

EDGE X FOUNDRY™

TSC Meeting

July 14, 2021

???

7/14/21 ←

national pandemonium day



Antitrust Policy Notice

- › Linux Foundation meetings involve participation by industry competitors, and it is the intention of the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws.
- › Examples of types of actions that are prohibited at Linux Foundation meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at <http://www.linuxfoundation.org/antitrust-policy>. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrave of the firm of Gesmer Updegrave LLP, which provides legal counsel to the Linux Foundation.

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	Jim White	jim@iotechsys.com	Outreach WG Chair
Intel	Bryon Nevis	bryon.nevis@intel.com	Security WG Chair
Intel	Lenny Goodell	leonard.goodell@intel.com	Applications & Analytics WG Chair
IOTech	James Butcher	james@iotechsys.com	Core/Test/QA WG Chair

Gavin Lu (VMWare), Tony Espy (Canonical), Melvin Sun (Intel)

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

- EdgeX Awards Ceremony
- Ireland Issues
- WG Updates
- TSC Chair
- New CVE procedures
- Outreach meeting time
- LTS policy review
- Ireland Documentation

EdgeX Awards Ceremony

Innovation Awards

Lenny Goodell

Ernesto Ojeda

Contribution Awards

Cloud Tsai

IOTech Taiwan team: Cloud Tsai, Jack Chen, Lindsey Cheng, Ginny Guan, Wendy Huang, Bruce Huang, Jude Hung, Chris Hung, Felix Ting, and Cherry Wang





EDGE X FOUNDRY™

Work Group Updates

Chairs

Ireland Release

Release process

- Any additional lessons learned or items we should capture for next release
- Hats off to Bill, Lenny, Test QA team, SNAP team, and others that had a direct hand in the getting Ireland out. Job well done!

Known issues

- Core data API issues (as reported by Cloud)

Working Group Chair Updates

- Around the horn
 - Release Czar - Bill Mahoney
 - Product Manager - Lenny Goodell
 - Applications - Lenny Goodell
 - Core - James Butcher
 - Device Services - Iain Anderson
 - DevOps - Ernesto Ojeda
 - Security - Bryon Nevis
 - Outreach - Jim White
 - Certification - Rodney Hess
 - Marketing - Camilo Dennis
 - Vertical Solutions (and LF Edge TAC) - Henry Lau

Release Czar (07-14-2021)

- Ireland wrap-up

Product Manager (7/13) - Jakarta

Cross Cutting Issues

In Progress (4)

- Securing Consul with Access Token
 - C Device SDK - **TBD**
 - C Device Services - **TBD**
- **Secure Message Bus connection**
 - C Device SDK - **TBD**
 - C Device Services - **TBD**
- Secret Provider for All
 - DS SDK C - **PR**
 - C Device Services - **TBD**
- **Metrics ADR - **WIP****

Done (0)

-

Backlog (1)

- Implement Generate/Inject passwords into Vault

Icebox (0)

Applications WG Update (14-July-2021)

Done

- Documentation updates mostly complete
 - Pending PR for App Services Migration document
 - Examples list needs refreshing
- 11 out of 16 App Service examples migrated
- rfid-llrp-inventory-service moved out of holding.
- Project Board updated for Jakarta

WIP

- Migrate remaining Cloud Export examples

Application Services - Ireland

■ New

■ Renamed

Functions (built into SDK)

- Add Tags
- Batch
- Compression (GZIP & ZLIB)
- Conversion (XML & JSON)
- PushToCore
- ~~MarkAsPushed~~
- Encryption (AES)
- Export
 - MQTT
 - HTTP POST & PUT
- Filtering
 - **By Profile Name**
 - By Device Name
 - **By Source Name**
 - **By Resource Name**
- JSONLogic
- **Set Response Data**

Features

- Store and Forward
- Batch and Send
- Web Server
- Configurable App Service
- Vault Integration for Secrets
- MQTT Event triggers
- **Filter by Topics**
- **Custom Triggers**
- **Publish Topics and URL Placeholders**
- **Structure Custom Configuration**
- **Background Publishing**
- **Received Topic**
- **Context Storage**
- Clients
 - Logging, Event
 - Command
 - **Device, DeviceService**
 - **DeviceProfile**
 - **Notification**
 - **Subscription**
 - **Registry**

Reference/Example App Services

(built on top of SDK)

- Simple Filter
- Simple Filter and MQTT Export
- Simple Filter and HTTP Export
- Simple CBOR
- Azure IoT Hub
- Amazon IoT Core
- Cloud Event Transformation
- Secret Retrieval
- JsonLogic

- Send Command
- Convert & Publish
- Custom Target Type
- IBM Watson IoT (ASC Profile)
- **Custom Trigger**
- **Influx DB Export**
- **Fledge Export**

Core Working Group (Last Meeting 1st July)

- Ireland
 - Performance google doc [here](#). PDF to come
- Jakarta
 - James and Cloud worked through task list
- Fixes
 - go-mod-core-contracts
 - [#634](#) [V2] Add Reading API constant and client
 - [#643](#) [V2] Add Reading API route & ReadingClient
 - go-mod-messaging
 - [#112](#) QoS has no effect on the behavior of MQTT msgbus
 - [#73](#) Replace ZeroMQ lib for a pure golang ZeroMQ lib
 - edgex-docs
 - [#463](#) Update Getting Started - Go Developers to V2
 - [#466](#) Update Virtual Device docs for V2

edgex-taf : all 530 tests passing

- Fixes
 - [#473](#) Add test to verify the Writable.PersistData configuration
 - [#478](#) Add tests for query readings by name and time range
 - [#492](#) [Perf] Eliminate the max and min value in the Ping test
 - [#493](#) [Perf] Test app service through API Gateway
 - [#211](#) Integration tests for Store and Forward
 - [#502](#) [ARM64] No retry post log found after app-service restart
 - [#491](#) [ARM64] Redis subscriber didn't receive data after getting device command
- Working
 - [#499](#) [Performance] Eliminate the max and min exported time
- New
 - [#486](#) Implement support-notifications V2 integration test

