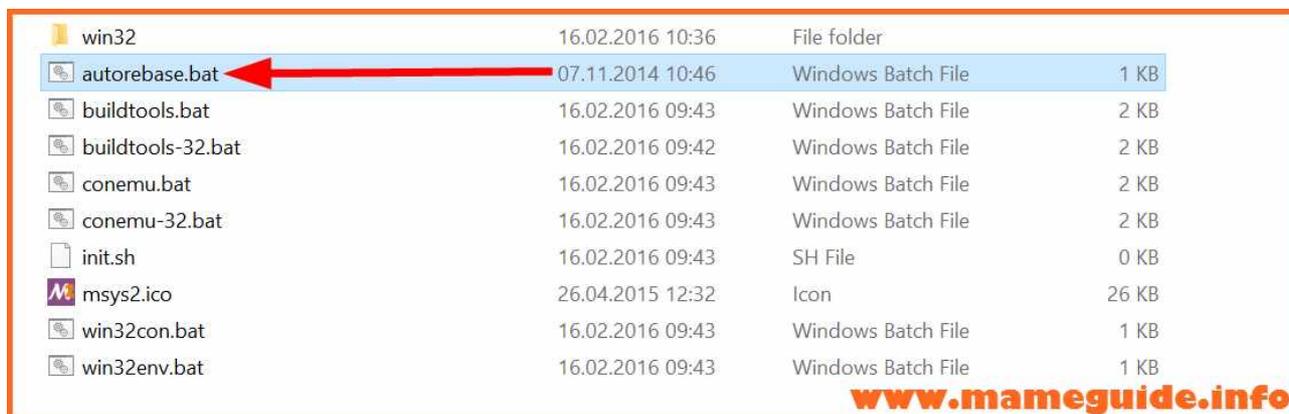


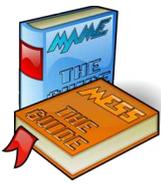
We have now a folder called “msys64” in that folder you have chosen to extract. (When you are using the x86 package it is called “msys32”).



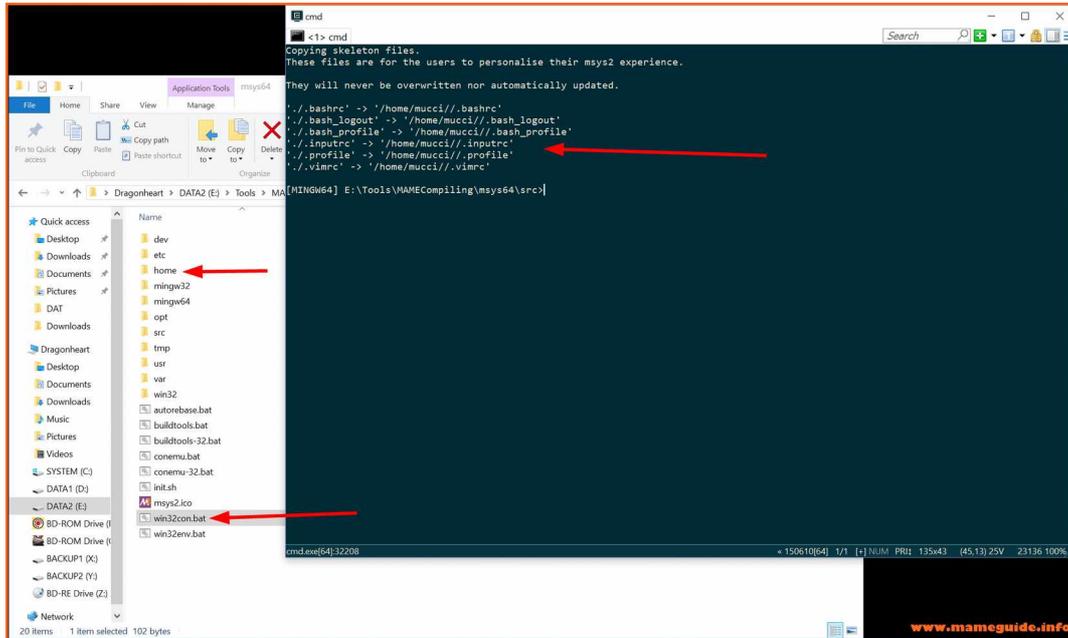
For the first time you must run the “autorebase.bat”. Double click that will set this “MSYS” environment depending on your install-folder.

>>>> **Don't forget to start it!**

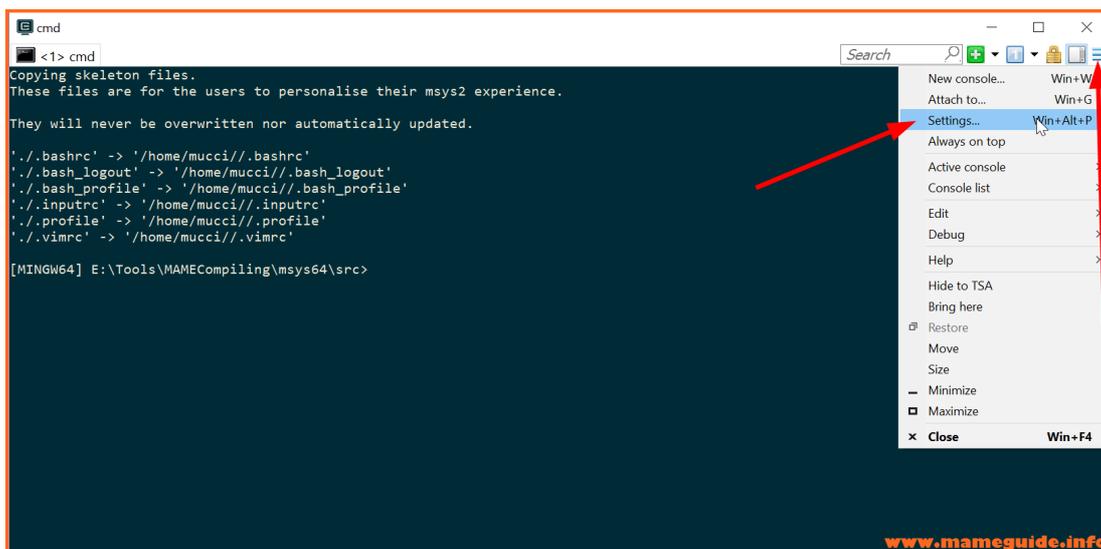




In that folder is a file called “win32con.bat”. Start it and it will open a shell. It creates some config-files and a home directory for the user you are using.

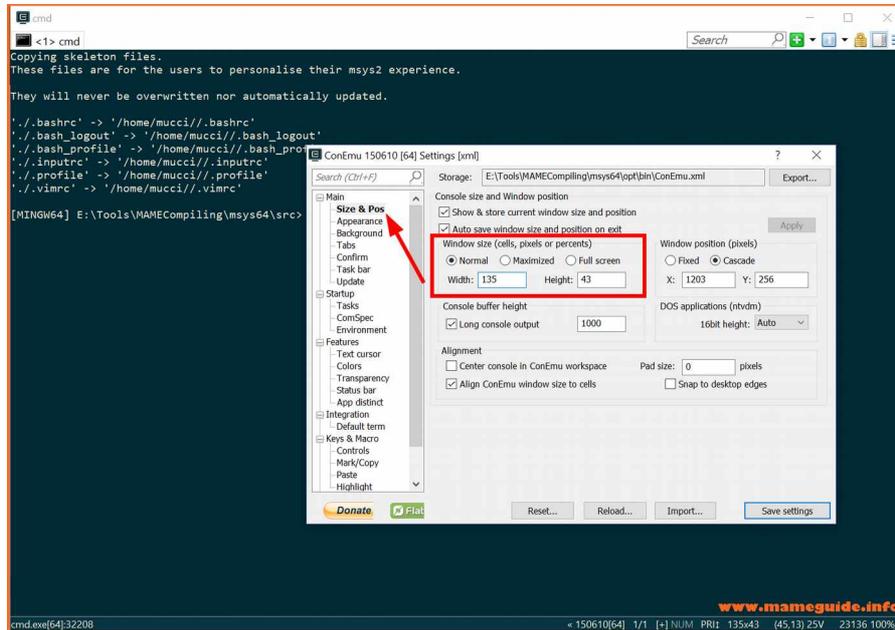


You can change this shell property (like colours, size and a lot more) within the menu “Settings”.





