

EDGE X FOUNDRY™

# TSC Meeting

July 13, 2022



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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?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
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 = 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 2022
- WG Updates
- ADR updates
- Doc updates
- Miscellaneous



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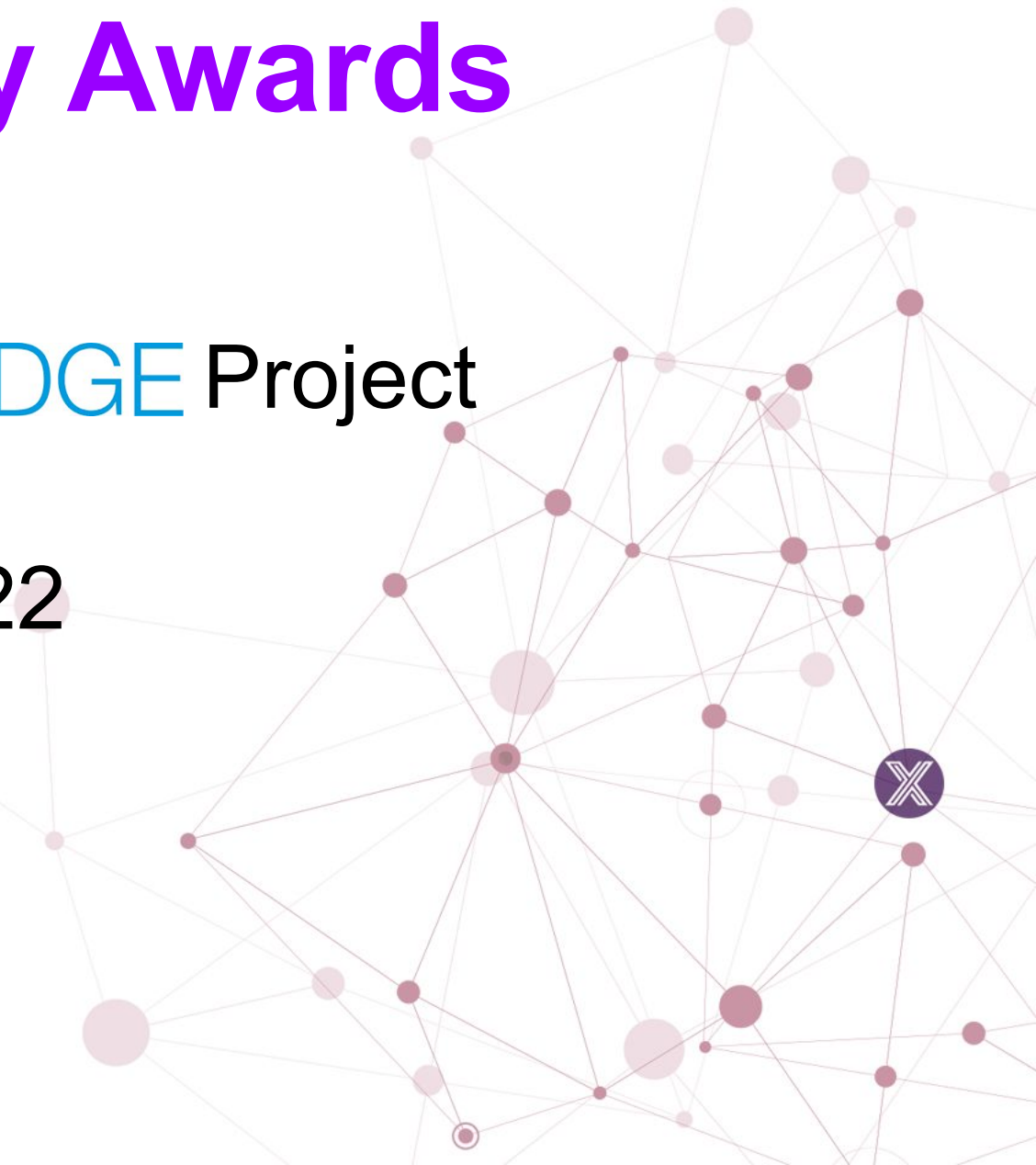
# EdgeX Awards

# 2022 EdgeX Foundry Awards



An **LFEDGE** Project

July 2022



# EdgeX Awards Ceremony

## Innovation Awards

Bryon Nevis & Jim Wang

Anthony Casagrande & Marc Fuller

Emilio Reyes

## Contribution Awards

Iain Anderson

Siggi Skulason







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# Work Group Updates

Chairs

# Working Group Chair Updates

- Around the horn
  - 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
    - Vertical Solutions (and LF Edge TAC) - Henry Lau

