



TECHNICAL DOCUMENT

LG WebOS 4 Setup Guide

This document is designed to act as a setup guide LG WebOS 4 players.

LG WebOS 4 Setup Guide

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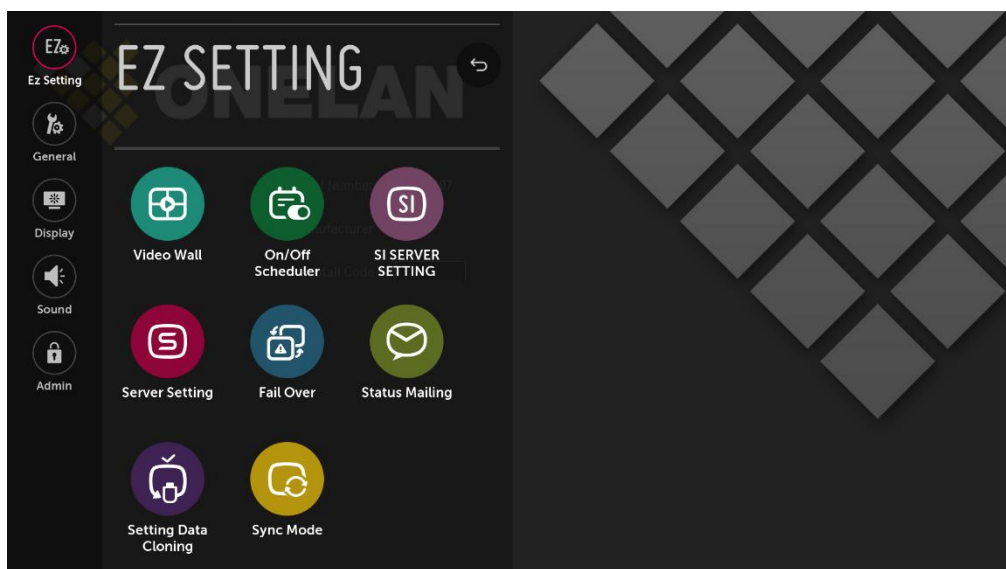
Installation

Plug the screen in and power on.

A keyboard can be plugged into the screen to assist with setup.

Setup

1. Using the remote, select your Language, Continent, Country and, if applicable, Time Zone.
2. Press OK.
3. Set the Rotation to the appropriate orientation you wish your screen to display.
4. Select a Network setting, either Wired if you are using an ethernet cable or Wi-Fi. If the latter, enter the network password.
5. For the On/Off Timer, ONELAN recommends that you set this to Always On as otherwise players may unexpectedly turn off despite instructions from the managing CMS.
6. You will now be taken to a screen with no signal. Press the Settings button on the remote or the gear icon (shown below). Select SI Sever Setting.



7. A server menu will now appear. Change Application Launch Mode to Remote and Fully Qualified Domain Name to On.

Note: At this point, ensure that Auto Set in the SI server setting menu is set to Off. SoC software update from CMS will not work otherwise.

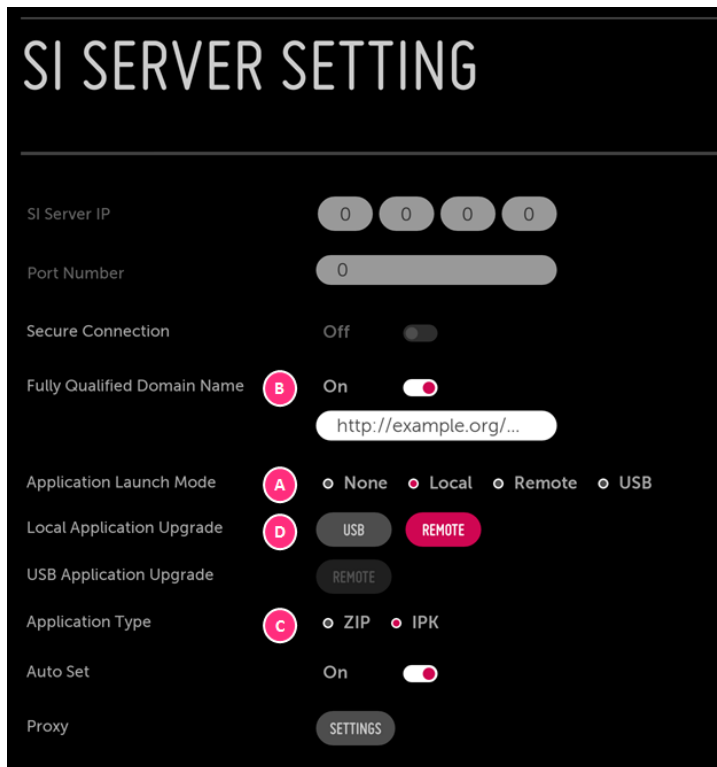
8. Now enter your CMS URL into the URL text box using the following format:

```
http://cms*****.domain.com/soc
```

