

EDGE X FOUNDRY™

TSC Meeting

August 24, 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	iain@iotechsys.com	Device Services WG Chair
Intel	Ernesto Ojeda	ernesto.ojeda@intel.com	Dev Ops WG Chair
Intel	Bryon Nevis	bryon.nevis@intel.com	Security WG Chair
Intel	Lenny Goodell	leonard.goodell@intel.com	Applications & Analytics WG Chair
IOTech	Cloud Tsai	cloud@iotechsys.com	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

- WG updates
- ADR and UCR updates
- Doc updates
- Miscellaneous



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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 (08/24/22) - Levski

[Cross Cutting Issues](#)

Icebox (1)

- Lite Builds (no security features) via Build Tags

Backlog (3, +1)

- Secure MQTT MessageBus
- Microservice Auth
- Go 1.19 (<https://tip.golang.org/doc/go1.19>)

In Progress (3, +1)

- **Commands via MessageBus (aka N/S MessageBus)**
 - Message Envelope - **WIP**
 - Core Command Service - **WIP**
 - go-mod-bootstrap - **WIP**
 - Go Device SDK - **TBD**
 - Go Device Services - **TBD**
 - C Device SDK - **TBD**
 - C Device Services - **TBD**
 - Command Client (core-contracts) - **TBD**
 - App SDK - **TBD**
 - APP Services - **TBD**
- **Additional Metrics**
 - App Services - **Done**
 - Device Services - **Defined**
 - Core - **Defined**
 - Security - **Defined**

- **NATS Make targets and compose**

- Compose Builder - **WIP**
- ASC - **WIP**
- edge-go - **TBD**
- App LLRP - **TBD**
- Device Services - **TBD**

Note: NATS adds 1.3MB to ASC and 0.6MB to Core Data
Once we remove ZMQ we'll gain back 1.6MB in ASC

Done (7)

- Request new Consul token on Auth failures
- System Events (aka CPE) (UC/ADR/Impl)
- Go 1.18
- NATs MessageBus
- 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](#)

Applications WG Update (08/24/22) - Levski

Newly Completed (2)

- [\[App SDK Docs\] Document how to decrypt data from the AES256 encrypt function #784](#)

New (1)

- [§ eKuiper 1.6.0 is not backward compatible #267](#)
 - 1.6.1 will resolve this

WIP (2)

- [\[ASC\] NATs MessageBus build option #459](#)
- [Record and Replay - Use Case Requirements #832](#)
 - PR here: <https://github.com/edgexfoundry/edgex-docs/pull/833>

Backlog (9, -1)

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

ICE BOX (6)

- Leftovers not planned for Levski and old low issues

Next

- UCR for Record and Replay ADR
- Build option on ASC for including NATS MessageBus

eKuiper

- 1.6.1 was released on 8/23/2022
 - <https://github.com/lf-edge/ekuiper/milestone/11>
 - Fixes issue with backwards compatibility
 - EdgeX will update to use it ASAP
 - Enhanced plug-in support
 - Connection exception management

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

Application Services - Levski

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 Snapshot (24 August 2022)

- Levski:
 - TAF
 - Functional tests: 594 - all passing
 - Integration tests: 55 - all passing
 - Performance tests: 10 - all passing
 - Core
 - Reschedule the time for next meeting
 - Discuss the impact of “docker compose” command change
 - Implementing north-south messaging

Core Project Board Status

- 2 New Issues (-3)
- 18 Release Backlog (-1)
- 1 In Progress/QA (+0)
- 63 Levski Done (+3)
- 19 Icebox (+2)

QA/Test Project Board Status

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

Next meeting: Tuesday August 29 @ 10AM Pacific Time

Device Services WG Update (24 August 2022)

Project board : 31 issues new/backlog (+14); 3 in progress/review (=)

Next meeting: August 29th

- New issues triage
- Further UCR discussion

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 and USB Cameras in Go
- REST in Go
- Grove in C (v1 only)
- 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
- 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 (08-24-2022)

Pipeline Related

- [#407](#) [Complete] Standardize make `version` between Jenkins and Snap builds
- [#409](#) [In Progress] edgex-ui: add UI unit test to pipeline (`ng test`)

Next DevOps WG Meeting: Thursday, September 8, 2022 @ 9AM PST

Release Czar (2022-8-24)

Kamakura (2.2.0):

- Released - 2022-5-11
- device-usb-camera released - 2022-7-28
- device-onvif-camera released - 2022-7-29
- C SDK- 2022-7-29

Security WG Update

Next Meeting: Next Week

- Cancelled today - no agenda items.

Security Project Board Status

- 3 New Issues (-3)
- 4 Release Backlog (-1)
- 6 In Progress/QA (+4)
- 2 In review (+1)
- 18 Done (+2)

Secure Consul Project Board Status

- 2 Phase 3 To-do (n/c)
- 0 In-progress (n/c)
- 0 In-review (n/c)

EdgeX China- EdgeX challenge 2022 (China region)

Updates of EdgeX challenge China 2022

- Entry level training (5 courses in total) on each workday this week
- Opening ceremony is scheduled on Aug 3rd
- Calling for sponsorship till end of July

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 (8/24/22)

Ready/Certification

- Rodney updated EdgeX Ready wiki

Social Media

- Performance blog post coming this summer
- Opportunity for additional Tech Talks

