How to install Xibo CMS 2.1.X on Windows Server 2016 using Xampp.

- Download the Xampp 7.2.24 (you must use 7.2.24 as 7.3.11 is not yet supported by ZeroMQ) installer from: https://www.apachefriends.org/xampp-files/7.2.24/xampp-windows-x64-7.2.24-0-VC15installer.exe
- 2. Run the installer, and leave all settings at the default.
- 3. Run the Xampp Control center as an administrator, it should be located at: C:\xampp\xampp-control.exe
- 4. In this program you should see the various modules and options for each, you need to click the red "X" to the left of Apache and MySQL, and this will install those modules as a service so it can auto start during startup.

Modules ervice	Module	PID(s)	Port(s)	Actions				🔘 Netstat
×	Apache			Start	Admin	Config	Logs	E Shell
×	MySQL			Start	Admin	Config	Logs	Explore
×	FileZilla			Start	Admin	Config	Logs	Service
	Mercury			Start	Admin	Config	Logs	🕑 Help
×	Tomcat			Start	Admin	Config	Logs	📃 Quit
30:07 A 30:07 A 30:07 A 30:07 A 30:07 A 30:07 A 30:07 A 30:07 A	M [main] M [main] M [main] M [main] M [main] M [main] M [main] M [main]	Control Par Running wit XAMPP Ins Checking fo All prerequi Initializing M Starting Ch Control Par	tel Version: 3.2 th Administrato tallation Directo or prerequisites sites found Modules eck-Timer tel Ready	2.4 [Compi r rights - go ory: "c:\xan	led: Jun 5th od! npp\"	2019]		

5. After you click the red "X" it will turn into a green check mark if it is successful, when both are green check marks we are good to move onto the next step.

🔀 XAMPF	Control Panel	v3.2.4 [Compiled: Jun 5th 2	2019]			_	
ខ	XAM	PP Control Panel v	3.2.4				Je Config
Modules Service	Module	PID(s) Port(s)	Actions				Netstat
~	Apache		Start	Admin	Config	Logs	Shell
	MySQL		Start	Admin	Config	Logs	Explorer
×	FileZilla		Start	Admin	Config	Logs	Services
	Mercury		Start	Admin	Config	Logs	😡 Help
×	Tomcat		Start	Admin	Config	Logs	📃 Quit
9:30:07 A 9:30:07 A 9:30:07 A 9:30:07 A 10:08:13 / 10:08:14 / 10:08:16 / 10:08:17 /	M [main] M [main] M [main] M [main] AM [Apache] AM [Apache] AM [mysql] AM [mysql]	All prerequisites found Initializing Modules Starting Check-Timer Control Panel Ready Installing service Successful! Installing service Successful!					~

6. Now that we have created our services we can now start each service manually by selecting the "Start" button to the right of the module name.

Control Panel	v3.2.4 [Compiled:	Jun 5th 201	19]			_		\times
XAM	PP Control Pa	anel v3.	2.4				<i>&</i> C	onfig
Module	PID(s)	Port(s)	Actions				🙆 Ne	etstat
Apache			Start	Admin	Config	Logs	2	Shell
MySQL			Start	Admin	Config	Logs	Ex Ex	plorer
FileZilla			Start	Admin	Config	Logs	🚽 🛃 Ser	rvices
Mercury			Start	Admin	Config	Logs	• •	lelp
Tomcat			Start	Admin	Config	Logs		Quit
M [main] M [main] M [main] AM [Apache] AM [Apache] AM [mysql] AM [mysql] AM [main]	Initializing Module Starting Check-Ti Control Panel Re Installing service. Successful! Installing service. Successful! Executing "service	es imer ady ces.msc"						*
	Apache MySQL FileZilla Mercury Tomcat M [main] M [main] AM [Apache] AM [Apache] AM [Apache] AM [mysql] AM [mysql] AM [main]	P Control Panel v3.2.4 [Compiled: XAMPP Control Parel Module PID(s) Apache MySQL FileZilla Mercury Tomcat M [main] M [main] Apache Initializing Module M [main] Starting Check-T Control Panel Re AM [Apache] AM [Apache] AM [mysqi] AM [mysqi] AM [main] Successful! AM [minin] AM [mysqi] AM [main] Executing "service.	Apache Module PID(s) Port(s) Apache MySQL FileZilla Mercury Tomcat Starting Check-Timer M [main] Starting Check-Timer AM [Apache] Successful! AM [mysqi] Installing service AM [mysqi] Successful! AM [mysqi] Executing "services.msc"	Apache MySQL FileZilla Mercury Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mimaini Mima	Apache MySQL Tomcat M [main] Initializing Modules M [main] Control Panel Ready Amage M [Apache] Installing service Amage M [main] Starting Check-Timer M [main] Control Panel Ready Amage M [Apache] Installing service Amage M [mysql] Installing services.msc"	Apache FileZilla Mercury M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[main] M[Procentrol Panel v3.24. [Compiled: Jun 5th 2019] ADACHP CONTROL Panel v3.2.4. Module PID(s) Port(s) Actions Apache Start Admin Config Logs MySQL Start Admin Config Logs FileZilla Start Admin Config Logs Mercury Start Admin Config Logs M [main] Starting Modules Start Admin Config Logs M [main] Starting Check-Timer Control Panel Ready Admin Config Logs AM [Apache] Installing service Max [Apache] Installing service AM [Apache] Successfu!! Max [main] Executing "services.msc"	P Control Panel v3.2.4 [Compiled: Jun 5th 2019] XAMPP Control Panel v3.2.4 Module PID(s) Port(s) Actions MySQL FileZilla Mercury Tomcat M [main] Initializing Modules M [main] Starting Check-Timer M [main] Starting Check-Timer M [main] Starting Check-Timer M [main] Starting Service AM [Apache] Installing service AM [mysqi] Installing services.msc"

