

Docker Run

Docker runs processes in isolated containers. A container is a process which runs on a host. The host may be local or remote. When an operator executes docker run, the container process that runs is isolated in that it has its own file system, its own networking, and its own isolated process tree separate from the host.

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Guacamole Remote Desktop Client

Use this command to install Guacamole Remote Desktop Client. Change the port and volume bind location if needed.

```
docker run \  
  -p 8080:8080 \  
  -v /guacamole:/config \  
  oznu/guacamole
```

Matomo

Take back control with Matomo – a powerful web analytics platform that gives you 100% data ownership.

Matomo is used to gather analytics on The Homelab Wiki

See the [official GitHub repo](#) for more information.

Use the following command to install Matomo. Change the port and volume as needed.

```
docker run -d -p 8000:8000 --name matomo \
-v /home/usr/matomo/data:/data \
crazymax/matomo:latest
```

The screenshot displays the Matomo dashboard interface. At the top, there's a navigation bar with 'matomo' logo, 'Dashboard', 'All Websites', 'Tag Manager', and utility icons. Below the navigation bar, there's a search bar and several filters: 'MATOMO', '2020-09-20', 'ALL VISITS', and 'DASHBOARD'. A notification for 'NEW UPDATE: MATOMO 3.14.1' is visible.

The main content area is divided into several sections:

- Visits in Real-time:** A table showing recent visits and actions. The table has columns for DATE, VISITS, and ACTIONS. It lists several entries for Monday, September 21, 2020, with details like time of day, browser, and device.
- Visits Over Time:** A line graph showing the number of visits over a period from Saturday, August 22 to Saturday, September 19. The y-axis represents the number of visits, ranging from 0 to 50.
- Become a Matomo Expert:** A widget showing progress towards becoming a Matomo expert. It includes a progress bar, a list of challenges (Embed tracking code, Add a goal, Upload your logo, Add another user, Add another website), and a 'Next challenges' link.
- Premium Features & Services for Matomo:** A section promoting the Enterprise version, with a 'READ MORE' button.
- Visits Overview:** A summary of key metrics: 45 visits, 39 unique visitors, 5 min 19s average visit duration, and 53% visits have bounced.
- Visitor Map:** A world map showing the geographic distribution of visitors, with a count of 39 unique visitors.

Intall Watchtower with E-Mail (Gmail) Notifications

Use the following code to install watchtower with gmail notifications. See more information and [documentation here](#).

```
sudo docker run -d \  
  --name watchtower \  
  -v /var/run/docker.sock:/var/run/docker.sock \  
  -e WATCHTOWER_NOTIFICATIONS=email \  
  -e WATCHTOWER_NOTIFICATION_EMAIL_FROM=youremail@gmail.com \  
  -e WATCHTOWER_NOTIFICATION_EMAIL_TO=youremail@gmail.com \  
  -e WATCHTOWER_NOTIFICATION_EMAIL_SERVER=smtp.gmail.com \  
  -e WATCHTOWER_NOTIFICATION_EMAIL_SERVER_USER=youremail@gmail.com \  
  -e WATCHTOWER_NOTIFICATION_EMAIL_SERVER_PASSWORD=your-email-password \  
  -e WATCHTOWER_NOTIFICATION_EMAIL_DELAY=2 \  
  containrrr/watchtower
```

Without email notifications

```
sudo docker run -d \  
  --name watchtower \  
  -v /var/run/docker.sock:/var/run/docker.sock \  
  containrrr/watchtower
```

Install Glances to Monitor Docker Containers (with web interface)

