

# FM SETUP INSTRUCTIONS

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## FM Installation

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### FM installation prerequisites

1. Install docker
2. Install docker-compose
3. Works only on x86 arch

### Setup FM

1. Clone fleet manager repository

```
git clone https://github.com/AtiMotors/fleet_manager  
cd fleet_manager  
git pull  
git submodule update --init --recursive
```

2. Checkout to release/branch, update mule submodule.

```
git checkout <branch>  
git submodule update --recursive
```

3. Setup cert files - You will need python installed in your machine to carry out this step

3.1 *Update all\_server\_ips, http\_scheme in static/fleet\_config/fleet\_config.toml, add wireguard ip of the server as well if wg access is present*

```
for example:  
all_server_ips=["192.168.6.11", "10.9.0.168", "127.0.0.1"]  
http_scheme="https"
```

3.2 *Install toml, cryptography in your machine(not server)*

```
pip install toml cryptography
```

*3.3 Upon successful installation of the above mentioned packages, run setup\_certs.py to generate FM cert file*

```
cd utils && python3 setup_certs.py  
..../static/fleet_config/fleet_config.toml ..../static"
```

*3.4 Copy the cert file(static/certs/fm\_rev\_proxy\_cert.pem) to all the sherpas(/opt/ati/config/fm\_rev\_proxy\_cert.pem)*

#### 4. Update static directory with map\_files, sherpa\_details

*3.1 Add fleet names, customer details, server\_ip to the static/fleet\_config/fleet\_config.toml*

```
server_ip="xyz"  
fleet_names=["sample_fleet", "sample_fleet_1"]  
customer="xyz"  
site="xyz"  
location="xyz"
```

*3.2. Add sherpa details of all the sherpas to the fleet\_config following the sample given below- make sure sherpa names match hostname in the mule*

```
[fleet_sherpas.<sherpa_name>]  
hwid="abc"  
api_key="qZhoteD9zOHn_wBoYW04vgeaiLSBIoWP_jaVy5TQLp0_T30-789PAI"  
fleet_name="sample_fleet"  
  
[fleet_sherpas.<sherpa_name>]  
hwid="xyz"  
api_key="ffZhoteD9zOHn_wBoYW04vgeaiLSBIoWP_jaVy5TQLp0_T30-789PAI"  
fleet_name="sample_fleet_1"
```

*3.3. Create map folders, map\_files.txt for all the fleet names present in fleet\_config.toml. Make sure grid\_map\_attributes.json is present*

```
mkdir static/sample_fleet/map/  
copy all the map files to sample_fleet/map/  
cd sample_fleet/map/  
ls > map_files.txt
```

5. If server has internet, allows you to download open-source packages

- a. If you want to setup fm on a remote location, run push\_fm script to create all the docker images on the server

```
./scripts/push_fm.sh -WDi username@ip
```

- b. If you want to setup fm on your machine, run push\_fm script to create all the docker images on your machine

```
./scripts/push_fm.sh -WD
```

6. If server doesn't have internet access, copy built docker images to the server from Ati server(data@192.168.10.21:/atidata/datasets/FM\_v2.0\_docker\_images), run the following commands

- a. Load base images on server/localhost

```
ssh username@ip  
cd FM_v2.0_docker_images  
bash load_docker_images.sh  
exit
```

- b. If you want to setup fm on a remote location, run push\_fm script from your machine to create all the docker images on the server

```
./scripts/push_fm.sh -WbDi username@ip
```

- c. If you want to setup fm on your machine, run push\_fm script from your machine to create all the docker images on your machine

```
./scripts/push_fm.sh -WbD
```

## Start or Restart FM

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1. Modify timezone if required by setting environment variables TZ, PGTZ in services fleet\_manager, db enlisted in static/docker-compose.yml.
2. Restart FM

```
cd static  
docker-compose -p fm down  
docker-compose -p fm up
```

### 3. Use FM through UI, if running FM on localhost use ip as 127.0.0.1

```
https://<ip>/login  
username: admin  
password: 1234
```

### 3. Induct all the sherpas that you want to use

- a. Press enable for trips button from sherpa card
- b. Only those sherpas that has been enabled for trips will get assigned with a trip

## Run FM Simulator

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a. Follow Setup FM, steps 1-2

b. Set simulate in static/fleet\_config/fleet\_config.toml

```
simulate=true  
http_scheme="http"
```

c. Make sure all the station below mentioned tags in grid\_map\_attributes.json pertaining to all the fleets(<fleet\_name>/map/grid\_map\_attributes.json). Tags like conveyor, auto\_hitch, auto\_unhitch doesn't work in simulator mode.

```
"station_tags": [  
    "parking",  
    "dispatch_not_reqd"  
]
```

d. Follow Setup FM, steps 3-5

## Copy cert file and modify mule config

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a. Copy fm cert file(fm\_rev\_proxy\_cert.pem) generated in Setup FM(step 3) to sherpa's /opt/ati/config directory

b. Add this patch to /opt/ati/config/config.toml in the mule

```
[fleet]
api_key = " "
chassis_number = " "
data_url = "https://<fm_ip_address>:443/api/static"
fm_ip = "https://<fm_ip_address>:443"
ws_url = "wss://<fm_ip_address>:443/ws/api/v1/sherpa/"
fm_cert_file="/app/config/fm_rev_proxy_cert.pem"
```