7. When those have started up you should see numbers populate into the "PID(s)" and "Port(s)" columns of the control panel. When you see that it is time to make our SQL database a little more secure, please click on the "Admin" button to the right of MySQL module.

3	XAN	IPP Control	ol Panel v3	.2.4				Je Config
Modules Service	Module	PID(s)	Port(s)	Actions				Netstat
1	Apache	1832	80, 443	Stop	Admin	Config	Logs	Shell
1	MySQL	5512	3306	Stop	Admin	Config	Logs	Explore
×	FileZilla			Start	Admin	Config	Logs	Service
	Mercury			Start	Admin	Config	Logs	😡 Help
×	Tomcat			Start	Admin	Config	Logs	📃 Quit
D:08:14 D:08:16 D:08:17 D:10:40 D:17:35 D:17:36 D:17:37 D:17:38	AM [Apach AM [mysql] AM [mysql] AM [main] AM [Apach AM [Apach AM [mysql] AM [mysql]	e] Successful Installing s Successful Executing e] Attempting e] Status cha Attempting Status cha	! ervice ! "services.msc" to start Apach nge detected: r to start MySQI nge detected: r	e service unning L service				

8. This will bring up the phpMyAdmin interface for our MySQL database, please click on the "User accounts" tab at the top of the page.



9. On the next page you will want to click on the "Edit privileges" link to the right of the account with the User name of "root" and the Host name of "localhost".

User name	Host name	Password	Global privileges 😡 L	Jser group	Grant	Action
Any	%	No@	USAGE		No	🐉 Edit privileges 🔜 Export
pma	localhost	No	USAGE		No	🐉 Edit privileges 🛛 Export
root	127.0.0.1	No	ALL PRIVILEGES		Yes	🐉 Edit privileges 📃 Export
root	::1	No	ALL PRIVILEGES		Yes	🐉 Edit privileges 🔜 Export
root	localhost	No	ALL PRIVILEGES		Yes	🐉 Edit privileges 🔜 Export

10. This next screen all we need to do is to click the button named "Change password" at the top of the page.

🚽 🧊 Serv	er: 127	.0.0.1					
Datab	ases	S S	QL	🐁 Status		User accounts	
Global	Data	abase	CI	nange passwo	rd	Login Informati	on

11. Now just create a secure password and type it into the field that is titled "Enter:" and "Re-type:" and click the "Go" button at the bottom right.

Change passwor	d		
O No Password			
Password:	Enter:	Strength:	Good
Password Hashing:	Native MySQL authenti	cation 🔻	
Generate password	Generate		
			Go

- 12. With that done we now need to edit a file so we can continue to use phpMyAdmin to interact with the database. You will want to edit the config.inc.php file located at C:\xampp\phpMyAdmin\config.inc.php.
- 13. Inside the file you will want to change two lines, the firs is the line "\$cfg['blowfish_secret'] = 'xampp';" you will want to replace xampp with a random string of characters. If you would like you can obtain a randomly generated one to paste in from <u>https://phpsolved.com/phpmyadmin-blowfish-secret-generator/?g=[insert_php]echo%20\$code;[/insert_php]</u>. The second line is "\$cfg['Servers'][\$i]['auth_type'] = 'config';" you will want to replace the word config with cookie. This will ensure that you have to sign in every time instead of the password just being stored in the config file.

```
E<?php
 1
 2
    E/*
 3
       * This is needed for cookie based authentication to encrypt p
 4
       * cookie
 5
       */
 6
      $cfg['blowfish secret'] = '-o}BghG8f.2bs-gP3iipL-=o-jm}WLL,';
 7
 8
    E/*
 9
       * Servers configuration
      - */
10
      $i = 0;
11
12
13
    E/*
14
       * First server
      - */
15
      $i++;
16
17
      /* Authentication type and info */
18
     $cfg['Servers'][$i]['auth type'] = 'cookie';
19
      $cfg['Servers'][$i]['user'] = 'root';
20
21
      $cfg['Servers'][$i]['password'] = '';
      $cfg['Servers'][$i]['extension'] = 'mysqli';
22
      $cfg['Servers'][$i]['AllowNoPassword'] = true;
23
      $cfg['Lang'] = '';
24
```