Glances can be installed through Docker, allowing you to run it without installing all the python dependencies directly on your system. Once you have Docker installed you can run the following command to install Glances with a web interface. [See more information here.](#)

```
sudo docker run -d --restart="always" -p 61208-61209:61208-61209 -e GLANCES_OPT="-w" -v /var/run/docker.sock:/var/run/docker.sock --pid host docker.io/nicolargo/glances
```

```
xps (Ubuntu 14.04 64bit / Linux 3.13.0-85-generic) - IP 192.168.0.6/24 Uptime: 1 day, 20:23:55
1.80/1.80GHz CPU [|||||] 100% CPU user: 97.9% nice: 0.0% ctx_sw: 7605 MEM 26.8% active: 878M SWAP 7.6% LOAD 4-core
MEM [|||||] 26.8% system: 2.1% irq: 0.0% inter: 5015 total: 7.71G inactive: 1.58G total: 7.91G 1 min: 3.21
SWAP [||] 7.6% idle: 0.0% steal: 0.0% sw_int: 1273 used: 2.06G buffers: 5.73M used: 612M 5 min: 1.86
free: 5.64G cached: 645M free: 7.31G 15 min: 1.17

NETWORK Rx/s Tx/s CONTAINERS 2 (served by Docker 1.11.1)
docker0 0b 0b
lo 392b 392b
h2c39a99 0b 0b
h610b701 0b 0b
wlan0 10.5Mb 860Kb

Name Status CPU% MEM /MAX IOR/s IOW/s Rx/s Tx/s Command
dbgrafana grafana_1 Up 2 mins 0.0 5.94M 7.71G 0b 0b 0b 0b /run.sh
_bgrafana_influxdb_1 Up 2 mins 0.1 8.60M 7.71G 0b 0b 0b 0b /run.sh

TASKS 257 (780 thr), 5 run, 252 slp, 0 oth sorted automatically by cpu_percent, flat view

DISK I/O R/s W/s
sda1 0 0
sda2 78K 2K
sda3 66K 0

FILE SYS Used Total
/ (sda2) 71.26 226G
/boot/efi 3.38M 511M

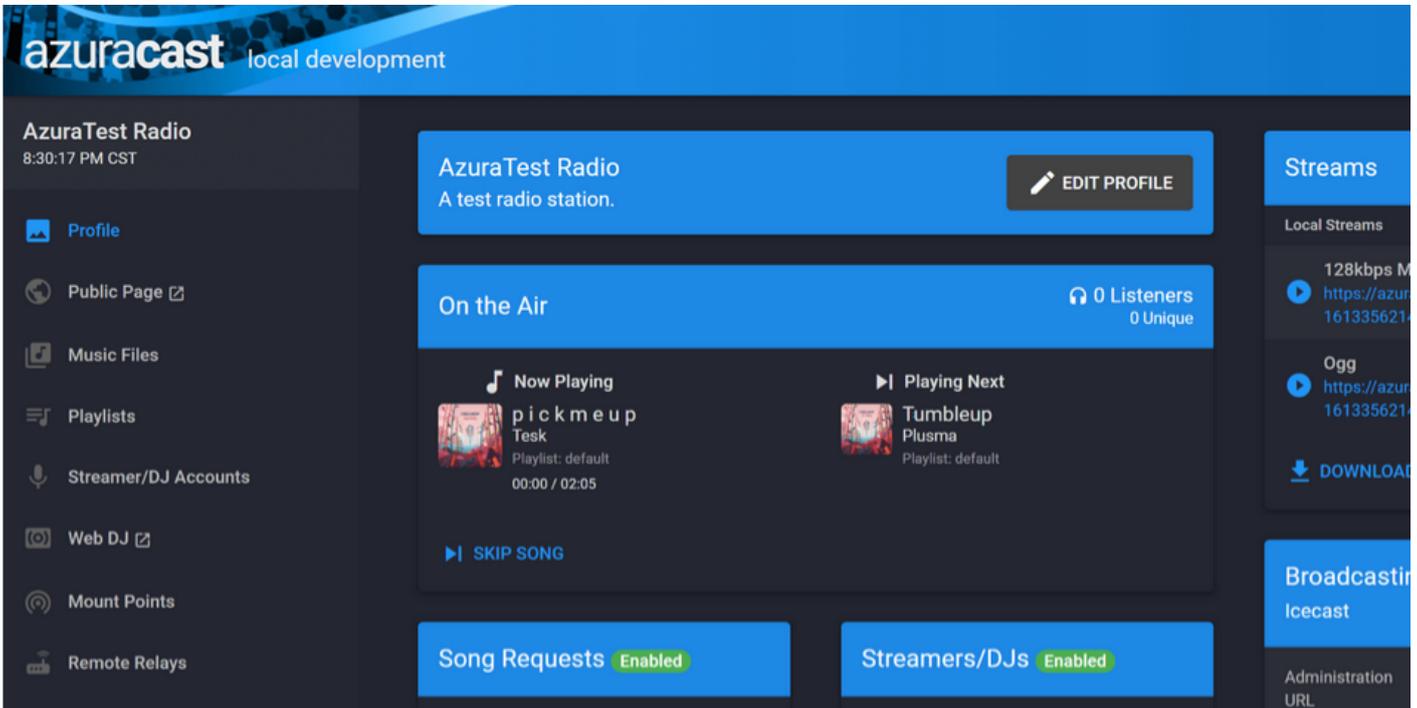
SENSORS
temp1 27C
temp2 29C
Physical id 0 74C
Core 0 74C
Core 1 74C
Battery 33%

CPU% MEM% VIRT RES PID USER NI S TIME+ R/s W/s Command
96.0 0.0 7.13M 100K 20888 nicolargo 0 R 0:03.50 0 0 stress --cpu 4 -t 30
91.8 0.0 7.13M 100K 20890 nicolargo 0 R 0:03.33 0 0 stress --cpu 4 -t 30
91.5 0.0 7.13M 100K 20891 nicolargo 0 R 0:03.26 0 0 stress --cpu 4 -t 30
86.4 0.0 7.13M 100K 20889 nicolargo 0 R 0:03.19 0 0 stress --cpu 4 -t 30
12.7 11.8 2.50G 933M 11378 nicolargo 0 S 2h21:43 0 1M /usr/lib/firefox/firefox
5.1 0.3 548M 23.4M 19899 nicolargo 0 R 0:07.27 0 0 python -m glances
4.3 2.1 2.04G 163M 3278 nicolargo 0 S 36:17.83 0 0 /usr/bin/gnome-shell
2.7 0.0 0 0 577 root 0 S 1:36.94 0 0 irq/59-iwlwifi