Events

- Exploring 2023 options

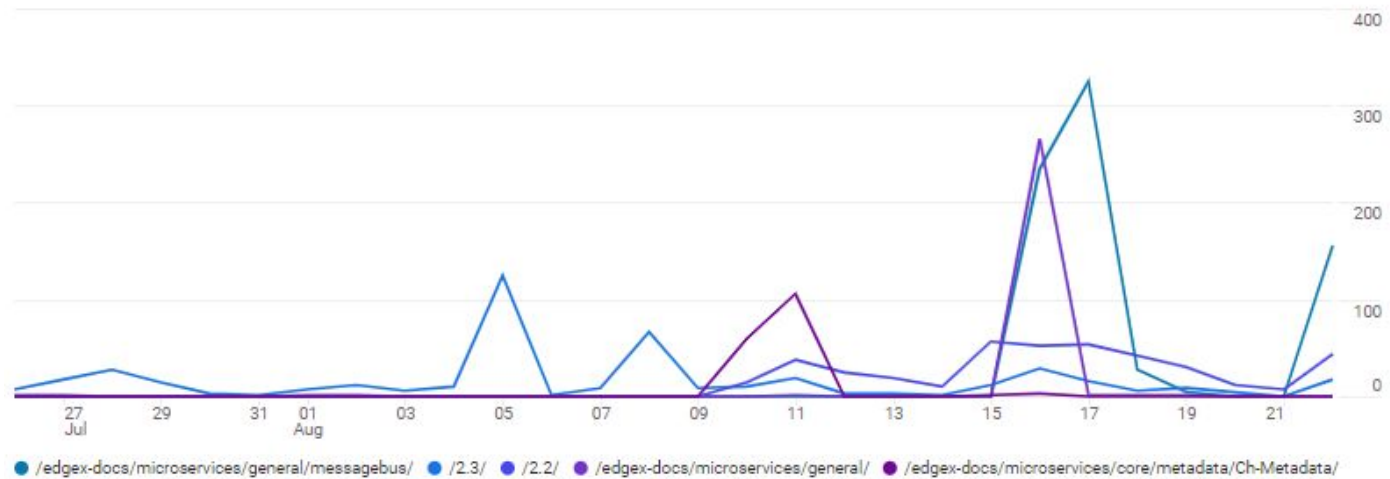
WebSite Changes (order or priority)

- Looking at spend of funding for (\$4500 budget)
 - Security Audit issues - addressed
 - SEO updates (shared between English and China sites) - WIP
- Update some content - done
- Google Analytics for docs - done
- Address SE issues of directing to latest

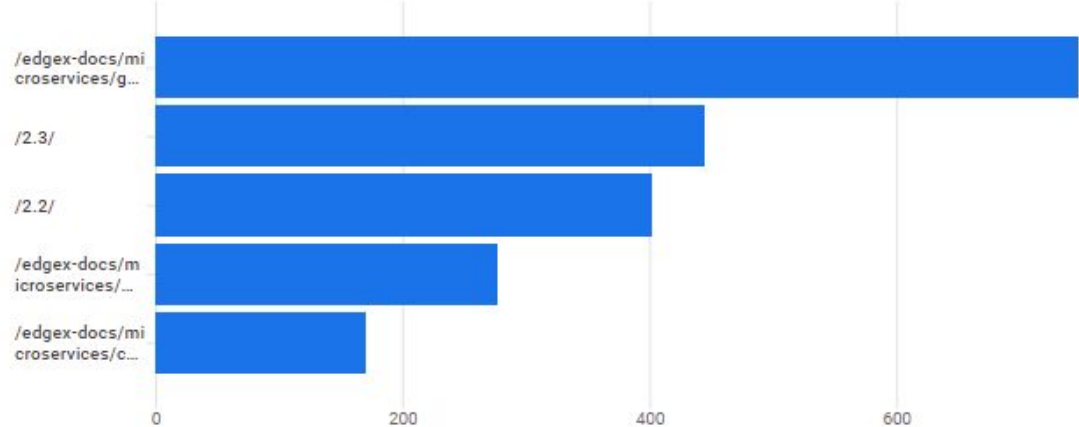
Next meeting Aug 29th@ 11am CDT (noon EDT) - is a UK holiday??? Jim will not be able to lead the meeting

Still looking for new group leader

Views by Page path and screen class over time



Views by Page path and screen class



ADR & UCR **PROCESS** review (as of 8/24/22)

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Parent/Child device relationship & Application Services Extending Device Data (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/800 under review; covered in a meeting this week	Tom-Eaton	DS
Provision Watch more Device Properties (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/806 under review; covered in a meeting this week. Look to approve this one soon	Tom-Eaton	DS
Hybrid App-Device Services (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/809 under review	Tom-Eaton	DS
Record and replay service	https://github.com/edgexfoundry/edgex-docs/pull/833 draft - under review	Lenny	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 8/23/22)

#641 L [EdgeX w/ K8s]

PR in - under review and needs updating

#788 M [fix notifications pages]

#787 M [fix scheduler pages]

Fixed

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

#732 L [role based access for Mosquitto]

#778 S [broken links]

WIP - just need old examples tagged

#784 M [document how to decrypt data]

Fixed

#808 M [add document section for the internal EdgeX MessageBus]

#774 Nats

#842 L [outdated DS page]

#843 M [SE indexing old docs]

Nice to have

#796, #392 M

#668 M

#643 M

#642 L

#598 L

#489 M (with #121, #21)

Miscellaneous

- Aug 29 - holiday in the UK.
- Sept 5 - holiday in the US.



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Thank You