

EDGE X FOUNDRY™

# TSC Meeting

February 26, 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/join?j=983155298>

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



# TSC – Members Present Today

| <u>Company</u> | <u>Name</u>              | <u>Email</u>                                                                 |
|----------------|--------------------------|------------------------------------------------------------------------------|
| Intel          | Brad Corrion             | <a href="mailto:bradley.w.corrion@intel.com">bradley.w.corrion@intel.com</a> |
| IOTech         | Iain Anderson            | <a href="mailto:iain@iotechsys.com">iain@iotechsys.com</a>                   |
| Intel          | James Gregg              | <a href="mailto:james.r.gregg@intel.com">james.r.gregg@intel.com</a>         |
| IBM            | Joe Pearson              | <a href="mailto:joe.pearson@us.ibm.com">joe.pearson@us.ibm.com</a>           |
| IOTech         | Keith Steele (TSC Chair) | <a href="mailto:keith@iotechsys.com">keith@iotechsys.com</a>                 |
| VMware         | Malini Bhandaru          | <a href="mailto:mbhandaru@vmware.com">mbhandaru@vmware.com</a>               |
| Intel          | Mike Johanson            | <a href="mailto:michael.johanson@intel.com">michael.johanson@intel.com</a>   |
| IOTech         | Robin Chattergee         | <a href="mailto:robin@iotechsys.com">robin@iotechsys.com</a>                 |
| Beechwoods     | Rodney Hess              | <a href="mailto:rodney@beechwoods.com">rodney@beechwoods.com</a>             |
| RSA            | Tingyu Zeng              | <a href="mailto:tingyu.zeng@rsa.com">tingyu.zeng@rsa.com</a>                 |
| Canonical      | Tony Espy                | <a href="mailto:espy@canonical.com">espy@canonical.com</a>                   |
| Dell           | Trevor Conn              | <a href="mailto:Trevor.Conn@dell.com">Trevor.Conn@dell.com</a>               |
| Dell           | Michael Estrin           | <a href="mailto:m.estrin@dell.com">m.estrin@dell.com</a>                     |

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

- F2F Limerick TSC Status
- Lisa's Release Czar Readout
- WG Updates
- Upcoming Events



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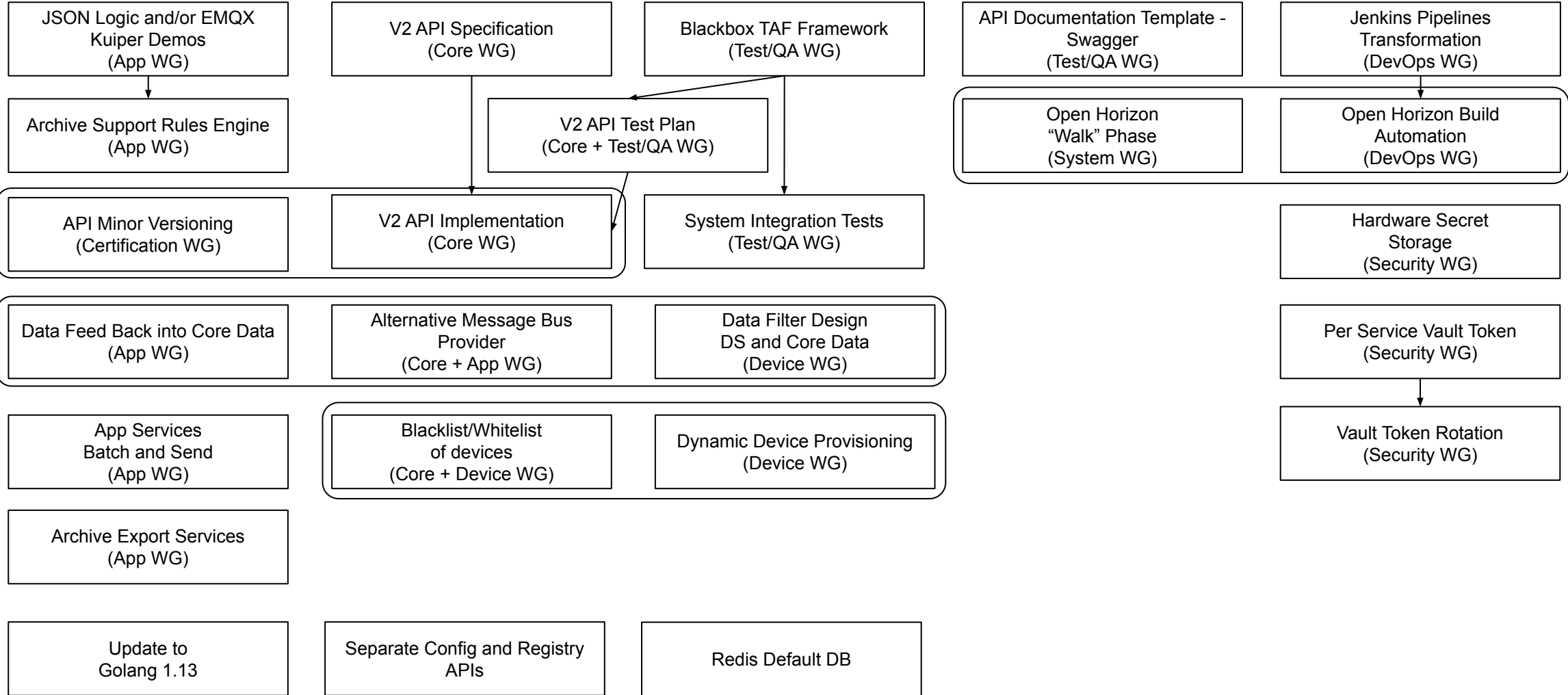
## F2F Limerick Status