Next Meeting: Tomorrow (Thursday) 8am PT

Device Services WG Update (14-July-21)

Current activity:

- Population of issues for Jakarta cycle
- Documentation
 - Add migration documents
 - Update examples and tutorials
- Completion of v2 release
 - SecretStore implementation for CSDK
 - BACnet, Grove, GPIO services
- Consideration of new services
 - LLRP (integration tests ongoing)
 - UART (Initial review commencing)

Next meeting: July 19th

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
- GPIO in Go

Open Source connectors (Future):

- LLRP / RFID in Go
- UART in Go

Commercial connectors (Current):

- 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
- Siemens S7 in C
- File reader in C

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

DevOps WG Update (07-14-2021)

Pipeline Related

- [Complete] Pipeline support for rfid-llrp-inventory-service
- [Complete] Device-coap-c having issues building due to bad Dockerfile
- [Complete] DockerHub description/overviews for new Docker images
- [Complete] Add support for hadolint and golanci in [Go build image](#)
- [Backlog] Spike: Replace Dockerfile.build in the pipeline
- [Backlog] go.sum research to enable commit back to repo
- [Backlog] Generate repo badges for newly promoted repos

Other

- [In Progress] Master --> Main branch rename.
 - All done except edgex-docs
 - **Need to look at existing and new holding repos <https://gist.github.com/ernestojeda/8c399925d226f42e0c15898139fb0e8e>
- [Backlog] Dot release support, need to get scope and schedule if possible
- [Hold] Spike Developer Badge Program

Next DevOps WG Meeting Thursday, July 15, 2021 @ 9AM PDT

Security WG Update (July 14)

Next Meeting: Today & July 21

We filed our first CVE

New	Backlog	Development	In Review	Done
Security board (projects/28)				
0	12 (→1)	1	0	(→1) 3
Consul board (projects/41)				
0	6	0	1 (today)	0
Snyk	Critical	High	Medium	Low
	0	41	18	6

Outreach WG Updates (7/14/21)

Certification Team

- Looking ahead for growing the EdgeX Ready program

Vertical Solutions Team

- Open Retail Reference Architecture sub-project:
<https://wiki.edgexfoundry.org/display/FA/Open+Retail+Reference+Architecture>
- Adopter series 2 events upcoming in August/September (UST Global, Advantech)

Marketing Team

- China Web Site is up

See upcoming meeting notes in misc!

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	Needs review	Jim White	Core
ADR on dynamic service list / #377	Needs review	Jim White	Core
ADR on unit of measure / #386	Needs review	Jim White	Core
ADR Securing access to Consul (update)/#424	Secty WG	Bryon Nevis	Secty

* - indicates some work this week

Miscellaneous Issues/Topics

- TSC Chair
 - No other nominations for TSC Chair - your stuck with Jim for 1 more year
- New CVE procedures
 - Bryon's latest CVE comes also with a new process
 - Write up the draft advisory: it must conform to CVE formatting guidelines, identify related CWE's, etc.
 - Create a LF ticket to create a draft advisory in GitHub with specific parties as collaborators.
 - Fill out the advisory details.
 - Followup with LF to click the "Publish as CVE" button.
 - GitHub will assign the CVE ID and publish it to the CVE List.
- LTS Policy
 - Per planning meeting - a desire to relook <https://wiki.edgexfoundry.org/display/FA/Long+Term+Support>
 - How to proceed? Here at TSC, in a work group, via email
- Jim will be out next week - cancel TSC or WG lead willing to run the meeting?

Ireland Documentation remaining to-dos

✓ Intro

Getting Started

✓ Quick start

✓ Getting Started with Docker

Getting Started with Snap

✓ Getting Started Developers

✓ Getting Started Go Developers

Getting Started C Developers

Working in a Hybrid Environment

✓ App Functions SDK

Device Services SDK

C SDK

✓ Go SDK

Tools; CLI

✓ Security (multiple pages)

Microservices

Cross Cutting

Configuration & Registry

Core Services

✓ Supporting Services

System Management

Device Services

✓ App Services

Examples and Tutorials

Reference (service ports has been completed)

Migration guides per
App Services
examples

Misc - Outreach consolidated meeting

- Outreach meeting time
 - Consolidated all outreach subgroup meetings into 1 bi-weekly meeting
- TopCoder Challenge - next steps or drop this?
- Web Site - EdgeX 2.0 updates? China Website
- Certification - EdgeX Ready (what remains and what's next)
- Adopter Series - fall presentations
- Vertical Solutions / ORRA - what's next? NRF show?
 - Industrial group - interest from China as well as organizations like Schneider, etc. How to start this effort (and other vertical groups - Jim has an idea).
 - AgStack - engaging and getting a target project going
 - Digital Twin - engaging and getting a target project going
- Blog and Vlog
 - Vlog and Blog every other month
- Hackathons
 - goal - virtual hackathon for early 2022 - English speakers (vertical?, needs, timeline, needs)
 - lessons we can learn from China Hackathons
- Event schedule
 - target 2022
 - Which shows
 - How to make big impressions on re-emergence - new demo kit, speakers, etc.



EDGE X FOUNDRY™

Thank You