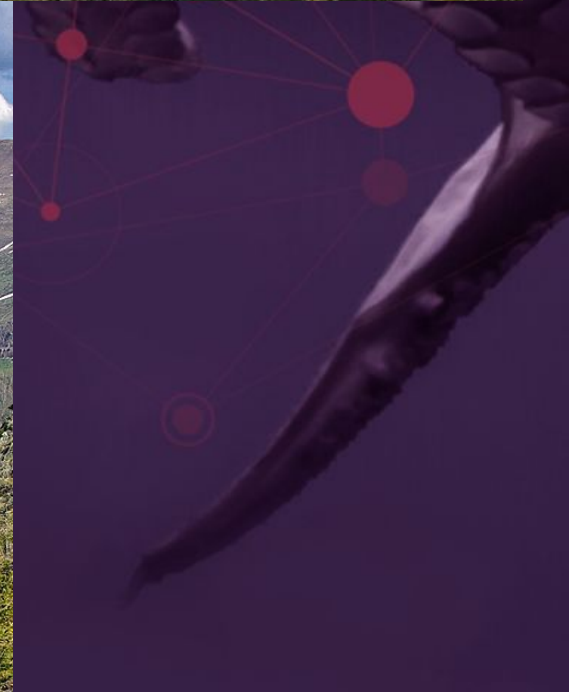
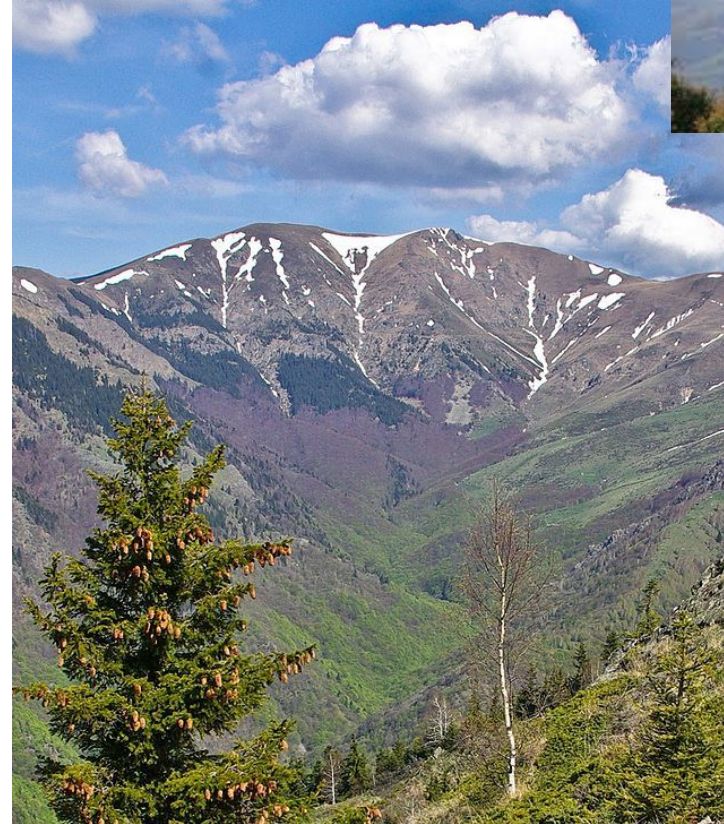


EDGE X FOUNDRY™

TSC Meeting

May 25th, 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
IOTech	Jim White	jim@iotechsys.com	Outreach WG Chair
Intel	Bryon Nevis	bryon.nevis@intel.com	Security WG Chair
Intel	Lenny Goodell	leonard.goodell@intel.com	Applications & Analytics WG Chair
IOTech	James Butcher	james@iotechsys.com	Core/Test/QA WG Chair

Gavin Lu (VMWare), Tony Espy (Canonical), Melvin Sun (Intel)

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

- Kamakura Release
 - Issues/bugs
- Jakarta LTS Update Release
- WG Updates
- ADR updates
- Levski Planning Review - Action Items and Scope
- EdgeX TSC Election schedule
- Miscellaneous
 - Tech Talks



