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.
  o Scripts we can handle by having the executable do a script if it wants (for now – relook in future)
  o When calling a binary, keep it simple by just passing services you want started or stop. No other parameters.
  o 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.