W3C WoT Retail Pseudo-devices

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WoT and "Pseudo-devices"

- "Pseudo-devices":
 - Are normally fed data from video or audio input streams
 - Substitute computation resources for discrete devices
 - Allow a single stream to serve many purposes
 - Allow event clients to use standard interfaces
 - Often rely on high-performance edge computing
 - May improve privacy of data streams if kept local



Simple Schematic





TD: Cooler Door

```
title: CoolerVaultDoorSensorThingDescription
description: A cooler door interface that cooler door open situations.
    properties:
      sensorOnline:
      initialSensorStateOn:
      eventCounter:
      observationPeriod:
      eventCounterLimit:
      maximumDoorOpenLimit:
      maintenanceNeeded:
      coolerVaultDoorSensorName:
      batteryState:
    actions:
      resetSensor:
    events:
      outOfResource:
      maintenanceEvent:
      doorOpenPastLimit:
      doorIsOpen:
      batteryLow:
```



TD: EStop

```
title: Smart-EStop
description: A smart Estop that signals loss of dispenser operations.

properties:
    eStopState:
    eventCounter:
    maintenanceNeeded:
    eStopName:
    initialState:

actions:
    resetEStop:

events:
    outOfResource:
    maintenanceEvent:
    stopEvent:
```



Pseudo-devices in action



