

FM SETUP INSTRUCTIONS

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FM Installation

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/atij/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

1. Modify timezone if required by setting environment variables TZ, PG TZ 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

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

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"
```