System Management WG Meeting: 12/11/18

Attendees: Rodney (Beechwoods), Tony (Canonical), and Jim, Akram, Trevor (Dell). 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

- Start/stop/restart EdgeX micro services redesign effort (see separate deck for this meeting)
 - o POCs nearly complete (able to start / stop services through Docker-in-Docker image)
 - Akram working on Dockerizing the SMA with DinD
 - Next step redesign of interface/interfaces
 - Following many of lan's suggestions
 - Planning to make type for wrapper around inputs
 - Action, and service names
 - Dealing with return results from executable or docker-compose call
 - Want plugin model to reduce inclusion of all the "executors" but not solved yet (Trevor working in Core WG with regard to DBs)
 - Not sure we need to interface the arguments to the start/stop/restart methods. Keep it simple.
 - For now, we need to keep the different implementations (like snap.go) in place until we get the plugin architecture down (beyond having docker-compose and exec executors)
- After start/stop...
 - o Go C SDK API work to be done
 - Add CPU usage metrics (in addition to memory usage metrics)
 - Additional API (and pass through to the services) to be added to the SMA
 - Look at abstraction around metric APIs to allow for other implementations going forward
 - Example: allow memory and CPU metrics to be provided by external executable
 - Add health/status check of the services to the SMA
 - This will be a call through to the configuration/registry service (Consul)
 - Allows a single point of entry for all EdgeX control plane needs
 - Stretch goal provide a translation layer (with abstraction) to offer SMA API via other protocol (like LWM2M, SNMP, etc.)
 - Likely focusing on SNMP as first option
 - Why provide anything more than just REST; take the DS SDK approach and let people build their own
 - SNMP 20+ years old
 - How about something like MQTT (although we'd need to design our own metadata around it)
 - How about looking at OneM2M
- Long term road map update (see separate doc for this meeting)
 - https://wiki.edgexfoundry.org/download/attachments/329501/EdgeX%20Foundry%20System%20Management%20Roadmap-11-26-18.pdf?version=1&modificationDate=1543285863433&api=v2

New Business

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