- 14. Download Xibo from <u>https://github.com/xibosignage/xibo-cms/releases</u> you will want to download the xibo-cms-2.1.X.zip file.
- 15. Once that is downloaded extract all files to C:\xamp\htdocs\Xibo.
- 16. Now that it is extracted where we want it we will want to point our web server at Xibo instead of its original default document. To do this we will alter the httpd.conf file located at C:\xampp\apache\conf\httpd.conf. There will be two lines that will be edited, the first is "DocumentRoot "C:/xampp/htdocs"" and the second is "<Directory "C:/xampp/htdocs">". In both cases we will be replacing "C:/xampp/htdocs" with "C:/xampp/htdocs/Xibo/web".

```
252 DocumentRoot "C:/xampp/htdocs/Xibo/web"
```

- 253 <Directory "C:/xampp/htdocs/Xibo/web">
- 17. Now it is time to install ZeroMQ. You can download the version of ZeroMQ we need from <u>https://windows.php.net/downloads/pecl/releases/zmq/1.1.3/php_zmq-1.1.3-7.2-ts-vc15-x64.zip</u> *Please note this is the thread-safe version of zmq, with Apache you need to use thread-safe and not NTS*.
- You will also need to install both the x64 and x86 versions of Visual C++ Redistributable for Visual Studio 2015-2019 VC15 found at X64 - <u>https://aka.ms/vs/16/release/VC_redist.x64.exe</u> X86 - https://aka.ms/vs/16/release/VC_redist.x86.exe
- 19. Extract the files from the zip file and transfer "php_zmq.dll" to C:\xampp\php\ext and "libzmq.dll" to C:\xampp\php.

20. Now it is time to modify the php.ini file which is located at C:\xampp\php\php.ini there are a few lines that need to be edited, we will go over each over the next few steps. The first is "post_max_size=40M" we will be changing 40M to 200M.

```
663 ; Maximum size of POST data that PHP will accept.
664 ; Its value may be 0 to disable the limit. It is ignored if POST data reading
665 ; is disabled through enable_post_data_reading.
666 ; <u>http://php.net/post-max-size</u>
667 post_max_size=200M
```

21. The next is "upload_max_filesize=40M" we will again replace the 40M with 200M.

```
818 ; Maximum allowed size for uploaded files.
819 ; <u>http://php.net/upload-max-filesize</u>
820 upload max filesize=200M
```

22. The next line will be added, under the "Dynamic Extensions" header we will insert "extension=php zmq" it doesn't matter where it goes in the list.

```
908extension=pdo_sqlite909;extension=pgsql910extension=php_zmq911;extension=shmop
```

23. The next line to be edited will be ";extension=soap" for this one we will simply remove the semicolon (;) to uncomment that line.

```
913 ; The MIBS data available in the PHP distribution must be installed.
914 ; See <u>http://www.php.net/manual/en/snmp.installation.php</u>
915 ;extension=snmp
916
917 extension=soap
918 ;extension=sockets
919 ;extension=sqlite3
```

24. The next line will be ";date.timezone = " for this line we will remove the semicolon (;) and insert the appropriate timezone given your area, for me it is America/Los_Angeles. To find what yours is please visit <u>http://php.net/date.timezone</u>

```
949 □ [Date]
950 ; Defines the default timezone used by the date functions
951 ; http://php.net/date.timezone
952 date.timezone = America/Los_Angeles
953
```

25. The next line is "SMTP=localhost" for this we will replace localhost with the smtp server for your mail provider.

```
1063 [mail function]
1064 ; For Win32 only.
1065 ; <u>http://php.net/smtp</u>
1066 SMTP=mail.exchange.com
1067 ; <u>http://php.net/smtp-port</u>
1068 smtp port=25
```

26. The next line is ";sendmail_from = <u>me@example.com</u>" here we will remove the semicolon (;) and replace the <u>me@example.com</u> address with the email address you want the emails to come from.

```
1070 ; For Win32 only.
1071 ; <u>http://php.net/sendmail-from</u>
1072 sendmail_from = example@exchange.com
```

27. The next and final setting that needs to be changed is "mail.add_x_header=off" for this we will change off to on.

```
1083 ; Add X-PHP-Originating-Script: that will include uid of the script followed by the filename
1084 mail.add_x_header=On
```

28. Now we will edit the System variables within the Environment Variables. First you open the Advanced System Settings. To do this I search for Control Panel, click System, and click on the Advanced System Settings link on the left. Once there click on the Environment Variables... button. In the bottom half of that window you will see system variables, select the Path variable and click Edit... From here you want to click the New button on the right and type in C:\xampp\php then move that to the top.

