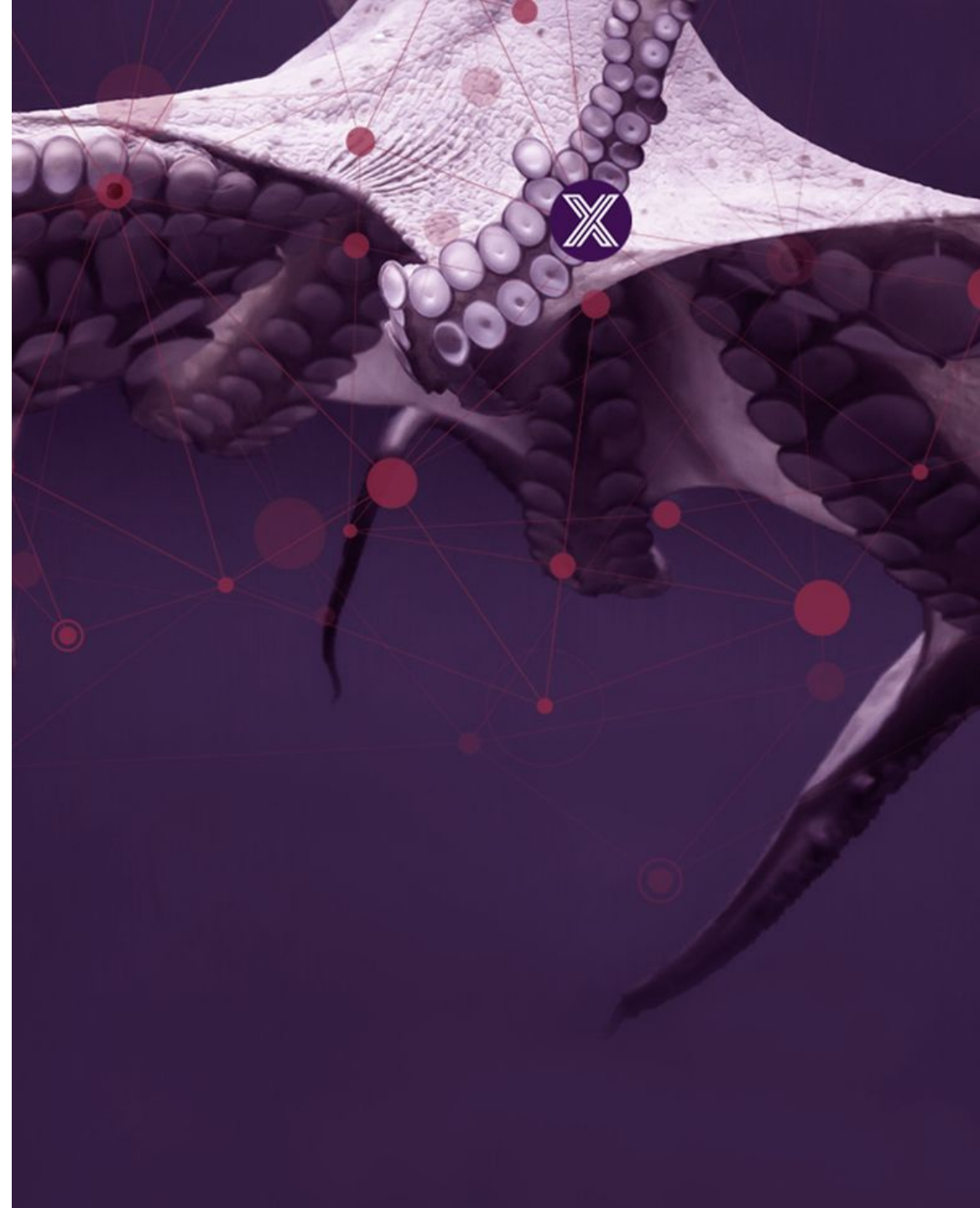


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# TSC Meeting

April 5th, 2023

edgexfoundry.org |  @edgexfoundry



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# Meeting Logistics

Time: Wednesdays 8am PDT – 9am PDT (Alternate Weeks)

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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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?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	<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
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	Cloud Tsai	<a href="mailto:cloud@iotechsys.com">cloud@iotechsys.com</a>	Core & Test/QA WG Chair

