Device Service Working Group Meeting 2/11/19

Chaired by Steve O (IoTech). Attendance not captured.

Old Business

Status update of Go SDK from Cloud:

- Updating SDK to address changes made to edgex-go
- Device object rename to device results
- Adding context associated with correlation id

Status update of C SDK from Ian:

- Registry abstraction is implemented
- Dynamic updates when registry configuration changes (needed)
- Service endpoints dynamically configured (needed)

Steve and Tony to triage the issues (over 35 exist today) – on call with Cloud later in the week. Toby requested to be a part of that call.

New Business

A. Addressable – simplify / change addressable for device to name/value pairs (a map). It will also be renamed (much discussion about this).   Steve as chair chose name: protocol properties. **To be implemented by SDK teams**. **Trevor is taking on this change.**

   We need to change external package folder to module. Should it be addressable change first or should the module work be done first (allowing SDK not to have to refer to edgex-go anymore)? Decision was to allow **Trevor and Cloud on which should be done first and second**.

B. Subscriptions versus scheduler (Issue 946). Essentially internalize the specific scheduling needs for device service in new subscription functionality (reduced set of features from scheduling service – to schedule reading pulls). **Requested a new name** (since "subscriptions" is used in notifications). **Steve, Ian, Tony, Cloud are addressing and putting this functionality into the SDKs; decision pending next week's meeting.**

   a. Scheduler will have no knowledge of these "subscriptions".
   b. They will be embedded in the device (for storage).
   c. Perhaps it needs to be a map of resources (device resource name to schedule attributes/properties) versus collections.
   d. Schedule event/schedules can be removed from metadata when this is done.
   e. On change, rate limit requires cache – but cache (whether transient or db driven) is a stretch goal for this release (Edinburgh).
   f. Handling a put command with the internal scheduler or "subscription" service is also a stretch goal (a use case for this subscription put command is not known, but the functionality does exist today). We need to remind our selves that this is a < 1.0 release. Going forward (after 1.0), we can't remove functionality.
   g. The subscription could hit a device resource or a device command (i.e. - an aggregation of resources).

C. Device profile refactor – put on the agenda for next week.
D. Device blacklist (& whitelist) – for device (re)discovery as well as helping the device delete issues. Typically, this is associated with dynamic discover (vs. static discovery). This was determined to be a stretch goal for Edinburgh. This would require a proposal before adopting and implementing for Edinburgh.
E. BLE device service being done by IoTech (and was started but stopped by Dell). IoTech is doing one in C without BlueZ stack. May be some licensing issues with BlueZ. **Tony & Steve to off-line this conversation and to make determination on what language and implementation.**
F. CBOR work continues and making good progress (Toby) – some concern about use of scheduler and where this is going and what is going away.