# Product Manager (07/13/22) - Levski

[Cross Cutting Issues](#)

## Icebox (1)

- Lite Builds (no security features) via Build Tags

## Backlog (3)

- Commands via MessageBus (aka N/S MessageBus)
- Secure MQTT MessageBus
- Microservice Auth

## In Progress (6)

- Request new Consul token on Auth failures
  - C SDK/Services - **WIP**
- Go 1.18
  - Smoke Test - **DONE**
  - Verify Tools (Linter & Mockery) - **DONE**
  - DevOps - **Done**
  - edgex-go - **Done**
  - Device SDK - **Done**
  - App SDK/Service - **Done**
  - Device Services - **WIP**
    - ONVIF/USB Camera - **OnHold?**
- NATs MessageBus
  - go-mod-messaging - **Pending PR**
- Additional Metrics
  - App Services - **Done**
  - Device Services - **Defined**
  - Core - **Defined**
  - Security - **Defined**

- System Events (aka CPE) (UC/ADR/Impl)
  - UCR - **Approved**
  - ADR - Pending PR

## Done (3)

- Explore goweight to see impact of individual libs (nothing actionable)
- eclipse/paho.mqtt.golang 1.4.1 (License update to v2.0)
- [Securing Consul with Access Token](#)
  - C SDK/Services - **DONE**

# Applications WG Update (07/13/22) - Levski

## Newly Completed (3)

- [Examples] Camera Management App Service [#117](#)
- [SDK] Additional committed metrics [#1116](#)
- [ASC] Additional metrics [#432](#)
- [App Services Docs] Document Additional Metrics [#780](#)
- Go 1.18 Upgrade [#1145](#)

## New (4)

- 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](#)
- [App SDK Docs] Document how to decrypt data from the AES256 encrypt function [#784](#)
- Add pipeline function to wrap raw data from previous function into an Event/Reading [#1149](#)

## WIP (0)

- 

## Backlog (9)

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

## ICE BOX (5)

- Leftovers not planned for Levski

## Next

- UCR for Record and Replay
- Add pipeline function to wrap raw data from previous function into an Event/Reading [#1149](#)

## eKuiper

- Working on 1.6 (release targeted July 27<sup>th</sup>)
  - <https://github.com/lf-edge/ekuiper/milestone/10>

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

# Application Services - Kamakura

## Functions (built into SDK)

- Add Tags
- Batch
- Compression (GZIP & ZLIB )
- Conversion (XML & JSON)
- PushToCore **\*\* DEPRECATED\*\***
- ~~MarkAsPushed~~
- 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)**

## 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)

### 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

# Core WG Snapshot (13 July 2022)

- Levski:
  - TAF
    - Functional tests: 594 - all passing
    - Integration tests: 55 - 52 passing, 3 failures on both x86 and arm64 (issue to be identified, App Service StoreAndForward related test cases)
    - Performance tests: 10 - all passing
  - New change
    - [#737](#) Add validation logic for the Reading values to prevent the wrong data type value
    - [#681](#) New core-data metrics tests are ready and running normally
  - Discussion
    - [#750](#) Discussion of name character restriction

## Core Project Board Status

- 4 New Issues (-11)
- 13 Release Backlog (+11)
- 1 In Progress/QA (-1)
- 40 Levski Done (+4)
- 17 Icebox (+0)

## QA/Test Project Board Status

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

Next meeting: Tuesday 19h July @ 5 PM Pacific Daylight Time

# Device Services WG Update (13 July 2022)

## Ongoing

- GitHub “Discussions” setup
- CSDK : Protocols validation, Token refresh
- Camera device services - last remaining issues
- UART updates
- Go 1.18

Project board : 15 issues new/backlog (=); 3 in progress/review (-3)

*Next meeting: July 18th*

# Device Services - current/coming (as of v2.2)

## Open Source connectors (Current):

- Modbus (TCP/RTU) in Go
- Virtual Device in Go
- SNMP in Go
- MQTT in Go
- BACnet (IP & MSTP) in C (v1 only)
- ONVIF Cameras in Go
- REST in Go
- Grove in C
- CoAP in C
- LLRP / RFID in Go
- GPIO in Go