C:\xampp\php	New
C:\Program Files (x86)\Intel\Intel(R) Management Engine Component	
C:\Program Files\Intel\Intel(R) Management Engine Components\iCLS\	Edit
C:\Program Files (x86)\Common Files\Oracle\Java\javapath	
%SystemRoot%\system32	Browse
%SystemRoot%	
%SystemRoot%\System32\Wbem	Delete
%SYSTEMROOT%\System32\WindowsPowerShell\v1.0\	
%SYSTEMROOT%\System32\OpenSSH\	
C:\Program Files (x86)\Intel\Intel(R) Management Engine Component	Move Up
C:\Program Files\Intel\Intel(R) Management Engine Components\DAL	
C:\Program Files (x86)\Intel\Intel(R) Management Engine Component	Move Down
C:\Program Files\Intel\Intel(R) Management Engine Components\IPT	
C:\Program Files\Intel\WiFi\bin\	
C:\Program Files\Common Files\Intel\WirelessCommon\	Edit text
C:\Program Files\PuTTY\	
C:\Program Files\dotnet\	
C:\Program Files\Microsoft SQL Server\130\Tools\Binn\	
C:\Program Files\Microsoft SQL Server\Client SDK\ODBC\170\Tools\Bi	
ОК	Cancel

29. This next step we will navigate to C:\xampp\htdocs\Xibo\vendor\bin where you will create a new file using a text editor named config.json that file will contain the following text. Please replace yourip with the ip address of the server.

{

"listenOn": "tcp://127.0.0.1:50001",

```
"pubOn": ["tcp://yourip:9505", "tcp://yourip:50002"],
"debug": true
```

- 30. Now you will go back to the Xampp control panel and stop the Apache module, wait for the button text to change from stop back to start and the restart it.
- 31. Next run an admin instance of command prompt and type in:
- cd C:\xampp\htdocs\Xibo\vendor\bin Press enter Now type in: php xmr.phar Press enter
- 32. You should see messages in your command prompt similar to the screenshot below.

```
Administrator: Command Prompt - php xmr.phar
Microsoft Windows [Version 10.0.18362.418]
(c) 2019 Microsoft Corporation. All rights reserved.
C:\WINDOWS\system32>cd C:\xampp\htdocs\Xibo\vendor\bin
C:\xampp\htdocs\Xibo\vendor\bin>php xmr.phar
[2019-11-01 22:07:00] xmr.INFO: Starting up - listening for CMS on tcp://127.0.0.1:50001. [] []
                                                            :9505 for Publish. [] []
[2019-11-01 22:07:00] xmr.INFO: Bind to tcp://
                                                            :50002 for Publish. [] []
2019-11-01 22:07:00] xmr.INFO: Bind to tcp://
2019-11-01 22:07:00] xmr.DEBUG: Adding a queue processor for every 5 seconds [] []
2019-11-01 22:07:30] xmr.DEBUG: Heartbeat...
2019-11-01 22:08:00] xmr.DEBUG: Heartbeat...
2019-11-01 22:08:30] xmr.DEBUG: Heartbeat...
2019-11-01 22:09:00] xmr.DEBUG: Heartbeat...
2019-11-01 22:09:30] xmr.DEBUG: Heartbeat.
```

- 33. Now we need to create a library folder for Xibo, I created mine titled Xibo_LIB and it is directly in the C:\ directory so my library directory is C:\Xibo_LIB.
- 34. Now we can start the actual installation, open your browser of choice and type localhost into the address bar and press enter.
- 35. You should be taken to the Xibo installation screen

Kibo Installation

Welcome to the Xibo Installation

Thank you for choosing Xibo. This installation wizard will take you through setting up Xibo one step at a time. There are 6 steps in total, the first one is below.

36. Below the welcome is a list of prerequisites for the installation of Xibo, if you followed along all should show check marks, if any show an "X" or an "!" please review that portion of documentation over again.

First we need to check if your server meets Xibo's requirements.

Item	Status	Advice
PHP Version	×	PHP version 5.5 or later required. Detected 7.2.24
Settings File System Permissions	~	Write permissions are required for web/settings.php
Cache File System Permissions	*	Write permissions are required for cache/

37. At the very bottom of the page you will see a "Next" button, click that.

OpenSSL	~	OpenSSL is used to seal and verify messages sent to XMR
SimpleXML	~	SimpleXML is used to parse RSS feeds and other XML data sources
Next		Xibo
		Xibö

38. On this next page we will be setting up the Xibo database, since this is a fresh install we will be creating the database. At the top there is a radio button labeled "Create a new database" this needs to be selected. For the "Host" field it will be localhost, "Admin Username" is root, "Admin Password" is the password you created in phpMyAdmin, "Database Name" will be whatever you want, I chose Xibo_DB. "Database Username" will be whatever username you want Xibo to use on the database, I chose XIBO_Admin. "Database Password" will be whatever password you want Xibo to use for the database. Once that is all filled out just click the Next button.

Create a new database

Select to create a new database

Host	localhost
	Please enter the hostname for the
Admin Username	root
	Please enter the user name of an
Admin Password	********
	Please enter password for the Adı
Database Name	Xibo_DB
	Please enter the name of the data
Database Username	XIBO_Admin
	Please enter the name of the data
Database Password	••••••
	Please enter a password for this u
	Next

- 39. This next page is where you will setup the first account for Xibo CMS, you can make the username and password whatever you want, and then click Next.
- 40. This page you need to provide the Library Location, this is the library file you created earlier, and mine is located at C:\Xibo_LIB. The Server Key is the key that will need to be input into each display to add them (don't worry about it; you can always get it from the settings in Xibo). As for the statistics checkbox that is totally up to you if you want to share your stats with the Xibo team. Now click the Next button.
- 41. If everything went as planned you should now see the Xibo signon screen.

