EdgeX Application Working Group 8/6/2019

Topics for today:

- Update from Cloud Export Meeting this morning
  - Mike to share module for extending App Functions SDK
  - Alex will start working on AWS Export
  - Cloud will port existing implementation so that it can extend the app functions SDK
  - Brad will share feature enhancements in the Application Working group meeting
    - CloudEvent should be added as an export formatter
      ■ Put it in holding along with the other cloud/north bound exports
      ■ Defer decisions to move to main edgexrepo until popular

- Feature Requests from Commerce Working Group
  - App Service Configurable - Ready for TSC Approval?
    - Yes, go for TSC Approval Wed Aug 7th
    - Export to rules engine
    - BlackBox testing
    - Ci/CD pipeline needs to be in place
    - Vault integration is captures as separate issue
    - Still waiting for module to leverage vault
  - MarkAsPushed - break it out from HTTP and MQTT
    - Currently baked in,
    - Will move this into its own transform to be called manually
    - **TOPIC FOR FUTURE:** What is the thing that determines that the item is removed from the gateway. How and when?
      ■ Maybe its just a delete? Avoid mutability

- BlackBox Testing
  - ZMQ through HTTP Export out of scope

Topics from last time:

Black Box Tests - Walkthrough for App Service Configurable
HTTPS Export -- We are at parity now (Good for Fuji) - Stretch goal to extend scope to the following:
- mTLS?
- OAuth?
- Token Based Auth for header?

Azure Export
- How many services do we want to provide an example for?
  - Support existing Azure IoT Hub (via MQTT)
  - Create issues for other Azure services that could be helpful with “help-wanted” tag
    - Blob Storage

Refactoring of Functions

Port Allocation:
- Default is 48095 today
- Option to support ephemeral ports (OS Picks).

Any Bugs needing to be discussed?
https://github.com/edgexfoundry/go-mod-messaging/issues/31

Any Other Updates?
Still in Beta today - Will match major release of EdgeX once released.

From Last Time:

Export Distro (Issue #512) / go-mod-messaging (Issue #28)
- Only able to recreate with core-data running in docker
- Found new issue where core-data stopped publishing events
  - No errors or crash.
  - Stopping DS(s) and restarting mongo resolved until both DSs running.
  - Dropping Events & Readings collections from Mongo resolves issue
- Lenny will merge fix and update edgex-go and retest
- Lenny will create issue for new issue where Core Data stopped publishing.
  - Lenny will take his test case to the QA/Test WG.

App-service-configurable Docker
- Profile specified from compose file ‘cmd:’ or docker run.
- Default run without profile will cause error.
- Will start with the following profiles:
  - rules-engine
  - mqtt-export
  - http-export
  - docker
    - Default sample (filter & xml transform)
- Current filter function need to pass-thru if filter values empty, currently none passed thru.
  - This allows more flexibility with configurable pipeline

Blackbox Testing
- First pass on existing REST API using current tooling and scripts to set config
  - Will also use REST Trigger to drive testing function pipeline
    - Post event
    - Pipeline runs
    - Result send back as HTTP response
- More Robust test once we have Robot (dependent on QA/Test WG)
  - Above race condition and previous expose that we don’t have sufficient full scale integration and stress testing.

Any Bugs needing to be discussed?

Any Other Updates?

- Rules engine update
  - Jim working on it to handle MessageEnvelope
  - Looking for recommendation for CBOR package for Java
- Environment variable override has been merged.