System Management WG Meeting: 6/11/19

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

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

- Open Horizons sub-project
  - Started Jun 3rd. Meeting again next week Jun 17th
  - [https://wiki.edgexfoundry.org/display/FA/Open+Horizons+-+EdgeX+Project+Group](https://wiki.edgexfoundry.org/display/FA/Open+Horizons+-+EdgeX+Project+Group)

- Fuji Work
  - Set Configuration – design diagrams provided by Akram A. (copies in Wiki)
    - Notes for Fuji (crawl)
      - We are not handling local file system config.
      - We are not handling read only config yet (although we do have it in the design to make sure we have the design right)
    - Design review callouts
      - Could we eliminate a 2nd round trip in request of Registry for its endpoint (combine 3 & 4)
      - Future – add caching for getting endpoint and config (stretch)
      - Fix 2nd diagram – SMA calls to service which calls to registry
      - Fix 3rd diagram numbering (and same SMA to service call)
      - On setting readable properties and having to poll for change: instead, call on Registry service’s built in WatchForChanges. Note, its a blocking function - something would need to shut it down at the end.
      - Are we setting single or multi-key value pairs? Single today, but could address multiple in the future.
      - We may want more of a batch mode in future
      - Should service have reload function? Services automatically have this today for "read only" properties; not for writeable because of the restart need.
  - Design questions
    - Is it OK for the service just to get the new value on the (recurring) service update of config, or would there be a need to immediately sync once putConfigurationValue is done and acknowledged?
      - Client - not only update Consul but also update cache locally.
      - When is a safe restart done? Do we need to build in checks whereby the SMA knows that it is safe to proceed with restarting a given service? Or, in contrast with such a "graceful" (non-intrusive) restart, do we proceed with a "forced" restart?
      - We need a hook to provide indication it is not safe to restart. Let the service decide what is part of “shutdown” operation. Each service should provide a “shutdown” function – that does the exit, but service can override and have a way to prevent immediate
shutdown or wait for something to finish before it shuts down. Need to work out the details of what is returned from this method.

- Can we add a callback capability to Registry whereby it (i.e. the Registry) informs the invoker (the SMA in this case) of the call to putConfigurationValue() that it has completed updating? (This will greatly simplify the job of the SMA in this connection to repeatedly query a given service in polling fashion to determine whether the configuration value was indeed updated.)
  - Covered with above discussion on Registry WatchForChange.

  - Metric collection by Executor – working
  - Start/stop/restart all done by the executor to include stop/restart of SMA
    - Executor tracks completion and returns results
  - SMA Translation layer (stretch)
    - Pick one protocol to start (LWM2M)

New Business
- None