The rest of this guide will be merged from a guide provided by another forum member by the username Skidoo, he helped me so much when trying to figure out why previous installation methods weren't working with the newer versions of Xibo.

Xibo CMS Post-Installation

Setup Guide

Introduction

Once your 2.0 series Xibo CMS is installed, there's some additional setup required to enable all functionality and to keep things running smoothly. This guide will take you through the steps needed.

Please note:

This guide relates to Xibo 2.0 series, for information relating to 1.8 series the old article is archived <u>here</u>.

If you have yet to install a Xibo CMS please follow the <u>CMS Installation</u> instructions appropriate for your environment.

If you'd rather not host your own CMS, then please do take a look at <u>Xibo in the</u> <u>Cloud</u> for hosting. **Xibo in the Cloud**customers benefit from pre-configuration of features and can, therefore, skip steps, as detailed below.

If you are running with Docker, please upload a test file (such as an image) to your CMS, and ensure that the same image then appears in the shared/cms/library directory on your local filesystem. If not, please **do not proceed** as your changes may not be saved.

Time and timezone

NTP

Xibo in the Cloud customers please skip this section and go directly to the **Timezone** section.

It's very important that the time is correct on your CMS, and that the CMS timezone setting is set correctly for the timezone you're working in.

You may want to consider setting up your Operating System to sync time automatically from the Internet so that the time is always correct.

<u>ntp.org</u> provide free access to time servers you can use to synchronise your CMS clock. Instructions for configuring access to their servers are provided here http://www.pool.ntp.org/en/use.html

Timezone

Now your clock is correct (and will remain so automatically), you need to let the CMS know what **Timezone** it should be using. The installer attempts to make an intelligent guess from the timezone that your OS has been set up to use, but it's not always able to make the best choice.

Log in to your CMS and go to the **Settings** page under the Administration section of the Menu and click on the **Regional** tab.

Dashboard	Xibö		
Schedule Dayparting	Settings		🕰 Import 🔷 Export 😫 Tidy Like
ESIGN	Configuration Defaults	Displays General Maintenance Network Permissions Regional Troubleshooting Users	
ampaigns ayouts	Regional		
emplates	Default Language	en_68	
Resolutions		The default language to use	
RARY	Timezone	(GMT) Europe, London	
/edia		Set the default timezone for the application	
)ataSets	Date Format	YmdHi	
ISPLAYS		The Date Format to use when displaying dates in the CMS.	
Displays		Detect Language	
Display Groups		Detect the browser language?	
Display Settings	Calendar Type	Gregorian	
Commands		Which Calendar Type should the CMS use?	
DMINISTRATION		Save	
Users			

Use the drop-down menu to select the nearest major city in your timezone, click **Save** at the bottom of the page.

CMS Maintenance and Email Alerts

The Xibo CMS is only ever running when a **User** is actively interacting with the system, or a **Player** is connecting to update its content. At all other times, Xibo isn't running at all which means in order to carry out certain background routines (eg clearing out old records) or to alert you if one of your Players stops connecting as expected, we need a regular "wakeup" to run Xibo that will allow those things to happen. Xibo uses **Tasks** and **XTR** to run these routines.

Xibo in the Cloud and **Docker installations**, running **XTR** will happen automatically. For non-Docker installations please follow the configuration instructions for <u>XTR-Routine Tasks</u>

Email Alerts

Now the CMS is being regularly woken up, you can optionally configure **Email Alerts** to be sent when Players stop connecting properly, and when they come back online after a period of downtime.

Again from the **Settings** page located under the Administration section of the Menu, click on the **Maintenance** tab. Here you will see some settings referring to the sending of emails.

Dashboard	Xibö	* 🕵
Schedule	future.	A legant A Equat 2 Toy Usary
Dayparting		
DESIGN	Configuration Defaults Display	s General Maintenance Network Permissions Regional Troubleshooting Users
Campaigns		
Layouts	Maintenance	
Templates	Enable Maintenance?	Protected
Resolutions		Adow the maintenance script to run if it is called?
LERARY	Enable Email Alerts?	• •
Media		Global switch for email aterts to be sent
DutaSets	Admin email address	
DISPLAYS		Errors will be mailed here
Displays	Sending email address	
Display Groups		Mail will be sent from this address
Display Settings	Sending email name	
Commands		Mail will be sent under this name
ADMINISTRATION	Maintenance Key	
Users		Shing appended to the maintenance script to prevent maticious calls to the script.
User Groups	Maxim in	
Settings	max cog Age	Waximum age for log entries in days. Set to 0 to keep logs indefinitely.
Applications		
Modules	Max Statutors Age	eq Musemum age for statistics entries in daws. Set to 0 to knep statistics indefinitely.

Xibo in the Cloud customers please note that some settings are pre-populated for you but are available for you to change, with others locked for editing.

