Commerce Project Meeting

March 27th, 2019
Rough Agenda

1. Roll Call and Opens
2. Review previous Opens
3. Calendar Update
4. Diagram preview
5. Commerce Project Getting Started / FAQ
6. Camera Device Service Overview
Previous Opens

• Previous Slides and Recordings have been posted to the Wiki:
  • https://wiki.edgexfoundry.org/display/FA/Commerce+Project

• Connection with NRF / ARTS
  • https://www.omg.org/retail
New Calendars

• Bi-weekly
  • Tuesdays at 8AM PST
  • Wednesdays at 4PM PST
The IoT Challenge

Challenge
Integration
Simplification
Innovation

Focus
Middleware
Future Ready Compute
AI Ready
The Store Room Closet

- Loss Prevention Cloud
- Bluetooth Beacon Cloud
- Inventory Mgmt Cloud

- Loss Prevention Gateway
- Bluetooth Beacon Gateway
- Inventory Mgmt Gateway

- BLE Beacon
- RFID

Arches
Example 1: Computer Vision

1. Gstreamer pipelines are spun up based on camera tags
2. IP cameras stream data to Gstreamer pipelines
3. Inference events are published to EdgeX
4. EdgeX makes inference available for apps and export
5. Containers utilize accelerators when available

- Docker Container
  - FFMPEG, Gstreamer & OpenVINO
- EdgeX Camera Sensor
- EdgeX Registry
- EdgeX API
- Docker Swarm
- Edge Nodes
  - CPU
  - CPU + GPU
  - CPU + VPU
  - CPU + FPGA
  - CPU + GPU
- ipcams
Example 2: Data Fusion

1. Cameras are used as virtual sensors in the experience
2. Sensors such as scales and scanners feed the basket validation algorithms
3. Data from separate sources, separate vendors, are utilized to guide the customer experience