

# README

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2023-09-13

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## 1 toddwint/smtp

### 1.1 Info

`smtp` docker image for simple lab testing applications.

Docker Hub: <https://hub.docker.com/r/toddwint/smtp>

GitHub: <https://github.com/toddwint/smtp>

### 1.2 Overview

Docker image for receiving SMTP messages.

Pull the docker image from Docker Hub or, optionally, build the docker image from the source files in the `build` directory.

Create and run the container using `docker run` commands, `docker compose` commands, or by downloading and using the files here on github in the directories `run` or `compose`.

Manage the container using a web browser. Navigate to the IP address of the container and one of the HTTPPORTs.

**NOTE: Network interface must be UP i.e. a cable plugged in.**

Example `docker run` and `docker compose` commands as well as sample commands to create the `macvlan` are below.

### 1.3 Features

- Ubuntu base image
- Plus:
  - postfix
  - mailutils
  - tmux
  - python3-minimal
  - iputils-ping
  - iproute2
  - tzdata
  - [ttyd](#)
    - ◊ View the terminal in your browser

- `frontail`
  - ◊ View logs in your browser
  - ◊ Mark/Highlight logs
  - ◊ Pause logs
  - ◊ Filter logs
- `tailon`
  - ◊ View multiple logs and files in your browser
  - ◊ User selectable `tail`, `grep`, `sed`, and `awk` commands
  - ◊ Filter logs and files
  - ◊ Download logs to your computer

## 1.4 Sample commands to create the macvlan

Create the docker macvlan interface.

```
docker network create -d macvlan --subnet=192.168.10.0/24 --gateway=192.168.10.254 \
  --aux-address="mgmt_ip=192.168.10.2" -o parent="eth0" \
  --attachable "eth0-macvlan"
```

Create a management macvlan interface.

```
sudo ip link add "eth0-macvlan" link "eth0" type macvlan mode bridge
sudo ip link set "eth0-macvlan" up
```

Assign an IP on the management macvlan interface plus add routes to the docker container.

```
sudo ip addr add "192.168.10.2/32" dev "eth0-macvlan"
sudo ip route add "192.168.10.0/24" dev "eth0-macvlan"
```

## 1.5 Sample docker run command

```
docker run -dit \
  --name "smtp01" \
  --network "eth0-macvlan" \
  --ip "192.168.10.1" \
  -h "smtp01" \
  -p "192.168.10.1:25:25" \
  -p "192.168.10.1:8080:8080" \
  -p "192.168.10.1:8081:8081" \
  -p "192.168.10.1:8082:8082" \
  -p "192.168.10.1:8083:8083" \
  -e TZ="UTC" \
  -e DOMAINNAME="test.lab" \
  -e HTTPPORT1="8080" \
  -e HTTPPORT2="8081" \
  -e HTTPPORT3="8082" \
  -e HTTPPORT4="8083" \
  -e HOSTNAME="smtp01" \
  -e APPNAME="smtp" \
  "toddwint/smtp"
```

## 1.6 Sample docker compose (compose.yaml) file

```
name: smtp01

services:
  smtp:
    image: toddwint/smtp
```

```
hostname: smtp01
ports:
  - "192.168.10.1:25:25"
  - "192.168.10.1:8080:8080"
  - "192.168.10.1:8081:8081"
  - "192.168.10.1:8082:8082"
  - "192.168.10.1:8083:8083"
networks:
  default:
    ipv4_address: 192.168.10.1
environment:
  - DOMAINNAME=test.lab
  - HOSTNAME=smtp01
  - TZ=UTC
  - HTTPPORT1=8080
  - HTTPPORT2=8081
  - HTTPPORT3=8082
  - HTTPPORT4=8083
  - APPNAME=smtp
tty: true

networks:
  default:
    name: "eth0-macvlan"
    external: true
```