TSC Meeting

October 28, 2020

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Meeting Logistics

Time: Wednesdays 8am PDT – 9am PDT

Join from PC, Mac, Linux, iOS or Android: https://zoom.us/j/983155298

Or iPhone one-tap (US Toll): +14086380968,983155298# or +16465588656,983155298#

Or Telephone:

Dial: +1 408 638 0968 (US Toll) or +1 646 558 8656 (US Toll)

+1 855 880 1246 (US Toll Free)

+1 877 369 0926 (US Toll Free)

Meeting ID: 983 155 298

International numbers available: https://zoom.us/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ

** TSC calls are recorded and added to Wiki post-call

TSC – Members Present Today

Company	Name	Email	Position
IOTech	Iain Anderson	iain@iotechsys.com	Device Services WG Chair
Intel	Ernesto Ojeda	ernesto.ojeda@intel.com	Dev Ops WG Chair
IOTech	Keith Steele	keith@iotechsys.com	Outreach WG Chair
Kong	Colin Hutchinson	colin@konghq.com	Security WG Chair
Intel	Mike Johanson	michael.johanson@intel.com	Applications & Analytics WG Chair
IOTech	James Butcher	james@iotechsys.com	Test/QA WG Chair
IOTech	Jim White	jim@iotechsys.com	Core WG Chair

Current quorum = 7 members

Note: Quorum for TSC meetings requires at least fifty percent of all voting members of the TSC to be present. The TSC may continue to meet if quorum is not met, but will be prevented from making any decisions at the meeting. Except as provided in Section 7.c. and 8.a, decisions by vote at a meeting require a majority vote of those in attendance, provided quorum is met. Decisions made by electronic vote without a meeting require a majority vote of all voting members of the TSC.

Today's Agenda

- Code Freeze today (5pm PDT)
  - Any issues/outstanding hold items
- WG Updates
- Ireland planning
- Upcoming Events (Dev Advocate)

Hanoi Freeze

Any requests for delay?

Any issues with features expected to go in?

Known bugs that are going to have to be addressed during freeze?

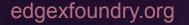# Hanoi Progress - Good Progress/Looking to deliver

- Go 1.15
- V2 API a slice of core and metadata APIs, DS, App Srv and SDKs
- Allow DS to be distributed
- SSH tunnel how to guide
- Abstraction and pluggable mechanism to provide generation of secrets
- Design secure subsystem launch/bootstrap dependencies
- Design enablement of Vault PKI secret engine
- Address container security
- Vetting of 3rd party packages
- Design of HRT
- DevOps perf improvements
- Restructure of compose files - *stretch*
  - overrides/remove dupes
- Snap build improvements
- Msg bus between DS and appl srv (design only) - *impl stretch*

- CLI v 1.0
  - Roadmap for CLI
- Roadmap for UI
- Gateway identification (tagging at export)
- Drools removal
- Kuiper enhancements
- LLRP RFID DS - *new (in holding)*
- TAF blackbox testing
- Performance metrics testing
- Scalability (modbus) testing for user guidance - *stretch*
- Endorsement program
- Web site refresh
- Topcoder challenge, next steps
- Overlay network how-to - *stretch*
- Deployment / orchestration options (Kubernetes)

Work Group Updates

Chairs

Working Group Chair Updates

- Around the horn
  - Product Manager - Lenny Goodell
  - Release Czar - Bill Mahoney
  - Applications - Mike Johanson
  - Device Services - Iain Anderson
  - Test/QA - James Butcher
  - DevOps - Ernesto Ojeda
  - Security - Colin Hutchinson
  - Outreach - Keith Steele
    - Certification - Rodney Hess
    - Marketing - Camilo Dennis
    - Vertical Solutions (and LF Edge TAC) - Henry Lau
  - Core/Supporting - Jim White

Product Manager (10/28/20)

Cross Cutting Issues (https://github.com/orgs/edgexfoundry/projects/35)

In Progress (2, +1)

- V2 Implementations
  - App Services APIs - Done
  - TAF testing App Services - Done
  - Device SDK Go - DONE
  - Device SDK C - DONE
  - **Core Data APIs - WIP**
  - **Core MetaData APIs - WIP**
  - **TAF testing V2 APIs - WIP**

- Conventional Commits for all
  - Core Service - Done
  - App Services - Done
  - **Device Services - WIP**

- ADR for Metrics & CPE - WIP

Backlog (2, +/-0)
- ADR for Message Bus from Device Service to App Services
- ADR for Secret Provider for all

Done (11, +/-0)
- Refactored Compose files
- Remove Support Rules Engine (just from compose files)
- Remove Client Monitoring
- Dockerfiles incorrectly uses ENTRYPOINT
- Configurable address for ListenAndServe
- Startup Configuration/Env does nothing
- EdgeX Go services move to Go 1.15
- Design metadata about the "gateway" or host platform (Tags)
- Allow device services to be distributed to alternate hosts
  - SSH & Overlay network
- DependaBot for All
- ADR for Generate/Inject random passwords into Vault

