

EDGE X FOUNDRY™

# TSC Meeting

July 28, 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)

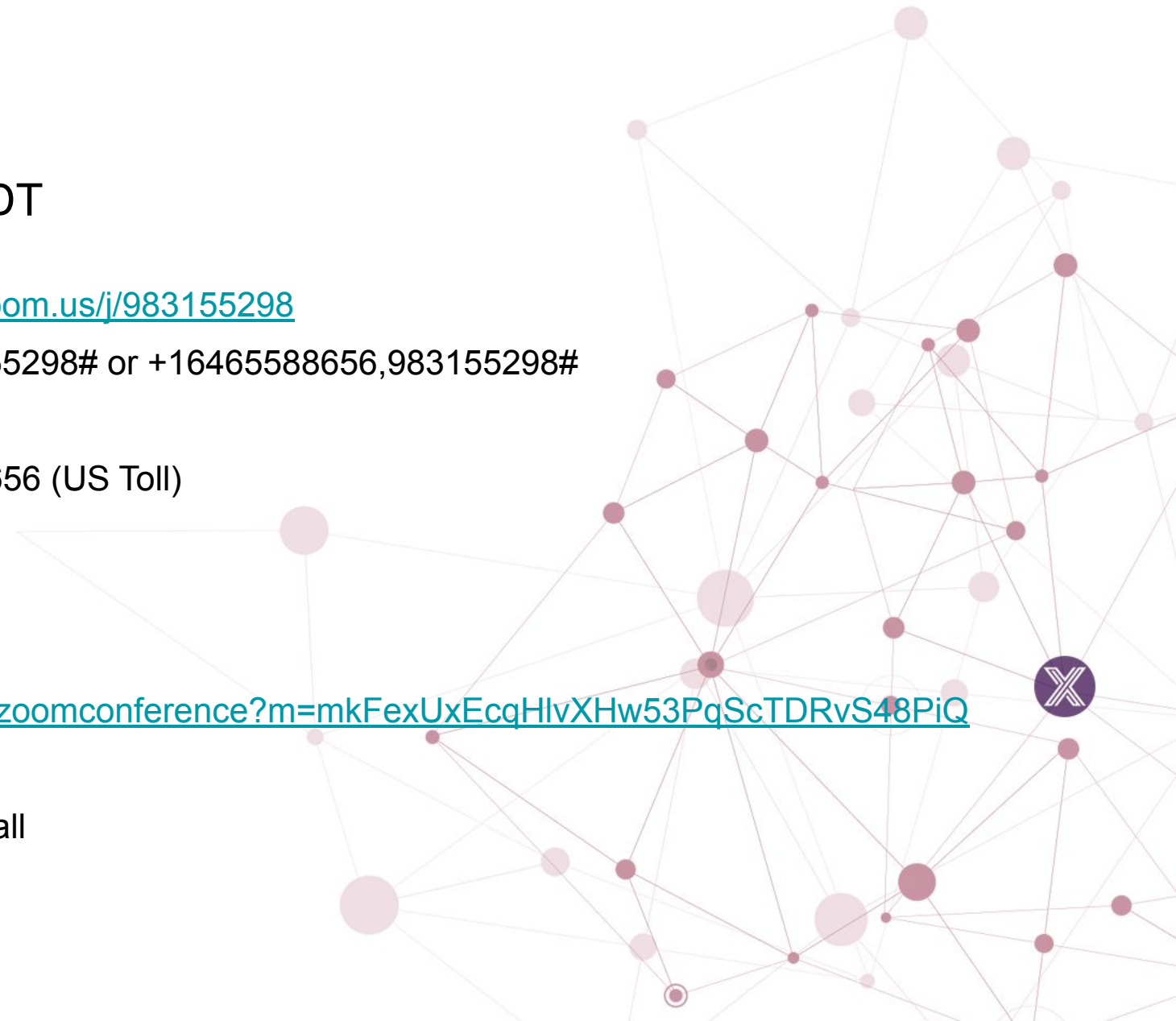
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Meeting ID: 983 155 298

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 | <a href="mailto:iain@iotechsys.com">iain@iotechsys.com</a>               | Device Services WG Chair          |
| Intel          | Ernesto Ojeda | <a href="mailto:ernesto.ojeda@intel.com">ernesto.ojeda@intel.com</a>     | Dev Ops WG Chair                  |
| IOTech         | Jim White     | <a href="mailto:jim@iotechsys.com">jim@iotechsys.com</a>                 | Outreach WG Chair                 |
| Intel          | Bryon Nevis   | <a href="mailto:bryon.nevis@intel.com">bryon.nevis@intel.com</a>         | Security WG Chair                 |
| Intel          | Lenny Goodell | <a href="mailto:leonard.goodell@intel.com">leonard.goodell@intel.com</a> | Applications & Analytics WG Chair |
| IOTech         | James Butcher | <a href="mailto:james@iotechsys.com">james@iotechsys.com</a>             | 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

