Jakarta Planning Meetings (Jun 21-25)

Day 4 Notes/Action Items

Action items in red

Ireland Release Update

- 30 failures; think these are due to the go-mod-messaging issue. Will have better results tomorrow after PRs for below are through.
- Go mods to be tagged today.
- New issues that need to be addressed
    - Needs to be closed since it was addressed in core contracts.
    - Fixed
- CoAP service and devops
  - Completed by Iain
- GUI team has reduced NPM audit issues considerably.
  - Documented other needs. Now ready for release.
- Changelogs completed for go-mods and edge-x-go. Still needed for SDKs and services.
- Snap PRs in flight – ETA Monday (edge-x-go, app-service-configurable, device services)

Scoping discussion covered in scope slide deck

Architectural Issues

- **On Metrics and UoM ADRs:**
  - Need to finalize these ADRs in this Jakarta release
  - If there are any parts we are comfortable with implementing for Jakarta we do so (with sensitivity to stability and backward compatibility)
  - Full implementation in Kamakura or later
- **Kong on all the time**
  - Benefits would be to delete a lot of test code and tests to deal with secure and non-secure modes and make it easier for end user scripting.
  - Added benefit of simplicity to user – only one URL to have to use per API – regardless of secure or non-secure mode
  - Decision: not implement Kong-on-all-the-time for Jakarta
    - Kong image is large
    - In Jakarta and through Kamakura:
      - First, have the QA team get performance numbers on current Kong use
        - How big is the image (including PostgreSQL)?
        - How much memory and CPU does it use?
      - Second research on use of Declarative Kong – how does it work, is it a drop-in replacement, etc.
        - Have QA team get performance numbers on Declarative Kong use
        - Compare Kong with Declarative Kong
• Third – research the work required to move from Kong to Declarative Kong if the performance numbers indicate this is a good idea.
  o Work to rewrite proxy setup and other setup of services/processes
  o Target is to have the research done by Kamakura planning meeting in this fall.

• **Declarative Kong**
  o Allows us to drop PostgreSQL DB
  o Can configure groups/user ACL
  o Only supports JWT users
  o See above for decision

• **Distributed Services**
  o Agreement on the part of the community to support distributed services in EdgeX and support in secure mode.
    ▪ The thought is that Device services, App Services and analytics are more likely to be distributed than other services.
  o Issue to which the community did not come to agreement at this time is how to support.
    ▪ What is our dependence on orchestration to support security elements in distributed mode?
    ▪ What underlying infrastructure do we want to use (Kubernetes, Swarm, etc.) to help facilitate this?
    ▪ We support docker containers, should we at least have something that works in Kubernetes orchestration?
    ▪ Should we say use Snaps for native deployments and Kubernetes for distributed/containerized deployments?

• **SDO/Fido integration**
  o Task for Jim to follow up with SDO team and Joe Pearson (ORRA and Open Horizon).
  What would EdgeX integration mean and what benefit?

• **EdgeX 3.0 - what would it look like?**
  o Distributed and/or HA services?
  o Secure micro service communications?
  o Incorporate secure device onboarding?
  o To fuzzy at this time to know

• **Get rid of ZMQ**
  o Decision: yes – after Jakarta
  o Deprecate in Jakarta
  o Should be a small effort to get rid of the ZMQ code
  o Will make install and development easier on some platforms (Windows especially)

• **Get rid of YAML?**
  o Mixed review from community on YAML (some like it, some prefer JSON).
  o Only place it is used is in device and device profiles today.
  o Stretch goal for Jakarta – add alternate JSON device and device profile files in addition to YAML.

• **Message bus between app services and command and device services (north to south)**
  o Decision: Should be a focus feature of Kamakura.
Elimination of ZMQ will make it easier.

- **Architecture decisions (small to large) – what’s the best place to track them and announce them**
  - Small ones are getting lost in meeting notes
  - Jim to research what other projects are doing and how they handle this and work it through the architect’s meetings.
  - Mike J suggested looking at: https://github.com/kubernetes/community/blob/master/sig-architecture/README.md

Unconference Presentations

- IOTech Systems on its new Edge Builder product. Slides available in the wiki.

Lessons Learned from this Planning Meeting

- Don’t overlap with freeze/release weeks
- Meeting times feel right (alternating 9-1pm and noon-3pm CDT)