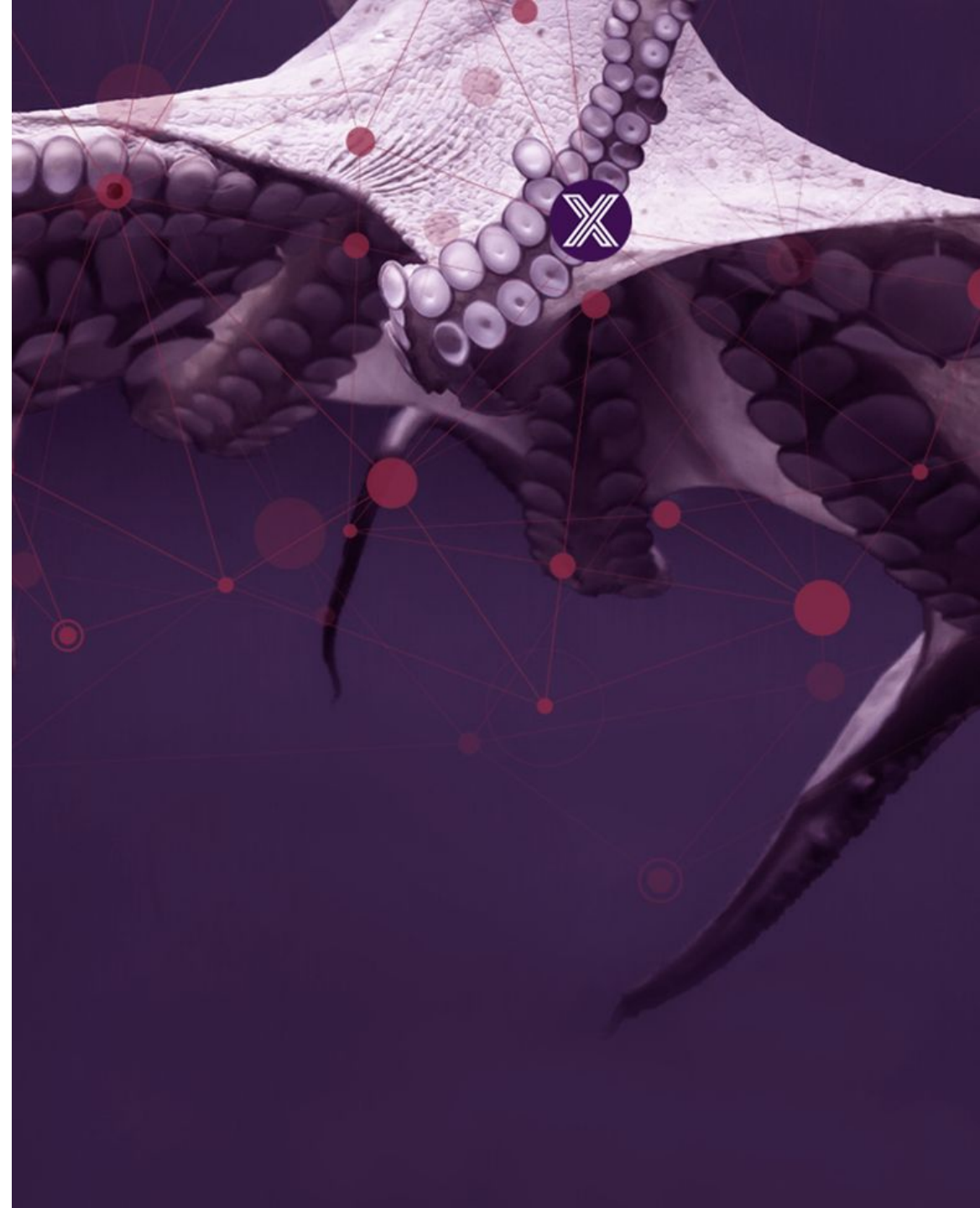


EDGE X FOUNDRY™

TSC Meeting

Nov 4, 2020

edgexfoundry.org |  @edgexfoundry



Antitrust Policy Notice

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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)