- 1. Enable Email Alerts? (MAINTENANCE_EMAIL_ALERTS) is set to On
- 2. Admin email address (mail_to) enter the email address that should receive an email when a Display goes offline or comes back online.
- 3. **Sending email address** (mail_from) enter the email address alerts from the CMS should come from.
- 4. Max Display Timeout (MAINTENANCE_ALERT_TOUT) enter a time in minutes for a Player to be considered as gone "offline" from the last time you saw the Player connect to the CMS. This can be overridden on a per client basis should you need that. Do not set this value lower than your normal Player collection interval. If in doubt, set it higher. The default is 30 minutes.
- 5. Send repeat Display Timeouts (MAINTENANCE_ALWAYS_ALERT)- if this is set to On, for each offline Display you'll receive an email every time the maintenance.php routine is run. Most people will want this set to Off which means that you'll be notified only once per downtime period.
- 6. Save your settings by clicking the **Save** button at the bottom of the page.

In some cases, it's also useful to alert **Users/User Groups** if a Player goes offline. To do this navigate to **Users** under the Administration section and use the row menu for

the selected User record to Edit. Click on the **Notifications** tab and tick the box to **Receive Display Notifications**.

Details Refer	Not	tifications	Options	3					
	Receive	e System No	otifications	?					
	SHOUID UIIS	, USEI TECEN	ve system	nouncations?					
	Receive	e Display No	otifications?	?					
	Should this	User receiv	ve Display	notifications for Displa	ays they have	permission to	see?		
							Help	Cancel	s
Can also be	set again	nst User	Group	DS.					
can also be User Group Name	set again	for this Use	r Group)S .					
Can also be User Group Name	set again	for this Use	r Group)S .		1/iP			
Can also be User Group Name Library Quota	The Name The quota t	for this Use	er Group	DS.		КіВ			
Can also be User Group Name Library Quota	The Name The quota t	for this Use	er Group be applied	DS.		KiB			
Can also be User Group Name Library Quota	The Name The quota t Receive Should mer	for this Use	er Group be applied bifications?	DS. I. Enter 0 for no quota. ? eccive system notificati	ions?	КіВ			
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Next, you need to decide which **Displays** should receive alerts. Navigate to Displays on the Menu and for each Display you want to receive alerts for, use the row menu to Edit then click on the **Maintenance** tab.

Edit a Display		×
General Loca	ation Maintenance Wake on LAN Advanced	
Email Alerts	Yes Do you want to be notified by email if there is a problem with this display? Use the Global Timeout? Should this display be tested against the global time out or the client collection interval?	T
	Help Cancel	Save

Make sure **Email Alerts** is set to Yes. For any display you don't want to receive email alerts for, set Email Alerts to No.

If you are not using **Display Setting Profiles** (see section below), ensure that you tick **Use Global Timeout?** tick box so that the value set earlier for the time a Display needs to be offline before being alerted is used. If you are using Display Settings Profiles, then if that box is unticked, the **Collect Interval** from the **Display Profile** will be used instead.

With Email Alerts configured, if you turn off one of your Displays, you should be notified by email. The email will be sent once the **Global Timeout** or Display Profile **Collection Interval** has elapsed since the Player last connected, on the subsequent run of the maintenance script.

Example: If the Global Timeout is 10 minutes and your maintenance script is set to run every 5 minutes, then you may not be notified for up to 15 minutes after the Player last connects.

When the Player comes back online, you will be notified instantly via email.

Please note: Multiple recovery emails are sent if the **Player** in use makes multiple simultaneous calls to the CMS when it starts up.

Log and Statistics Retention

Xibo in the Cloud customers should be aware that these settings are pre-configured and are not available to be modified, please skip this section.

The CMS generates log output when it's running, and also receives log output from the **Players** connected to it for the purposes of debugging and checking the system's state. It can also collect <u>Proof of Play Statistics</u>. All these records are held in the database and should be purged periodically to keep the size of the database manageable and to prevent system performance problems. The maintenance script performs that function.

Go to the Settings page under the Administration section of the Menu in the CMS, and click on the **Maintenance** tab.

Max Log Age	30	
	Maximum age for log entries. Set to 0 to keep logs indefinitely.	
	This setting is referred to as: MAINTENANCE_LOG_MAXAGE	
Max Statistics	30	
Age	Maximum age for statistics entries. Set to 0 to keep statistics indefinitely.	
	This setting is referred to as: MAINTENANCE_STAT_MAXAGE	

- **Max Log Age (MAINTENANCE_LOG_MAXAGE)** controls how many days logs should be retained in the CMS database before being automatically deleted. A setting of 5 would keep logs for 5 days and that's reasonable for most debugging purposes.
- **Max Statistics Age (MAINTENANCE_STAT_MAXAGE)** controls how many days proof of play statistics are retained in the CMS database before being automatically deleted. A setting of 30 would keep statistics for 30 days. If you need to keep them for audit purposes, they can be exported from the **Statistics** page in the CMS and archived for later use.