Icebox (9,+/-0)
- V2 API Consumption
- Explore possible collapse of core command and metadata
- EdgeX Metrics Collection & Control Plane Event Handling
- Drop Logging Service completely (Revert WIP)
- Remove Mongo code (Revert WIP)
- Update config.Clients usage for new naming scheme
- Secure Message Bus connection
- Secret Provider abstraction for all
- Implement Generate/Inject random passwords into Vault

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Release Czar (10/28/20)

Hanoi Release -

Code Freeze: October 28th (Today! 5pm PDT)

Release Date: November 18th (3 weeks away)

Applications WG Update (28-Oct-2020)

Completed:
- Fixed Content-Type not being set correctly on HTTP Trigger (#512) (Thanks Beau!)
  - Updated App Service Configurable
- Dependencies Updated for App Function SDK
- Snap updated to support changing startup duration and interval for ASC. (Thanks Haresh!)

WIP

- Help Create ADR for Device Service to App Services via Message Bus (#241)

App Working Group Meeting Schedule update:
- Next meeting **Oct 29th, 2020** @ 4:30 PM PDT

Application Services

Functions (built into SDK)
Current/Complete:

- AES Encryption
- GZIP Compression
- ZLIB Compression
- MarkAsPushed
- PushToCore
- Device Name Filter
- Value Descriptor Filter
- Batch
- JSONLogic Filtering
- XML Conversion
- JSON Conversion
- MQTT(S) Export
- HTTP(S) POST Export
- HTTP(S) PUT Export   NEW!

Features

- Store and Forward
- Web Server
- Configurable App Service
- Vault Integration for Secrets
- MQTT Event triggers (via go-mod-messaging)

Reference/Example App Services (Geneva)
(built on top of SDK)

- Azure IoT Hub   AVAILABLE

- Amazon IoT Core   AVAILABLE

- IBM Watson IoT
- Cloud Event Transformation   AVAILABLE
- Secret Retrieval Example

Device Services WG Update (28-Oct-20)

SDKs: ready for release

Services:

- Services now using current SDK (exception: device-grove, will be done today)
- 1 issue each against device-modbus, device-mqtt: to be fixed or relnoted
- Some enhancements originally targeted for Hanoi may be implemented for point releases

Documentation:

- 6 documentation issues to address

Next WG meeting November 2

Device Services - current/coming (as of 5/7/20)

Open Source connectors (Current):

- Modbus (TCP/RTU) in Go
- Virtual Device in Go
- SNMP in Go
- MQTT in Go
- BACnet (IP & MSTP) in C
- ONVIF Cameras in Go
- REST in Go (NEW!)
- Grove in C

Open Source connectors (Future):

- Bluetooth in C (late 2020)
- OPC-UA in C (late 2020)

Commercial connectors (Current):

- File Exporter in C
- BLE in C
- Zigbee in C
- GPS in C
- CAN in C
- MEMS in C
- EtherCat in C
- Profinet in C

There are additional commercial MQTT (Go), Modbus (Go), OPC-UA (in C) and BACnet (in C) that have added features over the community editions

Commercial connectors (Future):

- EtherNet/IP in C (summer 2020)
- CanOpen in C (summer 2020)
- OPC-UA Pub/Sub in C (summer 2020)
- ONVIF in C (summer 2020)

QA/Test WG Update (20th October)

- Postman blackbox test - all tests passing
- TAF blackbox test - all tests passing
  - Fixed issue
    - Issue #190 & #191, smoke test for PR validation - DevOps now using
    - Issue #106 & #107, create Core Metadata V2 API Test Cases
    - Issue #197, implement core-metadata POST deviceprofile and deviceservice V2 API tests
    - Issue #199, implement core-data GET event by id and Get event count V2 API tests
    - Issue taf-common#22, add selenium library for WebGUI test
  - Working issues
    - Issue #201, implement core-metadata DELETE/PUT deviceprofile and DELETE deviceservice testcases
    - Issue #137, Modbus scalability test - priority lowered behind V2 API testing
    - Automated Snap Testing: Postman tests almost complete and merged

Postman Blackbox Test Cases

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Redis	1309	0	0	0
x86_64 / CentOS	Security	Redis	1339	0	0	0
arm64 / Ubuntu	Non Security	Redis	1309	0	0	0
arm64 / Ubuntu	Security	Redis	1339	0	0	0

TAF Functional Blackbox Test Cases

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Redis	97	0	0	0
x86_64 / CentOS	Security	Redis	97	0	0	0
arm64 / Ubuntu	Non Security	Redis	97	0	0	0
arm64 / Ubuntu	Security	Redis	97	0	0	0