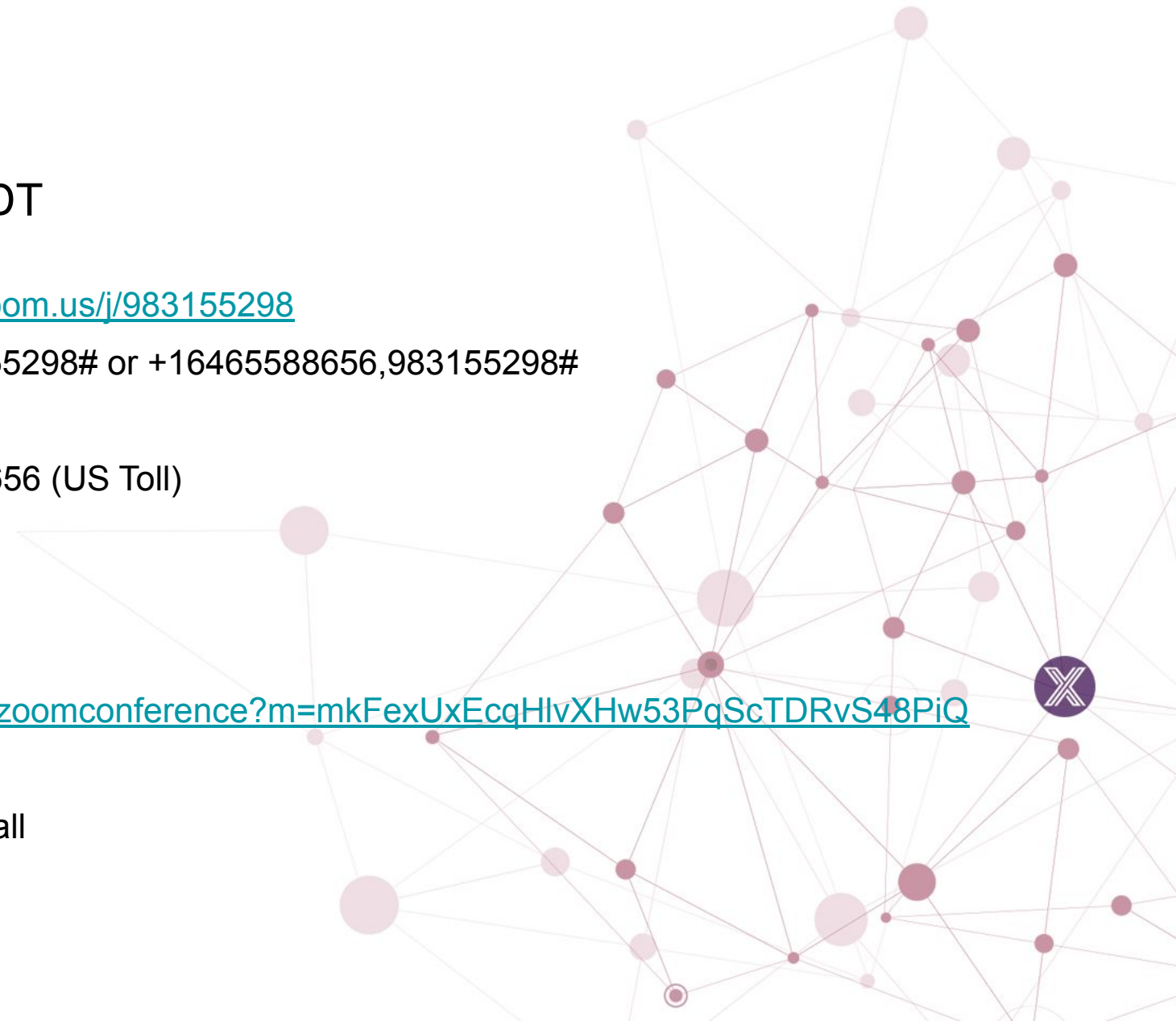
+1 855 880 1246 (US Toll Free)

+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>	<u>Position</u>
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

- Hanoi release - check with the Czar
- WG Updates
- Ireland planning
 - Please register today (to get Zoom links)
- Special ADR meeting
- Upcoming Events (Dev Advocate)

