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
 - https://github.com/edgexfoundry/device-sdk-go/issues/980
 - Needs to be closed since it was addressed in core contracts.
 - o https://github.com/edgexfoundry/go-mod-core-contracts/issues/638
 - Fixed
- CoAP service and devops
 - Completed by Iain
- GUI team has reduced NPM audit issues considerably.
 - o Documented other needs. Now ready for release.
- Changelogs completed for go-mods and edgex-go. Still needed for SDKs and services.
- Snap PRs in flight ETA Monday (edgex-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)
- o 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 nonsecure 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)?
 - O 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
 - 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.
 - 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

- Allows us to drop PostgreSQL DB
- Can configure groups/user ACL
- Only supports JWT users
- See above for decision

• Distributed Services

- 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.
- 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

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?

- Distributed and/or HA services?
- Secure micro service communications?
- o Incorporate secure device onboarding?
- To fuzzy at this time to know

Get rid of ZMQ

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

Get rid of YAML?

- Mixed review from community on YAML (some like it, some prefer JSON).
- Only place it is used is in device and device profiles today.
- 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)

Decision: Should be a focus feature of Kamakura.

- o Elimination of ZMQ will make it easier.
- Architecture decisions (small to large) what's the best place to track them and announce them
 - o 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)