

EDGE X FOUNDRY™

TSC Meeting

Sep 14, 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
 - Analytics from EdgeX website and docs
 - LF EdgeX Annual Review
 - Levski Release Schedule Planning
 - Monthly Architect's Meeting



EDGE X FOUNDRY™

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 (09/14/22) - Levski

Cross Cutting Issues

Icebox (1)

- Lite Builds (no security features) via Build Tags

Backlog (2)

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

In Progress (4)

- **Commands via MessageBus (aka N/S MessageBus)**
 - Message Envelope - **DONE**
 - Core Command Service - **WIP**
 - go-mod-bootstrap - **DONE**
 - 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**

- **Secure MQTT MessageBus**
 - Security Secret Store Setup - **DONE**
 - Compose Builder - **DONE**
 - eKuiper config - **TBD**
 - C SDK/Services - **TBD**
- **NATS Make targets and compose**
 - Compose Builder - **DONE**
 - ASC - **DONE**
 - edge-go - **DONE**
 - App LLRP - **WIP**
 - Device Virtual - **DONE**
 - Device Services - **TBD**

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 (09/14/22) - Levski

Newly Completed (0)

- None

New (0)

- None

WIP (0)

- None

Backlog (9)

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

ICE BOX (5)

- Leftovers not planned for Levski and old low issues

Next

- Record and Replay ADR

eKuiper

- No update this week

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 (14 Sep 2022)

- Levski:
 - TAF
 - Functional tests: 605 passing, 1 failure due to [#4138](#) POST device resource didn't validate Units of Measure
 - Integration tests: most of 55 passing, some failures due to [#707](#) Update script to support secure mqtt message bus
 - Performance tests: 10 - all passing
 - Core
 - Implemented UoM test
 - Implementing north-south messaging

Core Project Board Status

- 1 New Issues (-3)
- 16 Release Backlog (-1)
- 0 In Progress/QA (-3)
- 73 Levski Done (+10)
- 20 Icebox (+1)

QA/Test Project Board Status

- 3 New Issues (+3)
- 6 Release Backlog (-1)
- 1 In Progress/QA (-2)
- 9 Done (+3)
- 0 Icebox (+0)

Next meeting: Tues Sep 20th

Device Services WG Update (14 September 2022)

- Progress with “Extending Device Data” UCR
- Updates pending for proposed UART device service
- Project board : 16 issues new/backlog (=); 5 in progress/review (=)

Next meeting: September 26th

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 (09-14-2022)

Pipeline Related

- [#407](#) [Complete] Standardize make `version` between Jenkins and Snap builds
- [#409](#) [Complete] edgex-ui: add UI unit test to pipeline (`ng test`)
 - PR <https://github.com/edgexfoundry/edgex-ui-go/pull/549>
- [#412](#) [Backlog] Update edgeXReleaseDocs pipeline after latest changes
- [#413](#) [Backlog] Update Swagger API version on release

Other

Moving DevOps WG meeting to Tuesday's at 9AM PST starting October 6th

Next DevOps WG Meeting: Thursday, September 22, 2022 @ 9AM PST

Release Czar (2022-9-14)

Levski (2.3.0) - ~November 2022

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: Today

- Continue threat model review

Security Project Board Status

- 7 New Issues (+2)
- 5 Release Backlog (+2)
- 4 In Progress/QA (-2)
- 1 In review (+1)
- 26 Done (+6)

Secure Consul Project Board Status

- 1 Phase 3 To-do (0)
- 0 In-progress (-1)
- 0 In-review (n/c)

EdgeX China

- EdgeX Challenge China 2022 Updates
 - Completed preliminary round on Sep 5th
 - 64 proposals received
 - 28 in health, education, consumer industry
 - 36 in energy and heavy industry
- EdgeX Meetup planned for Q4 (Nov/Dec)

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 (9/6/22)

Ready/Certification

- No updates

Social Media

- Opportunity for additional Tech Talks

Events

- Exploring 2023 options
- [Building Systems Integrators](#) will present their use of EdgeX during TSC meeting in October

WebSite Changes (order or priority)

- Looking at spend of funding for (\$4500 budget)
 - SEO updates (shared between English and China sites) - WIP
- Address SE issues of directing to latest
 - LF ticket in and working Ernesto provided idea

Google Analytics for August available on the Wiki (covered during our meeting on Monday).

- New data for docs available.
- Will be monitored closely over next few months for possible action items.

Next meeting: Sept 26 @ 11am - email any topics to Jim W prior to the meeting

ADR & UCR PROCESS review (as of 9/6/22)

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Extending Device Data (UCR) - split from parent/child UCR	https://github.com/edgexfoundry/edgex-docs/pull/845 under review	Tom-Eaton	AS/core
Parent/Child device relationship & Application Services Extending Device Data (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/800 up for TSC vote (5 votes in favor so far)	Tom-Eaton	DS
Provision Watch more Device Properties (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/806 up for TSC vote (3 votes in favor so far)	Tom-Eaton	DS
Hybrid App-Device Services (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/809 under re-review	Tom-Eaton	DS
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

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

#732 L [role based access for Mosquitto]

#774 Nats

#778 S [broken links]

WIP - just need old examples tagged

#788 M [fix notifications pages]

#843 M [SE indexing old docs]

#847 M [secret provider API]

#855 - L [extend Go SDK API docs]

#859 - L [version warning popup]

Nice to have

#796, #392 M

#668 M - done

#643 M

#642 L

#598 L

#489 M (with #121, #21)

Miscellaneous

EdgeX Website Analytics

- Laura from the IOtech team created a new dashboard for Google Analytics for both the EdgeX website and EdgeX docs
- All the info you ever wanted
- <https://datastudio.google.com/reporting/4c1ac7f0-6e24-4eb7-9d1a-da497288bd2b>
- Link also available on Outreach wiki

Linux Foundation EdgeX Annual Review

- <https://wiki.lfedge.org/display/LE/Project+Annual+Reviews>
- James to create necessary material and run the review at the LF TAC meeting
Will reach out for any specific help

EdgeX 2.3 Levski Release Schedule - for TSC approval

- Per our new [planning schedule policy](#)
- Possible release dates of Nov 9th, 16th, 23rd or 30th (all Wednesdays)

Wed Nov 9	Wed Nov 16	Wed Nov 23	Wed Nov 30
Code Freeze: Oct 26 (Wed)	Code Freeze: Nov 2	Code Freeze: Nov 9	Code Freeze: Nov 16
Pre Wire: Oct 20 (Thurs)	Pre Wire: Oct 27	Pre Wire: Nov 3	Pre Wire: Nov 10
Planning: Nov 14-17 (Mon-Thurs)	Planning: Nov 21-24	Planning: Nov 28-Dec1	Planning: Dec 5-8

- USA Holidays:
 - Veterans Day: Friday Nov 11 - during Nov 16 code freeze period
 - Thanksgiving: Nov 24-25 - might impact Nov 16 planning meeting
- UK, Germany, Taiwan - None

Monthly Architect's Meeting

<https://wiki.edgexfoundry.org/display/FA/Monthly+Architects%27+Meeting>

Runs on the 3rd Monday of every month

- August's meeting was cancelled and Monday 19th Sep is now a national holiday in the UK
- Subjects to cover
 - EdgeX 3.0 Considerations
 - UCR and ADR reviews
- Options: run meeting anyway (no UK attendance) or push to following Monday (26th Sep)?



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Thank You