EDGE X FOUNDRY™

TSC Meeting

March 25, 2020

edgexfoundry.org | @edgexfoundry

LF Antitrust Policy Notice

EdgeX Foundry meetings involve participation by industry competitors, and it is the intention of the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws.

Examples of types of actions that are prohibited at EdgeX Foundry meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at http://www.linuxfoundation.org/antitrust-policy. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrove of the firm of Gesmer Updegrove LLP, which provides legal counsel to the Linux Foundation.

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
Intel	Camilo Dennis	camilo.a.dennis@intel.com
IOTech	Iain Anderson	iain@iotechsys.com
Intel	James Gregg	james.r.gregg@intel.com
IBM	Joe Pearson	joe.pearson@us.ibm.com
IOTech	Keith Steele (TSC Chair)	keith@iotechsys.com
VMware	Malini Bhandaru	mbhandaru@vmware.com
Intel	Mike Johanson	michael.johanson@intel.com
IOTech	Robin Chattergee	robin@iotechsys.com
Beechwoods	Rodney Hess	rodney@beechwoods.com
RSA	Tingyu Zeng	tingyu.zeng@rsa.com
Canonical	Tony Espy	espy@canonical.com
Dell	Trevor Conn	Trevor.Conn@dell.com
Dell	Michael Estrin	m.estrin@dell.com

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

- Hanoi Planning
- Freeze/Release dates
- Release Czar Readout
  - Geneva release info
- WG Updates
- EdgeX Awards
- ADR 0005 vote
- Hanoi planning
  - please discuss with your WG before next week's prewire
- Upcoming Events (Dev Advocate)

Hanoi Planning Conference

Hanoi Planning Conference Tasks

- Hanoi Pre-wire (architect's) virtual sessions (done)
  - Date's set Mar 31 and Apr 1
  - Invitations sent (pass to other invitees as necessary)
- Hanoi Pre-wire agenda and topic set (to do - Jim)
- Survey Monkey on desire for training (done)
  - https://www.surveymonkey.com/r/CLCLQ9V
- Hanoi Planning Conference dates selected (done)
  - See next page for tentative agenda (TSC approval requested)
- Hanoi Registration Website (in progress - Brett)
  - Sponsorship opportunity (upcoming slide)
  - LF working on marketing and advertising the event (in progress - Mae)
- Hanoi Wiki page updated (to do - Jim)
  - Hanoi Planning Conference detailed Agenda (to do - Jim)
- Training planning/schedule (depends on survey results)

High level conference agenda

Monday, Apr 27: 7-11 AM - Introductions, Agenda & Logistics, Business Topics, Architecture topic tee-up

Tuesday, Apr 28: 7-11 AM - Cadence Check, Architectural discussion

Wednesday, Apr 29: 5-9 PM - Hanoi scoping (General, Core, Application, Device service, TestQA, UI, System Management, Security Devops, Certification,...)

Thursday, Apr 30: 7-11 AM - Hanoi scoping continued, Ireland roadmapping

Friday, May 1: 7-11 AM - Action item review, Lessons learned for next meeting, "Unconference" - open time for any topic

Sponsorship opportunity

We will have a registration page similar to
https://docs.google.com/document/d/0B41uA7n5A25fdGhIR252OGZVWWFvYIhoVkZRWUdOSk9BeHIj/edit

On this page, there is the opportunity to be a sponsor and have your logo on the page.

