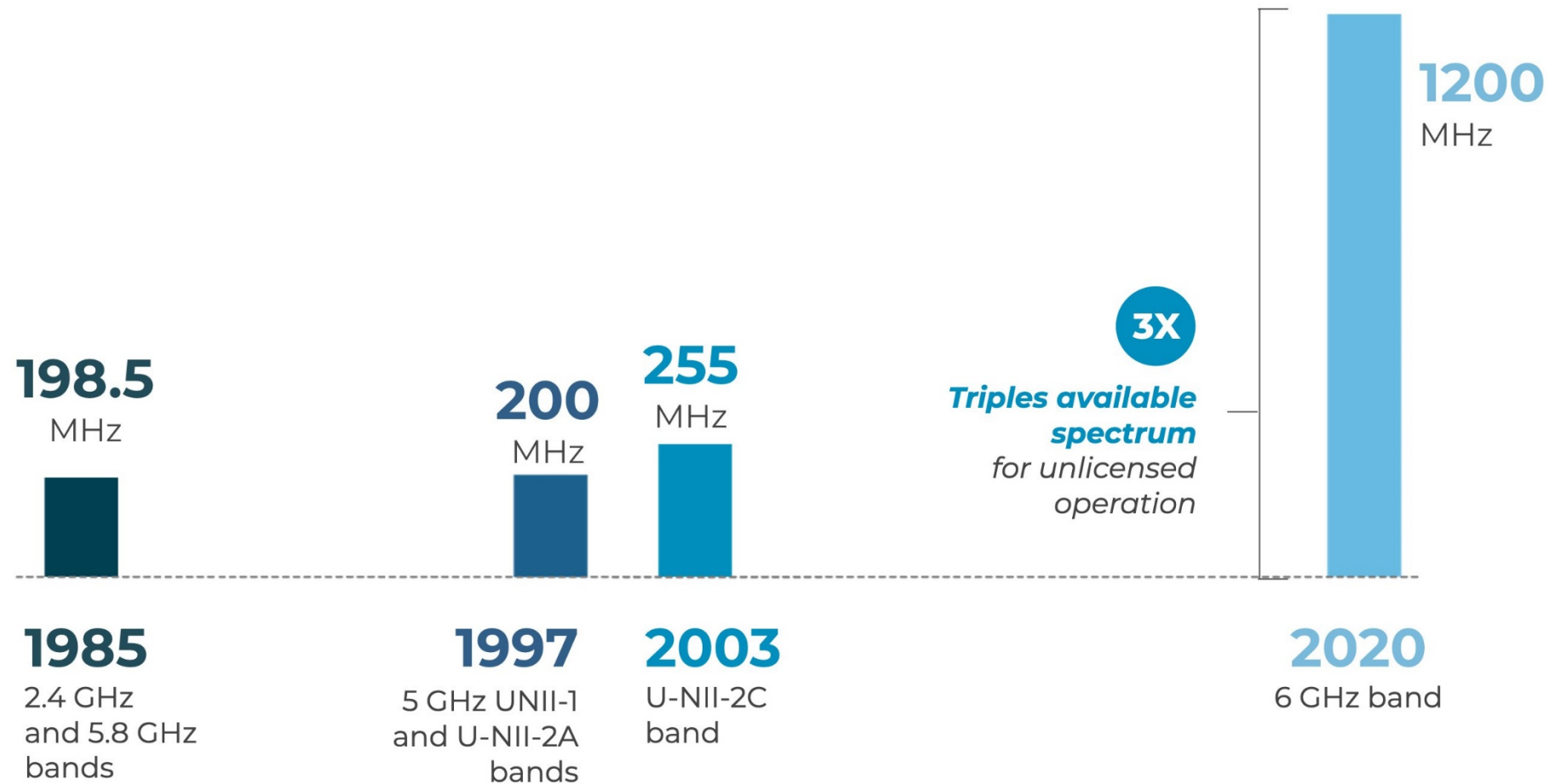


Putting the 6 GHz Band to Commercial Use

