Core Working Group Agenda 3/1/2018 meeting

Attended by: Greg Z (Sixgill), Avichal A (Samsung), Jim & Trevor (Dell), Fede (Cavium), Rodney & Brad (Beechwoods), Jeremy (LF), Tony (Canonical), Salim (VMWare), Alberto (NOV), Keith, Steve & Andy (IoTech), Darko & Janko (Mainflux). There may have been in attendance later in the meeting after the list of attendees were captured.

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

Old Business
DevOps issues/updates

- Automation of black box tests is priority 1
  - Not sending emails yet but ready to go.
- Go/Arm build work underway is priority 2
  - Working on verify jobs for mono repo of Go
  - Working on merge jobs, and that will also do Arm compilation
  - Daily jobs to push to Nexus/Docker Hub/etc. being worked
- Next up – Native Arm build and deploy, test (on Cavium boxes).
  - Box integrated into CI. First successful verify (build & test) on the Cavium box. Export go service did build.
  - If you rely on something outside of workspace it could pollute it and create problems
  - Question, is the Cavium box running Centos or Ubuntu on box? – Ans: Ubuntu

Current Work Tasks
Remaining work items now in Github Projects/issues and listed below. No meeting time to discuss unless there are significant updates

**California Release Work Tasks**

- Security & System Management – per WG task list (Jun – collective but Jim leading)
- Integration of System Management APIs into micro services (Jun – Dell)
- Core, Supporting, Application services in Go (Dell, Cavium, Mainflux, others?)
- DS SDK in Go (mid Feb, Tony)
- DS SDK in C (April, IoTech)
- ? number of DS in G and/or C (???)
- Blackbox tests for all services (and SDK??) (End of May, IoTech)
  - Opportunity for other companies to make contributions – good area for new groups to participate.
  - Jim Action – poke participating/community companies for help
- Performance tests (and meeting performance targets) (IoTech)
- Everything runs and is tested on ARM (Jeremy/IoTech)
- Environment – what target environment to do the tests (lab equipment, tools, software, cloud product availability).
- Documentation to Github – (Iotech)

**Face-to-Face Action Items**

- Go Lang Core/Export Services connected to Consul, config files in seed (Jim/Fede/Drasko, May 1st)
  - We load every property for all images (local or Docker) you get every config element – now and issue
- Cross compiling for all Go Lang artifacts to include Go Core Data, Metadata, Command, Export client, Export distro, and config seed use (Jeremy, Jan 31st)
Part of what is in the PR for review
- Only for Arm 64 for now per F2F
  - Arm native environment (Fede, Gorka, Jeremy, End of April)
  - Blackbox testing on Arm native environment (Andy F, Jeremy, End of May)
  - Wiki page on EdgeX on OS’es – attestation of testing page (TBD, End of May??)
  - Performance target tests – the Pi Tests (TBD, End of May??)
  - Setup “Sithub” (Jeremy, first week in Feb)
  - Samsung Code moved to Sithub (MJ, 2nd week in Feb)
  - Samsung Code reviewed and processed (TBD, TBD)
  - Naming, availability, startup/cleanup service architecture draft (Jim W, 3rd week in Feb)
  - Device Service requirements doc (Tony, mid Feb)
  - Go Code reorg/mono repo (Cavium and Mainflux, TBD) – closing out – its up!

Go Mono Repo
- Now available
  - edgex-go
- Working out build/CI kinks, working out some bugs
- Both mono repo and separate service repo active until at least Friday (please maintain both until the merge is complete)
- Current work – what do we need to do to get PRs in and builds going? Who owns what, how can the rest of us help
- Use issues to add requests/comments to PR work unless it is a critical item. We want to move over what we have and get it working before we worry about improvements or new work
- After Mono repo is up and working, we’ll be shutting down the Go Project Group
- 2 days ago – all builds failing because of 0MQ
- After that Arm jobs failed because they ran on Intel boxes (now those jobs are only running on Cavium Arm boxes)
- We need to recheck all PRs. Just add “recheck” comments on the GitHub UI – all lowercase no spaces before or after (can be done by anyone). Action: Jim to add recheck to all PRs to get them through.
- We generate artifacts anytime Java code is PR pushed to snapshot repo (up to Nexus). How should we do that for Go?
  - Build artifacts include binary and docker image
  - Weekly? Or semi-stable? Last known stable and daily?
  - Decision: do daily pushes to repos for Go, and make decision in this meeting when to have a “semi-stable” tag push

Vertical Solutions Group Requirements review
- Thanks for everyone’s participation last week.
- Any updates to those items we already adjudicated?
- We’ll pass recommendations formed from last week’s and this week’s meeting to TSC for approval/adoPTION
- Remaining items
  - Export data from date – to date operation (historical data)
    - Sounds reasonable – add “filter” need to roadmap, for Delhi
  - Need meeting for Applications WG – Janko setting up
OSI Soft Pi Export connector – contribution proposed from Vertical Group with hopes to have it accepted into EdgeX as a whole.