or

```
http://<IPaddress>/soc
```

Note: Ensure that you append '/soc' to the end of the URL.




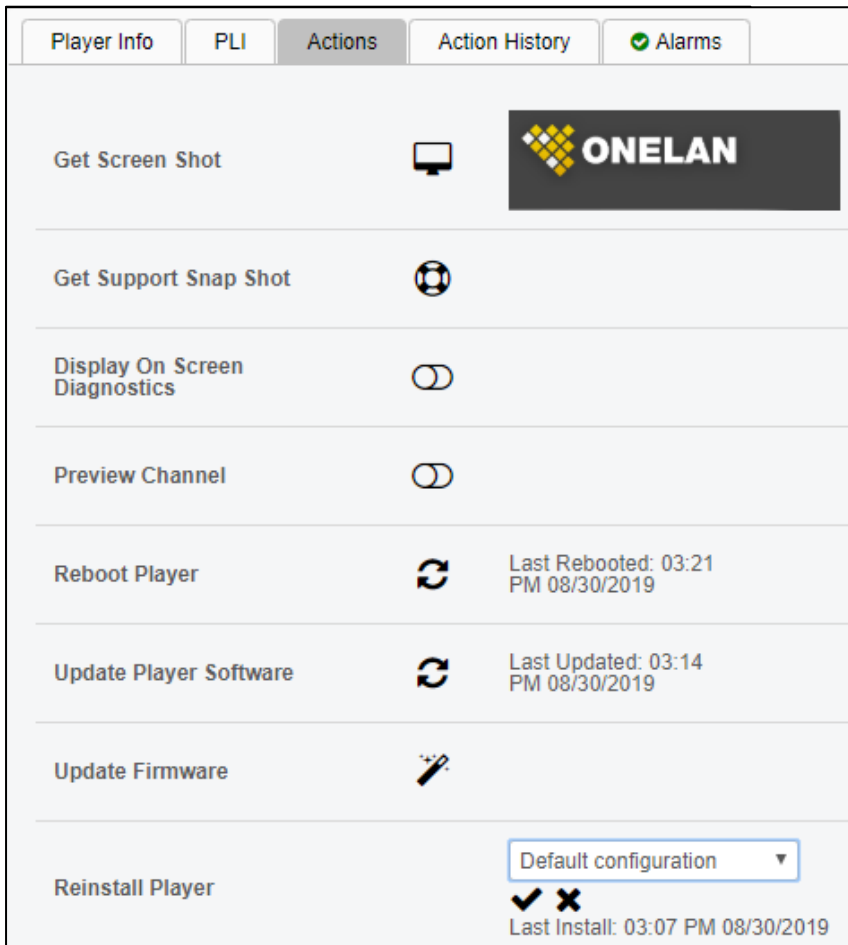
9. Now press the Back button in the top right of that menu and reboot the player.
10. The player will now connect to the CMS and install the Install Code page. This may take a few minutes and the player may reboot.

11. Now type the install code into the relevant field.

Note: This can alternatively be done remotely. See [installing configurations](#).


Installing Configurations

1. On your CMS, click the Manage Players  icon or navigate to Home > Manage Players.
2. Select the player from the list.
3. Click the Actions tab.