## Open Source connectors (Future):

- UART in Go
- OPC-UA in Go
- USB Cameras 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), ONVIF (C) and BACnet (in C) that have added features over the community editions



# DevOps WG Update (07-06-2022)

## Pipeline Related

- [#400](#) [Hold] Go 1.18 upgrade for Go pipelines.
- [#401](#) [In Progress] Makedocs—support for variables
- [#402](#) [In Progress] htmlproofer checks on each edgex-docs PR

## Other

- [#389](#) [In Progress] Help optimize local developer make docker builds

**Next DevOps WG Meeting: Thursday, July 7, 2022 @ 9AM PST**

# Release Czar (2022-7-13)

## Kamakura (2.2.0):

- Released (2022-5-11)
- C SDK / Device Services - Pending

## Jakarta (LTS) Patch (2.1.1):

- Released (2022-6-8)

## Updated Release Checklist:

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

# Security WG Update

## Next Meeting: July 13

- Starting to make some progress working through the backlog; expecting to accelerate in the coming weeks.
- Interesting email discussion with Snyk— they expect CVE fixes to be identical across branches; security engineers actually look into the code for the fix before posting it.

### Security Project Board Status

- 10 New Issues (+3)
- 7 Release Backlog (-1)
- 2 In Progress/QA (n/c)
- 1 In review (n/c)
- 7 Done (n/c)

### Secure Consul Project Board Status

- 0 In-review
- 0 In-progress
- 2 Phase 1 To-do
- 1 Phase 2 To-do
- 4 Phase 3 To-do

# EdgeX China- EdgeX challenge 2022 (China region)

**No updates this week.**

EdgeX events last week

- Joint AI/IOT devfest of Intel + Microsoft + EdgeX (2K registered developers)
- EdgeX developer summit - Q2 (5K+ online views)

Updates on sponsorship of EdgeX challenge 2022

- Strategic Partner level sponsors so far: Intel, Alibaba Cloud

Level	Cost		Benefits			
	RMB	USD	Logo exposure on KV, news reports, blogs	Keynote	Judge	OSS ingredient included in EdgeX Hackathon
Strategic Partner	260K	40K	Y	Y	Y	Y
Diamond	100K	15K	Y	Y	Y	
Gold	70K	10K	Y	Y		
Silver	35K	5K	Y			

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>

# Outreach WG (7/12/22)

## Ready/Certification

- Rodney working on Wiki update
- Rodney working on EdgeX Ready for Individuals presentation for TSC consideration
  - Survey sent via email for inputs

## Social Media

- EdgeX Awards blog post coming post ceremony
- Performance blog post coming this summer

## Events

- Wait and see mode

## WebSite Changes (order or priority)

- Looking at spend of funding for (\$4500 budget)
  - Security Audit issues
  - SEO updates (shared between English and China sites)
- Update some content (diagrams, et al) - internal

## Outreach WG

- Looking for new leader

Next meeting 7/18 @ 11am CDT (noon EDT)

# ADR **PROCESS** review (as of 7/12/22)

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Develop UC/Requirements template	<a href="https://github.com/edgexfoundry/edgex-docs/pull/775">https://github.com/edgexfoundry/edgex-docs/pull/775</a> reviews on going. Are we ready to accept and approve?	Farshid/Jim	
Parent/Child device relationship	Levski release	Eaton	Core
control plane events	UC doc approved ADR now open <a href="https://github.com/edgexfoundry/edgex-docs/pull/795">https://github.com/edgexfoundry/edgex-docs/pull/795</a>	Lenny	Core
Record and replay service	Lenny working		App Services
core data cache	Levski release		Core
global configuration	EdgeX 3.0 item (not in scope now)		
URI reference (profiles, config, etc.)	EdgeX 3.0 item (not in scope now; may be sub part of global config)		

# Document work (as of 7/12/22)

#685 L [build/run ARM32]

PR in - needs review

#641 L [EdgeX w/ K8s]

Work in progress

#788 M [fix notifications pages]

#787 M [fix scheduler pages]

#731 M [V2 migration guide fix event/reading DTO]

#732 L [role based access for Mosquitto]

#778 S [broken links]

#784 M [document how to decrypt data]

Nice to have

#643 M

#642 L

#598 L

#489 M (with #121, #21)

# Miscellaneous

- Monthly Architect's Meeting - move to July 25th or skip this month?





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Thank You