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

IEEE802.3bt Power Devices (PD)
IEEE802.3af/at Power Devices (PD)

Restrict Power delivery to 2-pair

4 pair delivery

AOS-CX CLS6 PoE Switches

Supported Platform CL6 PoE Switches:
- 6300, 6400
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:

```plaintext
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
```
Thank you

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