RPI5 LoopSign Deployment Guide

There is a very easy and reliable way to deploy LoopSign to a Raspberry 5

The OS is set to update itself with the latest available updates every Sunday. So, there is no need for any maintenance of the player.

Content

1. What do you need

- Raspberry Pi5
- MicroSD card (recommended SD card size is 32GB and above, as fast as possible)
  Please note that the Pi does not work with all kinds of SD card. If your Pi runs slow or gets unstable it is probably because of combability with the SD card. Then try another card brand.
- Hardware to «write» SD-Card
- Raspberry PI imager software
  https://downloads.raspberrypi.org/imager/imager_latest.exe
- Or if you prefer to use Rufus, that works perfectly as well. https://rufus.ie/en/

2. LoopSign Image Deployment

- Download the latest LoopSign Image from this link:
  https://sos.loopsign.eu/LS_Image/ls_image_2024_8_pi5.img.gz

- Connect an SD card reader and insert the SD card you want to use.
  - Start Raspberry Pi Imager
  - In Operating System, Choose "Use Custom"
  and select the file you downloaded
  - Choose storage (the SD-Card)
  - Click "Write"

- When "burning" has finished, insert the SD card in the RPI
- **Connect Network and HDMI-1 (port nearest the USB-C connector)**
- Connect power and wait for a few minutes for initial setup.
- If you do not get a picture after a few minutes, please disconnect/connect power to restart the unit.
- Note that if network is not connected it will take some extra time during startup

After starting up it will wait for confirmed network connection and then launch LoopSign demo page. (If network is connected)

3. Configuration

Press Alt+F4 to exit the kiosk browser.

3.1 Configure localization (Optional)

The PI is set up with Norwegian keyboard layout and TimeZone Oslo (Central Europe)
If you like to change this do as follows:
- Start - "Raspberry Pi Configuration" from desktop 🍓
- Select "Localization" and set whatever settings you prefer.

3.2 Configure WIFI (Optional)

If you need to connect to a WIFI network,
Click the "Double red cross/ Arrows" Icon in the right lower corner. And configure WIFI as needed

## 3.3 Configure screen orientation or resolution (Optional)

By default display runs in normal "landscape" mode 1080P 60Hz
If needed this can be changed by using the desktop Application "Screen Configuration".
Double click on the "Screen configuration" Icon, select "Execute" then right click on HDMI1 and
select orientation. Set the orientation to what you prefer.

4. Assign LoopSign screen

To assign player to your LoopSign screen note the displayed HASH code and assign it to your
LoopSign screen.