I'm changing the size (width) of this windows (example) → save setting



On the MAMEdev webpage is an additional information that we need.

Tools for building MAME on Windows

MAME Build Tools

Introduction

The MAME development environment for Windows consists of the GCC compiler (by way of MinGW), and the MSYS2 (POSIX/Unix compatibility layer), plus various utilities such as Python and Git. It is available as a prepackaged installer, or can be assembled from upstream components.

Source control is handled by [github](https://github.com/mamedev/mame.git) (<https://github.com/mamedev/mame.git>), so you'll need to check out a copy. Various modules are disabled by default, such as the MAME interactive debugger, but can be enabled through arguments when building and may require additional MSYS2 packages to be installed.

Installation and building

Downloads

- Windows 64-bit (x64) - [msys64-2016-02-16.exe](#)
- Windows 32-bit (x86) - [msys32-2016-02-16.exe](#)
- Dual 32-bit/64-bit - [msys64-32-2016-02-16.exe](#) (If you have 64-bit Windows but wish to build for both 32-bit and 64-bit. To switch between different mingw versions use [config32.bat](#) and [config64.bat](#))

Installation

If you are installing it in a location other than the default (c:\msys64 or c:\msys32), after you unpack double-click : **autorebase.bat**

To open a non-posix shell there are two batch files: **win32env.bat** for regular windows console, and **win32con.bat** for fancy looking conemu console.

Important thing is to setup your git environment first

```
git config --global core.autocrlf true
```

And if you are contributor

```
git config --global user.email youremail@something.com
git config --global user.name "Firstname Lastname"
```

Building

Then, to download the MAME source under your Msys2 user's homedir:

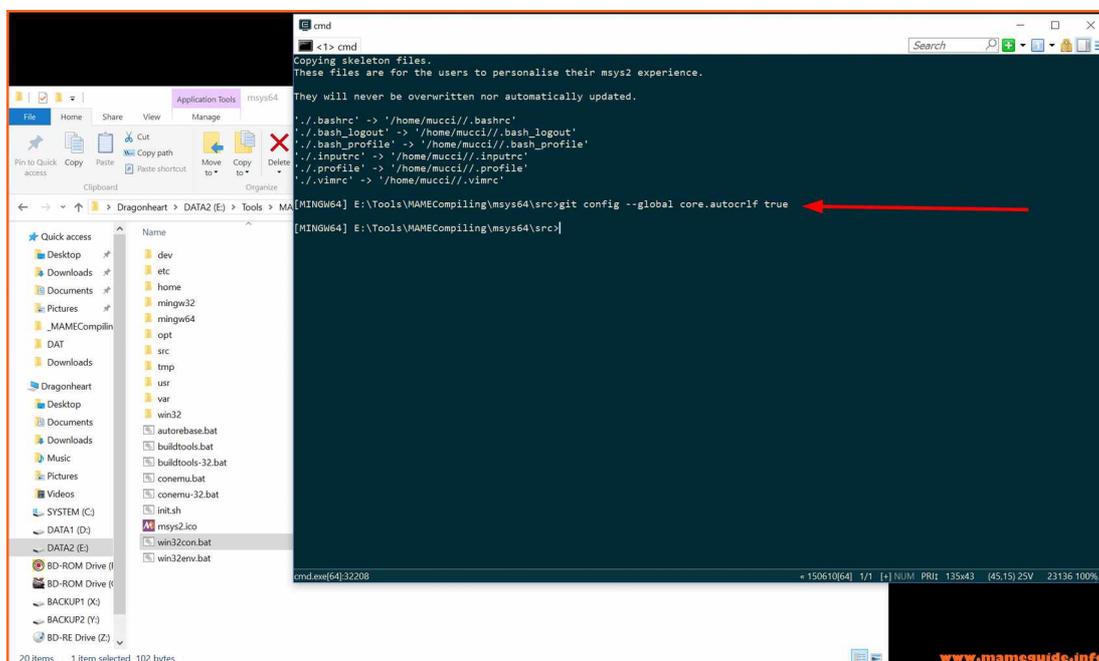
```
git clone https://github.com/mamedev/mame.git
```

www.mameguide.info

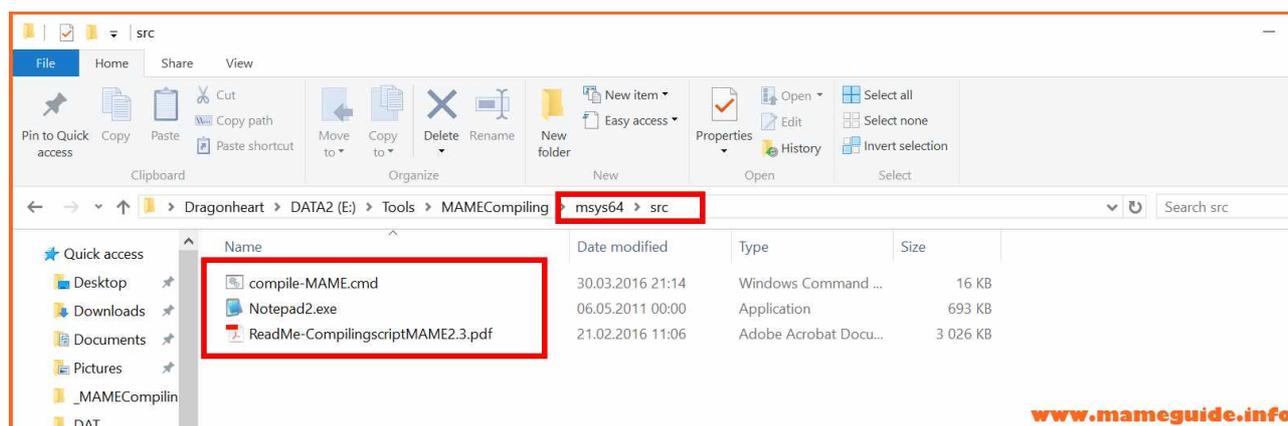


First of all we must initialize “git” in our environment with the command:

```
git config --global core.autocrlf true
```

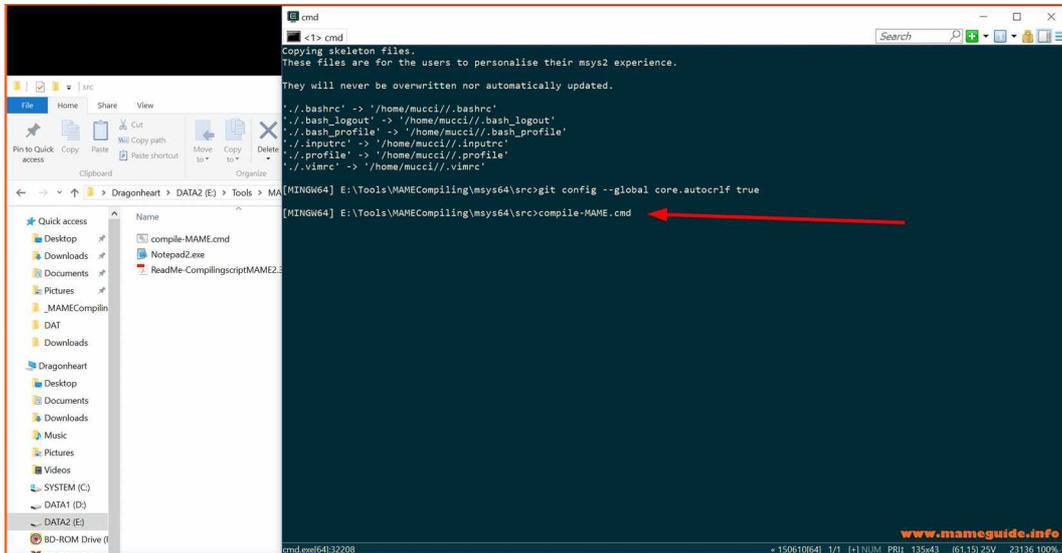


Now we copy/extract from the file “batch2.3a.zip” those 3 files into the “src” folder.