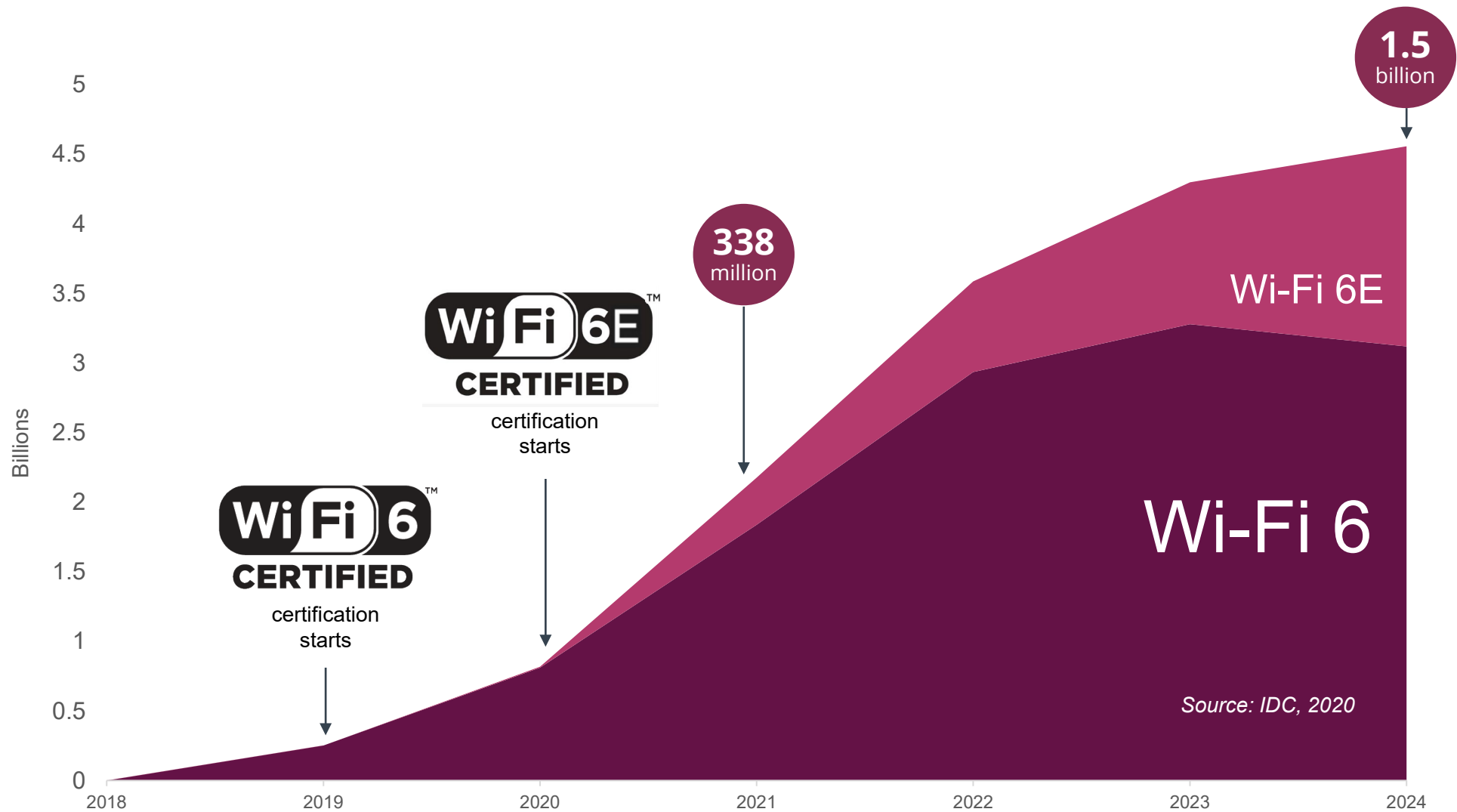
Dave Wright
Head of Global Wireless Policy