The cost of this registration site is $3,300US. EdgeX members willing to contribute up to $1k for logo placement on the website, acknowledgement in social posts and maybe even a small segment during the event should contact Jim or Camilo
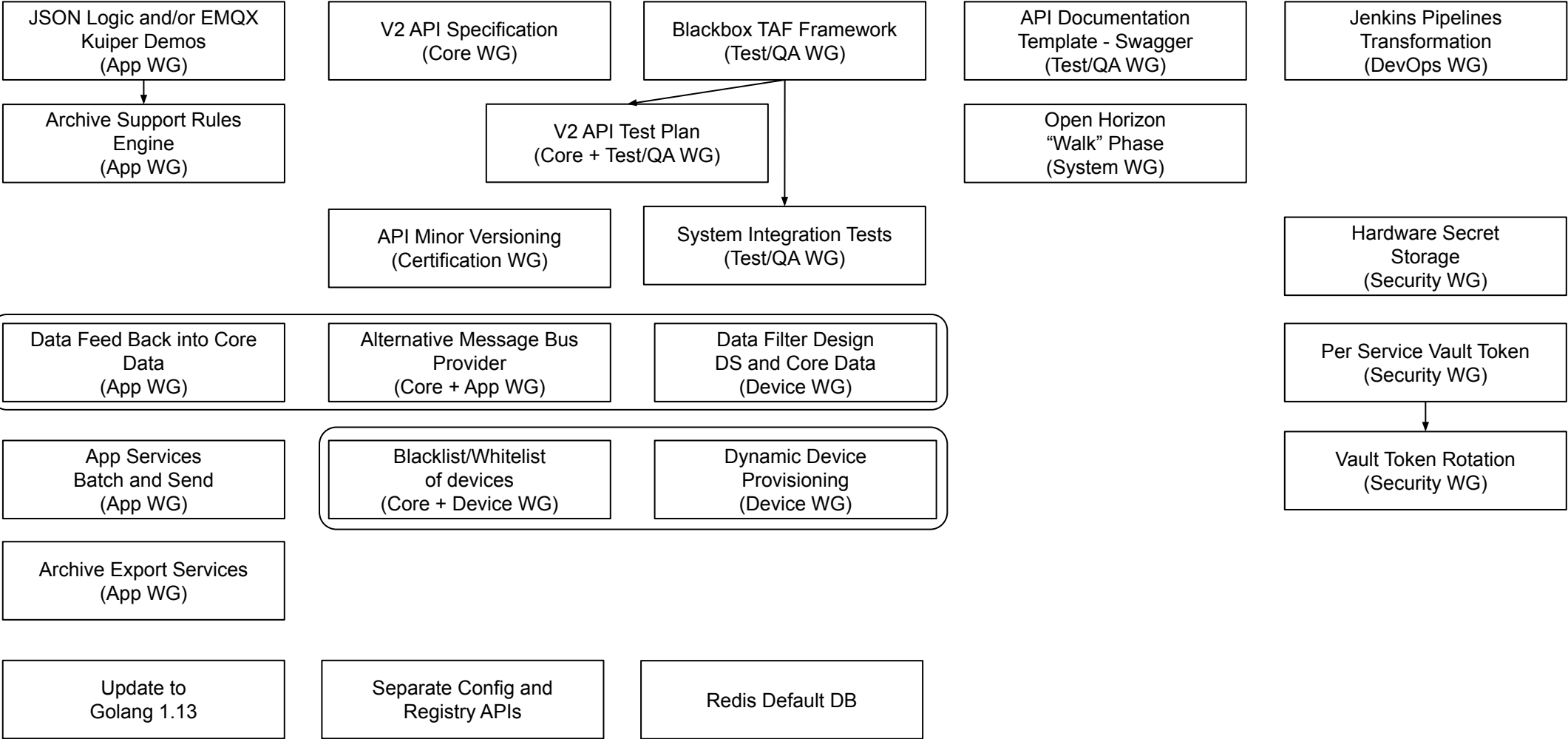
Release Tsar Readout

Freeze and Release dates

Needs TSC approval

Freeze: April 22 (Wed, week before planning meeting)

Release: May 13 (Wed two weeks after planning meeting)

EdgeX Geneva Release Overview

JSON Logic and/or EMQX
Kuiper Demos
(App WG)

V2 API Specification
(Core WG)

Blackbox TAF Framework
(Test/QA WG)

API Documentation
Template - Swagger
(Test/QA WG)

