

## Core Working Group Agenda 4/19/2018 meeting

Attended by: Ian & Tony (Canonical), Andy & Steve (IoTech), Rodney (Beechwoods), Trevor, Tingyu & Jim (Dell), Janko (Mainflux). There may have been others in attendance later in the meeting after the list of attendees were assembled.

Discussion and action items as a result of meeting in RED.

**NOTE: there will be no Core Working Group Meeting next week 4/25 due to Hannover Messe event! Happy Birthday EdgeX!**

**Trevor Conn** will be sitting in as interim-chairman for the following two weeks (May 2 & 9) as I will be unavailable.

## Old Business

### DevOps issues/updates

- Build 0.5.2 of EdgeX: now available. Jim working on a 0.5.2 compose file

### Documentation

- Now available in Github. Feedback welcome and encouraged.
- “Pretty” version available on IoTech Web site
  - <http://www.iotechsys.com/community/>
- Target early May cut over from Wiki to new documentation.
- Still need to resolve where to host output. Need to discuss with Jeremy (Jim Action).
- Could put on ReadTheDocs or on LF infrastructure (preferred) or host on 3<sup>rd</sup> party
- Some cleanup of formatting and such coming. Could use a bit more feedback (Jim Action to post to mailers and RocketChat)

### DS Requirements Discussion

- Open issues in DS requirements
  - Query All command results
  - logging/scheduling - resolved
  - actuation commands RAML accuracy
  - metadata updates (/callback) RAML incomplete – may be open for now
  - finalize appendix A on settings – resolved based on service name/availability doc
- New revision available – to be sent out later today.

### License file issue

- Jeremy to implement for Docker files
- Issue submitted against export services for attribution file need (#120)
- Can we close this discussion?
- Jeremy not in attendance

### Core Services Refactor

- See <https://github.com/edgexfoundry-holding/core-data-refactor>. Comments and feedback welcome.
- Will start to move it over post HM

- Again – this does not affect the APIs and external surface of the code.

### Service Naming, Availability and Configuration Bootstrapping

- Requesting approval to implement per <https://wiki.edgexfoundry.org/download/attachments/7602423/ServiceNameDesign-v6.pdf?version=1&modificationDate=1523468903687&api=v2>
- Comments and feedback welcome before the Dell team begins implementing for California release post HM

### Contribution Guidance Top 3

1. Commit subject line messages should explain the problem that the commit is solving in 50 characters or less. “Fixing bug” or “adding comments” doesn’t explain the problem the commit is solving!.
2. Provide a message body to the commit to provide more detail explanation. When you do, keep lines in the body to 72 characters or less.

You can add a commit subject line and multiple message bodies like this:

```
git commit -s -m "This is the subject; keep to 50 char" -m "This is the first line of the message body"$\n" "This is the second line of the message body."$\n" "Keep all message lines to 72 char."
```

3. Commit your changes in logical chunks. Make it easier for the community to review, comment on, and accept your contribution. For example, create a separate commit for a big fix and an enhancement.
  4. Rebase the upstream development branch into your topic branch. Do not merge master into your local PR branch (this is the lazy approach to dealing with committed code locally in a branch, and then realizing that your PR isn’t merge-able because HEAD has changed). See <https://git-scm.com/book/en/v2/Git-Branching-Rebasing> if you need more help.
- Added to wiki. Can someone add to Contributors.md in Go repo?
  - Closing out this item.

## New Business

### Release Number for California – 1.0?

- Depends on whether versioning by marketing or technical basis.
- Do we need some sys management (and more security) for 1.0? Perhaps Delhi is better for 1.0.
- Version 0.6.0 is the consensus.
- Andy: Might want to take this up with TSC. It infers lack of maturity. We don’t want to say you can’t use it in real systems.
- Making recommendation to TSC to use version 0.6.0. Allow TSC to decide if it should be 1.0 based on marketing/optics.

### Other Opens??

None

## Technical Debt and other issues we want to address at June F2F

- Suggested Themes for Delhi
  - System Management (System Management to provide, but based on current API/Agent scoping)
  - Next steps in security (Secty WG to provide)
  - Instrumentation and tracing
  - Stress and performance testing
  - Comprehensive testing of device profiles
  - Mongo replacement (size and support of 32 bit an issue)
    - Could be lighter weight Mongo or other NoSQL
    - Might we use a structured database for Metadata (export client, notifications)
  - Tech Debt/Architecture issues to address with this next release
    - Use of db IDs in objects
    - Device discovery onboarding/removal issues
    - Tackle compile issue for OMQ but not whole message infrastructure yet
    - Could we find a way to provide API documentation in automated fashion (regardless of whether it is RAML, SWAGGER, etc.)
    - Service outage and how that is broadcast out
    - Does Consul continue to support our needs, can we upgrade to latest?
      - Use in standalone fashion valid
      - We may need to get discussion going Hashicorp
    - Review architecture of export services
      - Can it be made more like the south side where it is more SDK'ed
      - Enabling more extensions and integration capability
      - Onboarding of devices, command API access – how would these be made available
      - System management metric data may follow similar pattern
      - Cloud as sensor
    - Relook JSON schema
    - Look at SENML (ITF standard) v. Value Descriptors

## Additionally proposed topics for technical debt and future releases

- Errors and warnings expressed in Mongo startup
- Next security features
- Drasko/Rodney issue from security WG on how we deal with device security (paragraph needed)
- First steps to distributed-EdgeX (services running on different host machines and impact to security reverse proxy, command calling, etc.)
  - Subsequent to Delhi
- Load balancing – multiple instances of services
  - Subsequent to Delhi
- Upgrade consul (0.7.3 is old, and warning generated on startup)
  - Review usage of consul in standalone mode with Hashicorp. Jim to try to get discussion going with Hashicorp.
- Registry - service outage notifications

- Need to think about now (for Delhi)
- Device discovery onboarding/removal issues
- Use of db IDs in objects
- How to support multiple Message bus implementations
- Replace RAML with SWAGGER (RAML is being abandoned??)
- Introduce new category for microservices: “Sharing Services” for East/West data exchange with non-edgex entities
- Lighter alternative to Mongo for metadata (or in general: how to enable multiple metadata backends)
  - See above
- Marketplace for value-add microservices and its implications (will we need a new EdgeX microservice acting as license server?)
- Security Certification for EdgeX by a specialized Cybersecurity third party
- Make Export Services to have the same architecture as Device Services (independent microservices using the same SDK) or at least make new export services to be as “plugins”. In the long run the number of export services will explode (same as DS).
  - See above