# EDGEXFOUNDRY™

# TSC Meeting

April 22, 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 |
|---|---|---|
| Intel | Camilo Dennis | camilo.a.dennis@intel.com |
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| Intel | James Gregg | james.r.gregg@intel.com |
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| 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.*
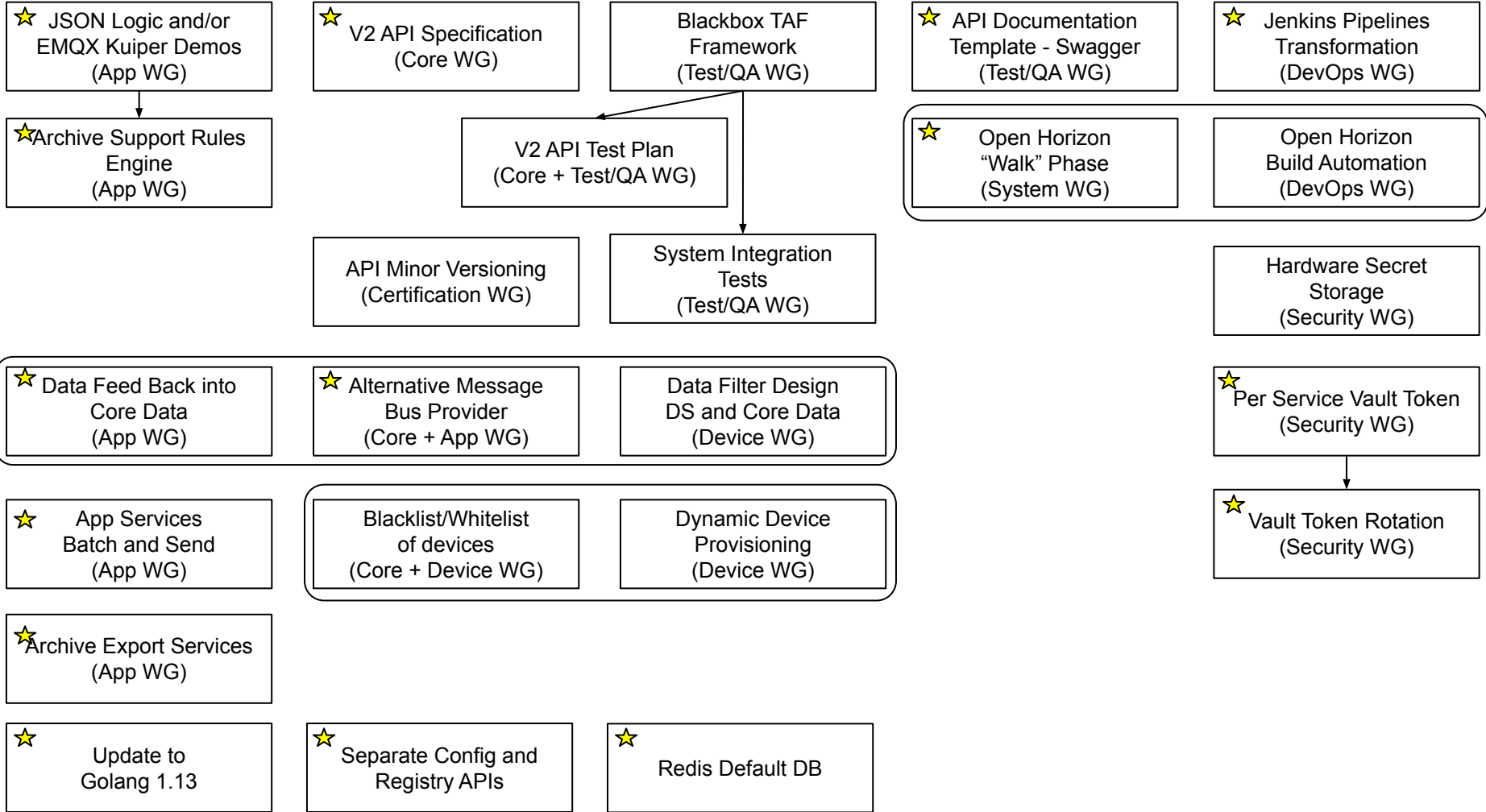
# Today's Agenda