The screenshot shows the 'Actions' tab for a player in the ONELAN CMS. The interface includes a navigation bar with tabs for 'Player Info', 'PLI', 'Actions', 'Action History', and 'Alarms'. The 'Actions' tab is active. Below the navigation bar, there is a list of actions:



- Get Screen Shot**: Includes a monitor icon and the ONELAN logo.
- Get Support Snap Shot**: Includes a camera icon.
- Display On Screen Diagnostics**: Includes a toggle switch icon.
- Preview Channel**: Includes a toggle switch icon.
- Reboot Player**: Includes a refresh icon and the text 'Last Rebooted: 03:21 PM 08/30/2019'.
- Update Player Software**: Includes a refresh icon and the text 'Last Updated: 03:14 PM 08/30/2019'.
- Update Firmware**: Includes a plug icon.
- Reinstall Player**: Includes a dropdown menu with 'Default configuration' selected, a checkmark and an 'X' icon, and the text 'Last Install: 03:07 PM 08/30/2019'.

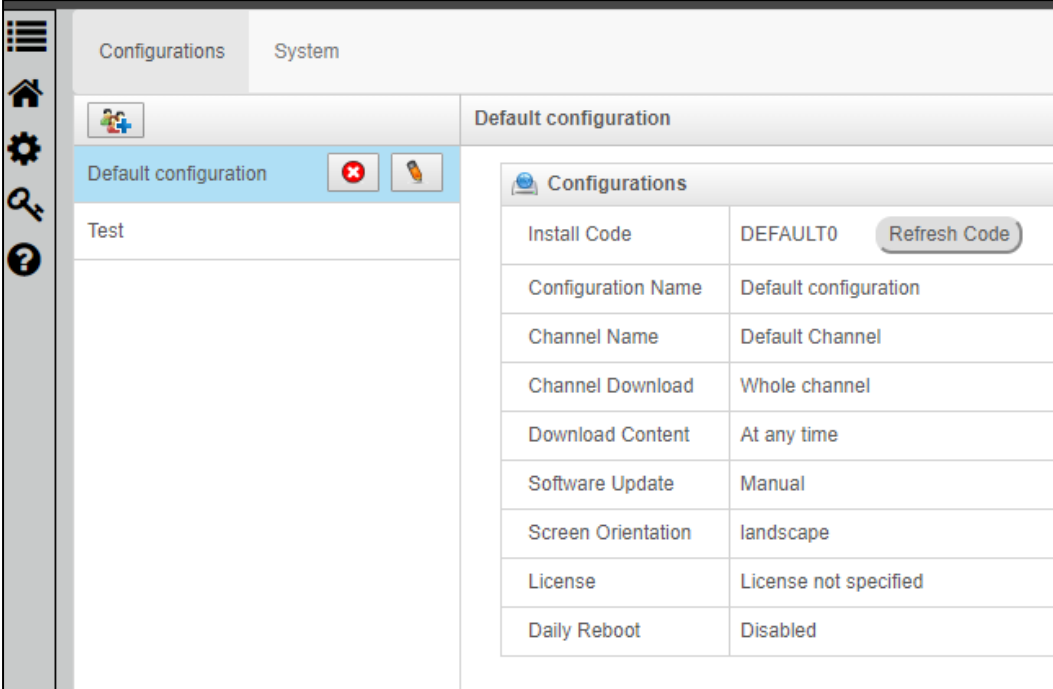
4. Click on the plug  icon.
5. Select the preferred configuration from the drop-down menu.

Note: During initial setup, when a SoC player displays the install code page you can use the reinstall feature on the CMS to install the player. This allows for a remote install rather than typing an install code into each player.

6. Click the tick button and the new configuration will install.


Creating Configurations

1. Click the Manage Players  icon in the top right-hand corner of the CMS. You can also reach this page by navigating to Home > Manage Players.
2. Click the Settings  icon on the left-hand side.



The screenshot shows the CMS interface with the 'Configurations' tab selected. The left sidebar contains navigation icons. The main content area is divided into two sections: 'Default configuration' and 'Configurations'. The 'Default configuration' section shows a table with the following data:

Install Code	DEFAULT0	Refresh Code
Configuration Name	Default configuration	
Channel Name	Default Channel	
Channel Download	Whole channel	
Download Content	At any time	
Software Update	Manual	
Screen Orientation	landscape	
License	License not specified	
Daily Reboot	Disabled	

3. Click the Add Configuration  button.
4. Type the name of the configuration and from the drop-down menus select the appropriate channel, screen orientation and license you want your configuration associated with. If you wish to restrict the channel download to specific times, click Restricted Times and enter the appropriate values.

