

EDGE X FOUNDRY™

TSC Meeting

May 19, 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?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ>

** 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
 - Ports issue
 - possible AgStack liaison
 - Monthly Architect's meeting readout
 - Schedule reminders
- Upcoming Events (Dev Advocate)



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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 19, 2021)

Ireland (2.0.0) Release - Key Dates

- Freeze Date:
 - Monday, **June 21st, 2021** (4 weeks)
- Jakarta Virtual Planning Meeting:
 - June 21-24 (Monday - Thursday)
- Release Date:
 - Wednesday, **June 30th, 2021** (6 weeks)
- EdgeX 2.0.1
 - ~ August 2021
- Jakarta Release:
 - ~ Early November 2021

Release Concerns:

Please let Lenny, Jim and myself be aware of issues as soon as possible.

Ireland (v2.0.0) Release Plan

Start Date:	6/21/2021													
	Week 1							Week 2						
Assigned to:	June							July						
	mon	tue	wed	thu	fri	sat	sun	mon	tue	wed	thu	fri	sat	sun
	21	22	23	24	25	26	27	28	29	30	1	2	3	4
	Code Freeze													
Developers	Update Documentation, Compose Files and Bug Fixes Testing on 'master'													
WG Chairs	GitHub Issues: Close / Mark for Ireland Testing on 'master'													
QA/Test WG	Testing on 'master' Advise TSC on quality of release													
Release Tsar	Create Release YAML		go-mods Release		SDK Release/Tag: app-functions-sdk-go (v2.0.0) device-sdk-go (v2.0.0) device-sdk-c (v2.0.0)		Update go-mods for: device-services app-services							
											Merge Release YAML Publish Docker Image Overviews Tag TAF Tests Update edgex-compose Update EdgeX Docs			
Community	Jakarta Release Planning				Unconference			EdgeX Ireland Release						

Product Manager (5/19)

Cross Cutting Issues

In Progress (9, -2)

- **V2 Implementations**
 - Support Notifications APIs - **WIP**
 - TAF testing V2 APIs - **WIP**
 - System Mgmt APIs - **WIP**
 - Support Scheduler APIs - DONE
 - Device SDKs - DONE
 - Core Services - DONE
- **V2 Consumption**
 - Support Notification Clients - TBD
 - App SDK V2 Clients - TBD
 - **Device Camera - TBD**
 - Device Random - DONE
 - Device REST - DONE
 - Device ModBus - DONE
 - Device Virtual - DONE
 - Support Scheduler Clients - DONE
- **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**
- Device Service send Events via MessageBus implementation
 - Device SDK C - **DONE**
 - **Kuiper password inject - WIP**
 - C Device Services - TBD
 - **Core Data Subscribe - DONE**
 - **Device Camera - TBD**
 - Device REST - DONE
 - Device Random - DONE
 - Device ModBus - DONE
 - Device Virtual - DONE
- Secret Provider for All
 - **DS SDK C - WIP**
 - Camera Device Service - TBD
 - C Device Services - TBD
 - Secret Store Setup - DONE
 - Go Device Services - DONE
 - App Services - DONE
- **Secure Message Bus connection**
 - C Device SDK - TBD
 - C Device Services - TBD
 - **Core Data - DONE**
 - **App Services - DONE**
 - **Go Device SDK - DONE**
 - **Go Device Services - DONE**

- **Service Key names & Clients Config overrides**
 - Compose - **WIP**
 - go-mod-bootstrap - **DONE**
 - go-mod-core-contracts - **DONE**
 - edgex-go - **DONE**
 - App SDK - **DONE**
 - ASC - **DONE**
 - Go Device SDK - **DONE**
 - Go Device Services - **DONE**
 - TAF Scripts updated - **DONE**
 - C Device SDK - TBD
 - C Device Services - TBD
- **Metrics ADR - WIP**

Done (15, +2)

- **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 (19-May-2021)

WIP:

Started looking at Multiple Export Capability
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 (19-May-21)

Done

- device-rest v2
- MessageBus for C
- Go 1.16
- Event Tagging (initial support for Go)
- Service keys update (Go)

