Doing Hotel Wi-Fi the Right Way

VALUEPOINT NETWORKS

Goals for Presentation

- Learn more about
  - Optimizing Wi-Fi for high speed Internet Access (HSIA)
  - Best ways to design your network
  - Available products from ValuePoint

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Why Wi-Fi for Hotels?

- Cover entire property at much lower cost than cabling to each room.
- Every laptop ships with Wi-Fi.
- Ideal for conferences and meeting rooms.
- A proven and reliable technology, if installed correctly.

Hardware Access Points and Controllers

- Access Points and Controllers provide and manage the Wi-Fi access at the hotel.
- APs broadcast the signal.
- The controller is the “brains” on-site. Sometimes called a gateway.

Wi-Fi coverage strategies

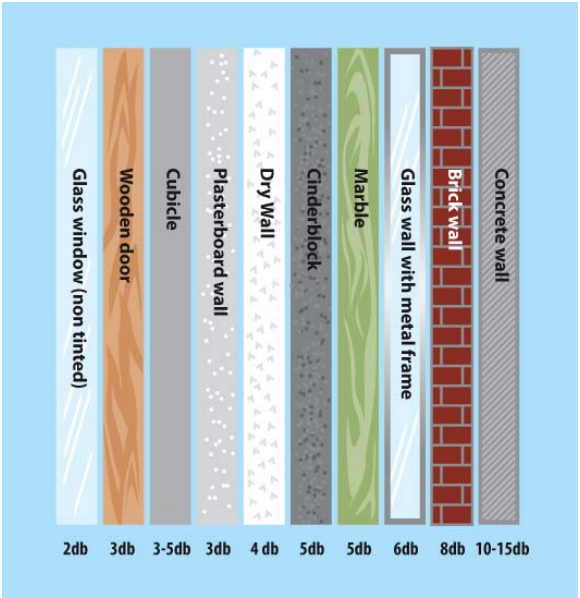
- “Outside-in”. Reach guest rooms by mounting APs outside and shooting into rooms.
- “Hallway”. Need a compact discrete form factor with high power.
- “All wireless”. Use WDS to eliminate cable runs.

How many APs do you need?

- High transmit power and receive sensitivity means less APs.
- Equals better service at lower cost.
- Brick or concrete walls: 15 rooms per AP.
- Drywall: 25 rooms per AP.

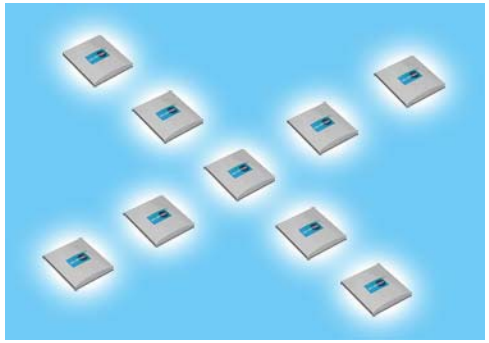
Signal Penetration

- Property construction has a major impact on Wi-Fi signal
- dB Loss is a function of Material



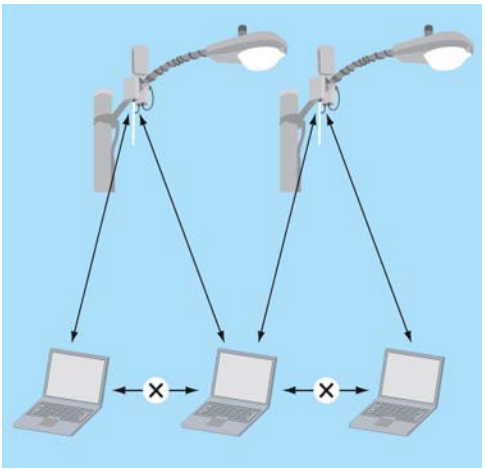
Wireless Distribution System (WDS)

- Saves cabling costs by allowing APs to talk to each other.
- “Wireless Ethernet”: not repeating means manageable overhead