- Geneva Release & Release Czar Readout - **we are officially in FREEZE**
  - What's in/out
- WG Updates
- Hanoi Planning - overview deck
  - Agenda details
    - Arch topics
    - Business topics
    - Unconference topics
  - Pre-wire discussion on the organizational plan
- Upcoming Events (Dev Advocate)

# Geneva Release & Release Czar readout

# 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)

Open Horizon Build Automation (DevOps 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

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# Release Artifact Status

- Docker Images are staged in Nexus for release
- Snaps are WIP
    - We have several PRs open in prep for the release

# Current list of "to-be-completed" (does not include work under review)

- Geneva docker compose files
- Documentation updates
- Support for array of types
  - Support for array of types by any rules engine (Drools, Kuiper, JSONLogic) pushed to Hanoi (comment will be added to release notes)
- Secure Redis deployment
- ~~JSONLogic still needs to be integrated into app service configurable.~~
- ~~Batch and Send function still needs to be integrated into service configurable.~~
- ~~MQTT for message communications still needs to be integrated into service configurable.~~
- ~~MQTT Export use of secrets from vault~~
- ~~Integrate go-mod-bootstrap~~
- ~~Bluetooth LE Device Service~~ (in C) - *slipped to post-Geneva*
- DS SDK Config Seed removal & service self-seeding (ADR 0005)
- ~~CLI updates & move out of holding~~
- Some level of backward compatibility testing
- ~~Performance testing to address key performance measures~~ - *pushed back*
- ~~Renew threat modeling~~ - Hanoi
- ~~Ensuring the services running are those expected and authorized (w/ DevOps assistance)~~ - deferred to Hanoi

# Work Group Updates

Chairs

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# 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 (22-Apr-2020)

- RedisStreams Impl in go-mod-messaging is complete
  - Thanks Lenny & Andre for review and comments.
  - As of this writing, needs to be integrated w/edgex-go and App-Functions
- Redis as default DB in secure EdgeX
  - As of this writing, PR is approved. Bryon requested additional testing from Tingyu before merge.

  - https://github.com/edgexfoundry/edgex-go/pull/2497
- Otherwise all major Geneva feature deliverables are complete.
- Core WG call @ 10AM US/Central tomorrow
  - Call for agenda items
  - If no agenda items received from community, will cancel the meeting.

# Applications WG Update

Complete:
- Integrating go-mod-bootstrap into the SDK .
- App Service Configurable(ASC0 updated with latest version of SDK enabling JSONLogic, Batc, and MQTT Message Bus support
- Sample TOML updated demonstrating how to use new features in ASC
- All Dependencies up to date

Work In Progress:
- Documentation update for edgex-docs


- App Working Group Meeting held on Fridays @ 9AM PDT
  - Cancelled for this week

# 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
- Cloud Event Transformation             **NEW!**
- Secret Retrieval Example

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# Device Services WG Update (22-April-20)

- SDK functionality completed
- Device Services being updated to new versions of SDK and supporting code
- 2 bugfix issues in SDK
- Issue also identified in device-virtual
- Documentation and testing ongoing
- device-ble to be considered after the release

# 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 (post-Geneva)
- GPS
- Bluetooth (post-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 (==22-04-2020==)

- Blackbox Test
  - Issue opened for failed testcases
    - Issue [edgex-go#2494](), [Security] device-virtual: 502 Bad Gateway
    - Issue [#434](), GET device by name returning wrong Content-Type
  - PR [ci-managment#598](), using compose container to execute tests was merged.
- New Blackbox Test
  - Issue opened for failed testcases
    - Issue [device-sdk-go#498](), Put FloatEndcoding into Reading if the ValueType is float (Fixed and waiting for new image)
  - PR [ci-build-images#129](), to reduce the size of compose image is waiting for review
  - PR [edgex-taf-pipeline#11]() to trigger core service compatibility has been merged
  - Integration/functional test scenarios ([Introduce slide]())
    - PR edgex-taf  [#56](), [#60]() to add robot files are ready for review
    - Complete integration test for end to end test.
    - PR [edgex-taf-pipelines#13]() trigger integration test for end to end test.