Hanoi Release

Issues, concerns, comments

Bill M. readout on release status

Release Czar (Nov 4th, 2020)

Hanoi Release -

Code Freeze: **In Progress**

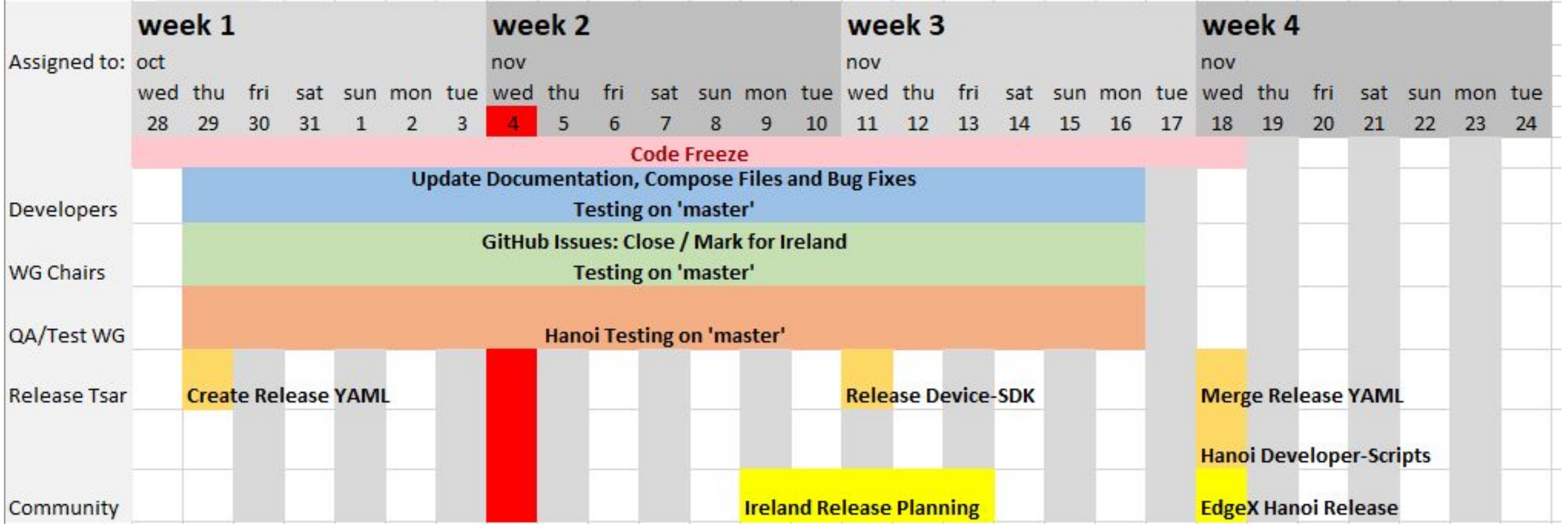
Release Date: November 18th (2 weeks away)

- Not Branching for Hanoi
 - Release / Test Artifacts from `'master'`
- WG Chairs
 - Close / Move Issues to Ireland
 - Update Documentation for Hanoi
 - Bug Fixes
 - Review Release Manifest (Versioning / Content)
 - Device-SDKs - <https://github.com/edgexfoundry/cd-management/pull/91>
 - Core / App SDK - <https://github.com/edgexfoundry/cd-management/pull/90>
 - Device-Services - <https://github.com/edgexfoundry/cd-management/pull/92>
- QA / Test Issues - Prioritize helping resolve any issues
- Go / No Go - TSC Vote - Nov 18th

Release Czar (Nov 4th, 2020)

Hanoi Release

Start Date: 10/28/2020





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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 (11/4)

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

In Progress (4, +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
- **ADR for Message Bus from Device Service to App Services - WIP**

Backlog (1, -1)

- 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

Applications WG Update (4-Nov-2020)

Completed:

- Nothing to report this week

WIP

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

- Next meeting **Nov 6th, 2020 @ 8:00 AM PST**

Application Services

Functions (built into SDK)

Current/Complete:

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

NEW!

NEW!

