OpenSync integration in RPI GW

Design considerations on VAP alignment for RPI WiFi HAL for OpenSync integration

Example Network Topology

GW <-> POD1(2VAP {bhaul} + 1 sta) <-> POD2

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POD3

Prerequisites

Ideally, 2 Radio are required for 2.4GHz and 5GHz bands in a target

For example in Turris Omnia target, we have 2 radios and each radio has capability to support 8 VAPs(for hostapd) + 1 STA(for wpa-supplicant)

OpenSync informally expects following capabilities

- atleast 2 VAP
- 1 STA

Design consideration for RPI target

Following combinations are tried in RPI target (currently)

- RPI in-built radio - 1 AP (wlan0)
- TP link - 1 AP(interface wlan1)
- TP link - 1 AP(interface wlan 4/5)

With Netgear Wi-Fi dongle, we need to have following arrangement.
wlan0 (in-built) - Not going to be used with OpenSync
wlan1 (1st netgear dongle for 2.4GHz radio) - VAPs: wifi0, wifi2, STA: 1
wlan2 (2nd netgear dongle for 5GHz radio) - VAPs: wifi1, wifi3, STA: 1

Need to have logic in hostapd_start.sh to dynamically configure above VAP interfaces

- wlan0 -> wifi0
- wlan1 -> wifi1 (can be either TPlink or 1 netgear)
  (with 2 netgear Wi-Fi dongles)
  wlan1-> wifi0, wifi2, 1 sta
  wlan2-> wifi1, wifi3, 1 sta

Need to run hostapd daemon in global mode (with -g), so that wifi interfaces can be attached dynamically.