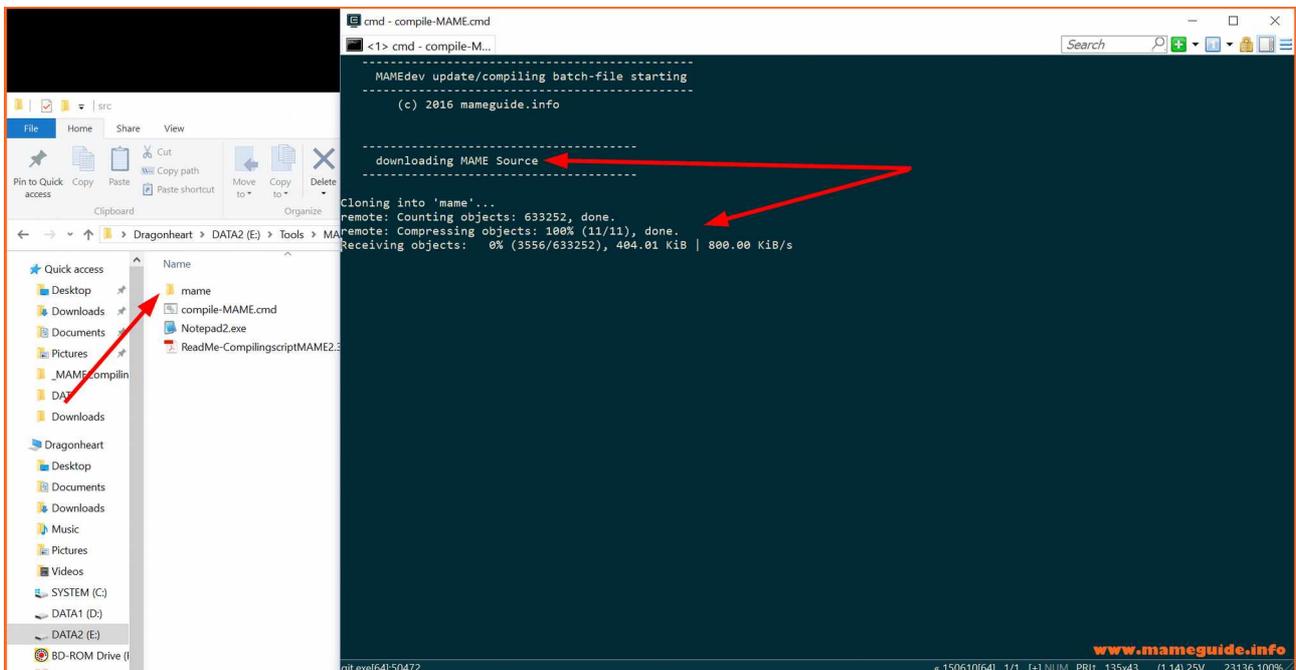




We can now start the compile-script in the shell with the command
“*compile-MAME.cmd*”

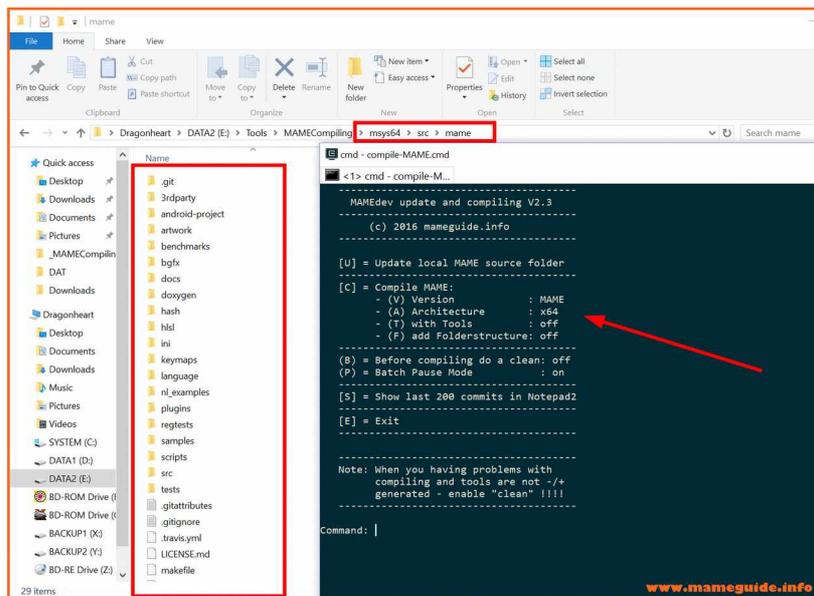


The compile-script starts and checks if the MAME source folder “mame” is available or not. If it is not there it downloads the MAME source code from the online repository.

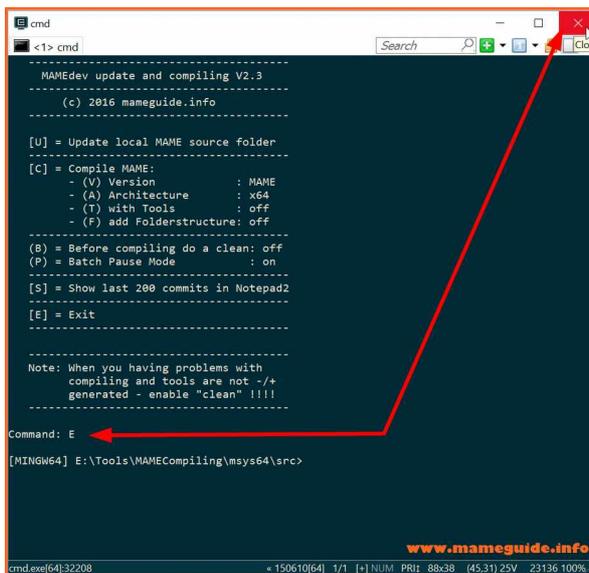




After some minutes (depending on your bandwidth) we have a folder “mame” with the source code. The script continues and shows us the main menu.

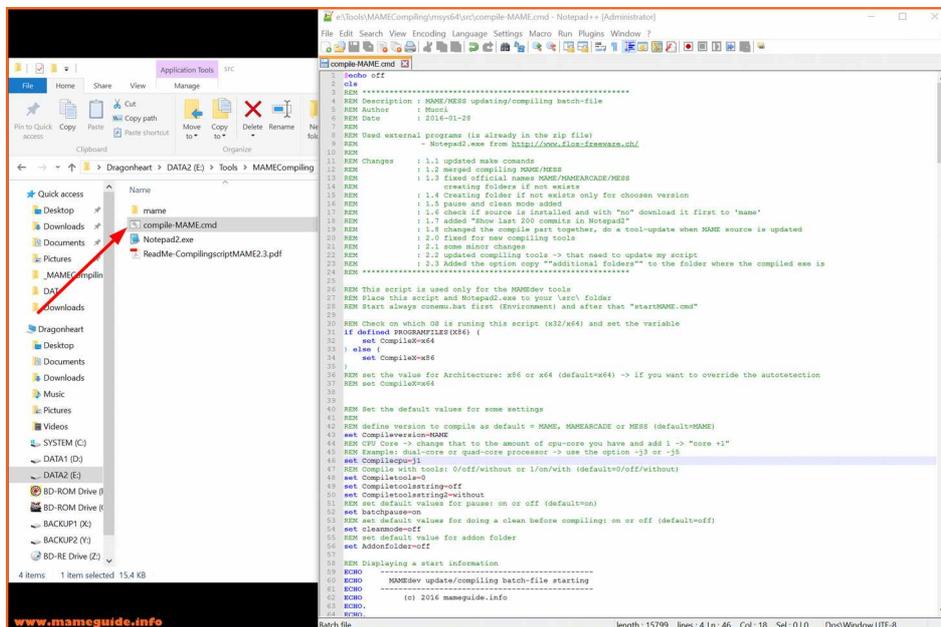


We have successfully installed the compiling-tool and downloaded the MAME source code. We close now the shell with the command “E” and with clicking the “X”.