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## Lisa's Release Tsar Readout

# EdgeX Geneva Release Overview







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# 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 (26-Feb-20)

- Move to Go 1.13 is complete
  - Surprise! Go 1.14 released yesterday!
  - <https://blog.golang.org/go1.14>
  - Not planning to adopt during this release cycle
- Provision Watcher (Brandon Forster)
  - Lining up two pieces of work
    - First, data management (CRUD) audit (edgex-go issue #2388)
    - Second, functionality to target dynamic device discovery per [design spec](#)
- Redis Streams (Anthony / Andre)
  - Feature delivery target for RedisConf (May 12-14)
  - Anthony to present at the conference
- Core WG tomorrow @ 10AM US/Central
  - Agenda includes
    - Review of config self-seed [ADR](#)
    - Question of adding datatype fields on Readings for Geneva (from Kuiper session)
    - Additional topics? Send them to me.

# Applications WG Update

- Ability to handle insecure secrets when vault is not used
  - PR#285 is still open
- Closed PR #291 Documentation for batch and Send
- Met w/ EMQ X Kuiper team last week
  - Publically tracking EdgeX integration here:
    - <https://github.com/emqx/kuiper/projects/4>

## In Progress:

- adding endpoint for storing secret through SDK to vault leveraging go-mod-secrets
- JSONLogic PR#292 - Draft
- App Working Group Meeting held on Fridays @ 9AM PST
  - Next meeting Friday, Feb 28th

# Application Services

## Functions (built into SDK)

Current/Complete:

### Fuji

- AES Encryption
- GZIP Compression
- ZLIB Compression
- MarkAsPushed
- PushToCore

EXPERIMENTAL

### Edinburgh

- Device Name Filter
- Value Descriptor Filter
- XML Conversion
- JSON Conversion
- MQTT(S) Export
- HTTP(S) POST Export

## Features

- Store and Forward
- Web Server
- Configurable AppService

## Reference/Example App Services (Fuji)

(built on top of SDK)

- Azure IoT Hub
- Amazon IoT Core

AVAILABLE

WIP

# Device Services WG Update (26-February-20)

- SDKs
  - Go: Dynamic discovery implementation requires test / example code
  - Go: Update to new bootstrapping code waiting on self-seed support
  - C: Bugfix for #230 (crash on invalid device-delete request)
  - C: New support library (prerequisite for Array readings)
  - Both: endian-ness incompatibility
- device-rest-go v1.0.0 released

