AOS-CX 10.09 PoE Enhancement: 802.3bt Class 6 2-pair power delivery
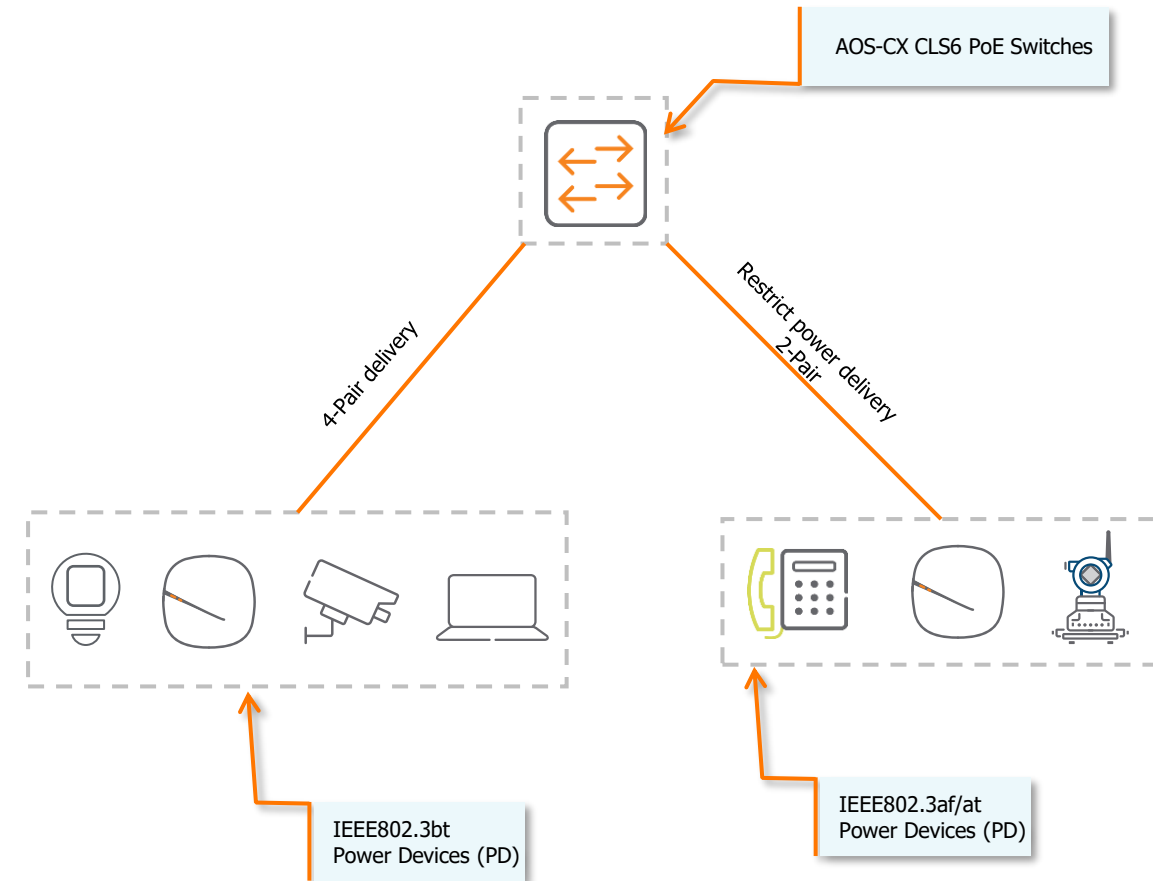
Presenters

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AOS-CX PoE CL6 PoE Enhancement: 2-pair power delivery

- AOS-CX CL6 PoE switches deliver power on all 4 pair as per IEEE 802.3bt standard.

- However, AOS-CX CLS6 capable switches have no restriction on IEEE802.3af (Class0 to Class3) and IEEE802.3at (Class4) power devices to draw power on both pairs.

- Because there is no restriction on AOS-CX CLS6 PoE Switches might risk non-compliant power devices .af and .at power devices once they plugged in!

- AOS-CX 10.9 offers PoE configuration option to restrict power delivery on AOS-CX Class6/802.3bt capable switches to 2-pair (ALT-A) only.