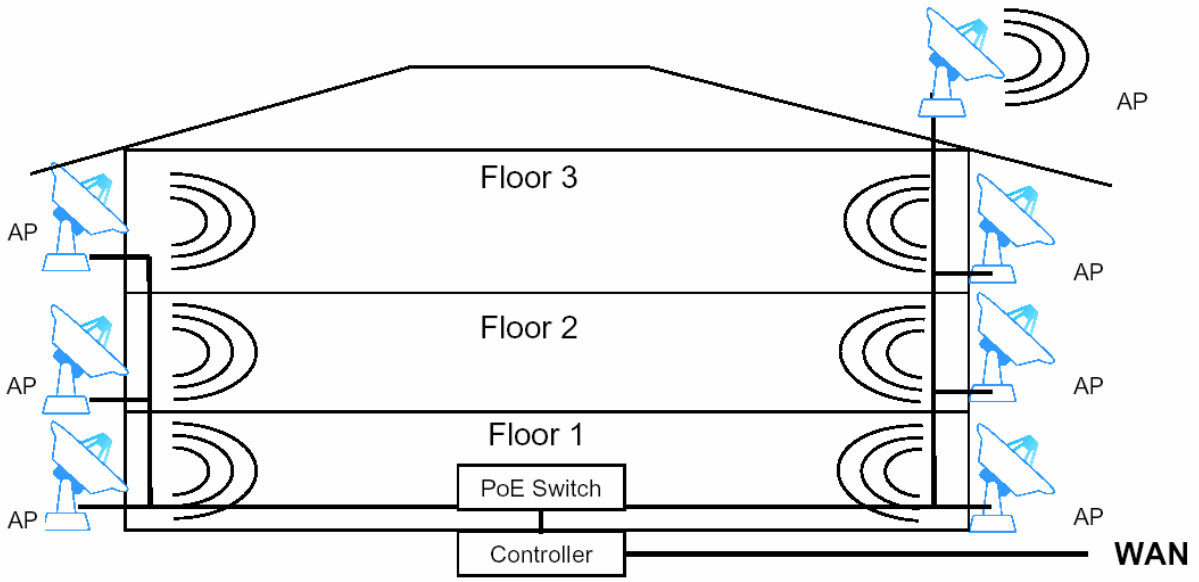
Layer 2 Isolation

- Your guests computers are fully protected from each other.
- All major brands require it.



