Installing Mosquitto on Amazon Linux 2023

Ahmed Mansouri · Follow

Published in AWS in Plain English

3 min read · Jan 24, 2024

(▷) Listen   (↑) Share

Amazon Linux 2023, the latest release of Amazon's Linux distribution, brings with it enhanced features and improvements. However, one notable absence from the default package repositories is the Mosquitto MQTT broker. Mosquitto is a widely used and robust open-source MQTT broker that facilitates communication between IoT devices. In this article, we will guide you through the process of installing Mosquitto on Amazon Linux 2023 using the source code.

While some Linux distributions provide pre-built packages for Mosquitto, Amazon Linux 2023 does not include it by default in its repositories. This necessitates the installation from the source code, ensuring that you have the latest version and full control over the configuration options.

— Prerequisites —

Before proceeding with the Mosquitto installation, it is essential to confirm the prerequisites listed below.

- Let's first check our OS

```
cat /etc/os-release
```


- Install the packages below

```
sudo su
yum install -y cmake openssl-devel libxslt
yum groupinstall -y "Development Tools"
```

```
git clone https://github.com/DaveGamble/cJSON.git
cd cJSON
cmake .
make
make install
```

Make sure that the `cJSON` is installed correctly

```
Consolidate compiler generated dependencies of target compare_tests
[ 80%] Built target compare_tests
Consolidate compiler generated dependencies of target cjson_add
[ 84%] Built target cjson_add
Consolidate compiler generated dependencies of target readme_examples
[ 88%] Built target readme_examples
Consolidate compiler generated dependencies of target minify_tests
[ 93%] Built target minify_tests
Consolidate compiler generated dependencies of target fuzz_main
[100%] Built target fuzz_main
Install the project...
-- Install configuration: ""
-- Installing: /usr/local/include/cjson/cJSON.h
-- Installing: /usr/local/lib64/pkgconfig/libcjson.pc
-- Installing: /usr/local/lib64/libcjson.so.1.7.17
-- Installing: /usr/local/lib64/libcjson.so.1
-- Installing: /usr/local/lib64/libcjson.so
-- Installing: /usr/local/lib64/cmake/cJSON/cjson.cmake
-- Installing: /usr/local/lib64/cmake/cJSON/cjson-noconfig.cmake
-- Installing: /usr/local/lib64/cmake/cJSON/cJSONConfig.cmake
-- Installing: /usr/local/lib64/cmake/cJSON/cJSONConfigVersion.cmake
[root@ip-172-31-5-11 cJSON]#
```

- Add the user that will be used by mosquitto

```
useradd -r -U mosquitto
```

— Downloading Mosquitto Source Code —

```
cd ..
mkdir mosquitto && cd mosquitto
wget https://mosquitto.org/files/source/mosquitto-2.0.18.tar.gz
tar -xvzf mosquitto-2.0.18.tar.gz
cd mosquitto-2.0.18
```

> *NOTE : If you intend to install the most recent version of Mosquitto, verify the latest release on the provided link. Afterwards, ensure to adjust the version in the* `wget` *command mentioned above accordingly.*

https://mosquitto.org/files/source/

— Installing Mosquitto —

```
cmake .
make
make install
```

```
-- Set runtime path of "/usr/local/bin/mosquitto_ctrl" to
-- Installing: /usr/local/bin/mosquitto_passwd
-- Installing: /usr/local/lib64/mosquitto_dynamic_security.so
-- Set runtime path of "/usr/local/lib64/mosquitto_dynamic_security.so" to ""
-- Installing: /usr/local/share/man/man1/mosquitto_ctrl.1
-- Installing: /usr/local/share/man/man1/mosquitto_ctrl_dynsec.1
-- Installing: /usr/local/share/man/man1/mosquitto_passwd.1
-- Installing: /usr/local/share/man/man1/mosquitto_pub.1
-- Installing: /usr/local/share/man/man1/mosquitto_sub.1
-- Installing: /usr/local/share/man/man1/mosquitto_rr.1
-- Installing: /usr/local/share/man/man3/libmosquitto.3
-- Installing: /usr/local/share/man/man5/mosquitto.conf.5
-- Installing: /usr/local/share/man/man7/mosquitto-tls.7
-- Installing: /usr/local/share/man/man7/matt_7
```

◑◗ Medium   🔍 Search   👤

process .