- Supported Platform CL6 PoE Switches:
    - 6300, 6400

AOS-CX CLS6 PoE Switches

4-Pair delivery

Restrict power delivery 2-Pair

IEEE802.3bt
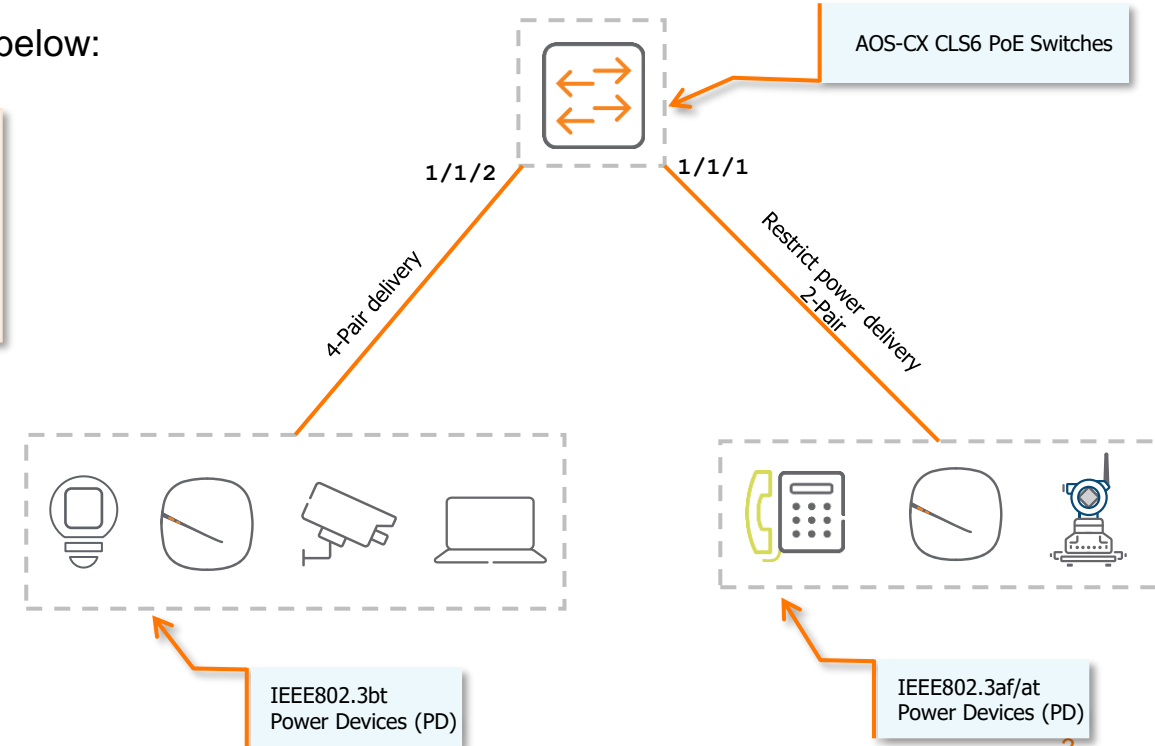Power Devices (PD)

IEEE802.3af/at
Power Devices (PD)

AOS-CX CL6 Switches power delivery on ALT-A only

- If the power pair is configured as "2-pair" on a 4-pair AOS-CX switch, then:

  - If PD is Class 0, Class 1, Class 2, Class 3 or Class 4, power delivery will be restricted to be only on 2-pair

  - If PD is Class 5 or higher, even though the power pair config is set, the same will not be enforced and power delivery will be allowed on both pairs.

  - If PD is a dual signature, even though the power pair config is set, the same will not be enforced and power delivery will be allowed on both pairs.

- Admin can configure "power pair" to allow power on 2-pair/alt-A only as below:

```
switch(config)# interface 1/1/1
switch(config-if)# power-over-ethernet power-pair 2-pair


switch(config)# interface 1/1/2
switch(config-if)# power-over-ethernet power-pair 2-pair
```

AOS-CX CLS6 PoE Switches

1/1/2   1/1/1

4-Pair delivery

Restrict power delivery 2-Pair

IEEE802.3bt
Power Devices (PD)

IEEE802.3af/at
Power Devices (PD)

Thank you

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