1 December 2021

The Biggest Unlicensed Allocation in History



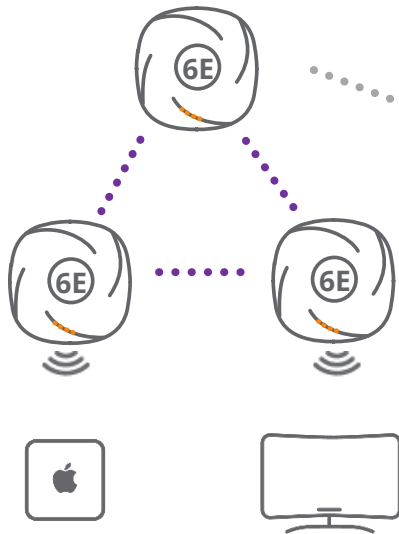
338 Million Wi-Fi 6E Devices Will Ship This Year



Device Classes in 6 GHz

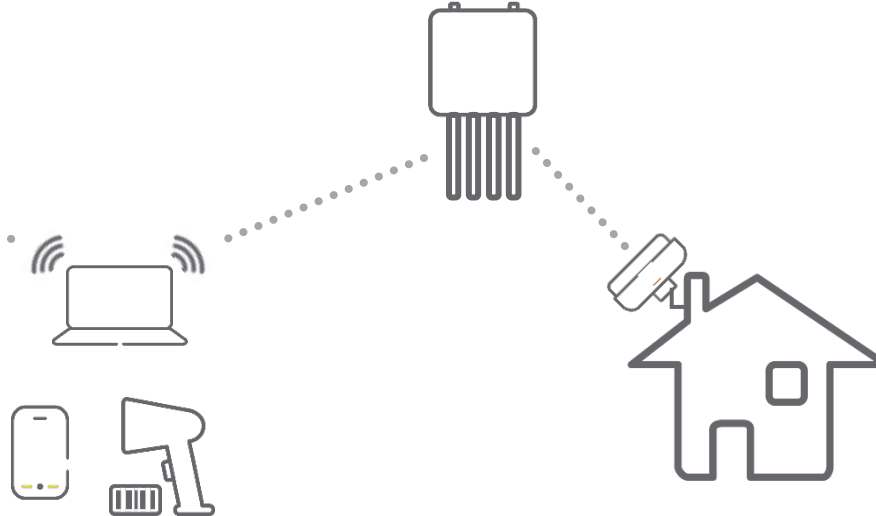
Low Power Indoor (LPI) AP

- Fixed indoor only
- Up to 63X lower energy
- No antenna connectors
- No weatherproofing
- Wired power



Standard Power (SP) AP

- Fixed indoor / outdoor
- Controlled by AFC database
- Automated geolocation
- Pointing angle restriction

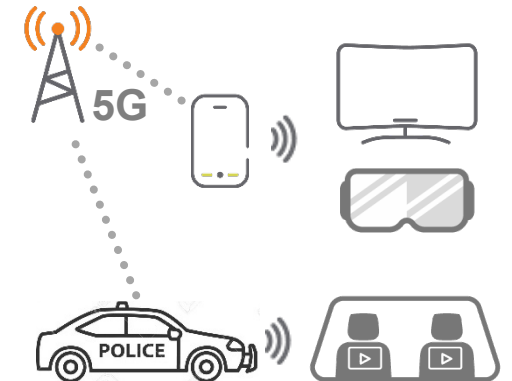


Mobile Client

- Indoor / outdoor
- 4X less power than connected AP

Very Low Power (VLP) AP

- Mobile indoor / outdoor
- 160X lower energy



*~2 Gbps throughput with
sub-ms latency at 3m*

The First Enterprise 6 GHz Access Point

Aruba 630 Series – Low Power Indoor AP



- Three 2x2 MIMO radios with **Ultra Tri-Band (UTB)**
- **Up to 3.9Gbps** “aggregate peak datarate” (HE160 + HE80 + HE20)
- **Dual 2.5Gbps Ethernet** ports for link aggregation and hitless failover
- Unrestricted operation 802.3at (class 4) POE
 - Max power consumption: 23.8W
 - Max when idle: 11.7W
 - Max in deep-sleep mode: 1.9W
- Up to **512 associated clients per radio**
- Moderate physical size (220 x 220)
- **Bluetooth** 5.0 & 802.15.4 (**ZigBee**) radios