TAF Integration Test Cases

Integration tests

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Redis	6	0	0	0
x86_64 / CentOS	Security	Redis	6	0	0	0
arm64 / Ubuntu	Non Security	Redis	6	0	0	0
arm64 / Ubuntu	Security	Redis	6	0	0	0

Compatibility tests

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Security	Redis	12	0	0	0
arm64 / Ubuntu	Security	Redis	12	0	0	0

TAF Performance test

Performance test Number Count

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	**Non Security**	Redis	10	1	0	1
arm64 / Ubuntu	**Non Security**	Redis	10	0	0	0

Jenkins Job: performance-test

DevOps WG Update (10-28-2020)

Pipeline Enhancements

- [#252](#) [Watching] Build Snaps natively on Ubuntu
- [#260](#) [In Progress] CodeCov results not uploading
- [#261](#) [In Progress] Snyk scan docker images pre release
- [#137](#) [In Progress] Spike: CIS Docker Security Benchmark for EdgeX

Next DevOps WG Meeting **Oct 29, 2020 @** 9:00 AM PDT

Security WG Update (Oct 21)

- Previous Meeting: Oct 28
- Next Meeting: Today and Nov 4
  - Today: security working group pre-wire
  - Next Week: secure bootstrapping ADR
- Security Board
  - 43 Done (+2)
  - 8 In Review (0)
  - 0 In Progress (0)
  - 3 Backlog (-5)
  - 0 New (0)
- Pending Hanoi Deliverables
  - Security Utility
  - Secure Kong Admin

Outreach WG Updates (10/28/20)

Certification Team

- Need volunteers: How-to guide when working with sample data
- Held a coordination meeting w.r.t. Endorsement assets and the new website

Vertical Solutions Team

-

Marketing Team

- Next meeting Monday, Nov 9th @10am
- 2nd EdgeX topcoder challenge being organized

Core Working Group (10-28-2020)

- Current Status
  - Backlog: 5(-9)   In progress: 2 (even)   Done: 135(+15)
  - Bugs: 7 (-2)   Under review: 0 (even)
- V2 API
  - selection of APIs (core/metadata) to allow device provisioning by Hanoi
- UI team working on Ireland prototypes
  - Data visualization - need feedback on prototypes
- VMWare team working on Kubernetes "crawl" phase for Hanoi
  - initial YAML (uses Mongo)
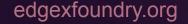- Next call - 10/29/20 @ 10AM US/Central tomorrow

Miscellaneous Issues/Topics

- LF Edge 2021 priorities submitted this a.m. to LF Edge governing board
- Interest in helping author an EdgeX book?
- During Freeze
  - Do not - update a dependent using dependabot or otherwise unless related to a bug fix
  - Do not - add any new code (bug fixes only)
  - Do - update docs
  - Do - add examples
  - Do - fix bugs
  - Do - check with Lenny, Bill or Jim if you have questions about what you can submit for PRs or merge

Ireland Release Planning

formerly F2F meeting

Ireland Release Planning Meeting

Dates

- ~~Architect's PreWire Meetings: Oct 13-14 (2 x ½ days)~~
- ~~Hanoi Freeze: Oct 28th~~
- Ireland Planning Meeting: Nov 9-13th (5 x ½ days)
- Hanoi Release: Nov 18

Register NOW

- See Wiki for details: https://wiki.edgexfoundry.org/pages/viewpage.action?pageId=52330532
  - Initial agenda deck should be available sometime next week
- Registration sight now available - please register (its FREE)
  - https://events.linuxfoundation.org/edgex-foundry-ireland-release-planning-conference-fall/

Business Topic Agenda

- All time approximate/all times shown in PDT
- 6:30 Web site (Andy/Camilo)
  - Current status
  - Website funding for 2021
  - Website revamp
- 6:45 Topcoder challenges (Camilo)
- 7:00 China Hackathon – readout on developer experience survey (Camilo and Melvin)
- 7:30 Industry Vertical Solutions Group (Keith)
- 8:00 Endorsement & Certification program (Rodney)
  - Current status of endorsement program
  - Certification program – Jiangxing Intelligence offer to help

Unconference Topics

- edgex-global-pipelines deep dive/training session - 15 minutes
- Edgex release process demo - 15 minutes
- Tibco product demo - 15 minutes
- Time series Database - Michael Hall
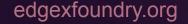
Planning finalization

Room for additional unconference topics, business topics

WG chairs - please review the scoping slides for your WG.

Adopters - I have input on our questions.

Working with the adopters to provide reaction to our scoping

Upcoming Events & Dev Advocate Update

Aaron's updates

Upcoming External Events

› KubeCon/CloudNativeCon North America: 17-20 November, 2020 - Virtual
› Open Source Summit Japan: 2-4 December, 2020 - Virtual
› IoT Solutions World Congress: 11-13 May, 2021 - Barcelona, Spain

› Discussions around upcoming events occur in the LF Edge Outreach Committee
› Members may subscribe at: https://lists.lfedge.org/g/outreach-committee

Thank You