## At Large Members:

Gavin Lu (VMWare), Farshid Tavakolizadeh (Canonical), Melvin Sun (Intel), James Butcher (IOTech), Tom Brennan (Eaton)

Current quorum = 6 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

- Working Group Updates
- Environment overrides vs Consul
- Review EdgeX 3.0 Project Board - <https://github.com/orgs/edgexfoundry/projects/48>
- Tagging of edgex-compose and referencing those from EdgeX docs
- UCR & ADR Updates
- Doc Updates





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## Work Group Updates

Chairs

# Working Group Chair Updates

- Around the table:
  - Product Manager - Lenny Goodell
  - Applications - Lenny Goodell
  - Core - Cloud Tsai
  - Device Services - Iain Anderson
  - DevOps - Ernesto Ojeda
  - Release Czar - Bill Mahoney
  - Security - Bryon Nevis
  - PRC Updates - Melvin Sun and Gavin Lu
  - Outreach and Marketing
    - Certification - Rodney Hess
    - LF Edge TAC - Jim White



# Product Manager (04/05/23) - Minnesota

[Cross Cutting Issues](#)

## Icebox (1)

- Lite Builds (no security features) via Build Tags

## Backlog (2, +1)

- V3 Rest API version bumps
- Add main branch Warning to all Repos

## In Progress (4, -2)

- **Switch to YAML for config files**
  - go-mod-bootstrap - DONE
  - edgex-go - DONE
  - App SDK - DONE
  - Device SDK Go - DONE
  - App Services - DONE
  - Go Device Services - WIP
  - EdgeX Docs - DONE
  - C Device SDK/Service - TBD
- **URIs for Files**
  - UCR - **Approved**
  - ADR - **Approved**
  - Implementation - TBD

- **Common Config**
  - UCR - DONE
  - ADR - DONE
  - go-mod-bootstrap - DONE
  - core-common-config-bootstrapper - DONE
  - Compose - DONE
  - edgex-go - DONE
  - App SDK - DONE
  - App Services - DONE
  - Go Device SDK - DONE
  - Go Devices Services - DONE
  - edgex-go Snap - DONE
  - Helm example - WIP
  - -cc/-commonConfig - DONE
  - bootstrap fixes/rework - TBD
  - C SDK/Services - TBD

- **Secret Path => SecretName refactoring**
  - go-mod-core-contracts (Secret DTO) - DONE
  - go-mod-secrets - DONE
  - go-mod-bootstrap - DONE
  - edgex-go - DONE
  - Go Device SDK - DONE
  - Go Device Services - DONE
  - App SDK - DONE
  - App Services - DONE
  - C SDK/Service - TBD

## Done (13, +2)

- V3 Go Mods
- Remove ZMQ
- Flattening of consul
- Get Command Parameter type
- Consistent Command-line options and Override names
- MessageBus Config refactoring
- Remove old metrics collection
- Go 1.20
- MessageBus Request API
- Consistent MessageBus Topic wildcards
- Topics as constants and Add service name to multi-level topic when publishing Events
- **Microservice Auth**
- **Remove use of TOML package**





# Applications WG Update (04/05/23) - Minnesota

## Newly Completed (5)

- SDK hangs when calling docker-compose stop#500
  - Unable to reproduce
- [WIP BUG] Store and Forward Enabled missing from profiles#537
- Change TargetType value from Consul didn't affect before restart service#1361
- Update store and forward configuration got runtime error#1355
- feat: Upgrade to eKuiper 1.9
- **App Services Compression function randomly crashes. #1250**

## Newly added (0)

- 

## WIP (3)

- Post secret API got error "SecretRequest.Path field is required"#522
- Camera Mgmt Example - Auto start EVAM on new camera devices#122
- Camera Mgmt Example - Add documentation on how to ingest EVAM results into EdgeX#123

## Done for Minnesota (68, +6)

## Backlog (1, -4)

<https://github.com/orgs/edgexfoundry/projects/50/views/2>

## ICE BOX (9)

## Next

- Documentation

## eKuiper

- Released 1.9.0
  - <https://github.com/lf-edge/kuiper/releases/tag/1.9.0>
- Working on 1.10 release
  - <https://github.com/lf-edge/kuiper/milestone/18>
  - Targeting to coincide with our Minnesota release

