Proxy Server & Wi-Fi Support

V23.2

Blyott | REMOTE INSIGHTS

Four Main Components

No AP's with BLE?
Use our Locators.
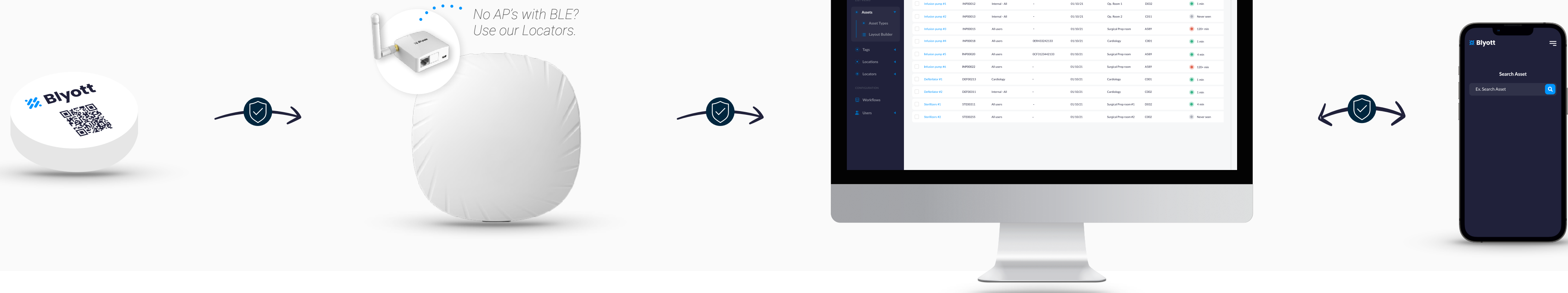
① Blyott Sensors

Fixed on assets. Location, temperature, movement. Many types, long battery life.

② Wi-Fi AP's with Bluetooth(*)

Receive Blyott sensor information. Wi-Fi AP's, fixed & mobile (4G) locators.

aruba   Extreme   FÜRTINET   JUNIPER   Mist AI   cisco Meraki

Mist AI   cisco Meraki

③ Remote Insights Platform

Serverless & scalable architecture. Insightful Big Data analytics and AI.

aws   sas   ▲▲

④ Customer Applications

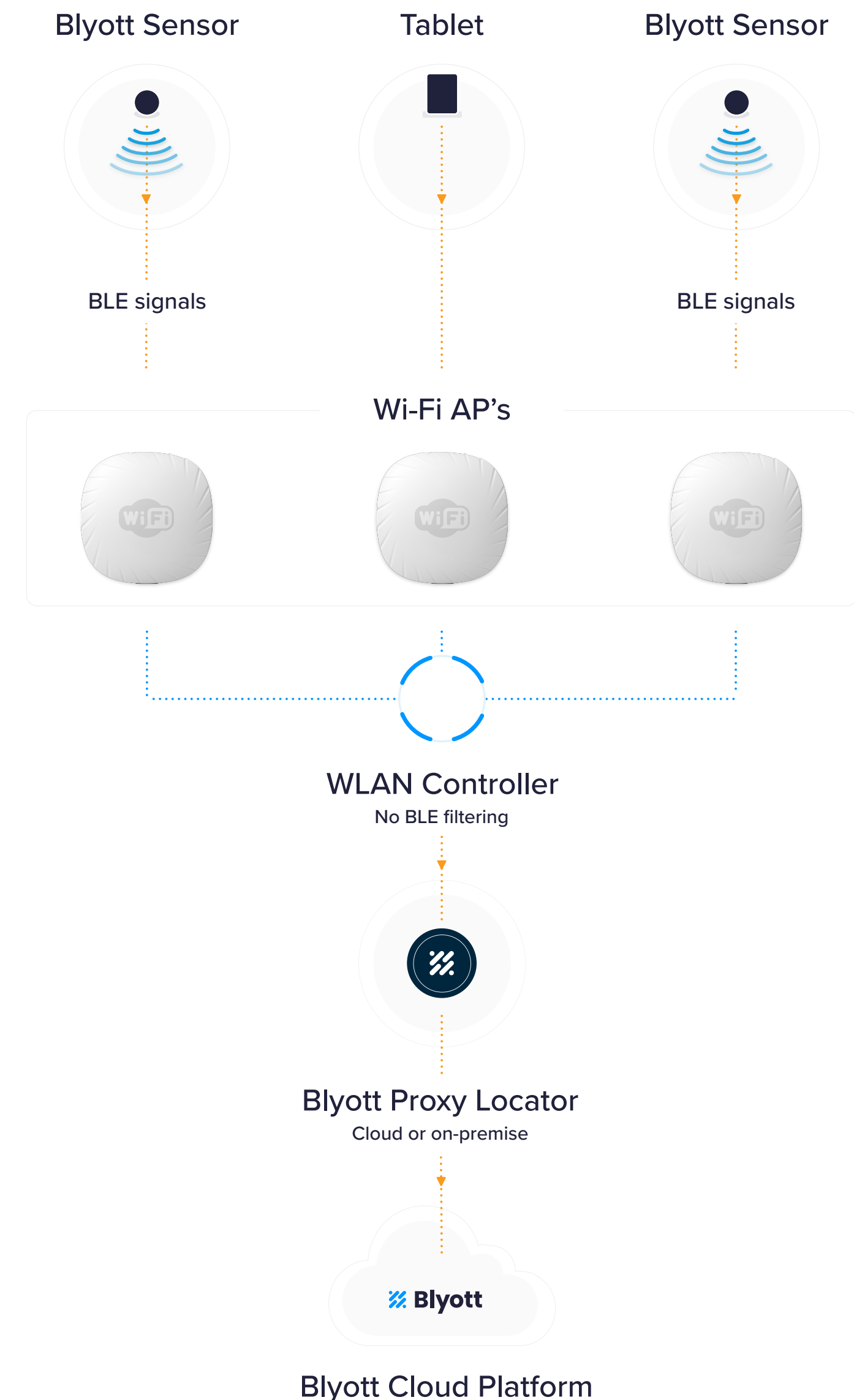Blyott web and mobile app. Support for 3rd party apps using Rest API's and webhooks.