Regional Settings

The Xibo has built-in support for display of the user interface in alternative languages, and to show dates in alternative formats too (eg DD/MM/YYYY vs MM/DD/YYYY).

All translations are contributed by the community and we are very grateful for all Community efforts to keep the system translations updated and accurate. If you're interested in improving the translations for a specific language, you can contribute directly via Launchpad Translations: Launchpad Translations

Edits made there will be automatically included in a future Xibo CMS release.

Language Detection

By default, the CMS will use the language preferences set in your web browser to auto-detect which language to display the CMS interface in. In some instances, for example, where only small parts of the CMS have been translated into a particular language, it may be desirable to disable language detection and enforce a specific language instead.

- From the **Settings** page of the CMS, move to the **Regional** tab
- Untick the **Detect Language (DETECT_LANGUAGE)** tick box
 - Detect Language

Detect the browser language?

This setting is referred to as: DETECT_LANGUAGE

- Select a suitable **Default Language** (see below)
- Save your changes

Default Language

If you disable language detection, the CMS will need to know which language file to take its translations from.

- From the **Settings** page of the CMS, move to the **Regional** tab.
- The Default Language is en_GB which will give you English (British) translations. You can enter any valid code from the list of languages Xibo is currently translated in to. You can see a list <u>here</u>
- Enter the language code, without the trailing .mo. So for example, to select Spanish, enter es
- Save your changes

Regionalised Date Formats

By default Xibo CMS shows dates in Y-m-d H:i format (eg 2015-03-29 10:00:00)

The date format used throughout the CMS can be adjusted from the **Settings** screen by adjusting the **Date Format setting**on the **Regional** tab.

Display Profiles

Display Profiles offer a powerful way of centrally configuring your Player settings from the CMS. When the Players connect to the CMS, they will receive any default or assigned **Profile** you've created and reconfigure themselves with those settings automatically.

Profiles are located on the **Display Settings** page of the CMS. You can create default profiles for each Player type or individual profiles which can then be applied to one or more Players to override the default settings.

Full details on managing **Display Profiles** can be found in the User Manual on the <u>Display Settings</u> page.

Important Note On Collection Intervals

The Xibo 1.8 series comes with <u>XMR</u> push technology, which means that by default when you make changes to content assigned to displays in the CMS, the Players are notified to connect in and download that update straight away. It's therefore strongly advisable to set relatively long collection intervals for your Players since those only really serve as a failsafe for any missed push messages.

You do not want 1.8 series CMS and Players with 1-minute collection intervals. 5 minutes is the absolute minimum for normal operation, and we strongly advise setting this value to **30 minutes** or longer.

Proxy Settings

Xibo in the Cloud customers can skip this section.

The CMS will need to be able to contact external servers to pull in **RSS feeds** from outside your local network, or for integrations such as <u>Twitter</u>. If your network uses a proxy server then you'll need to tell the Xibo CMS about it so it knows where to look.

Configuration Conte	nt Defaults Displays	General Mainter	nance Network	Permissions	Regional	Troubleshooting	Users
Network							
Proxy URL							
	The Proxy URL						
	This setting is referred to as:	PROXY_HOST					
Proxy Port							
	The Proxy Port						
	This setting is referred to as:	PROXY_PORT					
Proxy Credentials							
	The Authentication information	n for this proxy. usernam	e:password				
	This setting is referred to as:	PROXY_AUTH					
Proxy Exceptions							
	Hosts and Keywords that sho	uld not be loaded via the	Proxy Specified. The	se should be com	ma separated.		
	This setting is referred to as:	PROXY_EXCEPTIONS					

From the **Settings** page under the Administration section of the Menu, click on the **Network** tab.

Auto start XMR-Service on startup

Open notepad and create a batch file called XMR.BAT

cd C:\XIBO_CMS\vendor\bin php xmr.phar exit

Save it to C:\XIBO_CMS\xmr.bat

It is important that this script is always running. If not, XMR will not work.

Run "Task Scheduler" and select "Create Basic Task"



Give it a name "XiboXMRstartup" ==> Next Set the trigger to "When the computer starts" ==> Next Select "Start a program" ==>Next Browse to the Batch file where you saved it above Add the Start in path without the "\" at the end

Create Basic Task Wizard				×
🔞 Start a Program				
Create a Basic Task				
Trigger	Program/script:			
Action	C:\XIBO_CMS\XMR.BAT		Browse	
Start a Program				
Finish	Add arguments (optional):			
	Start in (optional):			
				_
		< Back	Next > Cance	el

Check the box: "Open the Properties dialog ..." ==>Finish Under General tab:

Select "Run whether user is logged on" "Run with highest privileges"

🕒 XiboXMRsta	rtup Properties (Local Computer)	Х
General Trigg	gers Actions Conditions Settings History (disabled)	
Name:	XiboXMRstartup	
Location:	V	
Author:	XIBO5\Administrator	
Description:		
- Security opti	ions	
When runni	ng the task, use the following user account:	
Administrat	or Change User or Group	
O Run only	when user is logged on	
Run whe	ther user is logged on or not	
🗌 Do n	ot store password. The task will only have access to local computer resources.	
Run with	highest privileges	
🗌 Hidden	Configure for: Windows Vista™, Windows Server™ 2008	\sim
	OK Cancel	

Under Conditions Tab:

Check "Wake the computer to run this task" "OK"

An authentication box will pop up.

