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TSC Meeting

July 6, 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:

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+1 855 880 1246 (US Toll Free)

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Meeting ID: 983 155 298

International numbers available: https://zoom.us/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ

** TSC calls are recorded and added to Wiki post-call

TSC – Members Present Today

Company	Name	Email	Position
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 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 (07/06/22) - Levski

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 (6)
- **Securing Consul with Access Token**
  - C SDK/Services - **WIP**
- **Request new Consul token on Auth failures**
  - C SDK/Services - **WIP**
- **Go 1.18**
  - Smoke Test - **DONE**
  - Verify Tools (Linter & Mockery) - **DONE**
  - edgex-go - **Draft PR**
  - DevOps - **WIP**
- **NATs MessageBus**
  - go-mod-messaging **- Pending PR**
- **Additional Metrics**
  - App Services - **DONE**
  - Device Services - **Defined**
  - Core - **Defined**
  - Security - **Defined**
- **System Events (aka CPE) (UC/ADR/Impl)**
  - UCR **- PR Pending**

Done (2)
- **Explore goweight to see impact of individual libs (nothing actionable)**
- **eclipse/paho.mqtt.golang 1.4.1 (License update to v2.0)**

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Applications WG Update (07/06/22) - Levski

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Completed (3)

- [SDK] Additional committed metrics #1116
- [ASC] Additional metrics #432
- [Examples] Camera Management App Service #117

New (3)

- [App SDK Docs] Document how to decrypt data from the AES256 encrypt function #784
- Camera Mgmt Example - Add documentation on how to ingest EVAM results into EdgeX #123
- Camera Mgmt Example - Auto start EVAM on new camera devices #122

WIP (0)

-

Backlog (11)

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

ICE BOX (5)

- Leftovers not planned for Levski

Next

- Go 1.18
- [App Services Docs] Document Additional Metrics #780

eKuiper

- No update this week

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

Next meeting **July 12th, 2022 @ 3:30pm Pacific**

Application Services - Kamakura

Functions (built into SDK)

- Add Tags
- Batch
- Compression (GZIP & ZLIB)
- Conversion (XML & JSON)
- PushToCore ** DEPRECATED**
- ~~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
- **ToLineProtocol (transforms Metric DTO)**

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
  - ~~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

Core WG Snapshot (6 July 2022)

- Levski:
  - TAF
    - Functional tests: 594 - all passing
    - Integration tests: 47- all passing
    - Performance tests: 10 - all passing
  - WIP
    - Finished the design of backward compatibility tests (e.g. between main and Jakarta)
    - Updated the Core and QA/Test project boards for adding Levski release backlogs

Core Project Board Status

- 15 New Issues (+4)
- 2 Release Backlog (+1)
- 2 In Progress/QA (+1)
- 36 Levski Done (+2)
- 17 Icebox (+0)

QA/Test Project Board Status

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

Next meeting: Tuesday 12h July @ 5 PM Pacific Daylight Time

Device Services WG Update (29 June 2022)

Ongoing

- GitHub "Discussions" setup
- CSDK : Secure Consul / Token refresh
- Remaining ONVIF camera issues prioritised with a view to releasing
- UART may come back in scope

Project board : 15 issues new/backlog (-3); 6 in progress/review (+3)

Next meeting: July 11th

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 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 (07-06-2022)

Pipeline Related

- [#400](#) [Hold] Go 1.18 upgrade for Go pipelines.
- [#401](#) [In Progress] Makedocs–support for variables
- [#402](#) [In Progress] htmlproofer checks on each edgex-docs PR

Other

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

Next DevOps WG Meeting: Thursday, July 7, 2022 @ 9AM PST

Release Czar (2022-7-5)

Kamakura (2.2.0):
- Released (2022-5-11)
- C SDK / Device Services - Pending

Jakarta (LTS) Patch (2.1.1):
- Released (2022-6-8)

Updated Release Checklist:
https://wiki.edgexfoundry.org/display/FA/Release+Checklist

Security WG Update

Next Meeting: July 13

- Last week:
  - We did brainstorming on go metrics for security. The list is: secret requested from store (counter), consul token requested (counter), put secret (counter), obtain secret (timer), obtain consul token (timer). Stretch: spiffe-token-provider token requested (counter), obtain token (timer), known secret requested (counter, tag by name)
  - Valina submitted PR against edgex-snap-hooks #64 (Snyk dependency update)
  - Updated known security issues wiki

Security Project Board Status

- 7 New Issues (+4)
- 8 Release Backlog (n/c)
- 2 In Progress/QA (n/c)
- 1 In review (n/c)
- 6 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

EdgeX China- EdgeX challenge 2022 (China region)

EdgeX events last week
-   Joint AI/IOT devfest of Intel + Microsoft + EdgeX (2K registered developers)
-   EdgeX developer summit - Q2 (5K+ online views)

Updates on sponsorship of EdgeX challenge 2022
-   Strategic Partner level sponsors so far: Intel, Alibaba Cloud

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

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Outreach WG (7/5/22)

Ready/Certification

- Rodney working on Wiki update
- Rodney working on EdgeX Ready for Individuals presentation for TSC consideration
  - <mark>Survey sent via email for inputs</mark>

Social Media

- EdgeX Awards blog post coming post ceremony
- Performance blog post coming this summer

Events

- Wait and see mode
- <mark>Hackathon decision by July 1</mark>

WebSite Changes (order or priority)

- Looking at spend of funding for ($4500 budget)
  - Security Audit issues
  - SEO updates (shared between English and China sites)
- Update some content (diagrams, et al) - internal

Outreach WG

- <mark>Looking for new leader</mark>

ADR PROCESS review

ADR name and PR number	Status	owner	Work Group
Develop UC/Requirements template	Available for review https://github.com/edgexfoundry/edgex-docs/pull/775	Farshid/Jim	
Parent/Child device relationship	Levski release	Eaton	Core
control plane events	under way with UC/R doc https://github.com/edgexfoundry/edgex-docs/pull/779	Lenny	Core
core data cache	Levski release		Core
Record and replay service	Future release		App Services
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

#685 L [build/run ARM32]

==PR in - review pending==

#641 L [EdgeX w/ K8s]

Nice to have

#643 M

#642 L

#598 L

#489 M (with #121, #21)

Miscellaneous

- Nothing new this week

Thank You