This feature allows you to add and edit configurations. Therefore, you can install screens with pre-set orientations and channels.

Add Configuration

Configuration Name

Channel Name

Channel Download **Whole channel**
 Content matching conditional play

Download Content **At any time**
 Restricted times



Software Update

Screen Orientation


Daily Reboot **Disabled**
 Reboot daily at

License

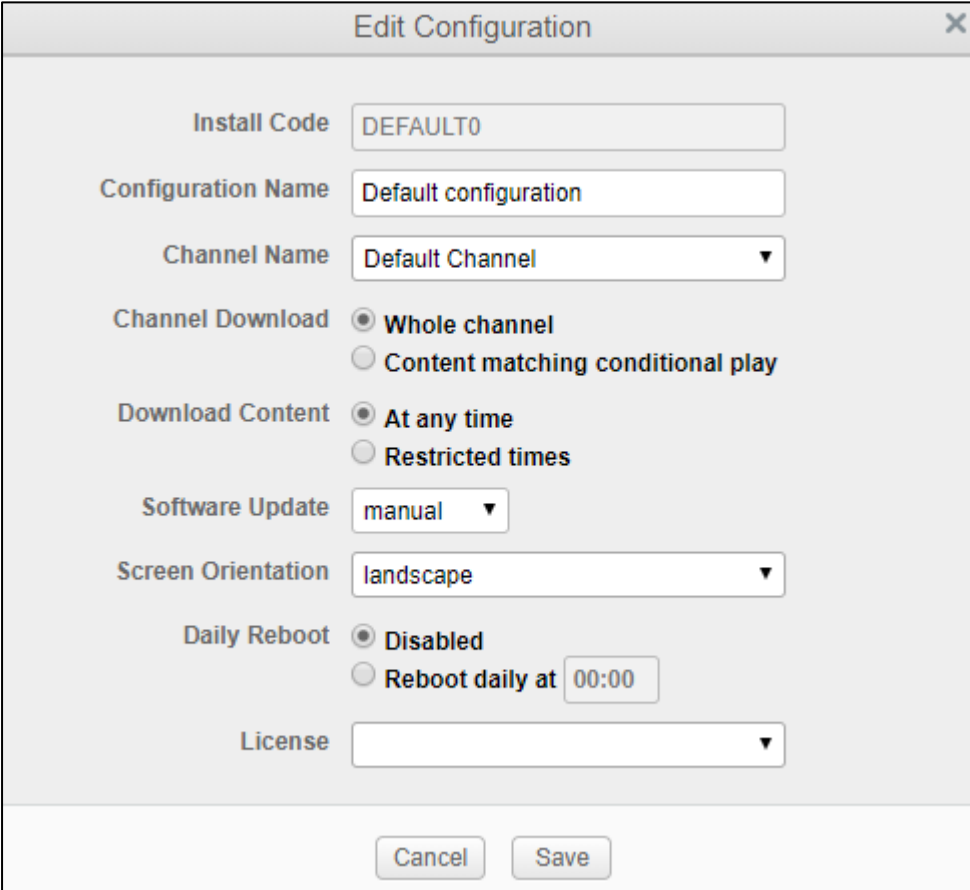
Editing or Deleting Configurations

1. Click the Manage Players  icon in the top right-hand corner of the CMS or navigate to Home > Manage Players.
2. Click the Settings  icon on the left-hand side.
3. Select a configuration in the list. It will highlight blue and two icons will appear to the right.

4. To edit:

4.1. Click the Edit  icon and a pop up will appear showing you the installation code.

4.2. You can rename the configuration, select a different channel, set channel download options, change the screen orientation or associated license and other options.



Edit Configuration

Install Code: DEFAULT0

Configuration Name: Default configuration

Channel Name: Default Channel

Channel Download: Whole channel Content matching conditional play

Download Content: At any time Restricted times

Software Update: manual


Screen Orientation: landscape

Daily Reboot: Disabled Reboot daily at 00:00

License: [Empty dropdown]

Buttons: Cancel, Save

5. To delete:

5.1. Click the Delete  icon.

5.2. This will open a pop up asking if you are sure. Select Yes.

Supported Formats

This section lists all the streaming protocols and media file formats supported on WebOS Signage 4.0.

