

EDGE X FOUNDRY™

TSC Meeting

May 26, 2021



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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

- WG Updates
- ADR review
- Miscellaneous
 - EdgeX Foundry Jakarta planning pre-wire meeting: June 4
 - Open to the public. Request TSC members to attend if possible to set the stage for our Jakarta planning
 - Our job in the prewire is to narrow the topics of consider or possible consider for Jakarta from out-of-scope and won't consider
 - Port changes
 - DTC and AgStack liaison updates
 - TSC nominations
- Upcoming Events (Dev Advocate)
 - And update on badge program



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Work Group Updates

Chairs

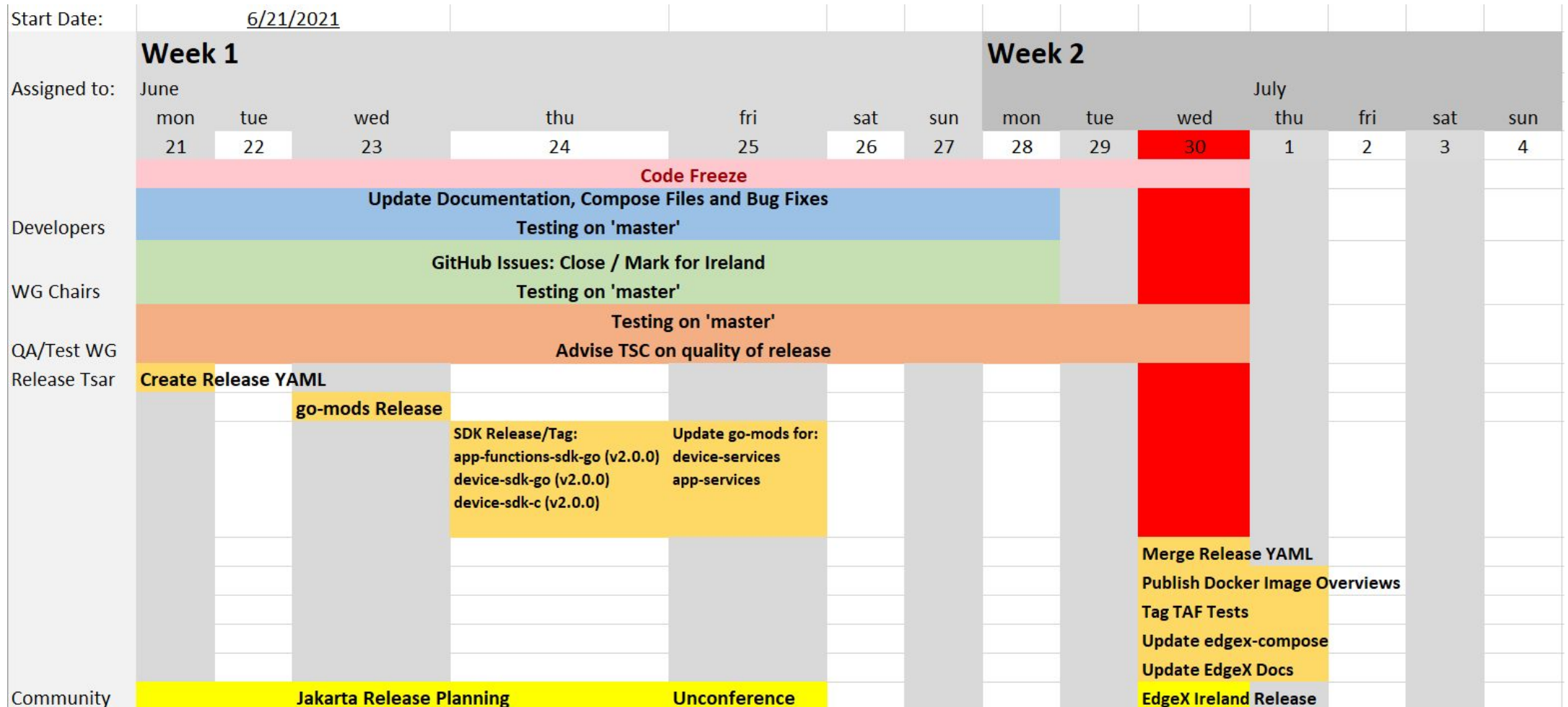
Working Group Chair Updates

- Around the horn
 - Release Czar - Bill Mahoney
 - Product Manager - Lenny Goodell
 - 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

Release Czar (May 26, 2021)

