

DigitalSTROM MQTTG Gateway in a Docker container

this is WIP this is how i set up Chriss Gross' [MQTT bridge](#) to run inside a node docker container. i have also slightly modified his script to use authentication and to allow setting the qos in the config file as well:

[docker-compose.yml](#)

```
# create ./app directory with uid and gid 1000 first
services:
  node:
    build: ./build
    restart: always
    user: 1000:1000
    working_dir: /app
    environment:
      - NODE_ENV=production
    volumes:
      - ./app:/app
```

```
mkdir ./app
chown 1000.1000 app
mkdir ./build
```

[build/startup.sh](#)

```
#!/bin/bash
USERNAME="myuser"
PASSWORD="mysecret"
MQTT_SERVER="mqtt.psuter.ch"

if [ -z "$(ls -A /app)" ]; then
  echo "installing dss mqtt bridge (see
https://github.com/cgHome/mqtt-dss-bridge)"
  cd /app
  npm install --save mqtt-dss-bridge
  echo "IMPORTANT: configure the bridge by editing
/app/node_modules/mqtt-dss-bridge/config.js"
  echo "installation completed"
fi
echo "Starting DSS to MQTT bridge"
# start the bridge in the background
cd /app
node /app/node_modules/mqtt-dss-bridge/index.js 2>&1 &
PID=$!
```

```
echo "DSS Bridge started with PID $PID"
# start a loop to monitor the status every second
errcntr=0
lastUpdate=999
while true; do
    lastUpdate=$(( \
        $(date +%s)\
        -\
        $(date -d "$( \
            mosquitto_sub -h $MQTT_SERVER -u $USERNAME -P $PASSWORD
-t dss/state/lastDiscovered -C 1 | \
            sed -E -e 's/'([0-9]{4}-[0-9]{2}-
[0-9]{2})T([0-9]{2}:[0-9]{2}:[0-9]{2}).*$/\1 \2Z/'\
        )" +%s)\
    ))
    if [ 10 -lt $lastUpdate ]; then
        if [ $errcntr -lt 10 ]; then
            let errcntr++
            echo "DSS Bridge state is too old (last updated
$lastUpdate seconds ago, max 10 allowed). This was failure $errcntr out
of 10 accepted failures"
        else
            echo "DSS bridge state is still too old ($lastUpdate
seconds) after 10 retries. killing mqtt-dss-bridge (pid $PID) and exit
with error status 1"
            kill $PID
            exit 1
        fi
    fi
    sleep 1
done
```

obviously you need to adjust the three variables at the top of the script to match your setup

```
chmod 755 build/startup.sh
```

build/Dockerfile

```
FROM node:22-bookworm
ARG DEBIAN_FRONTEND=noninteractive
ENV TZ=Europe/Zurich
# mqtt client
RUN apt-get update && apt-get install -y mosquitto-clients
#RUN npm install --save mqtt-dss-bridge
COPY startup.sh /startup.sh
CMD /startup.sh
```

```
nano ./app/node_modules/mqtt-dss-bridge/config.js
```

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Last update: **06.07.2024 09:26**