**Project Board:** <https://github.com/orgs/edgexfoundry/projects/50/views/2>



# Application Services - Minnesota

## Functions (built into SDK)

- Add Tags
- Batch
- Compression (GZIP & ZLIB )
- Conversion (XML & JSON)
- PushToCore **\*\* DEPRECATED\*\***
- **EventWrapper - NEW**
- Encryption (AES256)
- Encryption (AES) **\*\* DEPRECATED\*\***
- Export
  - MQTT
  - HTTP POST & PUT
- Filtering
  - By Profile Name
  - By Device Name
  - By Source Name
  - By Resource Name
- JSONLogic
- Set Response Data
- **ToLineProtocol (transforms Metric DTO) - NEW**

## 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
- Service Metrics - **NEW**
- Clients
  - Logging, Event
  - Command
  - Device, DeviceService
  - DeviceProfile
  - Notification
  - Subscription
  - Registry

## Reference/Example App Services

(built on top of SDK)

### Released Services

- App Service Configurable
- App RFID LLRP Inventory

### Examples

- Simple Filter
- Simple Filter and MQTT Export
- Simple Filter and HTTP Export
- Simple CBOR
- Cloud Export

- Cloud Event Transformation
- Secret Retrieval
- JsonLogic
- Send Command
- Convert & Publish
- Custom Target Type
- IBM Watson IoT (ASC Profile)
- Custom Trigger
- Influx DB & Flege Exports
- Camera Management - **NEW**



# Core WG Update (22 Mar 2023)

National Holidays in Taiwan this week

- TAF:
  - Functional tests:
    - Non-Security **589** tests - **10 failed** / Security **590** tests - **26 failed**
  - Integration tests:
    - Non-Security **121** tests - **46 failed** / Security **124** tests - **48 failed**
  - Performance tests:
    - Non-Security **10** tests - all pass / Security **10** tests - - 1 failed
- QA Progress
  - Keep tracking the impact of breaking changes and adjusting the test scripts
- Core Progress
  - Common configuration feature is under development
  - Protocol properties and Resource properties value type changed
  - URL escape is implemented, and working on command RegEx
  - Provision Watcher model restructure
- Any Other Business
  - Discuss auto discovery proposed changes <https://github.com/edgexfoundry/edgex-go/issues/4422> and <https://github.com/edgexfoundry/go-mod-core-contracts/issues/813>



# Device Services WG Update (5 April 2023)

- Locations of metadata files (devices, profiles) may be relative to config files (WIP)
- Eaton looking to add unit testing for C SDK
- Project board - 20 issues backlog (+1), 3 in progress / review (==)

*Next meeting: April 17th*



# Device Services - current/coming (as of v3.0)

## 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 and USB Cameras in Go
- REST in Go
- CoAP in C
- LLRP / RFID in Go
- GPIO in Go

## Open Source connectors (Future):

- 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 in C
- OPC-UA Pub/Sub in C
- Siemens S7 in C
- File reader in C
- WebSockets in Go

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



# DevOps WG Update (3/21/2023)

## Pipeline Related

- [#428](#) [In Progress] edgex-docs investigate htmlproofer issues
- [#423](#) [In Progress] POC Simple GitHub Actions and Simple Reusable workflow for Go builds

## Other

- N/A

Next DevOps WG Meeting: Tuesday, April 11, 2023 @ 9AM PST



# Release Czar (2023-4-4)

## Upcoming Releases - Minnesota (3.0.0)

- Code Freeze - 2023-5-10
- Release - 2023-5-31

## Recent Release History

- device-usb-camera 2.3.1 - 2023-3-21
- device-onvif-camera 2.3.1 - 2023-3-21
- device-sdk-go 2.3.1 - 2023-3-20
- device-usb-bacnet 2.3.1 - 2023-1-5
- device-usb-camera 2.3.0 - 2023-1-5

**EdgeX Release Process: <https://wiki.edgexfoundry.org/display/FA/Release+Checklist>**



# Security WG Update

## Next Meeting: [4/5](#) (today)

- BYOV UCR merged (thanks JimW!)
- Expected OpenZiti update today
- 5 tickets left on release backlog, all non-blocking
  - Remaining: security service metrics, API fuzzing, GoKart trial, +2 new

## Non-security

- Helm chart updates for Minnesota are WIP

### Security Project Board Status

- 2 New Issues (+1)
- 2 Release Backlog (0)
- 1 In Progress/QA (+1)
- 0 In review
- 51 Done (+5)