Ireland (2.0.0) Release - Key Dates

- Freeze Date: Monday, **June 21st, 2021** (3 weeks)
- Release Date: Wednesday, **June 30th, 2021** (5 weeks)



Product Manager (5/26)

Cross Cutting Issues

In Progress (11, +2)

- **V2 Implementations**
 - Support Notifications APIs - **WIP**
 - TAF testing V2 APIs - **WIP**
 - System Mgmt APIs - **WIP**
- **V2 Consumption**
 - Support Notification Clients - **TBD**
 - App SDK V2 Clients - **TBD**
 - Device Camera - **WIP**
 - C Device Services - **TBD**
- **V1 Code removal**
 - Core/Support Services - **WIP**
 - App Services - **DONE**
 - Device Services - **DONE**
- Securing Consul with Access Token
 - C Device SDK - **TBD**
 - C Device Services - **TBD**
 - Security Services - **DONE**
- **Port Reassignment**
 - Go Services - **DONE**
 - C Services - **WIP**
- **Metrics ADR - WIP**
- Device Service send Events via MessageBus implementation
 - Kuiper password inject - **WIP**
 - Device Camera - **WIP**
 - Device SDK C - **DONE**
 - C Device Services - **TBD**
 - Core Data Subscribe - **DONE**
 - Go Services - **DONE**
- **Consistent Service configuration**
 - go-mod-bootstrap - **DONE**
 - Core/Support/SysMgmt - **DONE**
 - App SDK - **DONE**
 - ASC - **DONE**
 - Device SDK GO - **DONE**
 - Device Virtual - **DONE**
 - Device Modbus - **DONE**
 - Device REST - **DONE**
 - Device Random - **DONE**
 - Device MQTT - **DONE**
 - Device Camera - **WIP**
 - Device SDK C - **TBD**
 - Device Bacnet - **TBD**
 - Device Grove - **TBD**
 - Device Coap - **TBD**
- Secret Provider for All
 - DS SDK C - **WIP**
 - C Device Services - **TBD**
 - Camera Device Service - **TBD**
 - Go Services - **DONE**
- **Secure Message Bus connection**
 - C Device SDK - **TBD**
 - C Device Services - **TBD**
 - Go Services - **DONE**
- **Service Key names & Clients Config overrides**
 - Compose - **DONE**
 - C Device Services - **WIP**
 - Go Services - **DONE**
 - TAF Scripts updated - **DONE**

Done (15, +/-0)

- Switch to Go 1.16
- Switch to Redis as default MessageBus
- Docker image renaming
- See project board for more...

Backlog (1, +/-0)

- Implement Generate/Inject passwords into Vault

Icebox (0, +/-0)

Applications WG Update (26-May-2021)

WIP:

Multiple Export Capability - Decided we're gonna go with chained/subsequent HTTPExports calls.
Working with Kuiper on injecting secrets

Old WIP :)

- Reviewing edgexfoundry-holding/rfid-llrp-inventory-service - Changes in-progress
- Documentation Updates

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 (26-May-21)

Done

- Consistency updates for configuration (Go)
- v2 model updates (C)
- RFID/LLRP device service review passed

WIP

- GPIO device service

Project status: 19 issues backlog + 3 new (net =)

Next meeting: June 7th

Device Services - current/coming (as of v2.0)

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
- Grove in C
- CoAP in C

Open Source connectors (Future):

- Bluetooth Low Energy in C (2021) - contributed
- OPC-UA in C (2021) - under dev
- GPIO (2021) - contributed
- UART (2021) - contributed
- GPS

Commercial connectors (Current):

- File Exporter in C
- BLE in C
- Zigbee in C
- GPS in C
- CAN in C
- CANOpen in C
- MEMS in C
- EtherCat in C
- EtherNet/IP in C
- Profinet in C
- OPC-UA Pub/Sub in C
- ONVIF in C
- Siemens S7 in C

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

Commercial connectors (Future):

- ZeroMQ (Q1 2021)
- RFID (Q1 2021)

QA/Test WG Update (25th May)

We didn't have a meeting this week

- TAF tests
 - Status - 10 failing TAF tests related to the following:
 - [#403](#) [Kong] connecting to original docker container IP after scheduler restart - pending discussion at Kong
 - [edge-go #3497](#), Core Data Subscribe receives own messages published to MessageBus - Core WG?
 - [app-functionsl-sdk-go #852](#), Service log shows sending to MQTT Broker, even the MQTT Broker is stopped - Lenny?
 - Fixed Issues
 - [#315](#), Start all services before running test script
 - [#414](#) & [#424](#) Updates for service key name changes
 - [#426](#), Update scripts / test cases for new port assignments
 - [#432](#), Handling long string in mqtt-subscriber data
 - [#434](#), device-virtual file configuration.toml needs to be updated