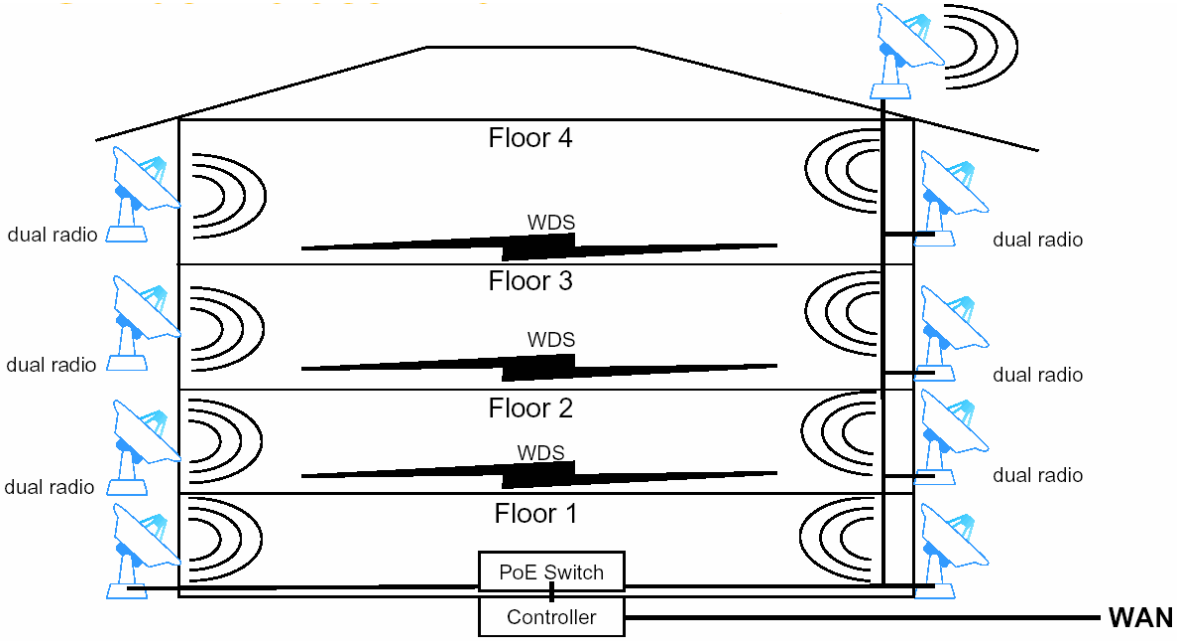
Typical Installation

- 2 APs per floor
- One or more AP outside
- Ethernet to all APs
- POE



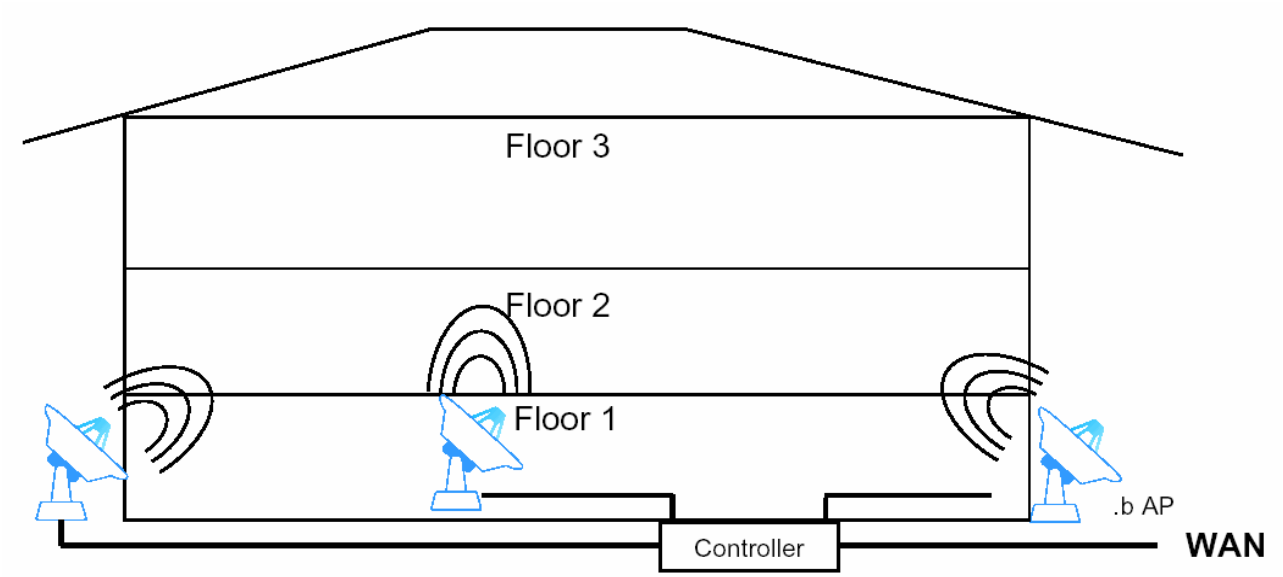
Using some WDS

- 2 APs per floor
- One AP outside
- Ethernet to only one side
- Saves installation cost