Jenkins Pipelines
Transformation
(DevOps WG)

Archive Support Rules
Engine
(App WG)

V2 API Test Plan
(Core + Test/QA WG)

Open Horizon
"Walk" Phase
(System WG)

API Minor Versioning
(Certification WG)

System Integration Tests
(Test/QA WG)

Hardware Secret
Storage
(Security WG)

Data Feed Back into Core
Data
(App WG)

Alternative Message Bus
Provider
(Core + App WG)

Data Filter Design
DS and Core Data
(Device WG)

Per Service Vault Token
(Security WG)

App Services
Batch and Send
(App WG)

Blacklist/Whitelist
of devices
(Core + Device WG)

Dynamic Device
Provisioning
(Device WG)

Vault Token Rotation
(Security WG)

Archive Export Services
(App WG)

Update to
Golang 1.13

Separate Config and
Registry APIs

Redis Default DB

Geneva Release Notes

Please see Geneva release notes sent to all TSC and WG chairs.

What corrections are needed?

On "To be done" items, let Lisa or I know what the likelihood is for completion by freeze date (April 22nd) and release date (May 13th)

Work Group Updates

Chairs

Working Group Chair Updates

- Around the horn
    - Core/Supporting - Trevor Conn
    - Applications - Mike Johanson
    - Device Services - Iain Anderson
    - Test/QA - Robin Chatterjee
    - DevOps - James Gregg
    - Security - Malini Bhandaru and Tingyu Zeng
    - System Management - Michael Estrin
        - Open Horizon - Joe Pearson
    - Certification - Rodney Hess
    - Vertical Solutions - Camilo Dennis and Henry Lau
    - Updates from Release Czar - Lisa
    - Updates from Dev Advocate - Aaron

Core Working Group (25-Mar-2020)

- Ongoing efforts from last week
  - Provision Watcher (Brandon Forster)
    - All operations complete except for DELETE, PR #2440 pending
  - Redis Streams (Anthony / Andre)
    - Feature delivery target for RedisConf (May 12-14)
    - PR has been delayed
- Anthony Bonafide is Core WG Point of Contact
  - Congratulations!
- Core WG tomorrow @ 10AM US/Central
  - Agenda still TBD
    - Probable initial discussion of some Hanoi scope
    - Any items to discuss? Send them to me.

Applications WG Update

In Progress:
- Updating App Service Configurable with MQTT message bus support, JSONLogic and BatchAndSend
- MQTT and HTTP Export w/ secret support
- 2nd SecurityStore client for service specific secrets

Next up:
- Example of JSONLogic in app-service-examples
- Documentation update for edgex-docs

- App Working Group Meeting held on Fridays @ 9AM PST
  - Next meeting Friday, Mar 27th
    - Reviewing Hanoi items - bring your ideas!

Application Services

Functions (built into SDK)
Current/Complete:

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

Features

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

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

- Azure IoT Hub `AVAILABLE`
- Amazon IoT Core `AVAILABLE`
- IBM Watson IoT `NEW!`

Device Services WG Update (25-March-20)

In progress:

- Dynamic discovery
  - Needs re-review
- v2 REST API specification (OpenAPI)
  - Feedback pending
- Type information in Readings
  - Implemented in CSDK

To do:

- Array datatypes
- Startup registry/configuration changes (ADR0005)

Device Services - current/coming

Open Source connectors (Current):
- Modbus (TCP/RTU)
- Virtual Device
- Grove C - ARM only
- SNMP
- MQTT
- BACnet (IP & MSTP)
- ONVIF Cameras
- REST

Open Source connectors (Future):
- OPC-UA (Geneva)
- GPS
- Bluetooth (Geneva)
- BLE in Go for Thingy 52 (Ian Johnson)

Commercial connectors (Current):
- GPS
- MEMS
- Zigbee
- Bluetooth
- EtherCat
- PROFINET

