How-to guide: Build Sowillo firmware with patched ESPHome on Linux

This tutorial describes how to build the firmware for sowillo box on Linux. All steps made on clean Ubuntu 20.04.

Update cache and install dependencies:

```
sudo apt update
sudo apt install python3 unzip python3-venv
```

Create a separate directory for build:

```
mkdir build-sowillo && cd build-sowillo
```

Download and unzip latest patched ESPHome package:

```
wget \
https://rawcontent.sowillo.com/repository/binary-files-ext/latest/esphome-patched.zip
mkdir esphome-patched && unzip esphome-patched.zip -d esphome-patched
```

Download and unzip latest ESPHome configurations for **Sowillo IoT Board**:

```
wget \
https://rawcontent.sowillo.com/repository/binary-files-ext/latest/sowillo-esphome-configurat

mkdir sowillo-esphome-configuration && unzip
sowillo-esphome-configuration.zip -d sowillo-esphome-configuration
```

Create a python virtual environment, activate it and install patched esphome to the environment:

```
python3 -m venv esphome-venv
source esphome-venv/bin/activate
pip install -U pip
pip install -e esphome-patched
```

Build firmware:

```
cd sowillo-esphome-configuration
mv secrets.yaml.in secrets.yaml
```

Edit `secrets.yaml`, you may configure your default WiFi settings and MQTT broker settings there:

```
nano secrets.yaml
```

Build the firmware that you're interested in:

```
esphome compile swlbox-300.yaml
```