InfluxDB Export connector – could be achieved in different ways. Again contribution proposed from Vertical Group with hopes to have it accepted into EdgeX as a whole.

Documentation
Revisit in March

- Reviewed by Andy last meeting 2/15 – thanks Andy. Looking good
- Current game plan:
  - IoTech to clean up til March 1
  - Review of IoTech repo target Mar 1 – 30
  - Work with Brett to track applicable changes in Wiki during the review period
  - Hold a pre-day meeting just before the cut over
  - Target early April cut over

Architectural Issues
Queued for upcoming discussions –

- Where should RAML live? Maybe we need API repo? Maybe APIs live in repo of code source (Java or Go – whatever the ref impl is). Architecture/technical item for future discussion.
  - Some of the new Go services include in repositories – and it should live in reference implementation
  - Other option would be to have central repo – one stop shop to look for RAML
  - Andy’s documentation can point to various repo
  - A single repo may run into a version issue – if it lives in repo, it gets version with code
  - Decision: put RAML with reference implementations. Action: Jim to move the RAMLs to appropriate location & work with Andy to have pointer doc in new documentation to RAMLs in Github and handle HTML generation
  - At some point we need to review RAML (Action: Jim to coordinate with Andy on Blackbox test verifications)

- License file issue - how do we get appropriate license files to project artifacts (Docker containers and such)?
  - From Tony E: I found that none of our docker images contain the full set of required licenses (copyright, LICENSE*, Attribution.txt, THIRD-PARTY-*, ..)
  - * This *could* be driver error (I used docker export)
  - * Our consul image may need an Attribution/THIRD-PARTY file added
  - Action: For next week, Jeremy to provide requirements on what is needed to assist CI process for this work, and make ask to dev community for what is needed in repos to support this. Includes Attribution.txt, license file.

- Message infrastructure between Core Data and Distro (and others in the future) – covered in the next Go meeting
  - Action: Jim – get Steve O (IoTech) invite to Go meetings
New Business

core snap
- amd64 & arm64 barca-based snaps pushed to snap store edge channel
- amd64 snap cali-preview-based snap pushed to new 'cali' track
  - currently based on individual go repos
  - will switch to mono repo once stable
  - 200MB smaller than barca-based snap (600M)!!!
- Available to community to pull down. Just need snap-d. Snap is fully confined (locked down). Right now just device-virtual is included.
- Readme file forthcoming in email from Tony

gxds (go ds sdk)
- At minimum, Tony to release this as a standalone Git repo before March 12th.
  - Try to get that in a PR against the mono-repo
- Goal is to have this functioning well enough to demo on a Gateway 3000 for Hannover Messe.

DS Requirements Discussion
Started to discuss this but ran out of time. Everyone is asked to consider these elements and have opinions at next Core WG meeting.

- settings; review proposal from DS requirements
  - new core Go services
    - use JSON instead of YAML (DS proposal)
      - Propose YAML for configuration, but not sure which format
      - This consideration is not for Metadata Profiles
  - don't use consistent (case) names for settings
  - no way to override settings file path from cmd-line
  - no way to override individual settings from cmd-line
  - (Java allows this via -D<property=value>)
- open issues in DS requirements
  - Query All command results, no device names or ids returned?
  - A DS must provide both forms (all & deviceId) of GET handlers
  - logging/scheduling - *inprogress*
  - data transform - *inprogress*
  - actuation commands RAML accuracy - *tbd*
  - metadata updates (/callback) RAML incomplete - *tbd*
  - finalize appendix A 'settings'

No time to discuss these items either – pushed for next meeting

Build 0.6.0?
Suggest a 0.6.0 build and containerization of all repo after Go work appears to be running – objections?

Potential Docker EULA issue looming
Update from Jim on call with Docker.