ZeroMQ on a Windows System 1.4V

for all the guys who have trouble to install ZeroMQ on an Windows System.

ZeroMQ is not working with PHP-Versions above 7.2.x !!!

1: Server-Environment:

1.1 You have to check what version of PHP is installed on your Webserver:

You can find that information, when you open your PHP-Info-File:

System	Windows NT KH0022953C 6.2 build 9200 (Windows 8 Enterprise Edition) AMD64
Build Date	Jan 9 2019 15:05:21
Compiler	MSVC11 (Visual C++ 2012)
Architecture	x64
Configure Command	cscript /nologo configure.js "--enable-snapshot-build" "--disable-isapi" "--enable-debug-pack" "--without-mssql" "--without-pdo-mssql" "--without-pi3web" "--with-pdo-oci=c:\php-sdk\oracle\x64\instantclient_12_1\sdk,shared" "--with-oci8-12c=c:\php-sdk\oracle\x64\instantclient_12_1\sdk,shared" "--enable-object-out-dir=../obj/" "--enable-com-dotnet=shared" "--with-mcrypt=static" "--without-analyzer" "--with-pgo"
Server API	Apache 2.0 Handler
Virtual Directory Support	enabled
Configuration File (php.ini) Path	C:\Windows
Loaded Configuration File	C:\xampp\php\php.ini
Scan this dir for additional .ini files	(none)
Additional .ini files parsed	(none)
PHP API	20131106
PHP Extension	20131226
Zend Extension	220131226
Zend Extension Build	API220131226,TS,VC11
PHP Extension Build	API20131226,TS,VC11
Debug Build	no
Thread Safety	enabled
Zend Signal Handling	disabled
Zend Memory Manager	enabled
Zend Multibyte Support	provided by mbstring
IPv6 Support	enabled
DTrace Support	disabled
Registered PHP Streams	php, file, glob, data, http, ftp, zip, compress.zlib, compress.bzip2, https, ftps, phar
Registered Stream Socket Transports	tcp, udp, ssl, sslv3, tls, tlsv1.0, tlsv1.1, tlsv1.2
Registered Stream Filters	convert.iconv.*, mcrypt.*, mdecrypt.*, string.rot13, string.toupper, string.tolower, string.strip_tags, convert.*, consumed, dechunk, zlib.*, bzip2.*

In my case the PHP-Version: 5.6.40

1.2 Under which Architecture the Server is running:

In my case the Server is running in the x64 Architecture (64bit)

1.3 Is the Server running under Thread Savety Conditions:

In my case: enable

2. Microsoft Visual C++ Version

ZeroMQ needs Microsoft Visual C++ Runtimes to run correctly.

If you have a x64 Server running, it‘s necessary to have both Runtimeversions

(x32 and x64) installed on the Server!!!

These are:

Microsoft Visual C++ 2008 (VC9)
Microsoft Visual C++ 2010 (VC10)
Microsoft Visual C++ 2012 (VC11)
Microsoft Visual C++ 2013 (VC12)
Microsoft Visual C++ 2015 (VC14)
Microsoft Visual C++ 2017 (VC15)

I made it easy and installed all. After that, don’t forget to reboot.

3. What ZeroMQ version I need:

Here you can download the ZeroMQ Package:

https://windows.php.net/downloads/pecl/releases/zmq/

1.1.1 = PHP Version 5.3.x – 5.5.x
1.1.2 = PHP Version 5.3.x – 5.6.x
1.1.3 = PHP Version 7.0.x – 7.2.x

In the name oft the file TS = Thread Save
NTS = None Thread Save

VC9 means: Microsoft Visual C++ 2008 (VC9)
VC11 means: Microsoft Visual C++ 2012 (VC11)
VC14 means: Microsoft Visual C++ 2015 (VC14)
VC15 means: Microsoft Visual C++ 2017 (VC15)

derived therefrom I need the following package:

PHP- Version = 5.6.40
Architecture = X64
Thread Save = Enable

php_zmq-1.1.2-5.6-ts-vc11-x64.zip

I must have installed Microsoft Visual C++ 2012 (VC11) in x32 and x64 Version

4. Installing

Download the right zip Archiv from the link above.