Features

- Store and Forward
- Web Server
- Configurable App Service
- Vault Integration for Secrets
- MQTT Event triggers

NEW!

Reference/Example App Services (Geneva)

(built on top of SDK)

- Azure IoT Hub
- Amazon IoT Core
- IBM Watson IoT
- Cloud Event Transformation
- Secret Retrieval Example

Device Services WG Update (4-Nov-20)

WIP:

- ADRs for Event Filtering, MessageBus transport: in review
- Conventional Commits enforcement

Dates:

- ADR review meeting Nov 6
- SDKs to be tagged Nov 11
- WG meeting Nov 16
- Device Services released as part of Hanoi, Nov 18

Device Services - current/coming (as of 11/4/20)

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 (2021) - contributed
- OPC-UA in C (2021) - under dev
- CoAP (2021) - contributed
- GPIO (2021) - contributed
- UART (2021) - contributed

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 (2021)
- CanOpen in C (2021)
- OPC-UA Pub/Sub in C (2021)
- ONVIF in C (2021)

QA/Test WG Update (3rd November)

- Postman blackbox test - all tests passing
- TAF blackbox test - 4 test failures: 3 Functional (#221 below), [1 Performance](#) outlier (concessioned)
 - Fixed issues
 - V2 API: Issue [#214](#), Issue [edgex-go#2845](#), Issue [edgex-go#2844](#)
 - Working issues
 - V2 API: Issue [#218](#), Issue [edgex-go#2860](#)
 - Issue [#221](#), functionalTest Jenkins Failure: Response Content Evaluating Expression Errors
 - Issue [#137](#), Modbus scalability test - issue encountered - **investigated**
- Other Business
 - Snap Postman blackbox progress - [PR#471](#) (review pending). TAF to follow next

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	154	2	3	2
x86_64 / CentOS	Security	Redis	154	2	3	2
arm64 / Ubuntu	Non Security	Redis	154	2	3	2
arm64 / Ubuntu	Security	Redis	154	2	3	2

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	0	0	1
arm64 / Ubuntu	Non Security	Redis	10	0	1	0

Jenkins Job: [performance-test](#)

DevOps WG Update (11-04-2020)

Pipeline Enhancements

- [#252](#) [Watching] Build Snaps natively on Ubuntu
- [#260](#) [Complete] CodeCov results not uploading
- [#261](#) [Complete] Snyk scan docker images pre release
 - All images scanned. Only found issues with docker-edgex-consul:master
- [#137](#) [Complete] Spike: CIS Docker Security Benchmark for EdgeX
- [#283](#) [Complete] Shared library for github-pages publish
- [#275](#) [In Progress] Update edgex-docs to use new github-pages publish

Next DevOps WG Meeting Cancelled **Nov 5th, 2020 @ 9:00 AM PST**

Security WG Update (Nov 4)

- Previous Meeting: Nov 4
- Next Meeting: Today is security wg pre-wire planning
- Security Board
 - 45 Done (+2)
 - 6 In Review (-2)
 - 0 In Progress (0)
 - 2 Backlog (-1)
 - 0 New (0)

Outreach WG Updates (11/4/20)

Certification Team

- Next steps: Documentation, i's and t's

Vertical Solutions Team

-

Marketing Team

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

Core Working Group (11-4-2020)

- Current Status
 - Board is clean except for 1 bug (everything else moved to Ireland or later)
- V2 API
 - selection of APIs (core/metadata) provided with Hanoi
 - After Hanoi - provide APIs for device service **and client**
- UI team working on Ireland prototypes
 - Data visualization - need feedback on prototypes
- VMWare team working on Kubernetes “crawl” phase for Hanoi
 - Kompose work will slip to Ireland
- Next call - 11/5/20 @ 10AM US/Central tomorrow
 - used for Security or ADR (TBD)

Miscellaneous Issues/Topics

- ADR meeting Friday morning (unless we can repurpose core or devops mtg)
 - Filter in DS
 - Metrics and Control Plane Events



