## VibTrans Quick Start

## Prognosis-Tech VibPro A308 and MOXA UC-8112

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0. We recommend to upgrade UC-8112's firmware from verion 3.1 to 3.2 . Version 3.2 is not yet released yet and could be downloaded <a href="https://example.com/here">here</a>

The method to upgrade firmware is through the serial console mode and could be referred to The lastest UC-8000 user manaul.

Reference: MOXA UC-8100 series manual. See section 6.2.

https://www.moxa.com/getmedia/22fd4408-751d-4208-b218-d76a7bb970cc/moxa-arm-based-computer-linux-user-manual-for-debian-9-manual-v4.1.pdf

1. Log in SSH from the ethernet

```
# Add an IP on the hosted machine sudo ifconfig INTERFACE_NAME 192.168.4.10 netmask 255.255.0.0 # connect through SSH to UC-8xxx LAN port 2 (password: moxa) ssh moxa@192.168.4.127
```

2. 3G/4G connection

```
# check SIM card status
sudo cell_mgmt sim_status

# create connection
sudo cell_mgmt start PIN=PIN_CODE APN=APN_NAME

# check the status of LTE connection
sudo cell_mgmt status
```

3. Get MURANO provision

```
# Create IoT connector on EXOSITE
```

## On ExoSite's upper panel → Home → IoT Connectors → ADD IOT CONNECTOR (create an object of IoT connector and click to enter)

## In the left panel of the page → Settings (at the bottom of the panel) → Protocol → change protocol from "MQTT" to "HTTP Device API"

```
# To create an "Device"
```

## "Device" section on the left panel  $\rightarrow$  NEW DEVICE(s)  $\rightarrow$  fill the name of the device in "Indentity" column

##

# Check the product ID

# edit murano par.py

```
./murano_activate_io_config.py

4. Edit trans_par.py
    (To be complete)

5. run pytrans.py
    ./pytrans.py
    # if you would like to see the srcreen log
    ./pytrans.py --log

6. Replacing the startup script (rc.local)
    # edit PIN_CODE and APN_NAME in /home/moxa/pytrans/rc.local
    # backup the original rc.local
    sudo cp /etc/c.local /etc/c.local.bak
    # copy the modified
    sudo cp /home/moxa/pytrans/rc.local /etc/c.local
```

## Appendix:

cd pytrans

If you would like remove "the mean of the acceleration" (in order to get rid of the measurement of the acceleration of the gravity), you could execute "./remove\_mean.py" (To be formally released before Jun 8 2020. And I suggested to monitor standard deviation derectly instead of RMS) after installing the sensor