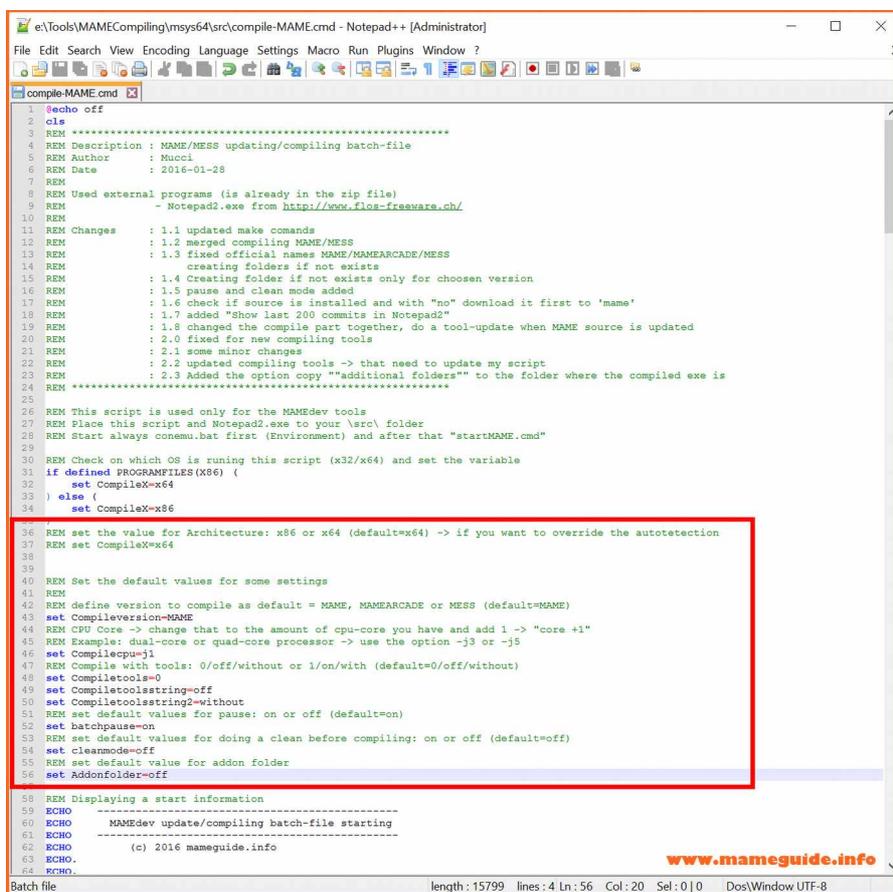




Open the “compile-MAME.cmd” with an editor.



In that section





..are default values that the script uses after it is launched. Change them to the value you are preferring and save it. Let's look in detail what they are.

```
28 REM Check on which OS is runing this scripct (x32/x64) and set the variable
29 if defined PROGRAMFILES(X86) (
30     set CompileX=x64
31 ) else (
32     set CompileX=x86
33 )
34 REM set the value for Architecture: x86 or x64 (default=x64) -> if you want to override the autotetection
35 REM set CompileX=x64
36
37
38 REM Set the default values for some settings
39 REM
40 REM define version to compile as default = MAME, MAMEARCADE or MESS (default=MAME)
41 set Compileversion=MAME
42 REM CPU Core -> change that to the amount of cpu-core you have and add 1 -> "core +1"
43 REM Example: dual-core or quad-core processor -> use the option -j3 or -j5
44 set Compilecpu=j13
45 REM Compile with tools: 0/off/without or 1/on/with (default=0/off/without)
46 set Compiletools=0
47 set Compiletoolsstring=off
48 set Compiletoolsstring2=without
49 REM set default values for pause: on or off (default=on)
50 set batchpause=on
51 REM set default values for doing a clean before compiling: on or off (default=off)
52 set cleanmode=off
53
```

Annotations in the code block:
① points to the first 'set' line in the OS detection block.
② points to the 'set Compileversion=MAME' line.
③ points to the 'set Compilecpu=j13' line.
④ points to the 'REM set CompileX=x64' line.
⑤ points to the 'set Compiletoolsstring=off' line.

www.mameguide.info

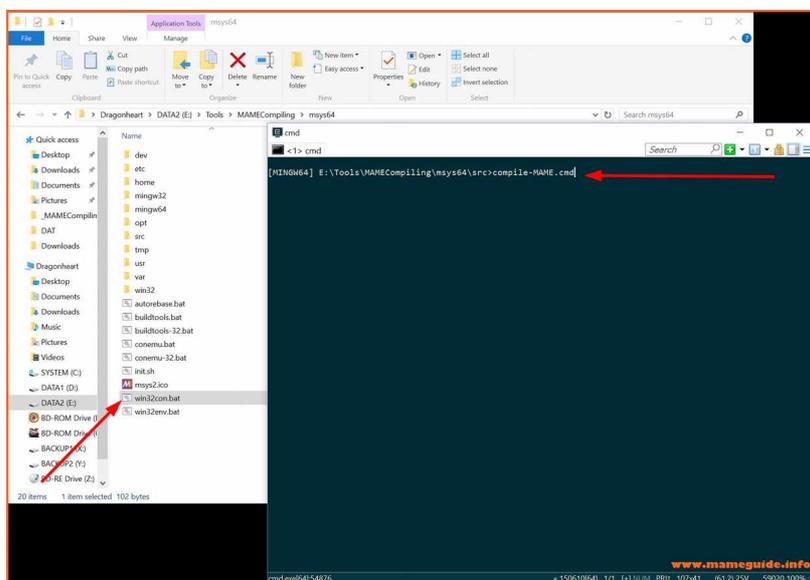
1. Those two section have settings that you can change (set name = value). Please change only in that section (at the beginning of the script) values.
2. There is always a REM line (remark) that describes what value are possible and what the default value is. Please be sure that you copy-paste the value you want to change from the remark line or be sure that you type it 100% correct.
3. There is a variable, as an example, that you can change the value.
4. The compile-script does detect your OS version while starting and set it to x86 or x64 value. If you are on a x64 environment, have the x86/x64 packages installed and want always compile a x86 version you can remove that "rem" in this line and set the value manually.
5. When you want that the compile always run and creates the MAME tools



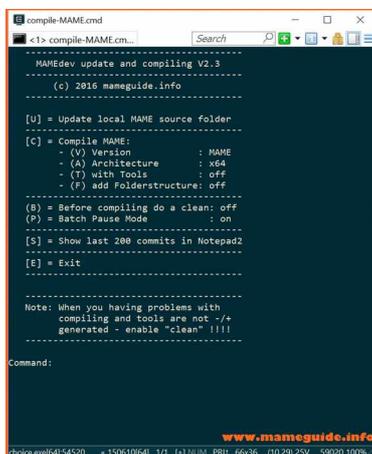
you have to change all those 3 values to the right setting. Check the remark line for the value you must set (In that case don't forget to do a “make clean” in the main menu (Key B)).

Note: Change the value of the variable “Compilecpu” from “1” to the number of cpu cores you have and add 1 to it (see the notes in the remark line). It speeds up the compiling process....

