System Management WG Meeting: 11/13/18

Attendees: Akram, Trevor & Jim (Dell); Ian & Tony (Canonical); Alain. 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

- Review of scope from Edinburgh Face2Face Meetings
    - Specifically also discuss what is out of scope of system management (as decided by group on architects day)

New Business

- System Management demo video (tutorial) done by Akram.
    - https://www.youtube.com/watch?v=tlEnEo6whas&feature=youtu.be
    - Reaction and feedback; suggestions for other demos
- Start/Stop a micro service via SMA
    - Architect fail for Delhi (Jim's fault)
    - Issues we face(d)
        - Using Docker Compose and all the libraries required
        - Running SMA in Docker Container
    - Requirements and design going forward
        - What are likely things that SMA would call on to start (or stop)
            - Docker Engine/Docker Compose
            - call to exec binary (would cover sysd)
            - ~~some OS specific script~~
                - No – at least let's not do that right now for this release; let's see where use case and needs take us.
                - advanced use case and gets into potential OS versions, tools, etc.
                - The advantage of using a script (versus executable binary) is that it is real easy to change script (value to support bash type)
            - Discussion on what we need and how we implement
            - Problem – all new implementations has to be written in go – but we should decouple that thinking; allow for custom implementation
            - Run into problems if we use official Go plugins only
            - SMA should be there – but commands to do start/stop should be configurable / dynamic
            - Easier to do in a container environment (Mike Intel) – has all of its configuration all built in making it easier
            - Custom type – wouldn't require re-code, just configuration
            - SMA (configuration – where to start)-> what program do I run to start or stop with argument that needs to start (or stopped)

  - Be prescriptive about it – don’t just allow anything (in terms wo what the SMA will call).
  - Keep it simple at first – do Docker Compose or call executable binary.
    - Scripts we can handle by having the executable do a script if it wants (for now – relook in future)
    - When calling a binary, keep it simple by just passing services you want started or stop. No other parameters.
    - Let the other executable deal with its own config settings and parameters to get a service up.
  - Container versus non-container “running”. These two need to be handled differently.
- Private registry – do we support 3rd party containers in our deployment and will the SMA handle?
  - Yes – just need to be in the manifest
- How does or should the SMA determine success/fail of start or stop
  - Desirable to get results – look at callback options as way to do it
  - Logging offers auditing capability – for more manual or use standardization on log entries to signal success/failure
  - Logging wouldn’t make sense if it was done through a binary since it wouldn’t have access to our EdgeX logging
- Jim and Akram on the hook to provide some preliminary ideas/design for next meeting.