### Helm Chart - Board Status

- 16 To do (+1)
- 1 In progress (+1)
- 0 In review (0)
- 16 Done (0)





# Outreach Update (4/4/23)

## Social Media

- Eaton has stepped up to do a Use Case promotion with LF
  - draft doc circulating
- Community is now in charge of its own LinkedIn/Twitter posts
  - Discussed strategy in yesterday's Outreach meeting
  - Posting 2-3 times a week (thanks to Sophie, Gavin and IOtech team for help)
  - If you have a post you'd like to make, let Jim/James/Gavin know

Next meeting: April 17th @ 10am PDT

## Events

- Intel Student Hackathon
  - No through June (winners announced in July)
  - Registration open til April 20th
  - <https://edgex-hackathon.com/>

## Ready/Certification

- No updates



# EdgeX China Update

EdgeX China community channels:

- Website: <https://cn.edgexfoundry.org/>
- OSChina: <https://www.oschina.net/group/edgex-foundry>
- CSDN: <https://blog.csdn.net/edgexfoundry>
- Zhihu: <https://www.zhihu.com/people/edgex-foundry>
- Bilibili: <https://space.bilibili.com/550595847>

Intel EdgeX Hackathon is underway

- Focusing on EdgeX and home automation
  - Opening and registration open: March 21
  - Registration and team building ends: April 20
  - Training: April-June
  - Announcement of shortlisted teams: end of April
  - Finals and Roadshow: July
  - Announcement of winners: July





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Other Topics

# Other Topics Today

- Environment overrides vs Consul
- Review EdgeX 3.0 Project Board - <https://github.com/orgs/edgexfoundry/projects/48>
- Tagging of edgex-compose and referencing those from EdgeX docs

<b>EdgeX 3.0 Release Date: Wed May 31st</b>
Code Freeze: May 10th
Pre Wire: May 25th
Planning: June 5-8



# Quick Summary: EdgeX 3.0 High Level Updates

Theme / Title	In Scope	Priority	T-Shirt	Breaking	Notes
Common Configuration	✓	High	L	✓	<a href="#">UCR</a> approved. <a href="#">ADR</a> approved
URIs for Configuration	✓	High	M/L	-	<a href="#">UCR</a> approved. <a href="#">ADR</a> approved
Configuration Formats	✓	Med	L	✓	Issue <a href="#">here</a>
Microservice Authentication	✓	High	L	✓	<a href="#">UCR</a> approved, <a href="#">ADR</a> approved
Parent/Child Devices	✓	Med	S/M	-	ADR not needed; Eaton to raise PR
Extending Device Data	✓	Med	L	-	ADR required (Eaton)
Provision Watch via Device Metadata	✓	Med	S/M	-	ADR not needed; Eaton to raise PR
Notification Service Improvements	Stretch	Low	S/M	-	
Core Data Retention	✓ (UCR)	Med	S/M	-	<a href="#">UCR</a> approved; ADR not needed. Impl with Core WG
Lowering the JSON Overhead	Stretch	Low	S/M	-	Need more customer stats (IOTech)
Replace Kong, Consul, Vault with Lighter Options	Stretch	Med	L/XL	-	Kong being replaced as part of Microservice Authentication
EdgeX Lite	Stretch	Low	S	-	Incubation work

# UCR & ADR Review (as of 2/22/23)

<b>UCR/ADR Name</b>	<b>Status</b>	<b>Owner</b>	<b>Work Group</b>
<a href="#">BYO Vault</a>	UCR under review; should be ready for vote this week (delayed a bit because of build issues)	Jim	Security



# Document work (as of 3/21/23)

## Docs that should be done for Minnesota

#992 L [Delay start security] (new)

#985 - L [Document summary of data model changes in v3]

#956 - S [Device GPIO port doc]

#913 - S [remove V2/Edgey sections]

#899/900 - L [why EdgeX security requirements are met]

#855 - L [extend Go SDK API docs]

#732 L [role based access for Mosquitto]

#714 L [images to LFS]

#667 L [how to build containers]

#642 L [export to cloud]

#489 M (with #121, #21) [consume/send binary]

some issues this week on  
builds (network issues and  
htmlproofer issues)





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Thank You