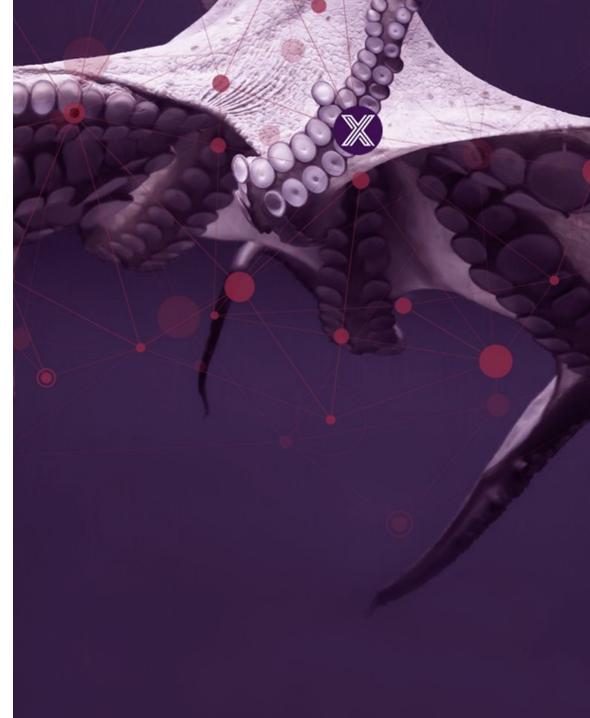


TSC Meeting

February 23, 2022



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# Meeting Logistics

Time: Wednesdays 8am PDT – 9am PDT

Join from PC, Mac, Linux, iOS or Android: <a href="https://zoom.us/j/983155298">https://zoom.us/j/983155298</a>

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: <a href="https://zoom.us/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ">https://zoom.us/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ</a>

\*\* 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.

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## Today's Agenda

- WG Updates
- ADR updates
- Upcoming Monthly Architect's meeting
- Miscellaneous
  - Poll results on in-person face to face and event survey



# 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

# Applications WG Update (02/23/22)

#### Completed

- [LLRP] use background publisher instead of Push to Core
- [LLRP] Update snaps for a Jakarta Release

#### **WIP**

App SDK Controller tests not actually run

#### New

None

#### **Protocol App Services**

- Defining high level requirements
  - https://docs.google.com/document/d/1TXFg5tkbDlFa2tj0yf TZcQ4NPNfo-Y8c/edit?usp=sharing&ouid=104667835989 061964851&rtpof=true&sd=true

#### **Next**

Metrics once ADR is approved

Project Board: <a href="https://github.com/orgs/edgexfoundry/projects/23">https://github.com/orgs/edgexfoundry/projects/23</a>

#### eKuiper

- Working on 1.4.3 (release targeted for this week)
  - https://github.com/lf-edge/ekuiper/milestone/7
  - 4 issues with shared connection exposed by EdgeX
  - Tdengine (sync plugin) has issue using Go 1.17, moving back to Go 1.16 for now.
- Working 1.5.0
  - https://github.com/lf-edge/ekuiper/milestone/6

Reminder: Bi-weekly morning App Service WG meetings are now being used for Eaton's discussions on C++ Protocol App Service. These discussions will continue on February 29th, 2022 @ 9am PST

## Application Services - Ireland

### Functions (built into SDK)

- Add Tags
- Batch
- Compression (GZIP & ZLIB )
- Conversion (XML & JSON)
- PushToCore
- 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

#### **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
  - o 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 (16 Feb 2022)

- Kamakura:
  - TAF All tests passing
    - Functional tests: 545
    - Integration tests: 43
    - Performance tests: 10
  - o Generally moving towards Kamakura release; fixing minor bugs and issues as we go
  - New: Redis concurrency bug needs assessing: #133

#### **Core Project Board Status**

- 6 New Issues (-2)
- 9 Release Backlog (+0)
- 0 Bug Backlog (+0)
- 4 In Progress/QA (+2)
- 39 Done (+2)
- 2 Kamakura Stretch (+0)
- 12 Icebox (+0)

### **QA/Test Project Board Status**

- 0 New Issues (+0)
- 1 Release Backlog (+0)
- 0 In Progress/QA (+0)
- 7 Done (+1)
- 0 lcebox (+0)

# Device Services WG Update (23 Feb 2022)

#### **SDKs**

- ProtocolProperties validation in review (Go)
- C SDK builds bumped to Alpine 3.15

### **Project board**

- 28 issues New+Backlog (-1)
- 7 In Progress+Review (-1)

Next meeting: February 28th

## Product Manager (02/23/22) - Kamakura Cross Cutting Issues

Icebox (0)

Backlog (0)

#### In Progress (8)

- **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
- CORS for all (secure and non-secure)
  - Go services DONE
  - C SDK/Services- TBD
- Request new Consul token on Auth failures
  - Go Services DONE
  - C SDK/Services TBD
- Implement Generate/Inject passwords into Vault
  - Go Services DONE
  - C SDK/Services TBD