een paired with a LoopSign screen. Please ad
your LoopSign account to view your content
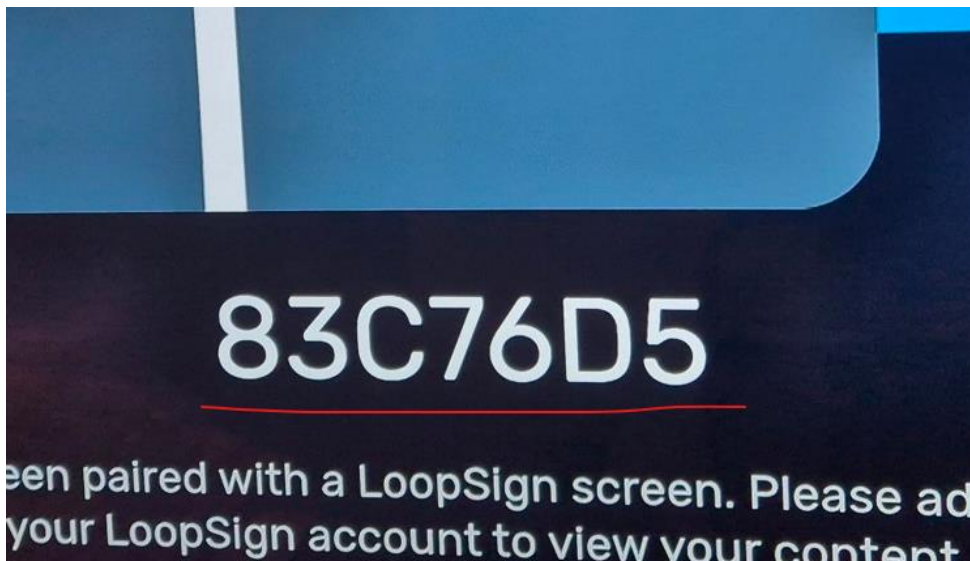
Login to your LoopSign account and enter "Settings" for the screen you want to assign.
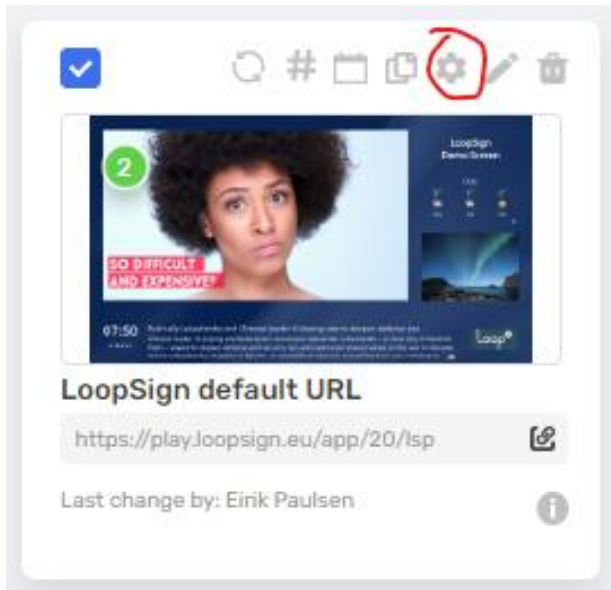
Enable "Samsung Tizen or Android LoopSign Player"
Then enter the HASH code from your player.

You can add more players to same screen if you like by selecting "ADD HASH"
Remember to Save settings.

5. Optional configurations

Feel free to tweak the OS as you like.
The password for the loopsign user account is: loop24.

5.1 Configure custom NTP server (Optional)

By default time sync is done by connection to a common NTP server on the internet. In most cases this is ok, however in the case where the network does not have NTP TCP port 123 open you need to specify an internal NTP server for time synchronization.

On the desktop, start a terminal window by clicking he LX Terminal icon up in the left corner.
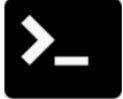
Type the following the terminal window then press enter:

sudo nano /usr/local/bin/loopsign.sh

Change the line where the NTP server is specified

Force sync the time using the ntpdate command
  ntpdate pool.ntp.org

After you also need to change system NTP server

sudo nano /etc/systemd/timesyncd.conf

Edit the file according to your needs.
To save file press "ctrl+o" then press "ctrl+x" to exit

```
[Time]

NTP=your.servername.goes.here

FallbackNTP=0.arch.pool.ntp.org 1.arch.pool.ntp.org 2.arch.pool.ntp.org 3.arch.pool.ntp.org

#RootDistanceMaxSec=5
#PollIntervalMinSec=32
#PollIntervalMaxSec=2048
```

6. Other options and add on

There are some configurations and tools that might be beneficial to install.

The password for the loopsign user account is: loop24.

6.1 Install Teamviewer

Open terminal window and run commends:

==wget bit.ly/loopsignteamviewer && sudo dpkg -i loopsignteamviewer==

==Sudo apt --fix-broken install -y==

6.2 Span over two screens

```
chromium-browser --kiosk <url> &

    sleep 5
    wmctrl -r Chromium -b remove,fullscreen
    wmctrl -r Chromium -b remove,maximized_vert,maximized_horz
    wmctrl -r Chromium -e 0,0,0,1920,2160
```

Add to bottom of bash script

```
# Wait for 10 seconds
sleep 10
# Activate the Chromium window
xdotool search --onlyvisible --class Chromium windowactivate --sync
# Wait for a brief moment
sleep 1
# Execute the wmctrl commands
wmctrl -r Chromium -b remove,fullscreen
wmctrl -r Chromium -b remove,maximized_vert,maximized_horz
wmctrl -r Chromium -e 0,0,0,1920,2160
```