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Work Group Updates

Chairs

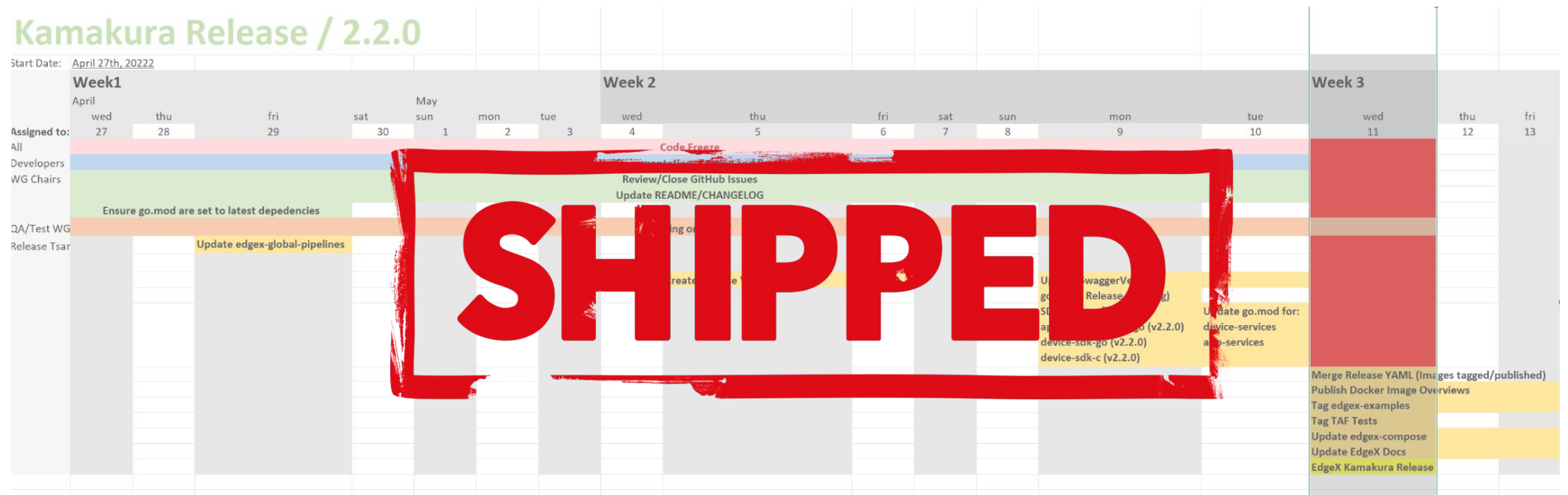
Release Czar (2022-5-25)

Kamakura (2.2.0):

- Released (2022-5-11)
- Reported Version String Fixes

Jakarta (LTS) Patch (2.1.1):

- Scheduled for 2022-6-8
- Status Check



Kamakura Release

- Still be done
 - C SDK
 - C Device Services
 - ~~LLRP Device Service and App Service (working through snap support)~~
 - Performance metrics report (Blog/marketing efforts associated with it)

Jakarta LTS

- Patch release?
 - Jun 8th target
- <https://github.com/orgs/edgexfoundry/projects/47>

Working Group Chair Updates

- Around the horn
 - Product Manager - Lenny Goodell
 - Applications - Lenny Goodell
 - Core - James Butcher
 - Device Services - Iain Anderson
 - DevOps - Ernesto Ojeda
 - Release Czar - Bill Mahoney
 - Security - Bryon Nevis
 - PRC Updates
 - Outreach - Jim White
 - Certification - Rodney Hess
 - Marketing - Camilo Dennis
 - Vertical Solutions (and LF Edge TAC) - Henry Lau

Product Manager (05/25/22) - Levski

[Cross Cutting Issues](#)

Icebox (1)

- Lite Builds (no security features) via Build Tags

Backlog (8)

- Go 1.18
- System Events (aka CPE) (UC/ADR/Impl)
- Commands via MessageBus (aka N/S MessageBus)
- Additional Metrics
- Secure MQTT MessageBus
- NATs MessageBus
- Microservice Auth
- Explore goweight to see impact of individual libs

In Progress (2)

- [Securing Consul with Access Token](#)
 - C SDK/Services - **WIP**
- Request new Consul token on Auth failures
 - C SDK/Services - **WIP**

Done (0)

.

Applications WG Update (05/25/22) - Levski

Completed (4)

- Released SDK, ASC and App LLRP for Kamakura!!
- Fixed CVE in App SDK for upcoming Jakarta 2.1.1 patch
- Fixed override of custom config for upcoming Jakarta 2.1.1 patch

WIP (0)

- None

Backlog (8)

- <https://github.com/orgs/edgexfoundry/projects/23>

New (2)

- Add ability to set MQTT Will options for external MQTT server connections #1117
- [Examples] Camera Management App Service #117

ICE BOX (5)

- Leftovers not planned for Levski

Next

- Go 1.18
- Decide on which addition metrics

eKuiper

- Nothing new

Project Board: <https://github.com/orgs/edgexfoundry/projects/23>

Next meeting **May 31st, 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 (25 May 2022)

- Kamakura:
 - TAF
 - Functional tests: 594 - all passing
 - Integration tests: 47- all passing
 - Performance tests: 10 - all passing
 - WIP
 - Performance Metrics Report
 - Core & Test/QA Project Board Updates and Levski planning

Side Note:

Discussion with GUI team this week.
Looking to replace Selenium with Test NG
Working on how to integrate with CI for
unit/integration tests
70% coverage by Levski
End-to-end tests will require more thought.