You have now configured/installed everything. Next time we want to compile we have to launch “win32con.bat” and execute “compile-MAME.cmd” in the shell (use the tab-key for auto complete the name ;-))



The compile-script menu appears and is ready to do his task :-)





Chapter 2: How to handle the script

The main menu of the compile-script have two type of action. We have some key-strokes that change settings in the menu like “pause-mode” or what version you want to compile. It sets only the value you want. Try it out....

```
compile-MAME.cmd
MAMEdev update and compiling V2.3
(c) 2016 mameguide.info

[U] = Update local MAME source folder
[C] = Compile MAME:
- (V) Version           : MAME
- (A) Architecture     : x64
- (T) with Tools       : off
- (P) add Folderstructure: off

(B) = Before compiling do a clean: off
(P) = Batch Pause Mode           : on

[S] = Show last 200 commits in Notepad2
[E] = Exit

Note: When you having problems with
compiling and tools are not -/+
generated - enable "clean" !!!!

Command:

www.mameguide.info
```

The other key-strokes are executing a task like “compiling” or “updating”. We are doing that later ...

```
compile-MAME.cmd
MAMEdev update and compiling V2.3
(c) 2016 mameguide.info

[U] = Update local MAME source folder
[C] = Compile MAME:
- (V) Version           : MAME
- (A) Architecture     : x64
- (T) with Tools       : off
- (P) add Folderstructure: off

(B) = Before compiling do a clean: off
(P) = Batch Pause Mode           : on

[S] = Show last 200 commits in Notepad2
[E] = Exit

Note: When you having problems with
compiling and tools are not -/+
generated - enable "clean" !!!!

Command:

www.mameguide.info
```



Chapter 3: Using the script

Before we compile we want to update our local source folder with the latest changes from the online repository. Press “U” and the update process

```
compile-MAME.cmd
<1> compile-MAME.cm...
MAMEdev update and compiling V2.3
(c) 2016 mameguide.info
-----
[U] = Update local MAME source folder
[C] = Compile MAME:
  - (V) Version      : MAME
  - (A) Architecture : x64
  - (T) with Tools   : off
  - (F) add Folderstructure: off
-----
(B) = Before compiling do a clean: off
(P) = Batch Pause Mode      : on
-----
(S) = Show last 200 commits in Notepad2
-----
[E] = Exit
-----
Note: When you having problems with
      compiling and tools are not +/-
      generated - enable "clean" !!!!
-----
Command:
-----
www.mameguide.info
choice.exe(64)54520 + 150610(64) 1/1 [+] NUM PRI: 66x36 (10.29) 25V 59020 100%...
```

.....starts. There are 2 update tasks, one checks for compiling tools updates and the second one for MAME source updates. In my example I have enabled “pause mode”, that means it will wait for a key-stroke after it has done the update.

```
compile-MAME.cmd
<1> compile-MAME.cm...
Updating local MAME tool folder
-----
:: Synchronizing package databases...
mingw32 is up to date
mingw64 is up to date
msys is up to date
mame is up to date
:: Starting core system upgrade...
there is nothing to do
:: Starting full system upgrade...
there is nothing to do
-----
Updating local MAME source folder
-----
From https://github.com/mamedev/mame
= [up to date] master -> origin/master
= [up to date] bgfx_shader -> origin/bgfx_shader
= [up to date] couriers -> origin/couriers
= [up to date] doxygen -> origin/doxygen
= [up to date] h8 -> origin/h8
= [up to date] n64_angrylion -> origin/n64_angrylion
= [up to date] new_menus -> origin/new_menus
= [up to date] polyplay -> origin/polyplay
= [up to date] saturn_cdblock -> origin/saturn_cdblock
= [up to date] wof -> origin/wof
Already up-to-date.
-----
Version : 8172
Build : 64488298684dc7f831c2652435932f80fe46cc
Revision : 42226
-----
Press any key to continue . . .
-----
www.mameguide.info
cmd.exe(64)98252 + 150610(64) 1/1 [+] NUM PRI: 91x43 (33.38) 25V 94780 100%...
```



If the tools need to be updated the script ask you to do that (correction with V2.3a: update procedure was very improved. It doesn't ask now for a "Y"):

```
 /src - compile-MAME.cmd
<1> /src - compile-...
-----
Updating local MAME tool folder
-----
:: Synchronizing package databases...
mingw32 is up to date
mingw64 is up to date
msys                130.0 KiB  63.5M/s 00:00 [#####] 100%
mame is up to date
:: Starting full system upgrade...
resolving dependencies...
looking for conflicting packages...

Packages (4) curl-7.47.1-1 file-5.25-1 libcurl-7.47.1-1 mintty-1~2.2.3-1
Total Download Size:  1.29 MiB
Total Installed Size: 7.53 MiB
Net Upgrade Size:     0.04 MiB

:: Proceed with installation? [Y/n] |
```

```
 /src - compile-MAME.cmd
<1> /src - compile-...
looking for conflicting packages...

Packages (4) curl-7.47.1-1 file-5.25-1 libcurl-7.47.1-1 mintty-1~2.2.3-1
Total Download Size:  1.29 MiB
Total Installed Size: 7.53 MiB
Net Upgrade Size:     0.04 MiB

:: Proceed with installation? [Y/n] y
:: Retrieving packages ...
libcurl-7.47.1-1-x86_64      185.0 KiB  90.3M/s 00:00 [#####] 100
curl-7.47.1-1-x86_64       595.3 KiB  96.9M/s 00:00 [#####] 100
file-5.25-1-x86_64        396.5 KiB  96.8M/s 00:00 [#####] 100
mintty-1~2.2.3-1-x86_64  147.2 KiB  71.9M/s 00:00 [#####] 100
(4/4) checking keys in keyring [#####] 100
(4/4) checking package integrity [#####] 100
(4/4) loading package files [#####] 100
(4/4) checking for file conflicts [#####] 100
(4/4) checking available disk space [#####] 100
:: Processing package changes...
(1/4) upgrading libcurl [#####] 100
(2/4) upgrading curl [#####] 100
(3/4) upgrading file [#####] 100
(4/4) upgrading mintty [#####] 100

-----
Updating local MAME source folder
-----

POST git-upload-pack (947 bytes)
remote: Counting objects: 655, done.
remote: Compressing objects: 100% (254/254), done.

git.exe[64]:31708  < 150610[64] 1/1 [+] NUM PRI: 105x33 (1,44) 25V 11496 100%
```



Note: Sometime it updates a lot to the compiling tools. Please quit the script and restarts it again. With that we are sure that everything works as expected :- (see pic below as example)

```
cmd - compile-MAME.cmd (Admin)
<1> cmd - compile-M...
:: Proceed with installation? [Y/n]
:: Retrieving packages...
filesystem-2016.03-2-x86_64          28.5 KiB  2.53M/s 00:00 [#####] 100%
mintty-1-2.2.3-1-x86_64             147.2 KiB  448K/s 00:00 [#####] 100%
(2/2) checking keys in keyring [#####] 100%
(2/2) checking package integrity [#####] 100%
(2/2) loading package files [#####] 100%
(2/2) checking for file conflicts [#####] 100%
(2/2) checking available disk space [#####] 100%
warning: could not get file information for mingw32_shell.bat
warning: could not get file information for mingw64_shell.bat
warning: could not get file information for msys2_shell.bat
** processing package changes...
(1/2) upgrading filesystem [#####] 100%
(2/2) upgrading mintty [#####] 100%
warning: terminate MSYS2 without returning to shell and check for updates again
warning: for example close your terminal window instead of calling exit

-----
Updating local MAME source folder
-----
From https://github.com/mamedev/mame
= [up to date] master -> origin/master
= [up to date] bgfx_shader -> origin/bgfx_shader
= [up to date] couriers -> origin/couriers
= [up to date] doxygen -> origin/doxygen
= [up to date] ns -> origin/ns
= [up to date] n64-angrylion -> origin/n64-angrylion
= [up to date] new_menus -> origin/new_menus
= [up to date] polyplay -> origin/polyplay
= [up to date] saturn_cdblock -> origin/saturn_cdblock
= [up to date] wof -> origin/wof
Already up-to-date.

-----
Version : 0172
Build : 3b5b093041d3fed314d78107ab4940db89811a40f
Revision : 42250
-----
Press any key to continue . . . |
www.mameguide.info
cmd.exe#64#18404 +150610[64] 1/1 [+] NUM PRI: 135x43 (33.84) 25V 22180 100%
```

After we have updated our local source folder our next step is compiling. Set the option what build you want to compile (MAME/ARCADE/MESS, x86/x64, with/without tools and with folderstructure or not). Remember MAME is now MAME and MESS together. When you only want the arcade part to be compiled choose “ARCADE” or “MESS” for a MESS executable.