The Broader 6 GHz Wi-Fi Ecosystem

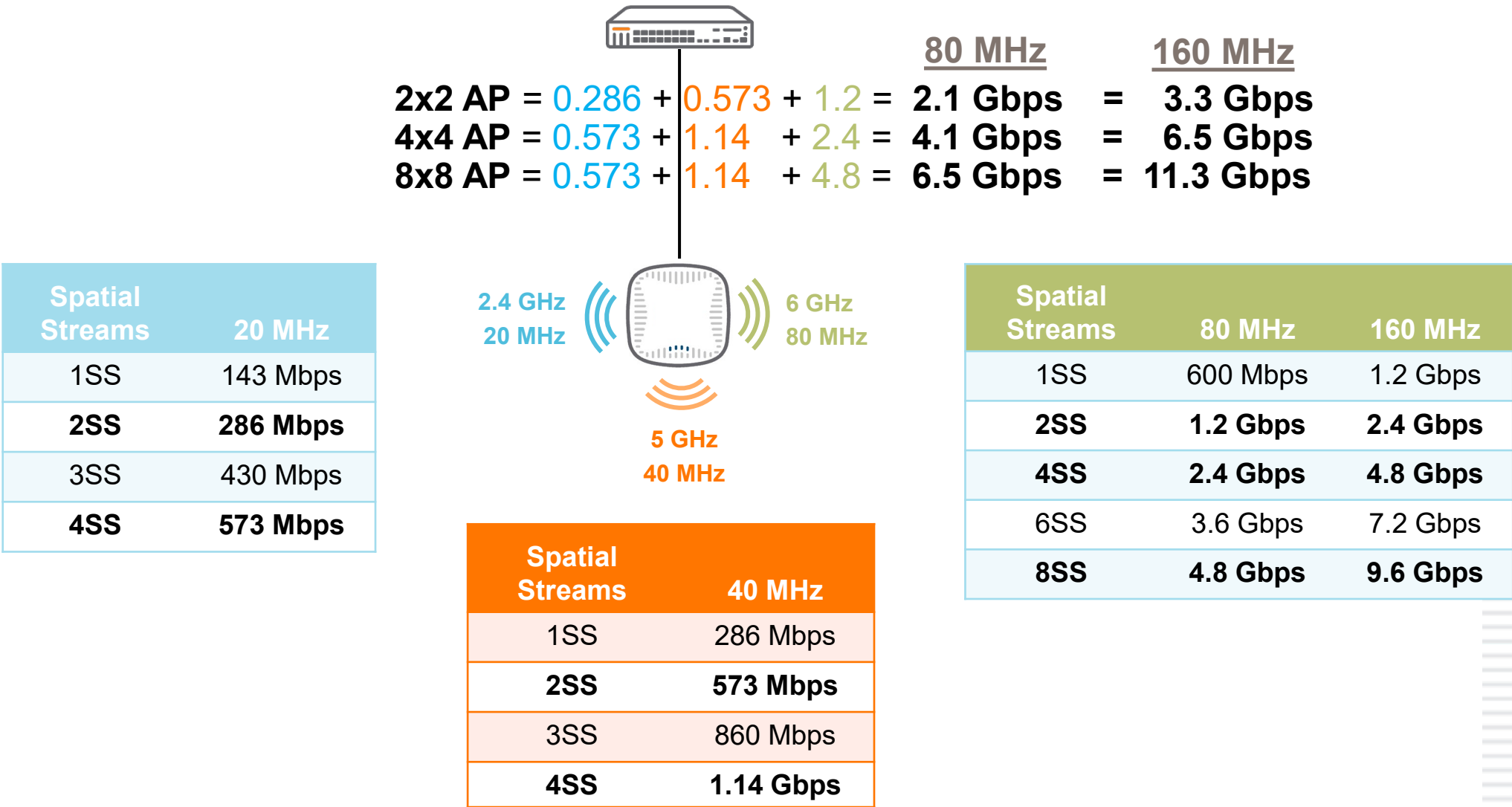
Addressing the Full Range of Use Cases: Consumer, Residential, Enterprise, IoT, etc...