Enter the password for the Administrator account

Configure XMR in Xibo

Settings-> Displays-> XMR Private Address: tcp://127.0.0.1:50001 Settings-> Displays-> XMR Public Address: tcp://x.x.x.x:9505 Save

Displays-> Display Setting for your display group -> Edit Under XMR Public Address: tcp://x.x.x.:9505 Save

Go to: Displays and push the button "Column visibility" and choose "Xmr-Registered" to display that your Xibo-Player received XMR-Commands.

In Displays menu choose: "Edit" and go to "Advanced" and check on "Reconfigure XMR" Save

After players get those settings you will need to restart player. You should now see XMR Status: Connected (tcp://x.x.x.x:9505, last activity 04.05.2017 12:23:22) It will update every 30 seconds.

More information can be found here: https://xibo.org.uk/docs/setup/xtr-routine-tasks

If you want to see if you can perform an upgrade of Xibo 2.03 to 2.10 following the instructions from the vendor, I would be happy to oversee your efforts.

https://community.xibo.org.uk/t/2-1-0-release-xibo-signage/20004

Xibo Upgrade Preparations

Since we're done with the configuration of the webserver itself, we can go on with the Xibo upgrade. This is how Xibo processes it's upgrades:

- 1. Create a back-up of your Xibo file in your './www' folder and one of your SQL database.
- Move the contents of your Xibo files to another folder. Call the old folder something like 'Xibo old'.
- 3. Copy the new Xibo installation to the place of your previous install.
- 4. Copy your custom 'config.json', 'xmr.bat' and 'settings.php' files from the previous installation.
- 5. Reboot Server
- 6. Now open Xibo through the installation and the upgrade process should pop-up!
- 7. Your Xibo upgrade is ready.

Now we got the Xibo CMS files, let's get a database dump. This one is pretty easy as it also requires one single command. Tweak the command down below so it's the same as your own user/database name.

cd c:\Program Files\MySQL\MySQL Server 5.6\bin mysqldump -u root -p xibo_db> xibo_backup.sql

Enter your SQL root password when prompted

This might take a minute or two. Once it's done I recommend to get all the files to an external disk or location. A back-up that's stored on the local device isn't a back-up, it's just an extra security risk!

We will now download the Xibo CMS files to your home directory on your server.

https://github.com/xibosignage/xibo-cms/releases/download/2.1.0/xibo-cms-2.1.0.zip

Now we move our current installation to a different folder. Change the destination folder to something on your own webserver

Create a new folder C:\Xibo_OLD move C:\Xibo_CMS*.* C:\Xibo_OLD

Now we need to copy custom XMR file to new version.

Copy c:\Xibo_old\vendor\bin\config.json c:\Xibo_CMS\vendor\bin*.*

Now we need to copy XMR startup batch file to new version.

Copy c:\Xibo_old\xmr.bat c:\Xibo_CMS*.*

This will be the last step before we can open the Xibo upgrade page. As stated before we needed to back-up the 'settings.php' before replacing and moving the website files.

Copy c:\Xibo_old\web\settings.php c:\Xibo_CMS\web*.*

Reboot server

Xibo Upgrade Process

Now we've done all the preparations we can head to the Xibo upgrade page. Open your favorite browser and refer to the server IP address. If everything is configured correctly you should be greeted with the Xibo installation page on the page '<your webserver>/install'. Note you should be forwarded to this page automatically. If this is not the case, please check the settings in your configuration files as you probably missed something

Press next if everything is correct. You will see an overview of the steps involved in this upgrade.

(ibö							
/elcome to	the Xibo Upgrade					Release	Note
he steps in	volved in this upgra	de have been listed below, clicking the start bu	utton will run through the steps one by one. Please read th	hrough the release notes before you	begin as they contain in	nportant informa	ation
f you enco Start	unter an error, please	contact support providing a screenshot of this	s page, making sure you include the step that experience	d the error.			
f you enco Start Step #	unter an error, please Version	contact support providing a screenshot of this Step	s page, making sure you include the step that experience	d the error. Requested On	Complete?	Run On	
f you encou Start Step #	Version 1.8.0-alpha	Contact support providing a screenshot of this Step Alter the Log Table - Part 1	s page, making sure you include the step that experience	d the error. Requested On July 2, 2018 15:16	Complete?	Run On	

Hit 'Start' to start the Xibo upgrade process. The Xibo upgrade progress might take a while, so if you want you can grab a cup of coffee in the meantime. I had a few errors along the way stating some table columns already existed. Had to manually start the upgrade process again as it halted after the error. I don't think this will cause too much problems.

Once the upgrade is done, you will see the following message.

Welcome to the Xibo Upgrade

Upgrade Finished

Thank you for upgrading. Please click here to continue.