# Postman Blackbox

| 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 | 30 | 2 | 30 |
| | | Redis | 1414 | 35 | 3 | 35 |
| x86_64 / CentOS | Security | Mongo | 1434 | 39 | 7 | 35 |
| | | Redis | 1434 | N/A | N/A | N/A |
| arm64 / Ubuntu | Non Security | Mongo | 1414 | 30 | 12 | 30 |
| | | Redis | 1414 | 36 | 12 | 36 |
| arm64 / Ubuntu | Security | Mongo | 1434 | 43 | 23 | 39 |
| | | Redis | 1434 | N/A | N/A | N/A |

# TAF Blackbox Testcases

| 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 | 52 | 26 | 0 | 26 |
| | | Redis | 52 | 26 | 0 | 26 |
| x86_64 / CentOS | Security | Mongo | 52 | 26 | 0 | 26 |
| | | Redis | 52 | N/A | N/A | N/A |
| arm64 / Ubuntu | Non Security | Mongo | 52 | 26 | 0 | 26 |
| | | Redis | 52 | 26 | 0 | 26 |
| arm64 / Ubuntu | Security | Mongo | 52 | 26 | 0 | 26 |
| | | Redis | 52 | N/A | N/A | N/A |

# DevOps WG Update (04-22-2020)

**Geneva**

- Jenkins Transformation to Pipelines
  - Work continues on the transformation to Jenkins Pipelines
    - Multiple stories related to release automation for Geneva - WIP
      - Identified a bug in the way we're linting the groovy code for edgex global pipelines - WIP
      - Go Version to 1.13x in Verify Jobs seems to have come to DevOps tracker  and tied to 2 projects
        - *The correct version of go version 1.13 is evident per the Jenkins Pipeline logs*
      - Snap integration for release automation - WIP
        - Making excellent progress and completed review with approval from Canonical yesterday
        - No longer at risk for completion but will carry past code freeze in support of the Geneva release
      - Documentation update for edgex-global-pipelines manual bump process
        - Ernesto recorded an asciicinema recording on the process yesterday https://asciinema.org/a/Pk1PmkU3wTPMgxMNbGNmJSdZm
        - Documentation updates will carry over past code freeze today without impacts to anything for the release
      - LFTools / Sigul latest version that supports Python 3.x - *RISK*
        - Need input from LF on alternative signing tool / No update ww17
        - Will work to resolve now in Hanoi

Next DevOps WG Meeting 04/23/2020 @9:00AM PST

# System Management WG Update (Apr 22, 2020)

- No Outstanding Geneva Deliverables
  - [Launch Status Check](#) -- "System Management is a go"
- No meeting this past week (April 17th)
- May 1st Meeting Cancelled -- overlap with Hanoi Planning Meetings
- Next meeting: Friday, April 24th @ 10AM CST
  - CLI

# Open Horizon Integration Update

- Nothing new since last week
- Meetings will resume May 11th

# Security WG Update (04-22-2020)

- Ongoing work for Geneva release (183 items done, 6 items in progress/review, 0 items backlog )
- SIR team update - No major issues found
- Security WG meeting this week focusing on item review for Geneva release

# Certification WG Update (4-20-20)

- Continued discussions on validating device profiles

- Next meeting is Monday, May 4th, 9 a.m. PDT

# Vertical Solutions WG Update (Apr 22, 2020)

- Next meeting: May 12, 2020, 10:00am PST

- China project: https://wiki.edgexfoundry.org/display/FA/China+Events
  - Apr 24: 2:00pm to 6:00pm China time, online meetup
  - Talks by VMWare, Linux Foundation, Intel, IOTech, EMQ, H3C, Thundersoft, JD.com, etc.

