Drone Engage Setup Instructions

DRONE ENGAGE SETUP

1) Flash legacy version (Debian Bullseye) of PiOS onto Raspberry Pi SD card, either the full version or the lite. It is not important between the two. Both will work.
2) Use an app such as PuTTy to SSH into the Raspberry Pi using its IP address (alternatively, connect to an external monitor and keyboard to access the terminal)
3) From the command line, install OpenSSL and Libcrypto as follows:
   - cd ∼
   - wget https://www.openssl.org/source/openssl-1.1.1w.tar.gz
   - tar -xvf openssl-1.1.1w.tar.gz
   - cd openssl-1.1.1w
   - ./config –prefix=/usr/local/openssl –openssldir=/usr/local/openssl
   - make
   - sudo make install
   - export LD_LIBRARY_PATH=/usr/local /openssl/lib:$LD_LIBRARY_PATH
   - sudo ldconfig -v | grep libcrypto
4) Install Mavproxy from the command line:
   - sudo apt-get install python3-dev python3-opencv python3-wxgtk4.0 python3-pip python3-matplotlib python3-lxml python3-pygame
   - python3 -m pip config set global.break-system-packages true sudo python3 -m pip config set global.break-system-packages true
   - pip3 install PyYAML mavproxy –user
   - echo 'export PATH="$PATH:$HOME/.local/bin"' » ∼/.bashrc
   - sudo apt remove modemmanager
   - sudo apt update && sudo apt upgrade
   - sudo nano /boot/firmware/config.txt (Set enable_uart=1)
5) From the Raspi-config menu, select:
   "NO" for "Would you like a login shell to be accessible over serial?"
   and
   "YES" for "Would you like the serial port hardware to be enabled?"
6) Retrieve the Drone Engage installer zip folders from the website, both for the camera and non-camera versions. Unzip them and ensure the install files are within.
7) Create a Drone Engage account on the web app if not already, making sure to keep note of your username and access code
8) To install Drone Engage:
   - chmod a+x ./install_droneengage.sh
   - chmod a+x ./install_droneengage_camera.sh
   - ./install_droneengage.sh
   - ./install_droneengage_camera.sh
9) Once the installers have run and no errors occur, you can customise the DE_COMM config file with your account details and enable USB connection to the flight controller by replacing the interface options within the DE_MAVLINK config file with:
   "fcb_connection_uri":
   {
   "type": "serial",
   "port": "/dev/ttyACM0",
   "baudrate": 115200,
   "dynamic": false
   },
10) The drone should now show up within your Drone Engage Web app when powered on, and it should show there is a flight controller attached if connected via USB