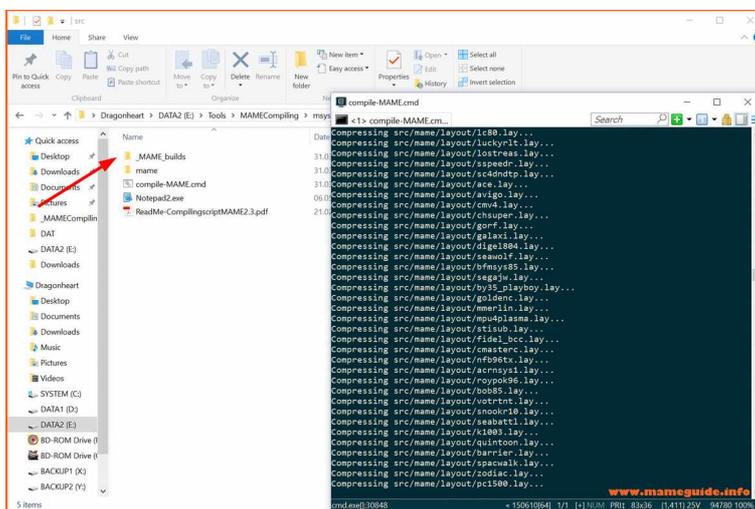
```
compile-MAME.cmd
MAMEdev update and compiling V2.3
-----
(c) 2016 mameguide.info
-----
[U] = Update local MAME source folder
[C] = Compile MAME
      (V) Version : MAME
      (A) Architecture : x64
      (T) with Tools : off
      (F) add Folderstructure: off
(B) = Before compiling do a clean: off
(P) = Batch Pause Mode : on
-----
[S] = Show last 200 commits in Notepad2
[E] = Exit
-----
Note: When you having problems with
      compiling and tools are not -/*
      generated - enable "clean" !!!!
-----
Command:
www.mameguide.info
choice.exe#64#109116 +150610[64] 1/1 [+] NUM PRI: 61x35 (10.29) 25V 94780
```



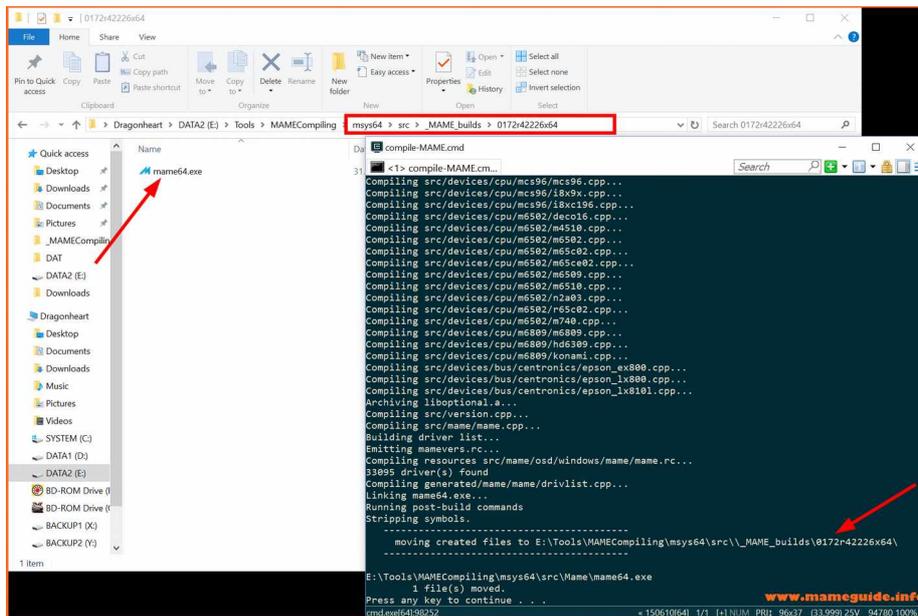
Compiling is starting (press “c”) and in the first line it will displays the information what it is compiling. If you have chosen a “version-type” for the first time it will creates a base-folder for that build where it stores the executables after finishing the compile.

```
compile-MAME.cmd
<1> compile-MAME.cm...
Compiling now MAME x64 without tools
-----
creating folder E:\Tools\MAMECompiling\msys64\src\_MAME_builds\
GCC 5.3.0 detected
Converting translation language/Macedonian/strings.po...
Converting translation language/French/strings.po...
Converting translation language/Polish/strings.po...
os_uid.c
os_isfile.c
Creating obj/Release
Creating obj/Release/src/host/lu5-5.3.0/src
Creating obj/Release/src/host
os_getcwd.c
os_stat.c
Converting translation language/Catalan/strings.po...
os_chdir.c
premake_main.c
Converting translation language/Indonesian/strings.po...
Converting translation language/Slovenian/strings.po...
Converting translation language/French_Belgium/strings.po...
www.mameguide.info
python.exe[64]:105456 + 150610[64] 1/1 [+ ] NUM. PRI: 83x36 (1.26) 25V 94780 100%
```

In our example it has created the base folder for “_MAME_builds”



After it has finished compiling check the output of the windows. It will displays informations and if something went wrong you will see an error message there. If you have disabled the “pause-mode” you have no time to read it because the script will not wait and displays the main menu again...



It has moved the executables to a subfolder named with the version-build number.

Let's do another compile with other settings. We have compiled the last time the MAME executable, now try ARCADE x86 with tools and folderstructure. If you need the tools to be compiled too, for example chdman.exe, you have to change the option (T) to “on”. Each change of this settings requires a “make clean” first because otherwise it will not compile it correctly. After a first initial compile run it does on the second run only compile files that have changed. This behaviour speeds up the compiling time that it takes less after an initial run. When you want to switch/un-switch the tools we must clear that “cache” first so the next compile runs without the cache and it compile it correct.



```
compile-MAME.cmd
<1> compile-MAME.cm.

-----
MAMEdev update and compiling V2.3
(c) 2016 mameguide.info
-----

[U] = Update local MAME source folder
[C] = Compile MAME:
      (V) Version      : ARCADE
      (A) Architecture : x86
      (T) with Tools   : off
      (F) add Folderstructure: on
-----

(B) = Before compiling do a clean: on
(P) = Batch Pause Mode      : on
-----

[S] = Show last 200 commits in Notepad2
[E] = Exit
-----

Note: When you having problems with
compiling and tools are not -/+
generated - enable "clean" !!!!
-----

Command: T
-----
enabling/disabling tools requires a clean up
-----

GCC 5.3.0 detected
Cleaning genie
Cleaning...
make.exe[1]: Entering directory 'E:/Tools/MAMECompiling/msys64/src/mame/src/devices/cpu/m68000'
Cleaning...
make.exe[1]: Leaving directory 'E:/Tools/MAMECompiling/msys64/src/mame/src/devices/cpu/m68000'

www.mameguide.info
rm.exe[64]:24584 < 150610[64] 1/1 [+ ] NUM PRI: 86x42 (1.37) 25V 94780 100%
```

Remember: set the default value that you wish for “tools” in the script once and save the script.