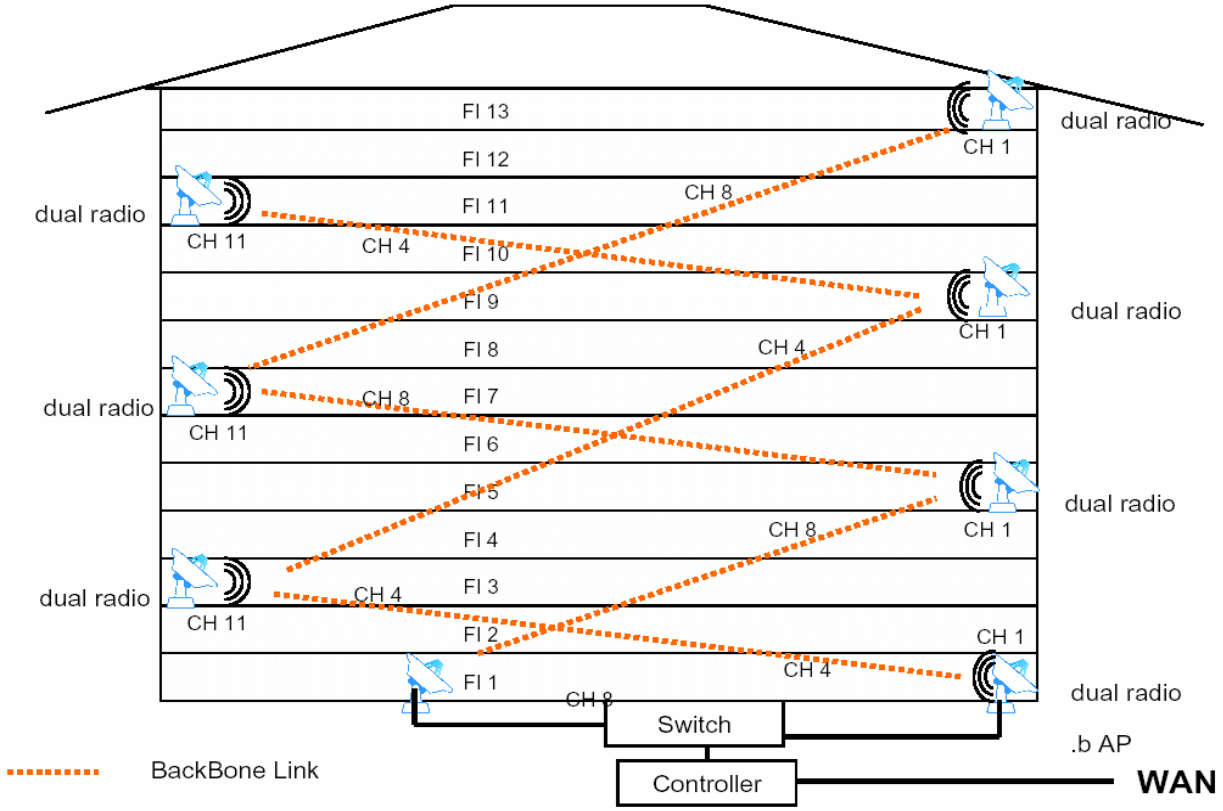
Easy to penetrate construction

- 3 APs total
- Covers every room
- Lowest installation cost



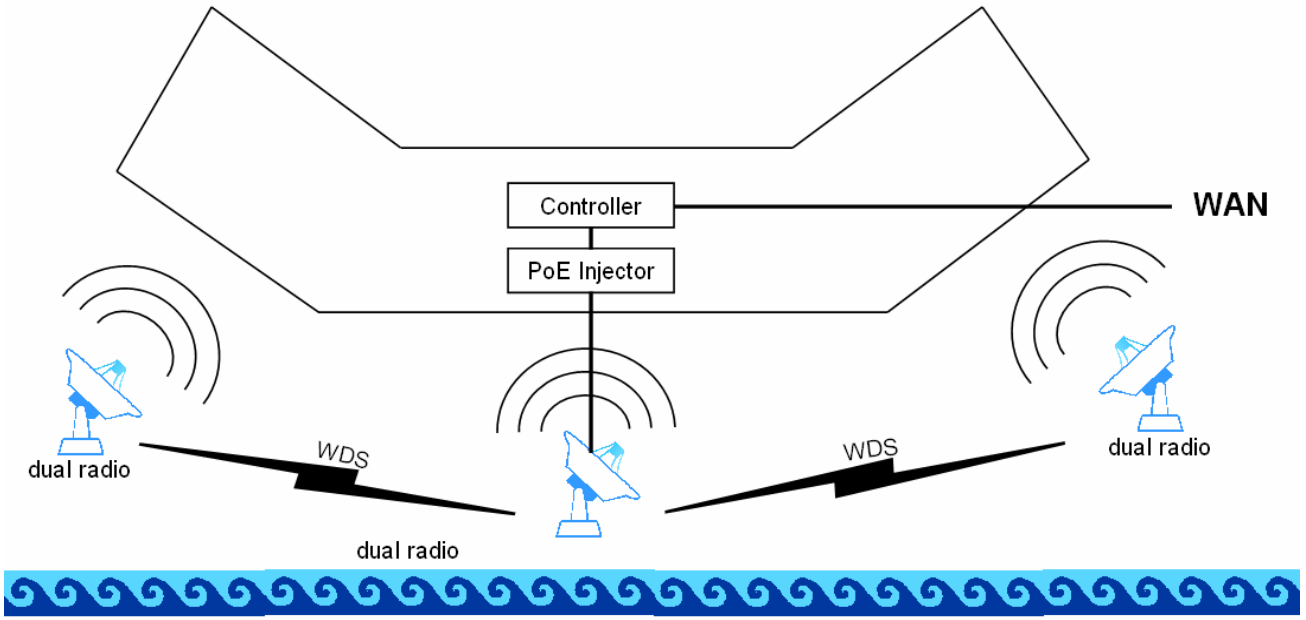
Using all WDS

- Use when cabling is impossible
- Performance not as good
- Lowest installation cost



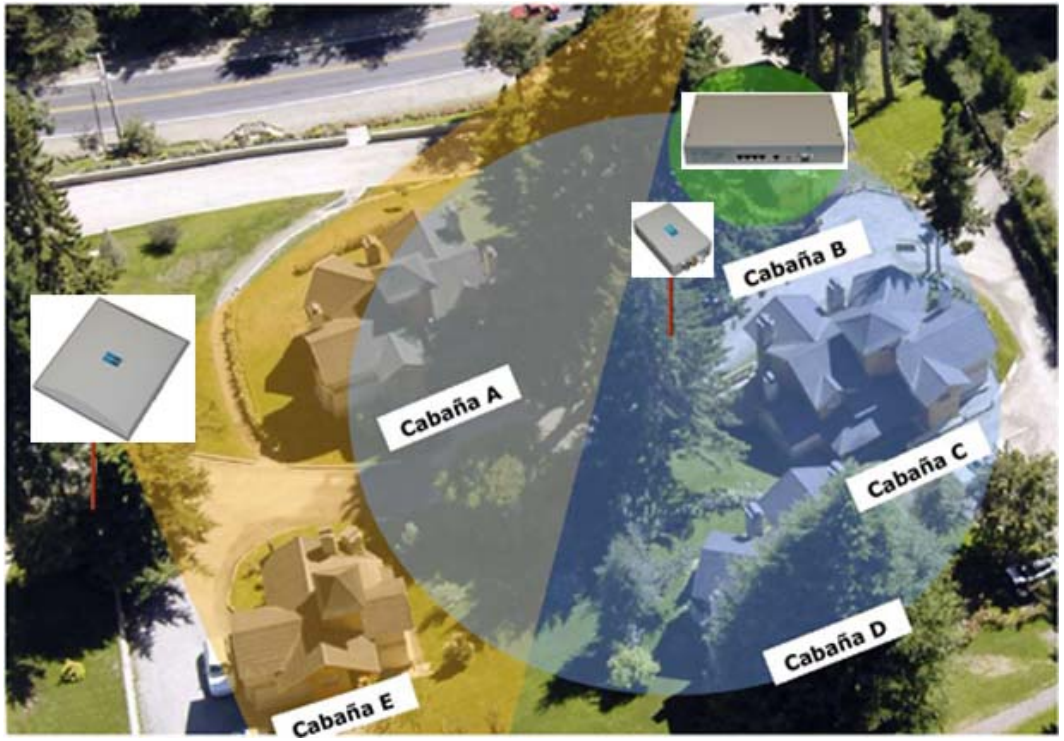
Outside-in

- Popular in Mexico
- Signal goes through windows
- WDS



Cabana coverage

- AP-18db flat panel in AP/bridge mode
- Dual AP/bridge in center
- Network controller



SuperAP 530g

- 300 mWatt output
- Outdoor rated
- Single SSID and WDS
- Layer 2 Isolation
- Attach external antenna

SuperAP 500DR

- Dual AP/Bridges in one unit
- Outdoor rated
- WDS and AP mode
- Layer 2 Isolation
- Used for hops and remote locations

SuperAP 530g IA-12

- Integrated 12 dBi antenna
- 36 dBi total output
- Ideal for hallways
- Compact and discrete
- Single SSID and WDS
- Layer 2 Isolation

SuperAP 530g IA-12 DR

- 2 APs and 2 Integrated 12 dBi antennas
- 36 dBi total output each direction
- Ideal for hallways
- Compact and discrete
- Single SSID and WDS
- Layer 2 Isolation

