System Management WG Meeting: 8/28/18

Attendees: Attendees that may have joined after the start of the meeting may not have been captured and listed.

Discussion and action items as a result of meeting in RED

Old Business

- Updates on implementation of SMA and micro service management API (MSM API) from Akram
  - PR submitted and first system management bits now on the master branch of edgex-go
- Edinburgh Release
  - Add metrics (not all of these would be in Edinburgh – TBD)
    - #Objects detected, inferences per second, time per inference (@ analytics level/AI)
    - Some metrics would be service specific (like above) some would be generic (ex: memory, CPU)
    - Need, potentially, to think about resolution of metric data (but don't want to impact service performance itself)
    - Data flow metrics: events per second, readings per second ideas
  - SMA Translation layer (to talk LWM2M, OMADM, etc.)
    - How to push data/metrics to other systems (REST v message)
    - How to allow for pull of data/metrics
- Fuji Release
  - Setting config (what is read only vs. writable property)
  - Callback (alerts on changes config/metrics)
  - Add actuation based on metric change (control plane level rules engine/analytics)
    - Ex: Stop or restart a service if we see CPU rise to a certain level
    - Anomaly detection at system level
  - Storing metrics collected locally?
    - How to push data/metrics to other systems (REST v message)
    - How to allow for pull of data/metrics
    - Concern with too many database; or should it be a shared database in EdgeX
    - Could be supported of in-memory database vs disk? Allow down stream to store to disk as needed. (Use Redis for this for example).
  - Get metrics into time series database (like InfluxDB)
- Wish list beyond two releases
  - Software update of micro services
    - Vs hardware/BIOS/etc.
    - How to do with various containers (Docker, Snap, Kubernetes, etc.)
  - Talk about broader "standard" for system management & system management APIs
    - Prescriptive guidance
    - Using EdgeX sys management as example implementation of
  - Test bed potential with consortia/standard groups

New Business

- Pre-cursor to Edinburgh meeting – what is EdgeX management versus broader gateway management (what in Salim's diagram is part of EdgeX)