PLANON   ULTIMO   ARTA   TOPdesk   itransport

THE NEW STANDARD IN LOCATION BASED TRACKING & MONITORING   (*)The Blyott solution is compatible with Wi-Fi AP's enabled with Bluetooth® technology from various vendors. Bluetooth® is a registered trademark of Bluetooth SIG, Inc.
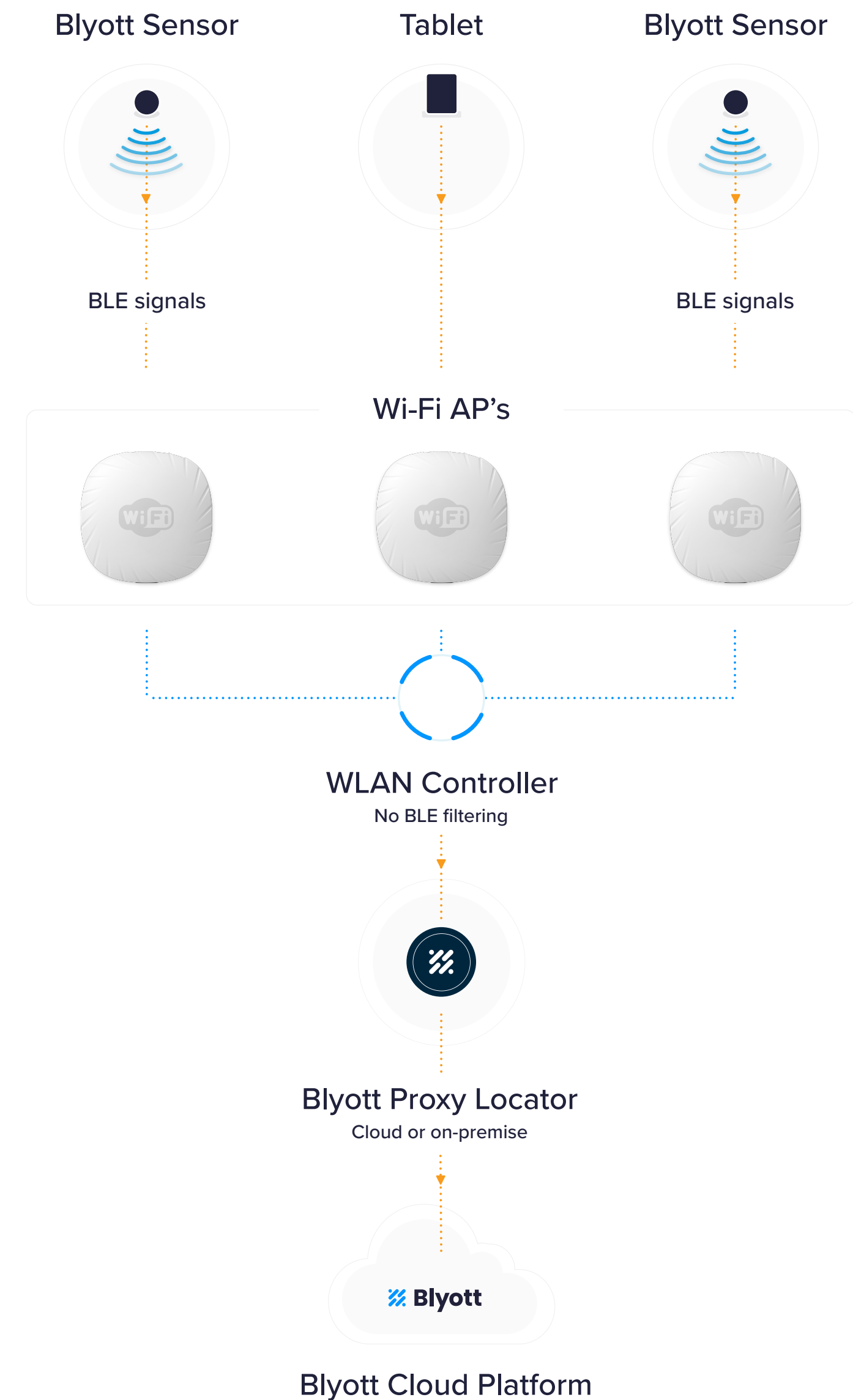
Blyott Proxy Server