1.5 1.3 477M 100M 2141 root 0 S 17:18.96 0 0 /usr/bin/X :0 -background none -verbose -auth /var/run/gdm/aut
1.5 1.5 1.18G 122M 23657 nicolargo 0 S 0:07.93 0 0 /usr/bin/perl /usr/bin/shutter
0.6 0.2 914M 19.2M 19237 nicolargo 0 S 0:33.56 0 0 /usr/bin/python /usr/bin/terminator
0.6 0.3 606M 20.8M 2870 root 0 S 0:30.96 0 0 /usr/bin/docker daemon --raw-logs
0.6 0.1 358M 6.70M 3142 nicolargo 0 S 1:14.27 20K 0 /usr/bin/ibus-daemon --daemonize --xim
0.3 0.1 612M 11.1M 3381 nicolargo 19 S 0:44.80 0 0 /usr/lib/tracker/tracker-miner-fs
0.3 0.0 201M 1.16M 3227 nicolargo 0 S 0:19.28 2K 0 /usr/lib/ibus/ibus-engine-simple
0.3 0.3 1.18G 22.2M 4835 nicolargo 0 S 0:23.10 0 0 nautilus --new-window
0.3 0.0 410M 2.81M 1112 root 0 S 0:07.11 0 0 NetworkManager
0.3 0.3 649M 27.3M 3099 nicolargo 0 S 0:08.46 0 0 /usr/lib/x86_64-linux-gnu/bamf/bamfdaemon
0.3 0.0 0 0 79 root 0 S 0:20.63 0 0 kworker/3:1
0.3 0.0 88.4M 240K 2083 www-data 0 S 0:02.72 0 0 nginx: worker process
0.3 0.3 2.07G 25.6M 2194 rabbitmq 0 S 5:41.18 0 0 /usr/lib/erlang/erts-5.10.4/bin/beam.smp -W w -K true -A30 -P
0.3 0.0 0 0 16492 root 0 S 0:01.94 0 0 kworker/2:2
0.0 0.0 0 0 18 root 0 S 0:00.00 0 0 rcuob/1
0.0 0.1 999M 10.0M 3315 nicolargo 0 S 0:09.78 0 0 /usr/lib/gnome-online-accounts/goa-daemon
0.0 0.0 0 0 27916 root 0 S 0:00.00 0 0 irq/61-mei me
0.0 0.0 0 0 39 root 0 S 0:00.70 0 0 ksoftirqd/3

Warning or critical alerts (last 4 entries)
2016-05-16 16:53:12 (ongoing) - CPU_USER (97.6): stress, stress, stress
2016-05-16 16:52:41 (0:00:18) - WARNING on MEM (76.0)
2016-05-16 16:52:01 (0:00:33) - CRITICAL on CPU_IOWAIT (Min:51.9 Mean:63.4 Max:77.1): bash, stress, firefox
2016-05-16 16:51:31 (0:00:30) - CRITICAL on CPU_USER (Min:80.5 Mean:95.8 Max:98.3): stress, stress, stress
```

Install AzuraCast

Use these commands to install AzuraCast on your host machine. This will install Docker in the process.



```
sudo su
```

```
apt-get upgrade
```

```
apt-get update
```

```
mkdir -p /var/azuracast
```

```
cd /var/azuracast
```

```
curl -fsSL https://raw.githubusercontent.com/AzuraCast/AzuraCast/main/docker.sh docker.sh
```

```
chmod a+x docker.sh
```

```
./docker.sh install
```