System Management WG Meeting Minutes: 08/13/19

Attendees: Trevor, Akram (Dell), Mike, Lenny (Intel), Joe (IBM), Rodney (Beechwoods), Amit (Independent). Attendees who 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

- Open Horizons sub-project
  - State of current POC
  - Next meeting again next week August 19th.

- Fuji Work
  - Edgex CLI was covered with Alex.
  - Code currently in holding (see TSC July 10 meeting recording for demo)
  - Need review and approval by this group to TSC to move forward
  - What’s MVP to accept this and bring it to edgexfoundry GitHub organization
    - Developer-centric
      - With options to expand
    - Additional APIs
      - Need to start services - start native as we are supporting developers
      - Similar to what we do make file with parameters, security, (profile is specific to a service)
    - Unit tests
      - Show some unit tests with simulated response that are easily extendable going forward
    - Documentation
      - Readme in Github with command line help in addition
      - Need some docs in docs.edgexfoundry.org
    - Should work with EdgeX security proxy/API gateway
      - Future need – developer focused
    - Services are currently determined by hardcoded ports
      - Need services and ports to be configurable (manifest?)
      - Already done
    - Other commands needed for Fuji?
      - What would be “released”? Would there be artifacts? If so, how are they to be managed, versioned, etc.?
        - No artifacts. Use Go get and snap deliveries
        - Versioned – versioned with EdgeX; API to call to see version of the CLI and EdgeX (via version API). Allow user to see they match.
        - Future would include ability to set CLI version and go between multiple EdgeX versions.
    - Metric collection by Executor – Demo/discussion by Akram
      - Code review ongoing
      - Issue from 7/30: What about RAML – how will choice of metric be documented?
      - Ongoing work per PR-1609.
New Business

- Update on Metrics collection by Executor – Akram to provide this, as well as the items that follow thereafter.
  - Refactoring code for testability.
  - Challenges faced in the process, and the strategy to overcome them.
  - Walkthrough of increased testability, and implications for code coverage.
  - Current results, in brief.
    - Akram walked attendees through the process followed, and the strategy taken up, to refactor for increased testability.
    - Demo the unit tests in action next time, along with the corresponding numbers for code coverage generated in real time.
    - Rodney: Looking to future as related to the certification process?
      - Akram: Taking into account the variability that we’ve opted for, rather than a rigidly-imposed set of structures, by way of flexible responses encoded in maps of JSON structures:
        - Go SDK-based services would return a set of metrics.
        - C SDK-based services would return a set of metrics.
        - When leaning on the executor, another set of metrics would be returned.
          - What unifies these variable responses is the flexibility afforded by key-value pairs (conveniently encoded in maps of JSON structures)

- Tasks ahead: A recap.
  - Set Configuration – planned
    - The scenario to be implemented (for Fuji) is the one which does not require a restart.
    - Trevor: Is the plan to incorporate security features for the Fuji release
      - JWT, etc., is (likely) not going to be in Fuji…
      - Therefore, for this feature—and this will be a TBD—we may need to target the Geneva release instead, since security aspects will be in place for Geneva (and not for Fuji).
  - Start/stop/restart all done by the executor to include stop/restart of SMA – planned
    - Incorporate industry best practices and design patterns as applicable
      - Is planned and will be worked on.

- Next meeting again next week August 20th.