— Starting and Verifying Mosquitto —

- Specify the desired user for running Mosquitto in the configuration file as follows:

```
vi /usr/local/etc/mosquitto/mosquitto.conf
```

For our case , I'm using the user *mosquitto* created before

Uncomment the entry for user *mosquitto*

```
# then it will drop privileges to the "nobody" user instead.
# If run as a non-root user, this setting has no effect.
# Note that on Windows this has no effect and so mosquitto should be started by
# the user you wish it to run as.
user mosquitto        ←──────────────

# ================================================================
# Listeners
# ================================================================
```

- Le't start `mosquitto`

==> `mosquitto` is operating successfully on port `1883` with the latest version, `2.0.18`, as of the article's creation.

In Plain English 🚀

Thank you for being a part of the **In Plain English** *community! Before you go:*

- Be sure to **clap** and **follow** the writer 👏

- Follow us: **X** | **LinkedIn** | **YouTube** | **Discord** | **Newsletter**

- Visit our other platforms: **Stackademic** | **CoFeed** | **Venture**

- More content at **PlainEnglish.io**
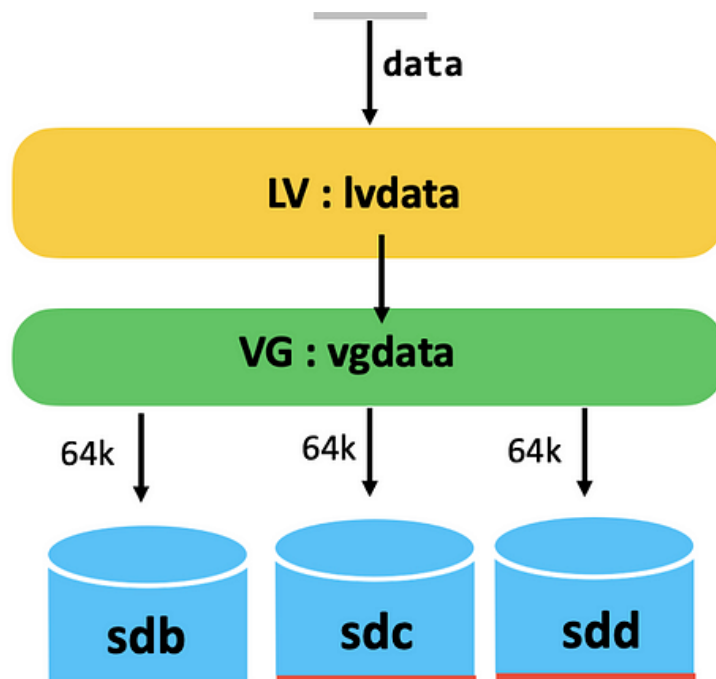
Aws Ec2   Amazon Linux 2023   Mosquitto   Mosquitto Mqtt   Linux

Written by Ahmed Mansouri

60 Followers · Writer for AWS in Plain English

System , Cloud and DevOps

Follow

More from Ahmed Mansouri and AWS in Plain English

👤 Ahmed Mansouri

Boosting Linux Storage Performance with LVM Striping

6 min read · Feb 4, 2024

👏 66   💬   🔖⁺

Usman Aslam in AWS in Plain English

10 Career Lessons from Recent Google Layoffs and Turbulent Tech Market

Insights and strategies to navigate career turbulence amidst Google's layoffs and the broader tech landscape

✦ · 6 min read · Jan 22, 2024

👏 865   💬 6   🔖⁺

Usman Aslam in AWS in Plain English

The 3 Secrets That 5x'ed My Friend's Tech Salary without FAANG

The game-changing tactics that helped my friend rise without FAANG

✦ · 4 min read · Jan 10, 2024

👏 953   💬 10   🔖⁺

Ahmed Mansouri

Working with "initramfs" and "initrd" in Linux

In Linux, the initrd (initial RAM disk) and initramfs (initial RAM File System) are different methods we can use to load a temporary root...

7 min read · Jun 27, 2023

👏 28   💬

🔖⁺

See all from Ahmed Mansouri

See all from AWS in Plain English

Recommended from Medium