WIP

- GPIO device service: approx 1 remaining issue
- SecretStore / Vault: C SDK
- device-snmp v2

Project status: 20 issues backlog + 2 new (net -6)

Next meeting: May 24th

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 (18th May)

- TAF tests
 - Status - 28 failing TAF tests
 - Arm 64 nodes all offline and blocking PRs, raised LF ticket [IT-22088](#)
 - [PR#208](#)/[PR#245](#): device-virtual & device-modbus: update for new service key names hyphen/underscore
 - [#403](#) [Kong] connecting to original docker container IP after scheduler restart - [pending discussion at Kong](#)
 - Fixed Issues
 - [#408](#), [V2] Metadata: add tests for GET /deviceresource profile
 - [#409](#), [V2] Command: Add param check when querying deviceCoreCommands
 - [#412](#), [V2] SMA: positive & negative tests
 - [#417](#), [Modbus] correct startingAddress to zero-base addressing
 - [#419](#), Update frequency field to interval for auto-events and scheduler interval

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	423	0	23	0
x86_64 / CentOS	Security	Redis	423	0	27	0
arm64 / Ubuntu	Non Security	Redis	423	0	23	0
arm64 / Ubuntu	Security	Redis	423	0	27	0

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	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

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

Jenkins Job: [performance-test](#)

DevOps WG Update (05-19-2021)

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

This week's DevOps WG Meeting May 20, 2021 Cancelled

Security WG Update (May 19)

- Next Meeting: Today & May 19
- Backlog
 - Security Board: 10 (+2)
 - Consul Board: 3 (0)
- Development
 - Security Board: 0 (0)
 - Consul Board: 0 (0)
- In Review
 - Security Board: 1 (-1)
 - Consul Board: 0 (0)
- Done
 - Security Board: 81 (+1)
 - Consul Board: 40 (+2)

Outreach WG Updates (5/19/21)

Combining meetings going forward

Certification Team

- EdgeX Ready soft launch! <https://wiki.edgexfoundry.org/display/FA/EdgeX+Ready>

Vertical Solutions Team

- Open Retail Reference Architecture sub-project:
<https://wiki.edgexfoundry.org/display/FA/Open+Retail+Reference+Architecture>
- Next call tomorrow (5/20/21) at 10 a.m. PDT
- Cancelling Adopter Series for 25th

Marketing Team

-

Core Working Group (5-18-2020)

- Ireland
 - Support services (notifications)
 - TAF tests (work underway)
 - System Management service (under way)
 - Integration / use of V2 APIs (work underway)
 - Documentation
 - Message bus support (work underway)
 - CLI to V2 (work underway)
- status
 - 17 in backlog (+2)
 - 12 in bug backlog (even)
 - 3 in progress or QA(+2)
 - 187 done (+5)
- Next call - 5/20/21 @ 8AM PDT
 - timeouts issue wrap up
 - Protocol in ServiceInfo

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	Added - updating based on monthly arch's meeting	Jim White	Core
ADR on unit of measure	Forthcoming	Jim White	Core

* - indicates some work this week

Miscellaneous Issues/Topics

- 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
- EdgeX Awards Ceremony - still waiting on trophy arrival
- TSC Elections - Nominations for WG and TSC at large starting next week
 - WG Chair elections week of Jun 7-11 if needed
 - At large elections week of Jun 14-18 if needed
- AgStock - new LF project.
 - working a cooperation or liaison effort - probably through vertical solutions
- Monthly Architect's Meeting readout
 - 2 issues
 - service list - good discussion and closure or requirements and high level approach
 - unit of measure - general approach and need for new ADR
- removing test-go-mod-tidy.sh -> now redundant

Port Issue

- Port issue
 - Device service use of 49986 conflicts with Windows Update app
 - 3 types of ports and our micro services should sit between 49152-65535.
 - 2 recommendations:
 - A) Leave our ports as is for now. Document how to change them if you find conflict in your environment. Document any known port conflicts. Also consider a port change to the Dynamic Port area for EdgeX 3.0
 - B) Change all the ports now to the Dynamic Port range. Suggested:
 - 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



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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](#) is open (closes 20 May)
- › [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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Thank You