- Add a "make lint" target
  - Go Device Services WIP
  - LLRP App Service DONE
  - edgex-go DONE
  - App Services DONE
  - go-mods DONE
  - Go Device SDK DONE
  - C Device Services N/A
- Metrics ADR WIP

#### Done (6)

- Secret Provider for All C Device Services DONE (COAP)
- Add service name to common response DTOs
- Switch to Go 1.17
- Update Swagger publishing to use version 2.2.0 (docs to point to 2.2.0)
- No ZMQ on Windows
- Secret store tokens for delayed-start services ADR

# Device Services - current/coming (as of v2.1)

#### 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

#### 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

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 (02-23-2022)

#### **Pipeline Related**

- [In Progress] Linux Foundation will be working on Ubuntu 20 based build agents for use in the pipelines
  - Will also be migrating away from CentOS due to EOL
- [Backlog] edgex-docs release automation
- [Backlog] Setup bi-weekly builds for less active repos for Snyk vulns

#### Other

edgex-docs: mkdocs htmlproofer link checker plugin. Jim will present in DevOps WG meeting.

Next DevOps WG Meeting: Thursday, February 24, 2021 @ 9AM PST

# Release Czar (2022-2-23)

No Updates This Week.

Upcoming:

Kamakura - May 2022

# Security WG Update (2/23/22)

### Next Meeting: Today, next

- Colin Peters, Fujitsu, on experiences running EdgeX on Kubernetes
- Delayed service start ADR status update
- Snyk update

#### **Security Project Board Status**

- 5 New Issues (n/c)
- 4 Release Backlog (n/c)
- 3 In Progress/QA (n/c)
- 1 In review (n/c)
- 16 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

# Updates on EdgeX China Project

No updates this week.

#### EdgeX China community channels:

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



# Outreach WG (2/2/22)

Next meeting Monday March 7 at 9am PST

### **Certification**

New EdgeX Ready applicant

## **ADR** review

ADR name and PR number	Status	owner	Work Group
Metrics / #268	Out for TSC vote	Jim White	Core
ADR on unit of measure / #386	Covered in Core WG last week - to be finalized this week Discussion at Monthly Architect's meeting if necessary	Jim White	Core
Device functions / #644	discussed in last DS Working Group; awaiting N/S	lain Anderson	DS
North-south message bus / #656	To be covered in Core WG this week; on deck for <b>Monthly Architect's meeting</b>	Jim White	Core
Microservice Authentication / #659	discussed in security WG  On hold for the moment	Bryon Nevis	Security
control plane events	Needed per planning meeting (low priority this release)		
cmake options to optimize dependencies	Needed per planning meeting	Eaton	
Global config	Needed per planning meeting (low priority this release)		
Securing the EdgeX message bus when using MQTT	Needed per planning meeting		
device parent/child relationship	Needed per planning meeting (labels vs other option)	Eaton	

# Upcoming Monthly Architect's Meeting

February Monthly Architect's meeting is Monday, Feb 28th @ 10am PST

### Topic list includes:

- Metrics ADR (if items remain to be discussed)
- UoM ADR (if items remain to be discussed)
- North/South Messaging
  - With <u>Device Functions ADR</u> auxiliary discussion
- Scope of ADRs issue discussion if time permits

### Miscellaneous

- work continues on Eaton App Service/Device Service design
  - WIP:
    - https://docs.google.com/document/d/1oT2za9 CeFluESritp7VRmIO-Enc5 owZMCsJBzvrzlk/edit
- Briefing for LF Edge Governing Board in March
  - Volunteer sought to go over EdgeX accomplishments and plans
- Planning meeting Face to face poll results

# LF Edge TAC survey

- Proposed response to LF Edge TAC on how they can help
  - 1. Help to build more of a "solution" story for LF Edge vs a loose (and sometimes competing) set of projects. Build (and them demonstrate) why people want to come to LF Edge for their edge needs. "we are greater than our parts"
  - 2. Help sponsor more combined events (hackathons, live events when they return, projects like ORRA with multiple participants)
  - 3. Turn the reporting structure around a bit. EdgeX (as all the projects do) provides updates and annual reviews to TAC. Do those serve a purpose? If so, great. If not, why do them? How about the LF Edge TAC help provide updates on what it is doing for the community back to the projects? Provide information on where they see the individual projects helping with the overall messaging, where there are joint project opportunities, etc. Help build something not just feel like a report collector.

# Tentative Spring Schedule (to be finalized in March)

- Planning
  - Per our new <u>planning schedule policy</u>
- If release was May 4th (Wednesday)
  - Freeze would begin April 20th (Wednesday 2 weeks for minor release)
  - Pre-wire would be April 14th (Thursday)
  - Planning meeting would be
    - May 9-12 (if virtual; M-Thur)
    - May 10-12 (if live)