Note: Each video encoding will have a huge variety of different parameters set, which may interfere with content playback. Therefore, is strongly recommended that you use the Channel Preview feature on your CMS to preview content before publishing content to your network of players to avoid any potential playback issues.

Audio

File Extension	Media Container	Code	Note
.mp3	MP3	MPEG-1, MPEG-2, Layer 2, Layer 3	<ul style="list-style-type: none">• Bite rate: 32 – 320 Kbps• Sample frequency: 16 – 48 KHz
.wav	WAV	PCM	-
.ogg	OGG	Vorbis	-
.wma	WMA	WMA	-

Image

File Extension	File Format
.jpeg, .jpg, .jpe	JPEG
.png	PNG
.bmp	BMP

Flash

Note: On WebOS signage, FLV and F4V files are playable only by using the <video> element.

Flash Player	Version	Flash Player v11.1
	Action Script	Actionscript v2.0, Actionscript v3.0
Graphic	Resolution	1920 x 1020 (FHD)
	Runtime-load Image Type	PNG, JPEG
Sound	Format	AAC, MP3
	Sample Rate	16 KHz, 32 KHz, 44.1 KHz
Flash Video	HW Codec	H.264 (with AAC audio only)
	Recommended Video Resolution	Up to FHD (1080p)
	Recommended Audio Sample Rate	44.1 KHz
Streaming Protocol		HTTP(s) RTMP/RTMP-e

Video

Note: The maximum supported video resolution is Full High Definition (FHD 1920 x 1080).

File Extension	Codec	
.asf, .wmv	Video	VC-1 advanced profile (WVMA excluded), VC-1 simple and main profiles.
	Audio	WMA Standard (WMA v1/WMA speech excluded), WMA 9 professional.
.divx, .avi	Video	DivX3.11, DivX4, DivX5, DivX6, XVID (except 3 warp-point GMC), H.264/AVC, Motion JPEG, MPEG-4.
	Audio	MPEG-1, Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, LPCM, ADPCM, DTS.
.mp4, .m4v, .mov	Video	H.264/AVC, MPEG-4.
	Audio	AAC, MPEG-1 Layer III (MP3).
.3gp, .3g2	Video	H.264/AVC, MPEG
	Audio	AAC, AMP-NB, AMR-WB
.mkv	Video	MPEG-2, MPEG-4, H.264/AVC, VP8
	Audio	Dolby Digital, PCM, DTS, MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Vorbis, AAC
.ts, .trp, .tp, .mts	Video	H.264/AVC, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III
.mpg, .mpeg, .dat	Video	MPEG-1, MPEG-2
	Audio	MPEG01, Layer I, II, MPEG-1 Layer III (MP3)
.vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1, Layer I, II, DCE-LPCM
.webm	Video	VP8, VP9
	Audio	Vorbis, Opus

Note: Use an audio file with a play time longer than one second. Playing a shorter audio file may not work properly on the platform.

Known Limitations

- NTB level gapless playback: this is a known limitation with LG Web OS players. The gapless playback will not be to the same level as the NTB and requires the configuration detailed in this document to be met. If the player cannot play one of the videos, then the player will fall back to playing the videos non-gapless.
- Gapless playback: is also not supported for 4K videos on LG Web OS players.
- Movies/images: use media of a similar size to the zone as otherwise scaling may cause loss of quality.
- GIFs: avoid using multiple animated GIFs as these can cause playback issues.
- SoC players do not yet support the Show part of Movie option for the Movie Size property.
- Letterbox mode is the only supported rendering mode for videos within gapless playback.
- LG cannot play audio and video soundtracks at the same time. Users must set volume to 0 on other items as appropriate.
- External storage: Kingston Datatraveler USBs are not recommended for use with external storage as this may lead to connectivity issues.
- If you are using HDMI as the sole input for playlist items and your external HDMI device goes offline, the playlist could show blank screens in a loop. Therefore, it is strongly recommended that your HDMI input playlist has a placeholder image that would show in instances where the HDMI input is offline.
- To ensure smooth playback, all playlist items containing videos or images must have a duration of 2 seconds or longer.
- Tile mode may result in playback issues for HDMI, DisplayPort, and video. To avoid these, ensure that Tile mode is disabled.