Some Examples of Wi-Fi 6E Chipsets, Modules, and Devices

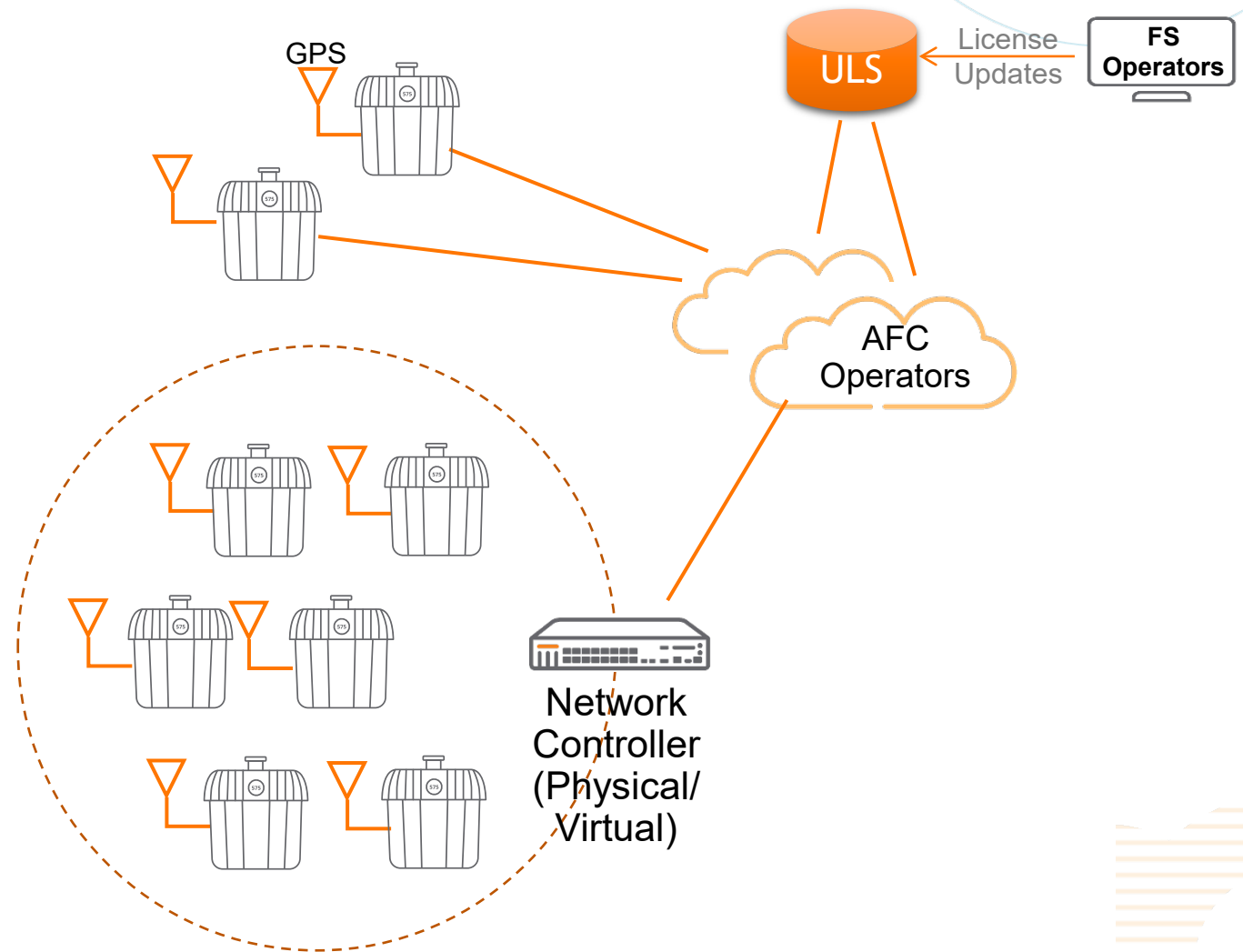


Dimensioning the Enterprise Edge for Wi-Fi 6E



How an AFC Deployment Works

- Constellation of APs under local or remote management and control
- AFC access points must be capable of determining their geolocation
- AFC access points must request a list of available channels from AFC Operator every 24 hours
- Channel availability requests include AP geolocation (with uncertainty estimate), FCCID and AP serial number
- AP or network controller chooses operating channel(s) and configures APs under its control



Thank you

Contact information