• Some Wi-Fi AP's and WLAN controllers can <u>not</u> filter BLE messages (e.g. BLE MAC addresses, Manufacturer ID, Service UUID).

• In such cases, BLE messages from e.g. keyboards, smartphones, tablets, … are also sent to the Blyott Cloud, resulting in up to 99% unnecessary data traffic.

• To avoid this, Blyott has developed its "Proxy Server". This server is installed between the WLAN controller of the client and the Blyott Cloud and only sends relevant BLE messages to the Blyott cloud.

• The "Proxy Server" can run in the cloud (for WLAN networks with <100 Wi-Fi AP's) or on-premise (for WLAN networks with >100 Wi-Fi AP's).

• See further for a list of Wi-Fi vendors who do (not) support BLE filtering.

• Blyott is not specialized in and neither responsible for configuring WLAN infrastructure! Please contact the party who did your WLAN installation for the latest info and assistance.


Blyott Sensor   Tablet   Blyott Sensor

BLE signals   BLE signals

Wi-Fi AP's

WLAN Controller
No BLE filtering

Blyott Proxy Locator
Cloud or on-premise

Blyott Cloud Platform

3

Proxy Server Requirements

- Virtual Machine (VM) requirements
  - ▸ 2 vCPU Linux Ubuntu / 4 vCPU Windows
  - ▸ 8 GB RAM, 100GB HD
  - ▸ Account with full admin rights

- Firewall - Incoming LAN traffic (from WLAN controller to VM)
  - ▸ Examples: Extreme Networks UDP 8004, Fortinet UDP300, Aruba TCP 8001, …
    (please contact Blyott support for latest updates)
  - ▸ The WLAN controller should sent all data to the (internal) IP address of the VM

- Site-2-Site VPN between client VM and Blyott

- Firewall - Incoming VPN traffic (from Blyott to VM)
  - ▸ CMP, UDP 161 & 162 (SNMP), TCP 10050 & 10051 (monitoring), TCP 80 & 443
    (http(s)), TCP 10069 (data-stream), remote access (SSH: 22, RDP: 3389)

- Firewall - Outgoing Traffic (from VM to Internet)
  - ▸ TCP 443 HTTPS, TCP 8883 MQTT (with content filtering disabled)

- Firewall - Outgoing Traffic (from VM to VPN)
  - ▸ TCP 10050 & 10051 (monitoring)

Blyott Sensor   Tablet   Blyott Sensor

BLE signals   BLE signals

Wi-Fi AP's

WLAN Controller
No BLE filtering

Blyott Proxy Locator
Cloud or on-premise

Blyott Cloud Platform

Payload Support

- A BLE message consists of 2 parts:
  - ▸ A "public" part which contains the MAC address of e.g. the Blyott sensor (= unique identifier)
  - ▸ A "private" part -often encrypted- which contains additional info like e.g. battery level, T°, ….

- The encrypted "private" part of a Blyott sensor contains the following info about the sensor:
  - ▸ Battery status
  - ▸ Temperature
  - ▸ Movement (is the sensor moving or not?)
  - ▸ Push button (is the push button pressed or not?)

- The "private" part of a Blyott message is not always "seen" by a Wi-Fi AP. This is dependant on the type -and manufacturer- of AP being used. When the "private" part is not seen, this implies that e.g. T° and battery status are not seen on the Blyott portal.

