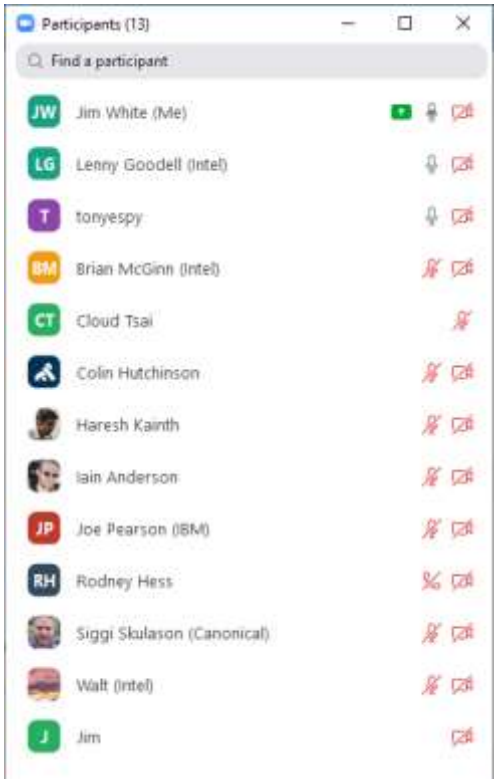
EdgeX Foundry Core Working Group

(plus system management and UI)

8/20/20

Attendees:



Others may have been in attendance after roll was captured.

Old Business

Current Status (Project board - as of 8/19)

- Backlog: 14 (+1)
- Bugs: 4 (same)

In progress: 2 (-1)
Under review: 0 (same)

Done: 44 (+9)
New: 5 (+5)

	Closed Issues	Working Issues (new)
edgex-go	2609, 2652, 2639, 2662 (use string vs. Itoa function in scheduler)	2614-2620 (module expl/removal)
contracts mod	258, 263, 266, 268	
bootstrap mod		

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go-mod-msg		56-57 (MQTT CBOR issues)

- MQTT - go-mod-messaging issues (56/57) - reviewed by Lenny/Tony
    - On hold until vacations end & design resolution achieved
- API V2
    - Event handler / controller PR (#2610) - MERGED!!
    - Metadata DTO (#253 on core-caks) - MERGED!!
    - Next up Event query APIs
        - This will assist in TAF testing of V2 API
        - Query by ID first
    - Continue handler/controller work
    - Put command DTOs on back burner for now
    - V2 Event model use of Checksum and CorrelationId
        - Why can't we just use CorrelationId?
        - Comes down to "how do we mark an event as pushed"
        - When an event (model instance - usually done by a Device Service) is created, a UUID gets created and attached to the event no matter where it is created.
            - ~~For CBOR - the event id would have to be put in the message header (the event id would otherwise be embedded in the CBOR and inconvenient for use without pulling apart the CBOR message).~~
            - We need to update core contracts to do this.
            - Requires an ADR (Jim to start this)
    - We will not implement any CBOR / binary support APIs for Hanoi V2
        - Revisit binary support with F2F in fall for EdgeX 2.0 API V2
    - What should the Path for V2 Version endpoint be?
        - In V1 it is **/api/version**
        - For V2 it is specified as **/api/v2/version**
        - V2 Response is same as V1 with addition **apiVersion**
        - **Decision: /api/v2/version**
            - **Services check this endpoint to check service compatibility**

  Due to lack of time CLI was not discussed in this meeting
- CLI
    - Roadmap doc
        - https://docs.google.com/document/d/1tHxomWv5C1bz7LHvrOcbSwRMSXhvBngWYhFUv5fk4JY/edit?ts=5f1efac4
    - Release artifact (for Windows, Linux, MacOS for both Intel and ARM) recommendation: provided by DevOps
        - Create pipeline with the following stages
            - Test
            - Cross Compile (New make target, developers will own)
                - Linux (amd64/arm64)
                - Windows (amd64/arm64)

        - MacOS (maybe)
    - Package artifacts (tarball)
    - Git-semver Push signed version tag
    - Push tarball to GitHub releases page (new scope)
        - This is a release activity when should this be done. How much involvement from the Release Czar is required? Update ADR10?
- Potential Additions
    - Snyk scan
    - Codecov.io
- Features needed
    - Several services may have the same operation but the CLI does not let you specify the specific service (examples: device, ping, commands, etc.)
        - Option 1 - use a flag to specify a specific service
        - Option 2 - make the first positional param the service with second param the command (endpoint)
            - Example: metadata device list
            - Versus: device list
    - Clean up of --help documentation
    - Provide for complete core & support API Coverage - Diana provided
        - Reaction??
    - Be able to configure what services are addressed/included in status calls
        - Use some sort of configurable list

New Business

- Issue 2651 - sys mgmt agent - use of Python 2 and vulnerability report
    - Image installs Python 2 and we need to try to install Python 3
- Issue 2647 - improve profile validation logic? Icebox for now? Or are we adding more for Hanoi?
    - Stretch goal for Hanoi. Must have for complete V2 API/EdgeX 2.0
- Gateway identification
    - Leave it to app service to append on export? (enrichment in App service before it goes out of EdgeX)
    - Or design it into V2 Event DTO/Model?
    - Add tags property to DTO/Event model (Jim to create an issue on core contracts)
    - Who populates and how - for now done in app services (done via configuration) as a crawl step

Due to lack of time UI Direction and Kubernetes was not discussed in this meeting

UI Direction

- Roadmap deck (draft)
- Demo
- Purpose (future - proposed): a production level user interface to manage and monitor a single instance of EdgeX Foundry (secured or unsecured)

        - To manage and monitor from on or off box
        - To monitor the state of EdgeX (status of services, memory, CPU usage, etc.) and provide alerts when something is outside of normal operating parameters
    - Coming (Hanoi)
        - Manage app services (add functions, see data temporarily, etc)
        - Manage Kuiper rules
        - Documentation
        - “Make sure it is usable with what we have in EdgeX today”
    - Roadmap items (past Hanoi)
        - See deck

Kubernetes Direction (release target is just a suggested goal)

- Crawl (Hanoi or Ireland): Have an example deployment.yml and service.yaml for deploying a single instance of EdgeX (minus device services) to a pod. With Redis, minus security.
    - Include example of how to setup device-virtual to send data to K8s instance
    - Document/demonstrate/provide example of setting up in K3s
    - Document what would not work in this environment
- Walk (Ireland): Include security
- Jog (Ireland or Jakarta): Helm charts & / or Operators
- Run (Jakarta or Kamakura): start addressing HA concerns in EdgeX