

Install MagicMirror on Debian

06/21/2025 10:11 PM - Daniel Curtis

Status:	Resolved	Start date:	06/21/2025
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Node.js	Estimated time:	1.00 hour
Target version:	Debian	Spent time:	0.00 hour

Description

This is a guide for installing MagicMirror with Debian Bookworm on a Raspberry Pi 2

Prepare the Environment

- Make sure everything is up to date:

```
sudo apt update && sudo apt upgrade
```

- Install nodejs repo:

```
curl -fsSL https://deb.nodesource.com/setup_22.x -o nodesource_setup.sh
sudo bash nodesource_setup.sh
```

- Install required dependencies:

```
sudo apt install wayfire seatd xdg-user-dirs git nano openssl ca-certificates wget gnupg libgt
k-3-0 libx11-xcb-dev libnss3-dev libxss1 libxtst6 libasound2 libdrm2 libgbm1 fonts-arphic-umin
g procps arp-scan libatk1.0-0 libraspberrypi-bin liblvm14 libgl1-mesa-dri libglapi-mesa libse
nsors5 libdrm-radeon1 libelf1 libdrm-amdgpu libdrm-nouveau2 libgpiod-dev nodejs
```

- Edit cmdline.txt :

```
sudo nano /boot/firmware/cmdline.txt
```

- Add wayland=on to the command line options:

```
console=serial0,115200 console=tty1 root=PARTUUID=ef31a647-01 rootfstype=ext4 fsck.repair=yes
wayland=on rootwait cfg80211.ieee80211_regdom=US
```

- Create the magicmirror user and add it to the video group:

```
sudo adduser --uid 1001 -ingroup users --shell /bin/bash --comment "magicmirror" mm
sudo usermod -aG video mm
```

- Create a wayfire service file:

```
sudo nano /etc/systemd/system/wayfire.service
```

- And add the following:

```
[Unit]
Description=Wayfire Wayland Compositor
After=rc-local.service

[Service]
User=mm
Type=simple
ExecStart=/usr/bin/wayfire
Restart=on-failure
Environment=XDG_RUNTIME_DIR=/var/run/user/1001

[Install]
WantedBy=multi-user.target
```

- Reload systemd and enable the service at boot:

```
sudo systemctl daemon-reload
sudo systemctl enable wayfire
```

Install MagicMirror

- Switch to the magicmirror user:

```
sudo su - mm
```

- Add `XDG_RUNTIME_DIR` to `.bashrc`:

```
echo "export XDG_RUNTIME_DIR=/run/user/1001" >> ~/.bashrc
```

- Clone the MagicMirror repository:

```
git clone https://github.com/MagicMirrorOrg/MagicMirror
```

- Install the application:

```
cd MagicMirror
npm run install-mm
```

- Create the config file:

```
cp config/config.js.sample config/config.js
```

Autostart MagicMirror

- Create a launch script:

```
nano /home/mm/launch-mm.sh
```

- And add the following:

```
#!/bin/bash
```

```
cd /home/mm/MagicMirror
npm run start:wayland
```

- Don't forget to make it executable:

```
chmod +x /home/mm/launch-mm.sh
```

- Create a wayfire config

```
nano /home/mm/.config/wayfire.ini
```

- And add the following:

```
[core]
plugins = autostart

[autostart]
boot = /home/mm/launch-mm.sh
```

Resources

- <https://docs.magicmirror.builders/getting-started/installation.html>
- https://github.com/sdetweil/MagicMirror_scripts/blob/master/raspberry.sh
- https://gitlab.com/khassel/magicmirror/-/raw/master/build/Dockerfile-debian?ref_type=heads
- <https://gist.github.com/seffs/2395ca640d6d8d8228a19a9995418211>
- <https://www.raspberrypi.com/documentation/computers/configuration.html#wayland>
- https://utdreadm.org/xdg_runtime_dir-is-invalid-or-not-set-on-raspberry-pi-5/
- <https://forums.raspberrypi.com/viewtopic.php?t=376273>

History

#1 - 06/22/2025 04:51 PM - Daniel Curtis

- Estimated time set to 1.00 h
- % Done changed from 0 to 90
- Status changed from New to In Progress
- Description updated

#2 - 06/22/2025 04:56 PM - Daniel Curtis

- Description updated

#3 - 06/22/2025 09:53 PM - Daniel Curtis

- % Done changed from 90 to 100
- Status changed from In Progress to Resolved
- Description updated