

EDGE X FOUNDRY™

TSC Meeting

August 4, 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#

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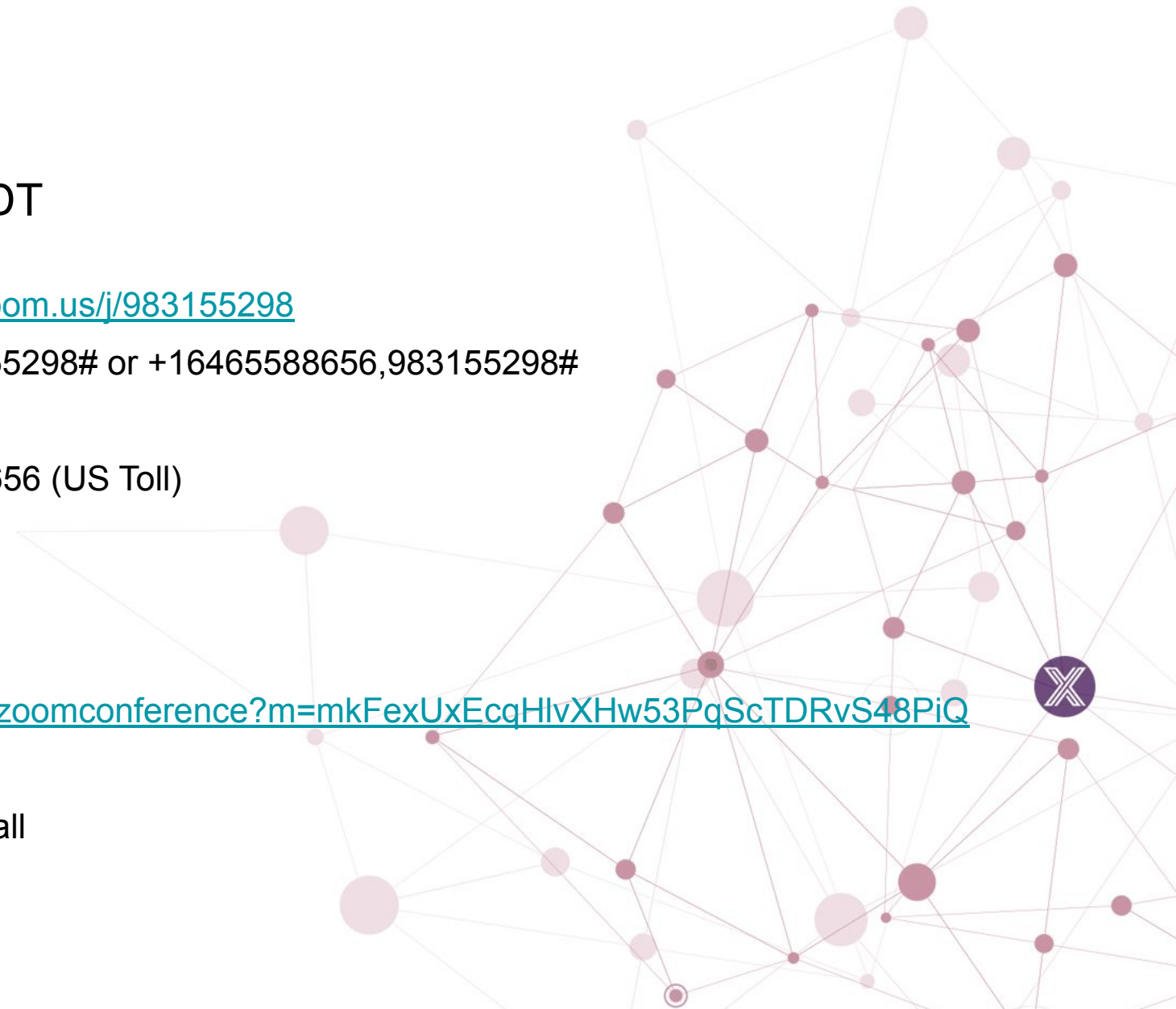
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Meeting ID: 983 155 298

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	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

- Patch release
- WG Updates
- Migration document discussion (where, what, etc)
- Ireland Documentation



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Work Group Updates

Chairs

Ireland Patch Release

app-functions-sdk

app-service-configurable

device-coap

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 (8/4) - 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

- Released App SDK 2.0.1 and App Service Configurable 2.0.1

WIP

- rfid-llrp-inventory-service one more round of validation
- Pipeline per Topic (just getting started)

Next

- Arthur from Jiangxing Intelligence presenting ideas on AI/ML framework at next WG meeting

Other

- Some early interest from Eaton using EdgeX and contributing a C version of the App SDK

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 WG Snapshot (4 Aug 2021)

- Ireland / 2.0.1
 - Documentation nearing completion
 - [Performance results](#), glossy doc to come
- Jakarta:
 - Currently: Config test working in progress.
 - TAF: All passing

Core Project Board Status

- 11 New Issues (+0)
- 7 Release Backlog (+0)
- 1 Bug Backlog (+0)
- 1 In Progress/QA (+0)
- 8 Done (+0)
- 27 Icebox (+0)

QA/Test Project Board Status

- 3 New Issues (+0)
- 1 Release Backlog (+0)
- 3 In Progress/QA (+0)
- 1 Done (+0)
- 1 Icebox (+0)

Next meeting Thurs **Aug 5, 2021 @ 9am Pacific Time**

Device Services WG Update (3-Aug-21)

- Documentation
 - Docs for SDKs & Device Profiles updated for v2 including migration information
 - For individual Device Services, TBD
- Releases
 - device-coap-c released at v2.0.1
 - RFID / LLRP will get a Hanoi-compatible release followed by update to v2.0

Next meeting: August 9th

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 (08-04-2021)

Pipeline Related

- [In Progress] [#345](#) EdgeX DevOps: Optional Dockerfile.build in pipeline
 - Found performance issues with edgex-go...investigating
- [In Progress] [#346](#) EdgeX Spike go.sum research to enable commit back to repo
 - Will present in next WG meeting
- [Complete] [#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, August 5, 2021 @ 9AM PDT

Release Czar (08-4-2021)

SDKs :

- app-functions-sdk (2.0.1)

App Services:

- app-service-configurable (2.0.1)

Device Services:

- device-coap-c (2.0.1)

Security WG Update (July 28)

Next Meeting: Today & August 18 (no August 4)

New	Backlog	Development	In Review	Done
Security board (projects/28)				
1 (+1)	12	3	0	3
Consul board (projects/41)				
	4 / 1 / 2 (nc)	0	0	3

Updates on EdgeX in PRC

- No update this week.

Outreach WG Updates (8/3/21)

Certification Team

- Rodney/Jim meeting - results coming up in next WG meeting

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

- Press briefings started yesterday on Ireland
- Upcoming
 - 2022 Events planning
 - English hackathon 2022 planning
 - Blog/Vlog planning

Next meeting: Aug 9th (Monday)

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

* - indicates some work this week

Miscellaneous Issues/Topics

- EdgeX Ireland Migration Docs
 - Lenny has put together a top level guide
 - <https://github.com/edgexfoundry/edgex-docs/pull/518>
 - We have a collection of some migration guides
 - Questions:
 - Where should the main “migration guide index” or top level doc be located
 - Where are migration guides needed (what’s left to do)
 -

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

- ✓ Core Data in review

- ✓ 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