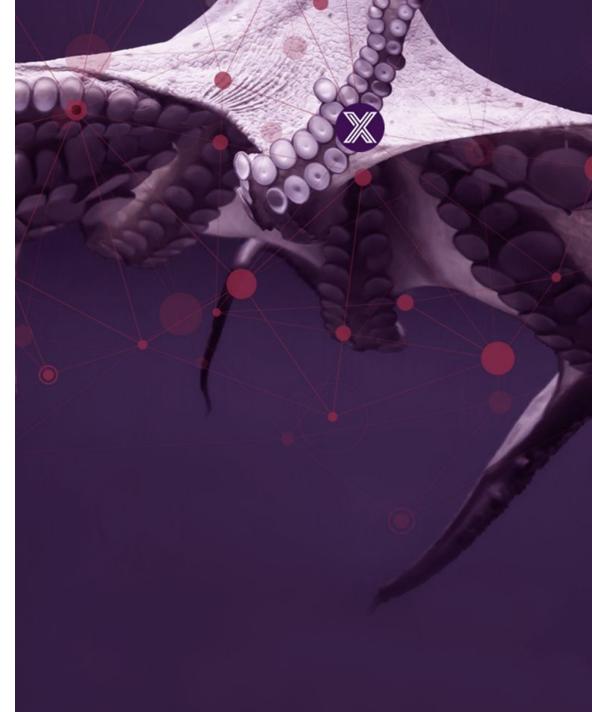


# TSC Meeting

August 31, 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

<b>Company</b>	<u>Name</u>	<u>Email</u>	<u>Position</u>
IOTech	lain 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.

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## Today's Agenda

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



## Working Group Chair Updates

- Around the horn
  - Product Manager Lenny Goodell
  - Applications Lenny Goodell
  - Core Cloud Tsail
  - 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 (08/30/22) - Levski

#### **Cross Cutting Issues**

#### Icebox (1)

Lite Builds (no security features) via Build Tags

## Backlog (2, -1)

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

### In Progress (4, +1)

- Commands via MessageBus (aka N/S MessageBus)
  - Message Envelope PR
  - 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 WIP
- Compose Builder TBD
- Go Core/Support/App/Device Services config TBD
- C SDK/Services -TBD

#### **NATS Make targets and compose**

- Compose Builder WIP
- ASC DONE
- edge-go PR
- App LLRP TBD
- Device Services WIP/PR (Device Virtual)

#### 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.mgtt.golang 1.4.1 (License update to v2.0)
- Securing Consul with Access Token



# Applications WG Update (08/30/22) - Levski

#### **Newly Completed (2)**

- eKuiper 1.6.0 is not backward compatible #267[App SDK Docs]
- [ASC] NATs MessageBus build option #459

#### New (1)

None

#### **WIP (2)**

- Record and Replay Use Case Requirements #832
  - PR here: <a href="https://github.com/edgexfoundry/edgex-docs/pull/833">https://github.com/edgexfoundry/edgex-docs/pull/833</a>

#### **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

Record and Replay ADR

#### eKuiper

No update this week





## 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 (31 August 2022)

- Levski:
  - o TAF
    - Functional tests: 595 all passing
    - Integration tests: 55 all passing
    - Performance tests: 10 all passing
  - Core
    - Implemented UoM test
    - Implementing north-south messaging

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

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

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

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

Next meeting: cancelled next week

## Device Services WG Update (31 August 2022)

- UCRs Provision Watcher enhancement, Parent-Child, Record/Replay
- Project board: 30 issues new/backlog (-1); 5 in progress/review (+2)

Next meeting: September 12th

## 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 (08-31-2022)

#### **Pipeline Related**

- #407 [Complete] Standardize make version between Jenkins and Snap builds
- #409 [Review] edgex-ui: add UI unit test to pipeline (ng test)
  - PR https://github.com/edgexfoundry/edgex-ui-go/pull/549
    - Request for reviews please

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

## Release Czar (2022-8-31)

## 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

Levski (2.3.0) - ~November 2022

# Security WG Update

## **Next Meeting: Today**

Threat model review

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

- 5 New Issues (+2)
- 3 Release Backlog (-1)
- 6 In Progress/QA (n/c)
- 0 In review (-2)
- 20 Done (+2)

#### **Secure Consul Project Board Status**

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

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

#### 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 (8/31/22)

## Ready/Certification

No updates

#### 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)
  - SEO updates (shared between English and China sites) - WIP
- Address SE issues of directing to latest

Next meeting: Sept 12 @ 11am - email any topics to Jim W prior to the meeting

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

ADR name and PR number	Status	owner	Work Group
Extending Device Data (UCR) - split from parent/child UCR	https://github.com/edgexfoundry/edgex-docs/pull/845 recently added (split from 800)	Tom-Eaton	AS/core
Parent/Child device relationship & Application Services Extending Device Data (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/800 under re-review; minor corrections completed	Tom-Eaton	DS
Provision Watch more Device Properties (UCR)	https://github.com/edgexfoundry/edgex-docs/pull/806 under re-review - approvals required DCO issue	Tom-Eaton	DS
Hybrid App-Device Services (UCR)	https://github.com/edgexfoundry/edgex-docs/pu ll/809 under re-review	Tom-Eaton	DS
Record and replay service	https://github.com/edgexfoundry/edgex-docs/pul l/833 under review (couple of approvals already)	Lenny	App Services
core data cache	Levski release		Core
global configuration	EdgeX 3.0 item (not in scope now)		
URI reference (profiles, config, etc.) gexfoundry.org    @edgexfoundry	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]
#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
#808 M [add document section for the internal EdgeX MessageBus
#774 Nats
#842 L [outdated DS page]
#843 M [SE indexing old docs]
#847 M [secret provider API]
```

#848 M [docker compose V2 changes]

# Nice to have #796, #392 M #668 M #643 M #642 L #598 L #489 M (with #121, #21)

## Miscellaneous

• Sept 5 - holiday in the US.