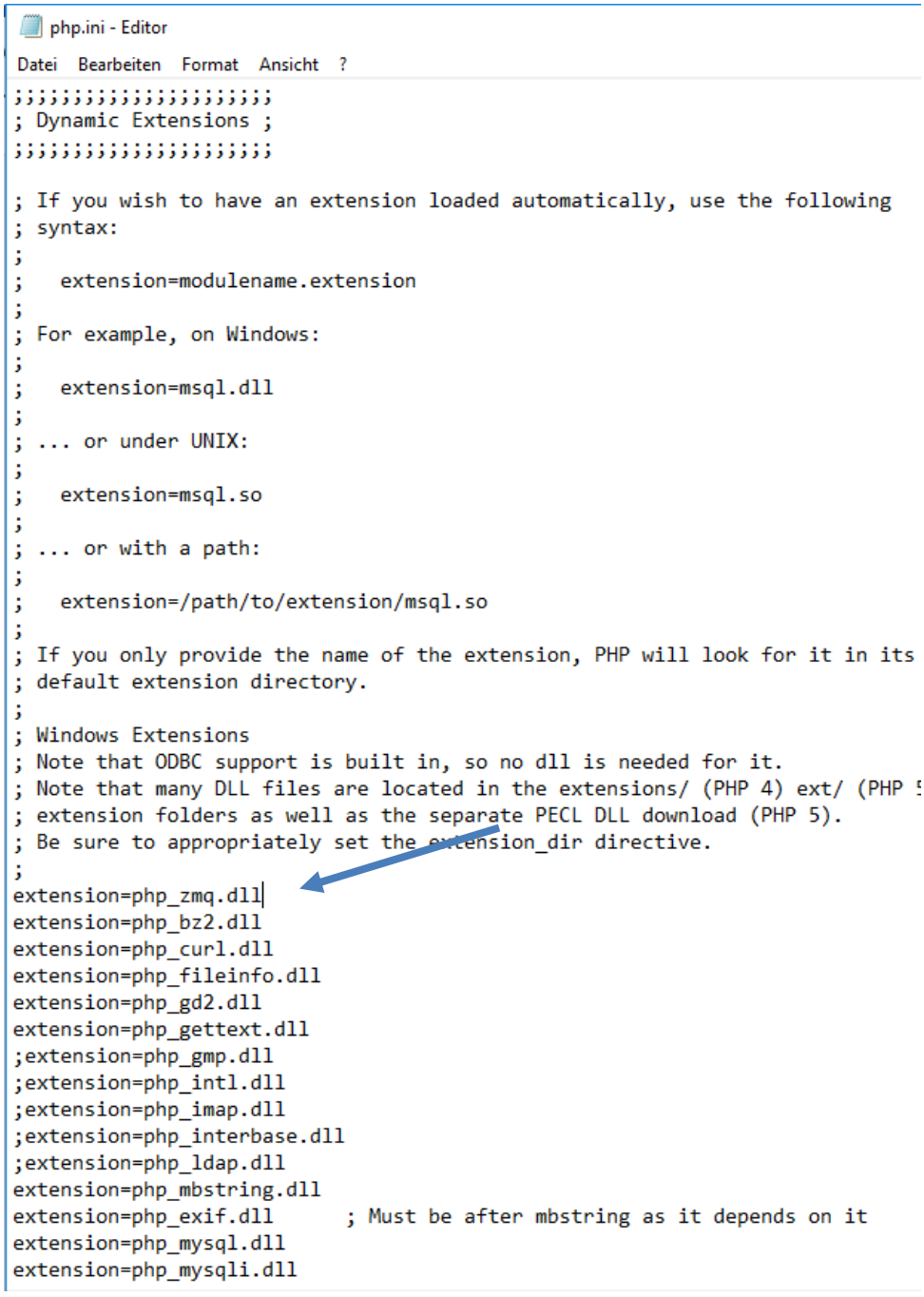
Unpack the following files to the folders:

File libzmq.dll must copied to your PHP folder
File php_zmq.dll must copied to your PhP-folder/ext

after that you must go to your PHP.ini and edit the following line:

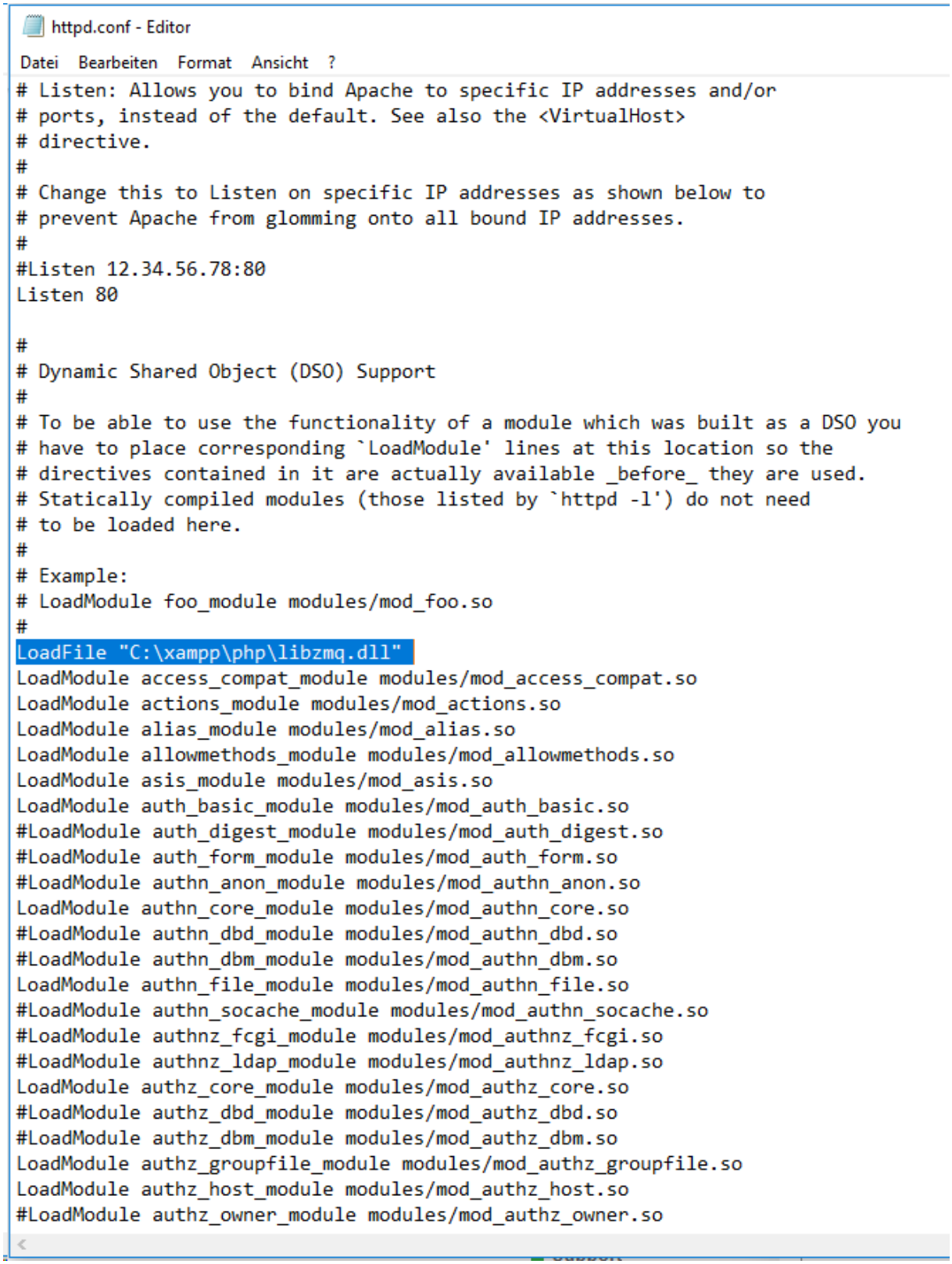
Under the chapter: „Dynamic Extensions“ you must write the line:

extension=php_zmq.dll



Sometimes it would be necessary, that you write the following line in your http.conf to load the .dll in the Apache Webserver.

LoadFile "C:\server-path\php\libzmq.dll"

