

EDGE X FOUNDRY™

TSC Meeting

August 3rd, 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 (07/27/22) - 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 (4, -1)

- Request new Consul token on Auth failures
 - C SDK/Services - **WIP**
- Go 1.18
 - ONVIF/USB Camera - **OnHold**
- Additional Metrics
 - App Services - **Done**
 - Device Services - **Defined**
 - Core - **Defined**
 - Security - **Defined**

- System Events (aka CPE) (UC/ADR/Impl)
 - UCR - **Approved**
 - ADR - **Approved**
 - Bootstrap - **DONE**
 - Core Contracts - **PR Pending**
 - Core Metadata - **PR Pending**

Done (4, +1)

- 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 (07/27/22) - Levski

Newly Completed (2)

- Add pipeline function to wrap raw data from previous function into an Event/Reading [#1149](#)
- feat: docs for built-in pipeline function to wrap event [#799](#)

New (0)

- None

WIP (1)

- feat(microservices): Add NATS MessageBus Overview for App Service Trigger [#805](#)

Backlog (12)

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

ICE BOX (5)

- Leftovers not planned for Levski

Next

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

eKuiper

- Release 1.6 is code complete
 - In process of creating the release.
 - <https://github.com/lf-edge/kuiper/milestone/10>
 - EdgeX will update to 1.6 for Levski once it is ready

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 (2 August 2022)

- Levski:
 - TAF
 - Functional tests: 594 - all passing
 - Integration tests: 55 - all passing
 - Performance tests: 10 - all passing
 - Core
 - Fixed some minor issues
 - Started implementing UoM ADR

Core Project Board Status

- 2 New Issues (-3)
- 20 Release Backlog (+0)
- 2 In Progress/QA (-2)
- 54 Levski Done (+6)
- 17 Icebox (+0)

QA/Test Project Board Status

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

Next meeting: Tuesday 9th August @ 5 PM Pacific Daylight Time

Device Services WG Update (3 August 2022)

- Camera device services and C SDK released for 2.2
- Initial discussions on Provision Watcher enhancement, Device relationships

Project board : 17 issues new/backlog (-1); 3 in progress/review (-3)

Next meeting: August 8th

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 (08-03-2022)

Pipeline Related

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

Other

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

Next DevOps WG Meeting: Thursday, August 4, 2022 @ 9AM PST

Release Czar (2022-8-3)

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, cancelled for next week

- Agenda for today
 - Discuss dispositioning of CVE-2022-28948
 - Discuss technical debt present in layout of Consul's KV database
- On vacation next week

Security Project Board Status

- 6 New Issues (0)
- 4 Release Backlog (0)
- 3 In Progress/QA (0)
- 1 In review (n/c)
- 13 Done (0)

Secure Consul Project Board Status

- 3 Phase 3 To-do (+1)
- 0 In-progress
- 0 In-review (-1)

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 (8/2/22)

Ready/Certification

- Rodney working on Wiki update

Social Media

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

Events

- Exploring 2023 options

WebSite Changes (order or priority)

- Tech talk reference from web site being explored
 - draft in place; need LF assistance to get it posted
- Looking at spend of funding for (\$4500 budget)
 - Security Audit issues
 - SOW signed off
 - SEO updates (shared between English and China sites)
 - WIP
- Update some content (diagrams, et al) - internal
- Google Analytics for docs
 - in place for Levski/branch
 - Looking at other versions

Next meeting Aug 15th@ 11am CDT (noon EDT)
Still looking for new group leader

ADR & UCR **PROCESS** review (as of 7/26/22)

<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 UC review ongoing	Tom-Eaton	DS
control plane events (ADR)	https://github.com/edgexfoundry/edgex-docs/pull/795 completed	Lenny	Core
Provision Watch more Device Properties (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/806 New	Tom-Eaton	DS
Hybrid App-Device Services (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/809 New	Tom-Eaton	DS
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 8/2/22)

#685 L [build/run ARM32]

PR in - still needs review

#641 L [EdgeX w/ K8s]

PR in - needs review and suggestions (thoughts about location)

#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]

WIP - need assistance from Lenny on where old examples went

#784 M [document how to decrypt data]

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

Nice to have

#643 M

#642 L

#598 L

#489 M (with #121, #21)

Miscellaneous

EdgeX meetings throughout August

TSC Meetings

- I'm on vacation 8th through 17th so will miss TSC Meetings on **Aug 10th** and **Aug 17th**
- Also on leave **Aug 24th**
- **Decision: Cancel the Aug 10th meeting, but Jim White has agreed to run the Aug 17th TSC meeting**

Monthly Architect's Meeting

- Next meeting is scheduled for Mon Aug 15th. Shall we run this?
- **Decision: Jim will liaise with Lenny next week and determine the urgency of architect decisions and the need for the Aug 15th meeting**

Regular Working Group Meetings

- Each WG Chair please coordinate with regular meetings members and postpone as necessary



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Thank You