# 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 (March 2020)
- 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 (25-02-2020)

- Blackbox Test
  - Issue opened for failed testcases
    - Issue [edgex-go#2399](#), core-command tests failure on master branch, this issue blocked all tests.
    - Issue [developer-script#228](#), used mongo db on docker-compose file, but some service still tried to connect to redis.
  - Fixed issue
    - Issue [#383](#) and [#390](#), to use default persistence to redis.
    - Issue [#394](#), to use mongo db on security jobs temporarily, because of no redis with security compose file.
- New Blackbox Test
  - Fixed issue
    - [#40](#), [#46](#), to correct checker of float value
    - [#44](#), to avoid redis issue [edgex-go#2394](#).
    - [#39](#), to sync docker-compose file from developer-script
    - [#34](#), to support running multiple device services continuous.
  - Open draft PR [edgex-taf-pipeline#1](#), adding Jenkinsfile to trigger functional testing from edgex-taf
  - Open issue [ci-build-image#109](#), for creating arm64 compose image .
- Swagger
  - Opened issue [#579](#) on ci-management, to publish v1 APIs to SwaggerHub
  - V2 APIs published to SwaggerHub



# Testcases Number Count (Master Branch)

| OS              |              | Total TCs No. | Failed TCs No. of Past Week | Failed TCs No. of This Week | Fixed TCs No. |
|-----------------|--------------|---------------|-----------------------------|-----------------------------|---------------|
| x86_64 / CentOS | Non Security | 1414          | 17                          | Blocked by issue            | Blocked       |
| x86_64 / CentOS | Security     | 1434          | 17                          | Blocked by issue            | Blocked       |
| arm64 / Ubuntu  | Security     | 1434          | 20                          | Blocked by issue            | Blocked       |
| arm64 / Ubuntu  | Non Security | 1414          | 18                          | Blocked by issue            | Blocked       |

Failed TCs No. calculated by last success run before 17/02/2020.

We have verified the 17 failed test cases have been fixed on local x86 machine by marking the blocking test case

# DevOps WG Update (02-26-2020)

## Geneva

- Jenkins Transformation to Pipelines
  - Work continues on the transformation to Jenkins Pipelines
    - Lisa is exploring work to look into full automation of the release - WIP
      - Demo planned for DevOps WG meeting this week
    - Automation for the GitHub Issue labels - WIP
    - EdgeX-Go Pipeline now in place
      - Need to update documentation and work on the issue with managing multiple Jenkinsfiles
    - PR “recheck” now resolved with new Jenkins Plugin
    - git-semver unit testing - decided to fix existing code vs. rewrite - WIP

## CommunityBridge - Advanced Snyk Reporting

- EdgeX Foundry added to the CommunityBridge Vulnerability Reporting
  - Ticket still open with Heather Willson & David Deal / CommunityBridge team
  - We now have Advanced Snyk Reports but working through multiple new issues

Next Meeting 02/27/2020 @9:00 PST  
Ernesto Ojeda will cover meeting

# System Management WG Update (02-26-2020)

- No meeting this past week.
- System Management
  - <https://github.com/edgexfoundry/edgex-go/issues/2345> merged
  - <https://github.com/edgexfoundry/edgex-go/issues/1662> out for review
- CLI
  - Requested improvements underway; update expected
- EdgeX-specific system-wide metrics follow up
  - <https://github.com/edgexfoundry/edgex-docs/pull/97> out for review
- Next meeting: February 28th @ 10AM CST (Trevor to chair)

# Open Horizon Update

- In progress:
  - Learn TAF and ask questions
  - Grok build automation integration
  - Continue to grow community
  - Increase development throughput
- Submit completed [project proposal](#) to LF Edge TAC by EOW



# Security WG Update (02-25-2020)

- Ongoing work for Geneva release ( 121 items done, 13 items in progress, 8 items backlog )
- SIR team update
- Threat modeling for Geneva in progress
- Next security WG meeting in one hour, covering discussion on SIR progress & Threat modeling for Geneva