Let's compile again with “C” and we have chosen to compile an arcade version of MAME. As it is our first run with this type it will create a base-folder “_ARCADE_builds”...

```
compile-MAME.cmd
<1> compile-MAME.cm.

-----
MAMEdev update and compiling V2.3
(c) 2016 mameguide.info
-----

[U] = Update local MAME source folder
[C] = Compile MAME:
      (V) Version      : ARCADE
      (A) Architecture : x86
      (T) with Tools   : off
      (F) add Folderstructure: on
-----

(B) = Before compiling do a clean: on
(P) = Batch Pause Mode      : on
-----

[S] = Show last 200 commits in Notepad2
[E] = Exit
-----

Note: When you having problems with
compiling and tools are not -/+
generated - enable "clean" !!!!
-----

Command: T
-----
enabling/disabling tools requires a clean up
-----

GCC 5.3.0 detected
Cleaning genie
Cleaning...
make.exe[1]: Entering directory 'E:/Tools/MAMECompiling/msys64/src/mame/src/devices/cpu/m68000'
Cleaning...
make.exe[1]: Leaving directory 'E:/Tools/MAMECompiling/msys64/src/mame/src/devices/cpu/m68000'

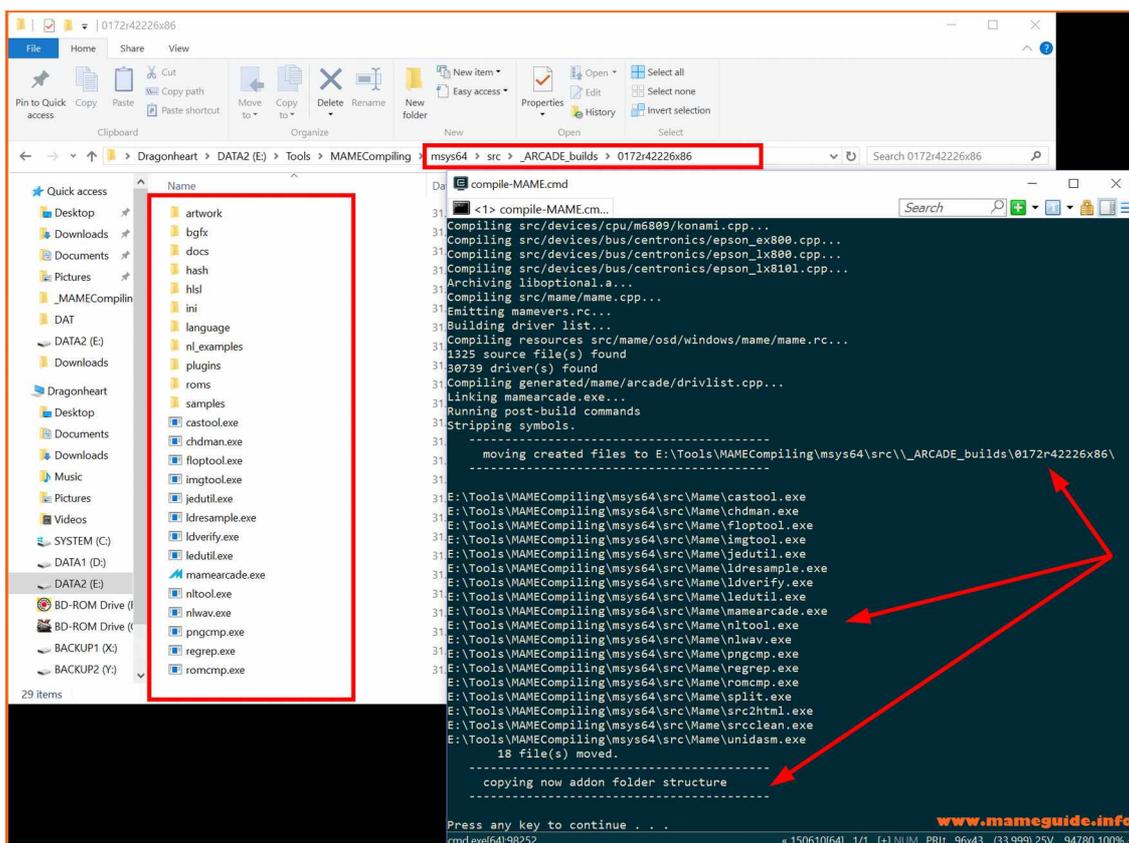
GCC 5.3.0 detected
Cleaning genie
Cleaning...
make.exe[1]: Entering directory 'E:/Tools/MAMECompiling/msys64/src/mame/src/devices/cpu/m68000'
Cleaning...
make.exe[1]: Leaving directory 'E:/Tools/MAMECompiling/msys64/src/mame/src/devices/cpu/m68000'

GCC 5.3.0 detected
Creating obj/Release
Creating obj/Release/src/host/luajit-5.3.0/src

www.mameguide.info
gcc.exe[32]:46000 + 150610[64] 1/1 [+ ] NUM PRI: 86x42 (1.19) 25V 94780 100%
```



After finished the compile task it will shows you “no error” and we see that it has move the ARCADE build with the tools to a subfolder inside the “_ARCADE_builds” named with the “build version + Revision number + x86 or x64”.



Note: We have compiled it with the option “subfolderstructure” enabled. Please note that those are not 100% complete as a full release of MAME has it included. But those are up-to-date from the repository and maybe it is also good to have them with the compiled exe.



Let's look at the next option in the main menu. We choose “S” for displaying information in the submitted-history-list of the source-code.

```
compile-MAME.cmd
<1> compile-MAME.cm... Search
-----
MAMEdev update and compiling V2.3
-----
(c) 2016 mameguide.info
-----

[U] = Update local MAME source folder
-----
[C] = Compile MAME:
      - (V) Version          : MAME
      - (A) Architecture     : x64
      - (T) with Tools       : off
      - (F) add Folderstructure: off
-----
(B) = Before compiling do a clean: off
(P) = Batch Pause Mode         : on
[S] = Show last 200 commits in Notepad2
[E] = Exit
-----

Note: When you having problems with
      compiling and tools are not -/+
      generated - enable "clean" !!!!
-----

Command:

www.mameguide.info
choice.exe[64]:109116 < 150610[64] 1/1 [+] NUM PRI: 61x35 (10.29) 25V 94780
```

It will check if the local source-folder is up-to-date against the online repository and shows you the answer. After that it will open the log-file with the Notepad2. There you can see who has submitted a change, when did that happens and a short description of that change.



```
compile-MAMEcmd
<1> compile-MAMEcm...
Show last 200 commits in Notepad2
Local source version:
Version      : 0172
Build       : b4408c290604dca7f831c2652435932f80fe46c6
Revision    : 42226
local source is up-to-date with remote
Press any key to continue . . .
cmd.exe[64]:98252          + 150610[64] 1/1 [H] NUM PRI:
www.mameguide.info
```

```
log.txt - Notepad2
1 commit b4408c290604dca7f831c2652435932f80fe46c6
2 Author: Mike Naberezny <mike@naberezny.com>
3 Date:   Wed Mar 30 21:06:12 2016 -0700
4
5   comp1ay.py: Python 3 compat. (nw)
6
7 commit 1892ba703ea8bca72b3063dda0af55fa0aa8f0c9
8 Author: Scott Stone <tafo1d@gmail.com>
9 Date:   Wed Mar 30 21:58:23 2016 -0400
10
11  Clean up MAME drivers which needed adjustment to match changes to the tms9995 (nw)
12
13 commit b9648ea91e579da1db16a8adbb58f50322b0266
14 Author: Roberto Fresca <robbie@mamedev.org>
15 Date:   Wed Mar 30 22:38:15 2016 -0300
16
17  Added dedicated inputs for both Crystals Colours sets.
18  Also added more technical notes. [Roberto Fresca]
19
20 commit d2c4c2e347361c560a86ef44f123ea200b1a9459
21 Author: Michael Zapf <Michael.Zapf@mizapf.de>
22 Date:   Thu Mar 31 01:25:06 2016 +0200
23
24  tms9995: Changed method names for some input lines
25
26 commit 93116a38c5a29b00f2a9c701e5d04e7a6cf8f37f
27 Author: Stiletto <stiletto@users.noreply.github.com>
28 Date:   Wed Mar 30 19:08:33 2016 -0400
29
30  (nw)
31
32  (nw)
33
34 commit a44e30e281eee5a4e0d7c19ec17f7e963442276
35 Author: Michael Zapf <Michael.Zapf@mizapf.de>
36 Date:   Thu Mar 31 00:58:27 2016 +0200
37
38  Logging changed; fixed HOLD handling; added synchronous RESET
39
40 commit 2a71be55e90288b6dab33b80d4c3687db0279d70
41 Author: Michael Zapf <Michael.Zapf@mizapf.de>
42 Date:   Thu Mar 31 00:56:13 2016 +0200
43
44  Log output changed
45
46 commit 9363101a9f93336ec800e8ff13cccd0eb93abd15
47 Author: Luca Elia <lucal1a@mamedev.org>
48 Date:   Wed Mar 30 23:23:44 2016 +0200
49
50  New machines added or promoted from NOT_WORKING status
51  -----
52  New 2001 (Italy, Ver. 2.00N) [f205v]
53
54  Map missing controls in bishjan (MT 1792)
55
```