- See further for a list of Wi-Fi vendors who do (not) support payloads.
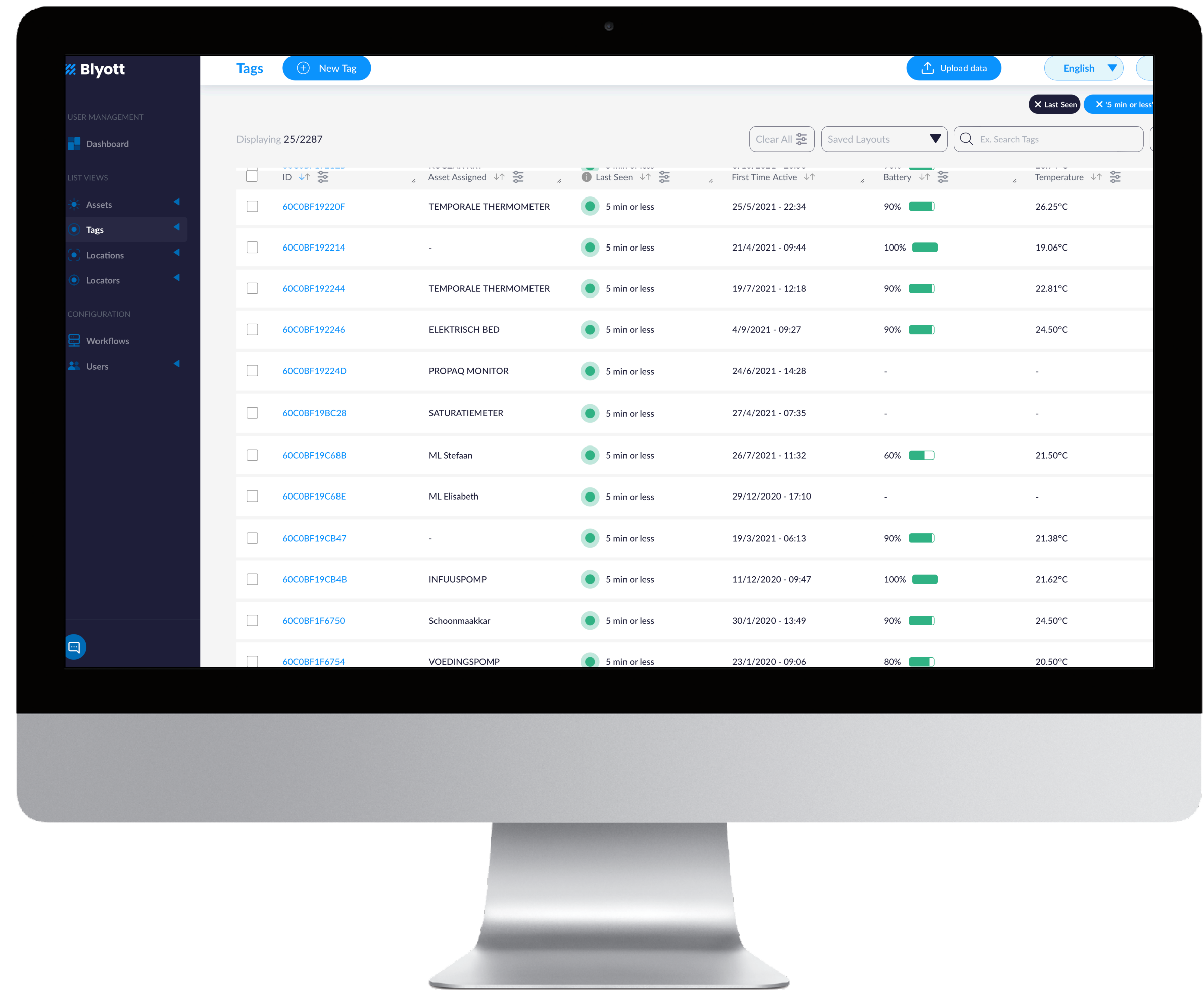
AP's with built-in BLE support BRANDS (*)	Supported by Blyott BLYOTT	Type of BLE Sensor TYPE	Proxy Server Required PROXY	BLE Payload Supported PAYLOAD
Alcatel - Lucent	No	iBeacon	-	-
Aruba SW 8.7 (or lower - use https)	Yes	Standard Sensor	No	No
Aruba SW 8.8 (or higher - use websocket)	Yes	Standard Sensor	No	Yes
Blyott Locator (with or without Wi-Fi AP)	Yes	Standard Sensor	No	Yes
Cisco (DNA spaces not required)	Yes	Standard Sensor	Yes	Yes
Extreme (Cloud IQ - Controller)	Yes	Standard Sensor	Yes	Yes
Extreme (Cloud IQ - On Premise)	No	-	-	-
Extreme (Cloud IQ - Public Cloud)	No	-	-	-
Fortinet	Yes	Standard Sensor	Yes	No
Huawei Wi-Fi	Not Yet …	-	-	-
Juniper Mist	Yes	Standard Sensor	No	Yes
LANCOM	Not Yet …	-	-	-
Meraki	Yes	Standard Sensor	No	Yes
Ruckus	Not Yet …	-	-	-

(*) PLEASE CHECK WITH YOUR WI-FI HARDWARE PROVIDER WHICH EXTRA SOFTWARE MAY BE REQUIRED

Big Savings
Happy Staff

Blyott | REMOTE INSIGHTS