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

- Ready to close https://github.com/edgexfoundry/app-functions-sdk-go/issues/110?
  - 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.
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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.