If you need more information use the webpage:

<https://github.com/mamedev/mame/commits/master>

Closing the Editor will bring us again to the script main menu.

With “E” for exit we quit the script.

Now you should know how to use the script :-)



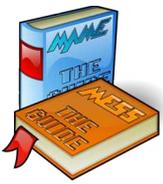
Chapter 4: Troubleshooting

When you have “compile-errors” do first a “make clean”. It will delete the compile cache and eliminates in most cases errors.

Example of a compiling error message:

A screenshot of a terminal window titled '/src - compile-MAME.cmd'. The window shows a list of compilation commands for various source files. The last command is 'Archiving liboptional.a...'. Below this, the terminal displays the error message: 'makefile:847: recipe for target 'windows_x64' failed' and 'make.exe: *** [windows_x64] Error 2'. A red arrow points from the right side of the terminal to the error message. Below the error message, there is a line of text: 'moving created files to E:\Tools\MAMECompiling\msys64\src_MAME_builds\0170r40982x64\'. At the bottom of the terminal, there is a message: 'A duplicate file name exists, or the file cannot be found. Press any key to continue . . . |'. The terminal also shows the website 'www.mameguide.info' and some system information at the bottom right: '< 150610[64] 1/1 [+] NUM PRI: 101x37 (33,1000) 25V 11496 100%'.

```
/src - compile-MAME.cmd
<1> /src - compile-...
Compiling src/devices/machine/netlist.cpp...
Compiling src/devices/machine/nsc810.cpp...
Compiling src/devices/machine/pci9050.cpp...
Compiling src/devices/machine/vt82c496.cpp...
Compiling src/devices/machine/pdc.cpp...
Compiling src/devices/cpu/arcompact/arcompact.cpp...
Compiling src/devices/cpu/arcompact/arcompact_execute.cpp...
Compiling src/devices/cpu/h8/h8.cpp...
Compiling src/devices/cpu/h8/h8h.cpp...
Compiling src/devices/cpu/h8/h8s2000.cpp...
Compiling src/devices/cpu/h8/h8s2600.cpp...
Compiling src/devices/cpu/mcs96/mcs96.cpp...
Compiling src/devices/cpu/mcs96/i8x9x.cpp...
Compiling src/devices/cpu/mcs96/i8xc196.cpp...
Compiling src/devices/cpu/m6502/deco16.cpp...
Compiling src/devices/cpu/m6502/m4510.cpp...
Compiling src/devices/cpu/m6502/m6502.cpp...
Compiling src/devices/cpu/m6502/m65c02.cpp...
Compiling src/devices/cpu/m6502/m65ce02.cpp...
Compiling src/devices/cpu/m6502/m6509.cpp...
Compiling src/devices/cpu/m6502/m6510.cpp...
Compiling src/devices/cpu/m6502/n2a03.cpp...
Compiling src/devices/cpu/m6502/r65c02.cpp...
Compiling src/devices/cpu/m6502/m740.cpp...
Compiling src/devices/cpu/m6809/m6809.cpp...
Compiling src/devices/cpu/m6809/konami.cpp...
Compiling src/devices/cpu/m6809/hd6309.cpp...
Archiving liboptional.a...
makefile:847: recipe for target 'windows_x64' failed
make.exe: *** [windows_x64] Error 2
-----
moving created files to E:\Tools\MAMECompiling\msys64\src\\_MAME_builds\0170r40982x64\
-----
A duplicate file name exists, or the file
cannot be found.
Press any key to continue . . . |
www.mameguide.info
cmd.exe[64]:32548 < 150610[64] 1/1 [+] NUM PRI: 101x37 (33,1000) 25V 11496 100%
```



```
compile-MAME.cmd
<1> compile-MAME.cm... Search
-----
MAMEdev update and compiling V2.3
-----
(c) 2016 mameguide.info
-----

[U] = Update local MAME source folder
-----
[C] = Compile MAME:
- (V) Version      : ARCADE
- (A) Architecture : x86
- (T) with Tools   : on
- (F) add Folderstructure: on

(B) = Before compiling do a clean: on
(P) = Batch Pause Mode      : on
-----
[S] = Show last 200 commits in Notepad2
-----
[E] = Exit
-----

Note: When you having problems with
compiling and tools are not -/+
generated - enable "clean" !!!!

Command:

www.mameguide.info
choice.exe[64]:92816 < 150610[64] 1/1 [+] NUM PRI: 65x35 (10,29) 25V 94780 100%
```

Sometimes are errors in the source code after a “bad” submit in the online repository. There is nothing we can do except update the local source code with “U” with a new version, try again to compile and see if it does run.

We had recently a special “error”, compiled it fine (no error) but “mame64.exe -listxml” had not worked with this compiled exe. That was really strange and after done a “clean” first, compiled the executable again this error was gone and the output from the mame64.exe was created again.



Problem: I can not change the parameter “(A) Architecture”!

The compile script does check on what platform it is running. You can not compile a x64 version on a x86 environment. Also if you have only the x64 package installed and not the x86/x64 package you can not switch to a x86 compile.

→ check your environment!

Problem: I got this “warning messages” after an update

Those warnings are only information that they are “up-to-date”, the script does work correct → ignore them.

```
cmd - compile-MAME.cmd (Admin)
<1> cmd - compile-M...
Updating local MAME tool folder
-----
:: Synchronizing package databases...
mingw32 is up to date
mingw64 is up to date
msys is up to date
mame is up to date
warning: bash-4.3.042-4 is up to date -- skipping
warning: pacman-5.0.1.6403.520736d-1 is up to date -- skipping
warning: msys2-runtime-2.5.0.17040.9d5d874-1 is up to date -- skipping
there is nothing to do
:: Starting core system upgrade...
there is nothing to do
:: Starting Full system upgrade...
there is nothing to do
-----
Updating local MAME source folder
-----
From https://github.com/mamedev/mame
= [up to date] master -> origin/master
= [up to date] bgfx_shader -> origin/bgfx_shader
= [up to date] couriers -> origin/couriers
= [up to date] doxygen -> origin/doxygen
= [up to date] h8 -> origin/h8
= [up to date] n64-angrylion -> origin/n64-angrylion
= [up to date] new_menus -> origin/new_menus
= [up to date] polyplay -> origin/polyplay
= [up to date] saturn_cdblock -> origin/saturn_cdblock
= [up to date] wof -> origin/wof
Already up-to-date.
-----
Version : 0172
Build : 20Fefdb782744b5d74c9e98e5c1d0056e16fb886
Revision : 42251
-----
Press any key to continue . . .

www.mameguide.info
cmd.exe*64j:41420 150610[64] 1/1 [+] NUM PRI: 108x47 (33.42) 25V 23756 100%
```