# Marketing update <mark>4/1</mark>

- Created sub-team to drive Website project with El Roboto (3rd party)
  - Folder with key documents milestones and information at the Marketing WG wiki https://wiki.edgexfoundry.org/display/FA/Marketing+WG


- Topcoder challenge. 85+ registrations as of 3/31
  - Launched on 3/21https://www.topcoder.com/challenges/3011
  - Banner placed in EdgeX Foundry website
  - Submissions start 4/4

# Miscellaneous (Jim)

- EdgeX Foundry Meetup Virtual Event - China
  - https://www.lfedge.org/event/edgex-foundry-virtual-china-meetup/
  - April 24th
- EdgeX Foundry Meetup Virtual Event - Japan
  - https://www.lfedge.org/event/edgex-foundry-tokyo-virtual-meetup/
  - May 12th
- All Work Groups are encouraged to cancel meetings next week due to planning meeting
  - TSC next week will obviously be cancelled
- Test QA WG lead
  - Robin out long term
  - We are nominating Andy to serve the remainder of his term.  Requires TSC approval

Hanoi Planning Conference

# Hanoi Planning Conference Tasks

- Hanoi Registration Website
  - https://events.linuxfoundation.org/edgex-foundry-hanoi-release-planning-conference-spring/
  - Email sent to all of you that have registered - please re-register for this virtual event!
  - Thank you Dell and Intel for sponsoring!!!!!
- Detailed agenda now available on Wiki
  - Architecture topics
  - Business topics
  - Unconference topics
  - Hanoi Scoping per WG

# Upcoming Events & Dev Advocate Update

Aaron's updates

# Upcoming External Events

› Open Source Summit North America: 22-24 June, 2020 - Austin, TX
  › CFP Closed. Schedule announced April 16.
› IIOT World: 30 June, 2020 - Virtual
  › Jim White: "Using Open Source Technology to Manage IoT/Edge Solutions."
› Open Source Summit Japan: 15-16 September, 2020 - Tokyo, Japan
  › CFP Open: https://events.linuxfoundation.org/open-source-summit-japan/program/cfp/
› FutureNet: 22-23 September, 2020 - London
  › Mike Woster: "Achieving a common architecture: the holy grail or fantasy?"
› **Open Networking & Edge Summit North America: 28-29 September, 2020 - Los Angeles, CA**
  › **ONES Unconference Track**
› Open Source Summit Europe: 26-28 October, 2020 - Dublin, Ireland
  › CFP Open: https://events.linuxfoundation.org/open-source-summit-europe/program/cfp/
› IoT Solutions World Congress: 27-29 October, 2020 - Barcelona, Spain
  › CFP Open: https://www.iotsworldcongress.com/get-involved/become-a-speaker/
  › Call for Testbeds Open: https://www.iotsworldcongress.com/activities/testbeds/
› Open Networking & Edge Summit Europe: TBD Q4, 2020 - Antwerp, Belgium
  › CFP Open: https://events.linuxfoundation.org/open-networking-edge-summit-europe/program/cfp/
› Discussions around upcoming events occur in the LF Edge Outreach Committee
› Members may subscribe at: https://lists.lfedge.org/g/outreach-committee

# LF Edge Webinar Series

› EdgeX Foundry
  › [EdgeX Foundry 101: Intro, Roadmap and Use Cases](#)
  › April 23 @ 9am PT
  › Register for the Webinar at:
    [https://zoom.us/webinar/register/4515850788014/WN_xCd6YPjEQrCwLiFhBWPKug](https://zoom.us/webinar/register/4515850788014/WN_xCd6YPjEQrCwLiFhBWPKug)

› Akraino Edge Stack
  › [Your Path to Edge Computing with Akraino Edge Stack](#)
  › Held Thursday, April 2
  › On-demand recording available at: [https://zoom.us/webinar/register/WN_Zjdo4-5fTQSIqH7pL8iHrQ](https://zoom.us/webinar/register/WN_Zjdo4-5fTQSIqH7pL8iHrQ)
› More to follow...

# Thank You