Looking at metrics incorporation

Core Project Board Status

- 8 New Issues
- 0 Release Backlog
- 0 In Progress/QA
- 0 Done
- 18 Icebox

QA/Test Project Board Status

- 2 New Issues
- 0 Release Backlog
- 1 In Progress/QA
- 0 Done
- 2 Icebox

Next meeting: **Tomorrow** Thursday May 26th @ 8am Pacific Time

Device Services WG Update (25 May 2022)

In progress / TBD

- MessageBus config fix for SDK for Jakarta (PR)
- C releases for Kamakura
- New camera DS x2
- Example updates

Next up

- Metrics - define initial set
- Project board population

Next meeting: June 6th

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 (05-25-2022)

Pipeline Related

- [#390](#) [In Progress] - Fix version mismatch issues for Go based LTS builds
- [#388](#) [Backlog] Optimize edgex-go SPIFFE/Spire docker image builds
-

Other

- [#389](#) [Backlog] Help optimize local developer make docker builds
- [#391](#) [Backlog] Add repo badges to README for device-onvif-camera
- [#392](#) [Backlog] Add repo badges to README for device-usb-camera

Next DevOps WG Meeting: Thursday, May 26, 2022 @ 9AM PST

Security WG Update

Next Meeting: Today, next

- Will review OpenSSF best practices survey
<https://bestpractices.coreinfrastructure.org/en/projects/1226>
(expected to take several security WG meetings)
- Planned Levki items:
some up with security metrics; speed up builds; prototype OpenZiti; Consul security hardening; SPIRE workload attestation agent for snaps; secret generation for mqtt; secure internal MQTT comms
- Helm charts: add SPIFFE and onvif camera support; remove volume init workarounds

Security Project Board Status

- 3 New Issues
- 8 Release Backlog (n/c)
- 2 In Progress/QA
- 2 In review
- 4 Done

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

Updates on EdgeX China Project

- Working on **renewal contract of EdgeX Chinese website**: July 1st 2022 ~ June 30th 2023.
- Negotiating collaborations with datawale.club on **Edge.AI training / certificate** in PRC.
 - Are there already a series of EdgeX training programs with certificates ?
- **CSP collaborations**: Alibaba cloud - EdgeX is adopted by OpenYurt, to connect IoT things/devices on the edge which interworks with the cloud as a K8S worker node.
- **Upcoming Events**:
 - Working with outreach WG to investigate possible worldwide EdgeX challenge.
 - Due to pandemic situation, there are possibilities to make it virtual or hybrid.
 - Q2 meetup scheduled on June 24th in Nanjing, hybrid model of online + in-person.
 - Intel is organizing an Edge.AI devfest with Microsoft AIOT Lab (Shanghai) on June 23rd, EdgeX China community is invited for speakership.

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 (5/11/22)

Next meeting Monday June 6th at 9am PST

Ready/Certification

- Rodney working on Wiki update
- Rodney working on EdgeX Ready for Individuals presentation for TSC consideration

Social Media

- Blog post on Levski planning, EdgeX Awards & birthday - this week

Events

- Wait and see mode
- Hackathon decision by July 1

WebSite Changes (order or priority)

- Contract renewal for China Website
 - May include some SEO work
- Security Audit issues
- SEO optimization
- Update some content (diagrams, et al) - internal
- Stretch - contact DB

Outreach WG - continue or fold into TSC

- Undecided
- Looking for new leader
- Need decision before elections

ADR **PROCESS** review

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Develop UC/Requirements template	to be done	Farshid	
Update ADR template and process documents	to be done	Jim White	
Parent/Child device relationship	Levski release	Eaton	Core
control plane events	Levski release		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]

in progress

#673 L [build/run outside of Docker]

PR pending

#641 L [EdgeX w/ K8s]

#599 L [build/run on Windows]

in progress

Nice to have

#643 M

#642 L

#598 L

#489 M (with #121, #21)

Miscellaneous

- [Levski Action Items & Scope](#)
- Need a volunteer to present EdgeX in the upcoming LF OSS event
 - Slide deck already available. Just need a presenter.
- EdgeX TSC Election Schedule - **subject to TSC approval**
 - Officially - current TSC term ends 5/24/22 (yesterday)
 - **TSC approval needed to extend the terms for a few weeks to allow for elections**
 - Working Group Chair & at large seat nominations: now until June 3
 - WG and at large seat elections (if needed): Week of June 6-10
 - TSC Chair selection: Week of June 13-17
- EdgeX roles (TSC approved)
 - PM
 - Release Czar

Upcoming Tech Talks

Tech Talks - mid-May through June

- Revising the old tech talks
- May 24 - Getting started (Jim) - Technical difficulties - rescheduled for May 31
- June 7 - Build an AS (Lenny)
- June 14 - Build a DS (Jim)
- June 21 - Build a Device Profile w/ mention of Ready program (James)
- June 28 - Getting started with Snaps (Canonical)

Registration Links

May 24-31: https://zoom.us/webinar/register/WN_c6c-4LAfRD6AJP1BQM6QeQ

June 7-28: https://zoom.us/webinar/register/WN_hyrYdafeR5mSM5oLcM75hA



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Thank You