SuperAP 530g IA-18

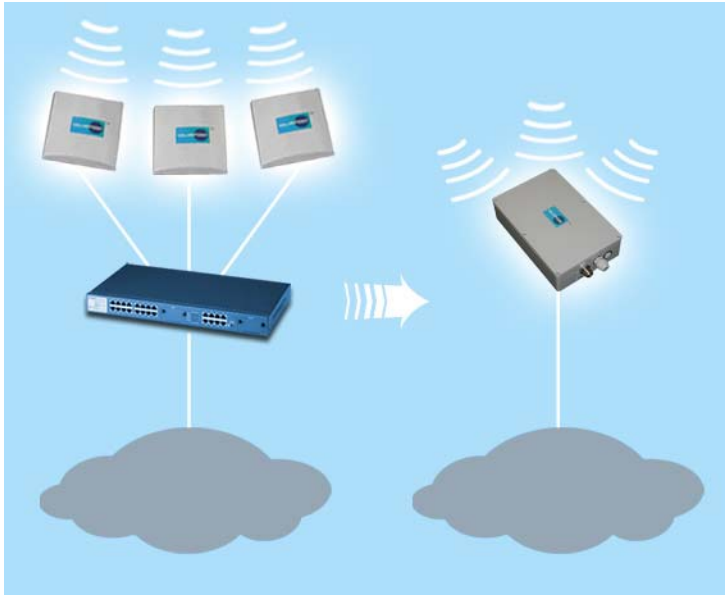
- Integrated 18 dBi antenna
- 42 dBi total output
- Ideal for WDS and “outside-in” approach.
- Mounts on poles.
- Waterproof coupler
- Single SSID and WDS
- Layer 2 Isolation

3000/3500 Controllers

- 50/200 concurrent users
- Local or remote authentication
- Login page and Terms of Use
- Bandwidth Control (3500)

Multi-SSID/VLAN

- Virtual APs in one unit
- Lowers equipment and installation
  cost versus multiple APs
- Integrates and extends the VLAN to wireless clients
- “Port-based VLAN for wireless”



Hotel VLAN – private vs. public vs. VOIP

- Use separate networks for staff and guests
- Guest network is open
- Staff network is secure
- VOIP highest priority
- MAC based
- May or may not need VLAN

M-SSID without VLAN

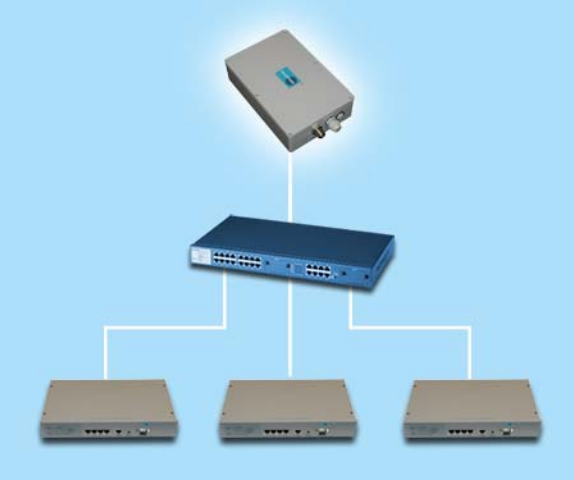
- Different wireless security settings
- Different privacy settings
- Different network ranges

Why VLAN

- Well known and well supported standard
- Proven in enterprise networks
- Integrates well with switches and routers
- Multiple vendor options lowers costs
- Highly secure and manageable

How the controller fits into the VLAN Network

- VLAN controller
- Controller behind VLAN switch



MultiAP 700g

- 16 broadcasted or private SSIDs
- Per SSID security/VLAN
- Outdoor rated POE
- High power b/g
- Per SSID bandwidth control

MultiAP 700g IA-12

- Integrated 12 dBi antenna
- 36 dBi total output
- Ideal for hallways
- Compact and discrete
- Outdoor rated POE
- 16 SSIDs and 16 VLANs
- Quality of Service

EC-5000 Controller

- VLAN built in (no switch needed)
- Different services based on VLAN

Questions

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Tel: 415-979-0606