1. downloading:

In README.md:

This git repository contains submodules, please clone using git clone --recursive https://github.com/gamax92/OCEmu.git

still old repository

cloning new repository

```
Michal@DESKTOP-24DG5MS MINGW64 ~
$ git clone https://github.com/zenith391/OCEmu.git
```

running msys script

./msys

```
Michal@DESKTOP-24DG5MS MINGW64 ~/OCEmu
$ ./msys2_setup_ocemu.sh
```

and failed to build lua

```
==> Tworzenie pakietu "mingw-w64-i686-lua"...
-> Generowanie pliku .PKGINFO...
-> Generowanie pliku .BUILDINFO...
-> Generowanie pliku .MTREE...
-> Kompresowanie pakietu...
==> Ukończono tworzenie: mingw-w64-i686-lua 5.2.4-1 (sob., 14 lis 2020 08:34:24)
Failed to build lua

Michal@DESKTOP-24DG5MS MINGW64 ~/OCEmu
$ |
```

why? script expects .pkg.tar.xz pakage

```
24 makepkg-mingw
25 if [ ! -e mingw-w64-${MACHINE_TYPE}-lua-5.2.4-1-any.pkg.tar.xz ]; then
26 echo "Failed to build lua"
27 exit 1
```

but lua comes in a .pkg.tar.zst extention

changing line 25 and 29 to use the .zst flies

also here i'll copy the script to home dir and copy it to OCEmu after recolning the rep after doing that i'll run the new script

```
Michal@DESKTOP-24DG5MS MINGW64 ~

$ rm -rf OCEmu/

Michal@DESKTOP-24DG5MS MINGW64 ~

$ git clone https://github.com/zenith391/OCEmu.git
cloning into 'OCEmu'...
remote: Enumerating objects: 85, done.
remote: Counting objects: 100% (85/85), done.
remote: Compressing objects: 100% (66/66), done.
remote: Total 1075 (delta 51), reused 39 (delta 19), pack-reused 990
Receiving objects: 100% (1075/1075), 313.05 KiB | 1.01 MiB/s, done.
Resolving deltas: 100% (743/743), done.

Michal@DESKTOP-24DG5MS MINGW64 ~

$ cp msys2_setup_ocemu.sh OCEmu/

Michal@DESKTOP-24DG5MS MINGW64 ~

$
```

the lua install goes well

after lua made, luafilesystem starts to download and rm asks for comfirmention on deliting some files in luafilesystem/.git

```
rm: usunąc zabezpieczony przed zapisem plik zwykły 'luafilesystem/.git/objects/00/5c38ece4al0e62/2/406eac213585c1f3e6/34'?
rm: nie można usunąć 'luafilesystem/.git/objects/00': Directory not empty
rm: usunąć zabezpieczony przed zapisem plik zwykły 'luafilesystem/.git/objects/0e/4007ed0fe9a628859dfd3b4lae53a2dd0da3ac'?
rm: nie można usunąć 'luafilesystem/.git/objects/0e': Directory not empty
rm: usunąć zabezpieczony przed zapisem plik zwykły 'luafilesystem/.git/objects/11/70ad25c90b3733719b666da93057c22a7550bf'?
rm: usunąć zabezpieczony przed zapisem plik zwykły 'luafilesystem/.git/objects/11/94711715b60c69e015afee646e04bd9924b235'?
rm: nie można usunąć 'luafilesystem/.git/objects/11': Directory not empty
rm: usunąć zabezpieczony przed zapisem plik zwykły 'luafilesystem/.git/objects/1c/11efc89e18ffeb5fed9673d7def61926f0b7a5'?
```

but after holding enter so a couple of secound luafilesystem builds successfully and the script moves on to luautf8 and the same happens here