Next Meeting June 1st, 8am PST

TAF Functional 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	430	23	7	16
x86_64 / CentOS	Security	Redis	430	27	10	17
arm64 / Ubuntu	Non Security	Redis	430	23	9	14
arm64 / Ubuntu	Security	Redis	430	27	8	19

Jenkins Job: [functional-test](#)

TAF Integration 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	6	0	1	0
x86_64 / CentOS	Security	Redis	6	0	2	0
arm64 / Ubuntu	Non Security	Redis	6	0	1	0
arm64 / Ubuntu	Security	Redis	6	0	2	0

Jenkins Job: [integration-test](#)

TAF Performance 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	10	10	0	10
arm64 / Ubuntu	Non Security	Redis	10	10	0	10

Jenkins Job: [performance-test](#)

DevOps WG Update (05-26-2021)

Pipeline Enhancements

- N/A

Other

- Master → Main branch rename coming up after Ireland release.
- [In Progress] Developer Badging Program
- [Backlog] DockerHub Overviews for new docker images

Next DevOps WG Meeting May 27, 2021

Security WG Update (May 26)

- Next Meeting: Today & June 2
- Backlog
 - Security Board: 8 (-2)
 - Consul Board: 3 (0)
- Development
 - Security Board: 0 (0)
 - Consul Board: 0 (0)
- In Review
 - Security Board: 1 (0)
 - Consul Board: 0 (0)
- Done
 - Security Board: 82 (+1)
 - Consul Board: 40 (0)

Outreach WG Updates (5/26/21)

Combining meetings going forward

Certification Team

- EdgeX Ready soft launch! <https://wiki.edgexfoundry.org/display/FA/EdgeX+Ready>
- Next meeting is Monday, June 14th (skipping 3/31 due to US Memorial Day holiday)

Vertical Solutions Team

- Open Retail Reference Architecture sub-project:
<https://wiki.edgexfoundry.org/display/FA/Open+Retail+Reference+Architecture>
- Next call tomorrow (5/27/21) at 10 a.m. PDT
- Adopter series for June will be the hour before the TSC F2F meeting on Tuesday June 22

Marketing Team

- China Web Site has been started and we are now getting weekly updates

Core Working Group (5-25-2020)

- Ireland
 - Notifications wrapping up
 - System Management wrapping up
 - V1 code ripped out thanks to Lenny
 - TAF tests (following API work)
 - Integration / use of V2 APIs (work underway)
 - Documentation
 - CLI to V2 (Canonical leading - but moving a refactored and improved CLI to 2.0.1)
 - Now UI may be near completion for June deadline (may still be 2.0.1 - TBD in 2 weeks)
- status
 - 11 in backlog (-6)
 - 12 in bug backlog (even)
 - 3 in progress or QA(+2)
 - 207 done (+20 !!!!!)
- Next call - 5/27/21 @ 8AM PDT
 - should be a lite agenda

ADR review (in order of priority)

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Metrics / #268	Refreshed - needs review	Jim White	Core
ADR on dynamic service list / #377	Approval?? - updated per monthly architect's meeting (for pre-wire)	Jim White	Core
ADR on unit of measure / #386	New - needs review (per monthly architects meeting)	Jim White	Core

* - indicates some work this week

Miscellaneous Issues/Topics

- Jakarta pre-wire will be June 4 (Friday), 8am-11 PDT
 - Mike Johanson - can we cancel App Services WG that week? or move it?
 - Do we need 2 days? (we have used 2 x ½ days in the past for this virtual meeting)
 - Open to the public. Purpose - limit scope discussions for Jakarta (what's possibly in and what's definitely out) and also talk a bit about 2.0.1
 - Jakarta F2F planning meeting - Jun 21-25, ½ day sessions (alt 7-11, 10-1)
 - Separate China update and feedback session in weeks shortly thereafter
 - **Note:** Adopter series presentation from Canonical will be right before the Tuesday morning planning meeting session!!
- EdgeX Awards Ceremony - still waiting on trophy arrival
- DTC and Agstack liaison updates
 - Presenting EdgeX to DTC on June 9th, 6:30 EDT (let me know if you'd like to attend)
 - Agstack announcement out on Agstack Web site. Next step is tech deep dive presentation
 - <https://agstack.org/blog/agstack-joins-with-lf-edge-and-edgex-foundry-to-create-agriculture-iiot-solutions/>

