# **Linux Installation**

## Prerequisites

- Have a computer/server running Linux (recommended: Ubuntu 18.04 LTS or newer)
- Download the required version of the Chariot MQTT Server zip file



If Upgrading Chariot to a Newer Version please review this tutorial.

The instructions below detail Installing (as superuser), Installing (as non superuser), Starting, Stopping, Restarting and Uninstalling the Chariot MQTT Server.

# Installing Chariot® MQTT Server (as superuser)

1. Using the file transfer method of your choice, transfer the Chariot MQTT Server zip file to the Linux server. From a command prompt, run the unzip command on the file. For example, unzip the files into a directory named Chariot

```
unzip ./chariot_linux.zip -d ./Chariot
```

2. From the command prompt, run the Chariot service install script in the directory where the files were unzipped.

/bin/bash ./install.sh

```
ubuntu@ip-10-0-8-247:~/Chariot$ /bin/bash ./install.sh
install.sh: Installing JDK ...
install.sh: Installing YAJSW ...+++++++++ YAJSW SET ENV +++++++++
openjdk version "11.0.6" 2020-01-14 LTS
OpenJDK Runtime Environment Corretto-11.0.6.10.1 (build 11.0.6+10-LTS)
OpenJDK 64-Bit Server VM Corretto-11.0.6.10.1 (build 11.0.6+10-LTS, mixed mode)
wrapper home : /home/ubuntu/Chariot/yajsw
configuration: /home/ubuntu/Chariot/yajsw/conf/wrapper.conf
openjdk version "11.0.6" 2020-01-14 LTS
OpenJDK Runtime Environment Corretto-11.0.6.10.1 (build 11.0.6+10-LTS)
OpenJDK 64-Bit Server VM Corretto-11.0.6.10.1 (build 11.0.6+10-LTS, mixed mode)
           -- YAJSW SET ENV --
sudo: unable to resolve host ip–10–0–0–247
openJDK Runtime Environment Corretto-11.0.6.10.1 (build 11.0.6+10-LTS)
OpenJDK 64-Bit Server VM Corretto-11.0.6.10.1 (build 11.0.6+10-LTS, mixed mode)
wrapper home : /home/ubuntu/Chariot/yajsw
configuration: /home/ubuntu/Chariot/yajsw/conf/wrapper.conf
openjdk version "11.0.6" 2020-01-14 LTS
OpenJDK Runtime Environment Corretto-11.0.6.10.1 (build 11.0.6+10-LTS)
OpenJDK 64-Bit Server VM Corretto-11.0.6.10.1 (build 11.0.6+10-LTS, mixed mode)
           - YAJSW SET ENV -
 YAJSW: yajsw-stable-12.14
     : Linux/4.4.0–1075–aws/amd64
JVM : Amazon.com Inc./11.0.6//home/ubuntu/Chariot/lib/runtime/amazon-corretto-11.0.6.10.1-linux-x64/64
********* INSTALLING chariot *************
 Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService getPid
INFO: wrapper pid file: /run/wrapper.chariot.pid
 Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService install
 WARNING: created daemon script: /etc/init.d/chariot
 Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService install
INFO: created link : /etc/rc5.d/S20chariot
 Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService install
INFO: created link : /etc/rc3.d/S20chariot
Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService install
INFO: created link : /etc/rc2.d/S20chariot
Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService install
INFO: created link : /etc/rc4.d/S2Ochariot
Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService install
INFO: created link : /etc/rc1.d/K2Ochariot
Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService install
INFO: created link : /etc/rc6.d/K20chariot
Sep 23, 2020 4:46:02 PM org.rzo.yajsw.os.posix.PosixService install
INFO: created link : /etc/rc0.d/K20chariot
Service chariot installed
install.sh: Chariot successfully installed!
install.sh: To launch Chariot daemon:
         $ ./daemonStart.sh
install.sh: Current Chariot status: INSTALLED
 ubuntu@ip-10-0-0-247:~/Chariot$
```

3. The Chariot MQTT Server should now be installed in the Linux server and will run automatically when the server is booted.

## Installing Chariot MQTT Server (as non-superuser)

- 1. Using the file transfer method of your choice, transfer the downloaded Chariot MQTT Server zip file to the server.
- 2. From a command prompt, create a new user 'chariot' and give the user super user privileges

```
sudo adduser chariot
sudo usermod -aG sudo chariot
```

3. From the command prompt, install the unzip utility.

```
sudo apt-get install unzip
```

4. From the command prompt, switch user to the 'chariot' user

```
su chariot
```

5. From the command prompt, run the unzip command on the file. For example, unzip the files into a directory named chariot

```
sudo unzip /tmp/chariot_linux.zip -d ./chariot
```

6. From the command prompt, run the Chariot service install script in the directory where the files were unzipped.

```
cd chariot sudo /bin/bash ./install.sh
```

7. From the command prompt, change ownership to 'chariot', log out of the 'chariot' user, remove 'chariot' from the sudo group and log in as 'chariot'

```
cd ..
sudo chown -R chariot:chariot ./chariot
exit
sudo deluser chariot sudo
su chariot
```

8. The Chariot MQTT Server should now be installed in the Linux server and will run automatically when the server is booted.

# Starting the Chariot MQTT Server

From a command prompt, run the Chariot service start script in the directory where the service was installed.
 For Chariot versions prior to 2.4.1

```
/etc/init.d/chariot start
```

For Chariot versions 2.4.1 and newer

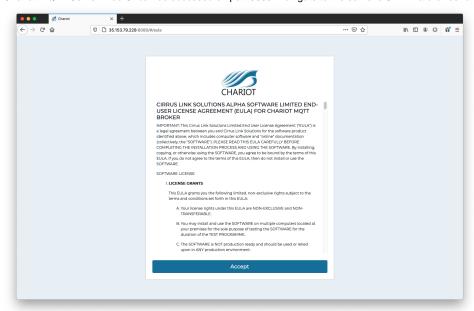
```
systemctl start chariot
```

2. Verify the Chariot service is running. From a command prompt, run the Chariot service status script in the directory where the service was installed.

```
./status.sh
```

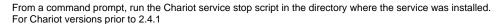
The status returned will be: INSTALLED, NOT INSTALLED or RUNNING.

Additionally the Chariot MQTT Server Web UI can be accessed on port 8080. Navigate to the server's URL in a browser and verify that the EULA



page is shown.

## Stopping the Chariot MQTT Server



/etc/init.d/chariot stop

#### For Chariot versions 2.4.1 and newer

systemctl stop chariot

### Restarting the Chariot MQTT Server

From a command prompt, run the Chariot service restart script in the directory where the service was installed

For Chariot versions prior to 2.4.1

/etc/init.d/chariot restart

#### For Chariot versions 2.4.1 and newer

systemctl restart chariot

#### Uninstalling the Chariot MQTT Server

1. From a command prompt, run the Chariot service uninstall script in the directory where the service was installed.

./uninstall.sh