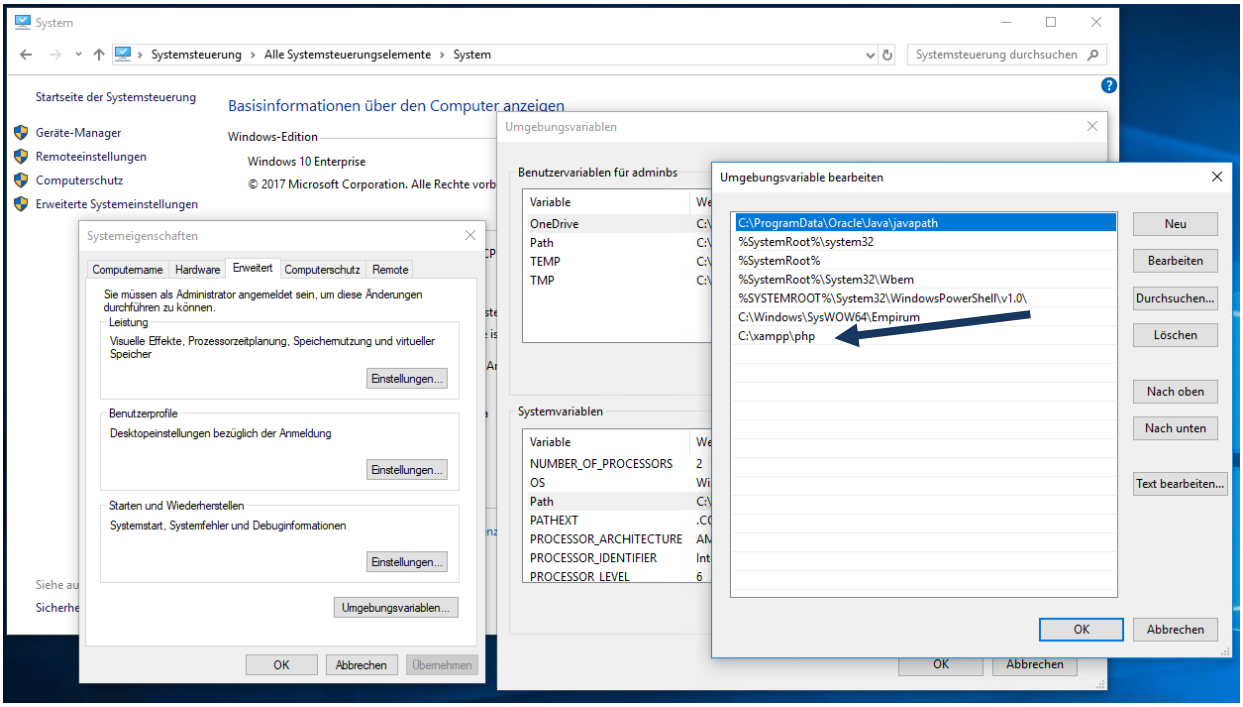


After the last step, you must go to your

Control Panel
System
System Proberties
Environment Variables
System Variables

Under the Key: „Path“ you must write down the path to your PHP-Directory

In my case: c:\server-path\php



Finally you must reboot your Windows Server and do the Xibo-System-Test again.

Hopefully the ZeroMQ Extension is successfull installed.

5. Configure the XMR Service under a Windowssystem

Please go to:

In your Webroot-Folder\xibo\vendor\xibosignage\xibo-xmr

In my case: C:\xampp\htdocs\xibo\vendor\xibosignage\xibo-xmr

and create a empty texfile

write in that textfile:

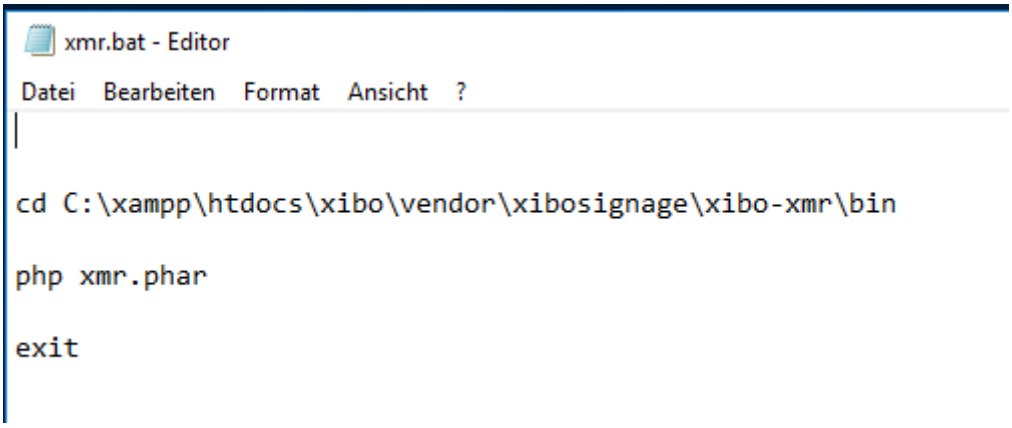
```
{
  "listenOn": "tcp://127.0.0.1:50001",
  "pubOn": ["tcp://Webserver_IP:9505"],
  "debug": true
}
```

Save and close it.

Rename it to: config.json

Now you must call the xmr.phar to start the XMR-Service.

In my case i have a Batch-Script to start the XMR-Service on Systemstart:



Its importent that the script is allways running. If it don‘t run, XMR don’t work!!!

6. Configure XMR in Xibo

Login in Xibo an go to : Settings -> Displays:

under XMR Private Address : tcp://127.0.0.1:50001

Under XMR Public Address: tcp://Webserver_IP:9505

Save

Go to: Display Settings: Chose your Display-Profile that you use and chose “edit” on the Menu

under XMR Public Address you write: tcp://Webserver_IP:9505

save

Go to: Displays and push the Button “Column visibility” an chose “Xmr-Registered” to display that your Xibo-Player received XMR-Commandos.

In Displays in menu chose: “Edit” and than got to “Advanced” and make a check on “reconfigure XMR” and save it.

After that restart your Player.

Hopefully you get a hook at “XMR-Registerd” in Displays an so you can send commands and recieved screenshots from the player.

Greetings from Germany

Torsten