and the same with luaffifb

now real trouble starts with luasocket - the compiler throwes an error

```
In file included from luasocket.c:30:
inet.h:46:13: error: conflicting types for 'inet_ntop'
46 | const char *inet_ntop(int af, const void *src, char *dst, socklen_t cnt);

Accessorial
In file included from wsocket.h:12,
from socket.h:18,
from inet.h:18,
from luasocket.c:30:
```

as per issue https://github.com/diegonehab/luasocket/issues/298

i remove -DLUASOCKET_INET_PTON from src/makefile

and it work fine

```
Michal@DESKTOP-24DG5MS MINGW64 ~/OCEmu/src/extras/luasocket

$ LUALIB_mingw=-llua LUAV=5.2 make mingw
make - c src mingw
make - c src mingw
make[]: wejście do katalogu '/home/Michal/OCEmu/src/extras/luasocket/src'
make all PLAT=mingw
make[2]: wejście do katalogu '/home/Michal/OCEmu/src/extras/luasocket/src'
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)' -pedantic -wall -02 -fno-common -fvisibility=hidden -c
gcc - T/usr/include/lua/5.2 -DLUASOCKET_NODEBUG -DLUA_NOCOMPAT_MODULE -DWINVER=0x0
='__declspec(dllexport)'
```

so with ubuntu WLS i generate a patch

```
if [ ! -e luasocket ]; then
         echo "Failed to download luasocket"
         exit 1
129 cd luasocket
130 cd src
131 cat << 'EOF' > makefile.patch
132 --- makefileOLD 2020-11-14 09:17:45.892001600 +0100
133 +++ makefile 2020-11-14 09:20:57.252003000 +0100
134 @@ -161,7 +161,7 @@
      SO_mingw=dll
      O_mingw=o
     CC_mingw=gcc
     -DEF_mingw= -DLUASOCKET_INET_PTON -DLUASOCKET_$(DEBUG) -DLUA_$(COMPAT) MODULE \
     +DEF_mingw= -DLUASOCKET_$(DEBUG) -DLUA_$(COMPAT)_MODULE \
       -DWINVER=0x0501 -DLUASOCKET_API='__declspec(dllexport)' \
          -DMIME_API='__declspec(dllexport)'
     CFLAGS_mingw= -I$(LUAINC) $(DEF) -pedantic -Wall -O2 -fno-common \
     patch < makefile.patch
     LUALIB_mingw=-llua LUAV=5.2 make mingw
147 if [!-e src/mime.dll.1.0.3]; then
```

and the patch worked

next is luasec

as per issue https://github.com/brunoos/luasec/issues/93 i changed the git line to get the master branch

```
152 cd ..

153 rm -r luasocket

154 git clone -b master https://github.com/brunoos/luasec.git

155 if [ ! -e luasec ]; then

156 echo "Failed to download luasec"
```

and i needed to change the pach a little (line 174-176)

```
cd luasec
160 cat << 'EOF' > luasec_mingw.patch
161 --- src/luasocket/Makefile-old 2015-06-27 11:28:34.279159900 -0600
162 +++ src/luasocket/Makefile 2015-06-27 11:31:17.381422000 -0600
      @@ -5 +5 @@
    @@ -26 +26 @@
     -usocket.o: usocket.c socket.h io.h timeout.h usocket.h
168 +wsocket.o: wsocket.c socket.h io.h timeout.h wsocket.h
      --- src/Makefile-old 2015-06-27 11:54:34.670465000 -0600
      +++ src/Makefile 2015-06-27 11:54:42.310475600 -0600
     @@ -1 +1 @@
     -CMOD=ssl.so
    +CMOD=ssl.dll
174 @@ -55 +55 @@
         $(CCLD) $(LDFLAGS) -o $@ $(OBJS) $(LIBS)
          $(CCLD) $(LDFLAGS) -o $@ $(OBJS) $(LIBS) -llua -lws2_32
      patch -p0 < luasec_mingw.patch
179 INC_PATH= LD=gcc CC=gcc make linux
```

and that fixed it, it does compile and the OCEmu.exe works