# Certification WG Update (2-24-20)

- Monitoring progress on v2 API effort
- Next meeting Monday, March 2nd, 9 a.m. PST

# Vertical Solutions WG Update (2/19/2020)

- Last call on Feb 18 10am PST
- 18 participants - Intel, IBM, IOTech, Redis, RedIron, AppCard, Megh, GS1, HP
- Intel team went over the learnings from “Real time sensor fusion for loss detection at checkout reference solution” showcased at NRF, including reduce integration effort and ability focus on value add activities and innovation

# Dev Advocate

(see next slide taken from the TAC meeting- from Brett P.)



## Upcoming External Events

- › [Open Networking & Edge Summit North America](#): 20-21 April, 2020 - Los Angeles, CA
  - › CFP Notifications will be sent Tuesday, March 4
  - › **New:** [ONES Unconference Track](#)
    - › Originally coordinated by LFN; Expanding to include LF Edge (assuming LFE interest)
    - › Most topics will be scheduled on a **first-come, first-serve basis** (so [Submit Today](#))
    - › Will publish initial schedule on March 24
  - › **New:** Call for LF Edge Booth Demos
    - › Demo ideas submissions **due February 26**
    - › See [Call for Demos email](#) for full information
    - › Submission form:  
<https://docs.google.com/forms/d/e/1FAIpQLSfwjEfCcWUKMfiK404Uu51ZI70-8lqcRFCKKQ5vW3eeLOGAfw/viewform>
- › [IoT Build](#): May 12-13, 2020 - Santa Clara
  - › LF Edge will host an edge track with several speaking sessions on May 12 in the afternoon
  - › If you're interested in speaking or moderating the track, please email [Maemalynn@linuxfoundation.org](mailto:Maemalynn@linuxfoundation.org)



# Miscellaneous (Jim)

- API V2 - next step
- Coronavirus and pre-wire (RDU) and F2F (Limerick) meetings
  - LF monitoring and current health policy suggestions
  - Request from some organizations for self-quarantine (14 days) prior to coming to meetings if you are coming from or have traveled to any of the following: China, Hong Kong, Macau, South Korea, Japan, Singapore, or Italy

# Miscellaneous (Jim)

- ADR process clarification
  - Submit ADR as PR - approved but open for comment (not merged)
    - put status as “under review”
  - Once approved by TSC it will be updated to “approved” status and merged
- In need of company support for F2F meeting in Ireland
  - Coffee/morning snack sponsors
  - Lunch sponsors
  - Castle event sponsor
- Face-to-Face meeting in Ireland
  - Current registrants: 21
    - IOTech 7
    - Intel 5
    - Dell 4
    - IBM 2
    - VMWare, Redis, HP all with 1



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## Upcoming Events

# Hanoi TSC

Arrangements for the spring TSC meetings has been finalized

- **WG Chair/Architects Pre-Wire meeting will be March 31st (Tue)**
  - Dell EMC office , Research Triangle Park, 62 T.W Alexander Dr., Durham, NC 27709, Room: Aspen Cedar, first floor, Capacity: 50
- **Hanoi TSC F2F will be April 27-30**
  - Dell IOT Lab, Limerick Ireland
  - April 27 - Architect's day (invite only)
  - April 28-29 - General planning sessions with business topics to lead off
  - April 30 - Training day (additional hackathon or other planning meetings as necessary)

## Upcoming External Events

- › [Industry of Things World](#): Mar 12-13 - San Diego CA
  - › Henry Lau will be in attendance
- › [IoT Tech](#): Mar 17-18 - London, UK
- › [KubeCon EU 2020](#): 31 March - 2 April, 2020 - Amsterdam
  - › CFP closed 22 November
- › [IoT World](#): Apr 6-9 - San Jose, CA
- › [Hannover Messe](#): April 20-24 - Hannover GE
- › Open Networking & Edge Summit North America: 20-21 April, 2020 - Los Angeles, CA
- › Open Source Summit North America: 22-24 June, 2020 - Austin, TX



## Upcoming External Events

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





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Thank You