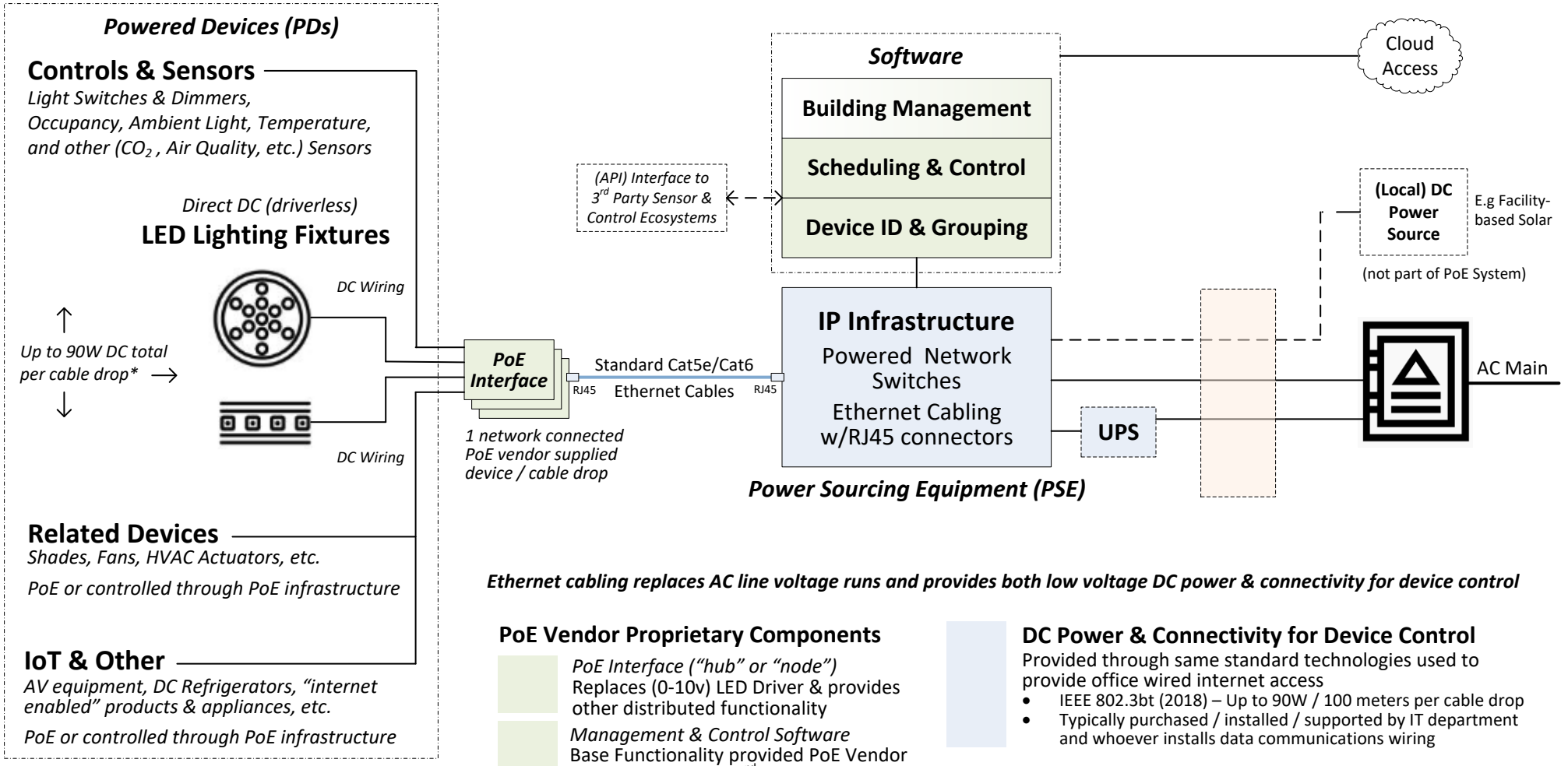
LFP Lighting PoE Infrastructure Components

Schematic Representation of Typical **PoE** (Power over Ethernet) Implementation for Lighting, Lighting Control & Related Functions



Virtually any LED Lighting fixtures on the market today can easily be adapted to work with PoE

* Per current IEEE standard. Practical limit when specifying actual loads is 71W total per cable drop.

Ethernet cabling replaces AC line voltage runs and provides both low voltage DC power & connectivity for device control

PoE Vendor Proprietary Components

PoE Interface ("hub" or "node")
Replaces (0-10v) LED Driver & provides other distributed functionality

Management & Control Software
Base Functionality provided PoE Vendor
May interface with 3rd party systems for advanced Building Energy & Information Management functions

DC Power & Connectivity for Device Control
Provided through same standard technologies used to provide office wired internet access

- IEEE 802.3bt (2018) – Up to 90W / 100 meters per cable drop
- Typically purchased / installed / supported by IT department and whoever installs data communications wiring

DC/Alternative Building / Campus Power Infrastructure (Optional / Future)
Lighting is typically 40% of building electricity usage. eliminating the need to power lights with AC electricity is a significant step towards making DC & other Power Infrastructure options feasible