Port Changes

- EdgeX ports have been moved to IANA dynamic port range
 - Avoids some conflicts (49986 conflicts with Windows Update app)
 - Here are the new ranges
 - North side services (app, rules, analytics, etc.): 597xx
 - Core and supporting services: 598xx (58880 for core data and 58881 for metadata for example)
 - South side services (device services): 599xx


TSC makeup

- I believe Core and TestQA are now practically one work group
- The same people are working on core and Test QA
- James and I come from the same company
- The management role can be merged
- Allowing for one more TST at large seat

Thoughts and discussion

TSC Nominations

- I nominate the following
 - Applications Working Group chair: Mike Johanson
 - Device Services Working Group chair: Iain Anderson
 - Dev Ops Working Group chair: Ernesto Ojeda
 - Core Working (and Test QA) Group chair: James Butcher
 - TSC at-large seats: Tony Espy and Lenny Goodell
 - Open: Security, Outreach (some potential candidates I am discussion with)
 - Roles
 - PM: Lenny
 - Release Czar: Bill Mahoney
 - Certification group leader: Rodney Hess
 - Vertical Solutions group leader: Henry Lau
 - Open: marketing group leader (discussing)
 - TSC Elections - Nominations for WG and TSC now open
 - WG Chair elections week of June 7-11 if needed
 - At large elections week of June 14-18 if needed



Thank you **Keith and Colin** for all you have done for the project. Colin, we hope you stay around as IC. Keith will continue to serve in LF Edge board



Upcoming Events & Dev Advocate Update

Aaron's updates

Upcoming External Events

- › [Open Source Summit Europe / Embedded Linux Conference](#): **27-30 September, 2021 - Seattle, WA** (and Virtual)
 - › [CFP](#) Deadline: 13 June, 2021
- › [OSPOCon](#): **27-29 September, 2021 - Seattle, WA** (and Virtual)
 - › [CFP](#) Deadline: 13 June, 2021
- › [The Global Open Source Technology Conference \(GOTC\)](#): 9-10 July, 2021 - Shenzhen/Shanghai
- › [IoT Solutions World Congress](#): 5-7 October, 2021 - Barcelona, Spain
 - › [CFP](#) closed (notifications in June)
 - › [Call for Testbeds](#) (closed)
- › [Open Networking & Edge Summit North America](#): 11-12 October, 2021 - Los Angeles, CA + Virtual
- › [KubeCon + CloudNativeCon North America](#): 12-15 October, 2021 - Los Angeles, CA + Virtual
 - › [CFP](#) is open (closes 23 May)
- › Discussions around upcoming events occur in the LF Edge Outreach Committee
- › Members may subscribe at: <https://lists.lfedge.org/g/outreach-committee>



Upcoming Project Events

EdgeX Foundry Adopter Series - Canonical EdgeX Snaps: 22 June, 2021

› Registration: https://zoom.us/webinar/register/WN_2BvbgjYNQZCKhx_U2F23Zg

› More to follow...





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EdgeX Badge Update

Quick Recap- Goals

1. **A reward/Thank-you** to the community member for their hard work
2. **Strengthen the connection** with the new members by giving us another touch point to them. (if someone has done a commit, we really want them to do a second one.)
3. **Honor people** who are the bedrock of the community (more exclusive badges or verified ones).
4. **Use our community to advertise EdgeX.** By posting that they received a badge or including the winners in our blog posts, PR's, etc. others will see it.

Possible Badges

- On your 8th commit, you get an “Edgy” (Edgey?, Edgie?) (the mascot of the EdgeX)
 - So not everyone would get one and odds are you are not going to put in 8 PRs for oxford commas
 - Could also add a star for each factor (8^1 , 8^2 , 8^3 (512), 8^4 (doubt that we get here))
- Firefighter
 - Close out 2 “3-high” PRs
- Bug Catcher - close out 1 PRs labeled bug
 - How many should it be to earn the badge?
- Doc Wizard - 5 documentation updates. I would like to say meaningful, but not sure how to quantify this

Current Status

- Dev Ops is working on making this an automated process.
 - when your second bug fix is accepted, you receive an email with a thank you message, links to the wiki to show you how to install the badge and the badge itself.
 - needs to be automated because otherwise it will become too much of a burden.
- below are two samples, next version will be without the octopus-bug





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Thank You