Commercial connectors (Future):
- CAN SocketCAN, CANopen
- EtherNet/IP
- Siemens s5/s7

Test/QA WG Update (25-03-2020)

- Blackbox Test (TSF) - all Jenkins jobs (Mongo and Redis) now running
  - Issue opened for failed testcases
    - Issue edgex-go#2421, for failed tests on core-command.
    - Issue edgex-go#2448, support-notifications can't start up normally with mongo db non-security mode
    - Issue device-sdk-go#465, for failed tests on core-data
  - Fixed issue
    - Issue developer-script#233, services start failed when using mongo db
- New Blackbox Test (TAF)
  - Opened PR #65, to deploy security service when security enabled.
  - Core service compatibility test
    - PR edgex-taf #63 is ready for review
  - Integration/functional test scenarios (Introduce slide)
    - PR edgex-taf #56, #58, #60, #62 to add robot files are ready for review
- Swagger
  - EdgeX API version 1.2.0 is published in private to SwaggerHub.
  - EdgeX API version 1.1.0 set to public.
    https://app.swaggerhub.com/apis-docs/EdgeXFoundry1/core-command/1.1.0

Testcases Number Count (Master Branch)

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	Mongo	1414	Blocked	105	Blocked
		Redis	1414	4	4	0
x86_64 / CentOS	Security	Mongo	1434	0	0	0
		Redis	1434	N/A	N/A	N/A
arm64 / Ubuntu	Non Security	Mongo	1414	Blocked	105	Blocked
		Redis	1414	4	4	0
arm64 / Ubuntu	Security	Mongo	1434	0	0	0
		Redis	1434	N/A	N/A	N/A
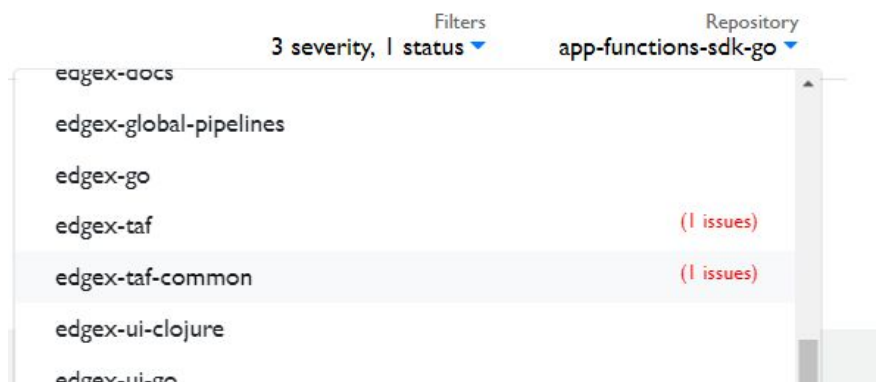
DevOps WG Update (03-24-2020)

Geneva

- Jenkins Transformation to Pipelines
    - Work continues on the transformation to Jenkins Pipelines
        - Multiple stories related to release automation for Geneva - WIP
            - Using sample-service to demonstrate automation of the release
            - New stage to Add snap stage for edgex-go in cd-management
            - Create global function to handle docker images for the automated release
        - Optimizations of edgex-global-pipelines
            - Migrate from Maven to Gradle unit test runner in order to easily leverage jacoco test reports for code coverage

- Community Bridge Advanced Snyk Reporting
    - CB team has added the new feature that was requested which improves the UX
        - Added a count to identify issues

No EdgeX DevOps WG meeting on 3/26/2020
Next Meeting 04/02/2020 @9:00AM PST

System Management WG Update (Mar 25, 2020)

- CLI
  - Move out of holding delayed until Mike's review comments are addressed
- Hanoi (and beyond) Metrics Discussed -- next steps
  - Amend ADR ([edgex-docs/pull/104](#)) per 3/20 WG discussion
  - Merge ADR
  - Discuss metrics communication options
- Next meeting: Friday, March 27th @ 10AM CST
  - Discuss metrics communication options
  - Discuss Hanoi road map

Open Horizon Update

- In progress:
  - Collecting and building out documentation
  - Want to meet w/DevOps, this week's meeting cancelled. Alternatives?
- TAC Subgroup readout an hour ago

Security WG Update (03-24-2020)

- Ongoing work for Geneva release (150 items done, 4 items in progress, 6 items backlog)
- SIR team update: CBOR issue
- Threat modeling for Geneva in progress
- Next security WG meeting with in hour.