- WG Updates
- LTS policy review
- LF's Slack replacement
- Ireland Documentation



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# Work Group Updates

Chairs

# Working Group Chair Updates

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

# Product Manager (7/28) - 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)

No changes from last TSC



# Applications WG Update (28-July-2021)

## Done

- Documentation
- App Service examples migrated
- rfid-llrp-inventory-service building in CI Pipeline.
- Issues created for Jakarta
- Fix a few bugs. 1 critical & 2 lows

## WIP

- Design for Pipeline per Topic
- rfid-llrp-inventory-service final validation

## Next

- Create patch release of SDK and ASC

# Application Services - Ireland

## 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 (7-28-21)

- Ireland
  - Performance google doc [here](#). PDF to come
- Fixes
  - go-mod-core-contracts
    - Fixed issues
      - Issue [#650](#) Ignore the empty Reading fields in DTO
      - Issue [#652](#) Add missing DBTimestamp for Model To DTO conversion
      - Issue [#649](#) missing requestBody in dtos/models.Address(RESTAddress)
      - Issue [#645](#) Remove unclear HTTP status code
  - edgex-docs
    - many doc updates

edgex-taf : all 541 tests passing

- 

Next Meeting: James out, next meeting Aug 5

# Device Services WG Update (28-July-21)

## Current activity:

- 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: August 2nd*

# 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 (07-28-2021)

## Pipeline Related

- [In Progress] [#345](#) EdgeX DevOps: Optional Dockerfile.build in pipeline
- [In Progress] [#346](#) EdgeX Spike go.sum research to enable commit back to repo
- [In Progress] [#347](#) EdgeX DevOps: 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
- [Hold] Spike Developer Badge Program

**Next DevOps WG Meeting Thursday, July 29, 2021 @ 9AM PDT**

# Release Czar (07-28-2021)

- No release updates

# Security WG Update (July 28)

Next Meeting: Today & August 4

When to release device-coap:2.0.1?

| New                          | Backlog  | Development  | In Review | Done   |
|------------------------------|----------|--------------|-----------|--------|
| Security board (projects/28) |          |              |           |        |
| 0 (→1)                       | 11 (→1)  | 3            | 0         | (→1) 3 |
| Consul board (projects/41)   |          |              |           |        |
|                              | 7 (+3)   | 0            | 0         | 3 (+3) |
| Snyk                         | Critical | High         | Medium    | Low    |
|                              | 0        | 40 (-24 wip) | 19        | 6      |



# Updates on EdgeX in PRC

- EdgeX challenge 2021 launched on Jul 12th, with plenty of large companies willing to join: Advantech, ZTE, H3C, etc.
- GOTC (Global Open source Technology Conference) will be held on Jul 31st-Aug 1st, all mainstream LF projects covered. 2 sessions reserved for EdgeX to further improve visibility.
- To further evangelize EdgeX, workshops under planning in Taiwan in Q3.

# Outreach WG Updates (7/28/21)

## Certification Team

- Web site now touting EdgeX Ready

## Vertical Solutions Team

- Open Retail Reference Architecture sub-project:
  - Architect document publishing v1 shortly
  - working on demo
- Adopter series 2 events upcoming in August/September (UST Global, Advantech)
  - Advantech Sept 14, 8am PDT - registration link now available on web site

## Marketing Team

- Updated web site landing page for Ireland

## Miscellaneous

- Ireland press release to go out after today
- Digital Twin Const meeting
- Upcoming
  - 2022 Events planning
  - English hackathon 2022 planning
  - Blog/Vlog planning

***Next meeting: Aug 9th (Monday)***

# ADR review (in order of priority)

| <b><i>ADR name and PR number</i></b> | <b><i>Status</i></b> | <b><i>owner</i></b> | <b><i>Work Group</i></b> |
|--------------------------------------|----------------------|---------------------|--------------------------|
| 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                     |

\* - indicates some work this week

# Miscellaneous Issues/Topics

- LTS Policy
  - Tiger team met 7/26/21
  - Working a draft / rewrite of the current policy
  - Meeting again 8/13/21
  - Goal to bring a new policy to TSC this summer
- LFX Chat
  - Slack replacement
  - being tested by Open Horizon
  - OK to engage LF for a test?

# 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



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Thank You