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Ireland Release Planning

formerly F2F meeting

Register NOW

- See Wiki for details:
<https://wiki.edgexfoundry.org/pages/viewpage.action?pageId=52330532>
- Registration sight now available - please register (its FREE)
 - <https://events.linuxfoundation.org/edgex-foundry-ireland-release-planning-conference-fall/>
- Currently at 31 registered
- **Register to get the Zoom link for the meeting!!!**

Final Schedule

Nov 9th

6am – introductions and logistics

6:30am – **Business** Topics

6:30 Website update (Andy/Camilo)

6:45 Topcoder challenge

7:00 Shanghai Challenge Hackathon readout
(Melvin/Gavin)

7:30 Industry Vertical Solutions (Keith)

8:00 Endorsement / Certification programs
(Rodney)

All times listed in **PST**. *We'll attempt to adhere to the schedule as closely as possible but as the meeting flows from one topic to the next, the daily schedule will not follow exact times.*

8:45am – Major themes & **Architecture Topic Tee**
Up

Not a deep dive – just an overview of the issues

10am – Adjourn

Final Schedule

Nov 10th

6am – **Release cadence**, event coordination, release naming

6:30am – **Architecture topics** discussion and decisions

[We'll use any extra time by starting Ireland scoping]

10am – Adjourn

All times listed in **PST**.

Nov 11th [APJ time friendly day]

4pm – Quick check on **Hanoi** issues/lessons learned

4:30pm – **Ireland Scoping**

6:30pm – APJ **Adopter Feedback** (reaction to our scoping and answers to specific questions)

Thundersoft, Jiangxing Intelligence

7:30pm – Adjourn

All times listed in **PST**.

Final Schedule

Nov 12th

6am – Europe and America **Adopter Feedback**
(reaction to our scoping and answers to specific questions)

Tibco, Accenture, IoTech, HP

7am – **Ireland Scoping** continuation (picking up from Nov 11th)

[followed by continuation of architectural discussions if needed]

9am – Jakarta release early scoping/**backlog** discussion

10am – Adjourn

Nov 13th “Unconference”

6:00am - Conference Wrap Up action items & lessons learned

6:45am – IoTech Product Demo – James

7:30am – Tibco Integration with Analytics/ML – Jesus/Marcello

8:15am – DevOps (2 topics)

edgex-global-pipelines training session

Edgex release process demo

9:00am - Time Series Database – Michael Hall

10am - Adjourn



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>



LF Edge Webinar Series

Akraino Edge Stack

Held Thursday, April 2 - [Your Path to Edge Computing with Akraino Edge Stack](#)

› On-demand recording available at: https://zoom.us/webinar/register/WN_Zjdo4-5fTQSIqH7pL8iHrQ

EdgeX Foundry

› Held Thursday, April 23 - [EdgeX Foundry 101: Intro, Roadmap and Use Cases](#)

› On-demand recording available at: https://zoom.us/webinar/register/4515850788014/WN_xCd6YPjEQrCwLiFhBWPkug

Project EVE

› Held Friday, May 29 - [Building the “Android of the IoT Edge”](#)

› On-demand recording available at: https://zoom.us/webinar/register/6415888722675/WN_35oZJ3hrQE69snMaiJUTPg

White Paper

› Held Thursday, July 9 - [Demystifying the Edge with the new LF Edge Taxonomy and Framework](#)

› On-demand recording available at: https://zoom.us/webinar/register/WN_icv5h6wFTcuw9O0xvMpgLw

Fledge

› Held Thursday, August 13 - [How Google, OSIssoft, FLIR and Dianomic use Fledge to implement Industrial 4.0](#)

› Recording available at: <https://www.youtube.com/watch?v=6JXNv3AJWog>

State of the Edge

› Held Thursday, September 17 - [State of the Edge: Exploring the Intersection of IoT, AI, 5G and Edge Computing](#)

› On-demand recording available at: https://zoom.us/webinar/register/8115959695936/WN_4rt-MmP1RI6Vkzn3ULpiAA

Home Edge

› Held Thursday, October 15 - [Home Edge: How Your Home Devices Get Deployed in An Edge Computing Services Ecosystem](#)

› On-demand recording available at: https://zoom.us/webinar/register/WN_uSlgb-R5Q4etkDhxoSXISQ

› More to follow...





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Thank You