Certification WG Update (3-23-20)

- Activity has been quiet as we wait on progress on the v2 API effort

- Next meeting is Monday, April 6th, 9 a.m. PDT

Vertical Solutions WG Update (Mar 25, 2020)

- Next WG meeting: March 31, 2020, 10:00am PDT
  - Waiting for confirmation from Connexus
  - Standards that Conexxus drives at convenience stores and top use cases in the c-store industry

- China webinars: https://wiki.edgexfoundry.org/display/FA/China+Events
  - Feb 28: Create new Device Service (VMWare)
  - Mar 6: Write export service and scheduling plan (VMWare)
  - Mar 13: Add device and service monitoring (ThunderSoft)
  - Mar 20: Use with NodeRed (IOTech)

Marketing update 3/25

- Selected EdgeX website vendor: El Roboto
  - Will create a folder for website project with milestones and information at the Marketing wiki page

- Topcoder challenge
  - Launched on 3/21https://www.topcoder.com/challenges/3011
  - Banner placed in EdgeX Foundry website
  - Submissions start 4/4

Miscellaneous (Jim)

- EdgeX Awards
  - Nominations being accepted
  - See https://wiki.edgexfoundry.org/display/FA/EdgeX+Awards for details
- ADR 0005 - config seed removal and service self seed
  - Need TSC approval to finalize
- Kuiper 0.2.1 version was released Monday (Kuiper Docker image also available)
  - You could refer to this tutorial -
    https://github.com/emqx/kuiper/blob/master/docs/en_US/edgex/edgex_rule_engine_tutorial.md
- Hanoi planning - doc out for circulation to start to have all WG's consider items for the upcoming release (new features or tech debt)
- Asia time-zone friendly TSC meetings
  - UI team (VMWare), Kuiper team, IOTech Taiwan dev center, new Singapore adopters and more are leading us to having this meeting at different time on some regular occurrence.
- Slack archive project

Upcoming Events & Dev Advocate Update

Aaron's updates

Events

- LF Events through April are postponed
    - LF is trying to reschedule events but there isn't much public information

-

Upcoming External Events

› Open Source Summit North America: 22-24 June, 2020 - Austin, TX
› IIOT World Day: Jun 30-Jul 1
   › Call for papers until March
› Open Source Summit Japan: 15-16 September, 2020 - Tokyo, Japan
   › CFP Status: Details Available Late 2020
› Open Networking & Edge Summit Europe: 30 September - 1 October, 2020 - Antwerp, Belgium
   › CFP Status: Open til Jun 7, 2020
› Open Source Summit Europe: 26-28 October, 2020 - Dublin, Ireland
   › CFP Status: Details Available Late 2020
› IOT SWC: 27-29 Oct, 2020 - Barcelona, Spain
   › **Looks like we will do what we did last year. Looking for sponsors**
› Discussions around upcoming events occur in the LF Edge Outreach Committee
› Members may subscribe at: https://lists.lfedge.org/g/outreach-committee

Other Items

- Speaker's Bureau- Are you interested in speaking on behalf of EdgeX or LF Edge? Looking for developers/Architects http://bit.ly/LFEdgeSB

- EdgeX Awards

- TopCoder Event

- LF LinkedIn Post on learning Linux, if you would like to learn Linux or know people bored at home.

- EdgeX FAQ- on Slack if you see something that should be added to a FAQ, mark it with #add_to_faq

  - Any ideas on how to improve this, please let me know

Thank You