

EDGE X FOUNDRY™

TSC Meeting

November 17, 2021



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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#

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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: <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

- Jakarta release
 - Status of testing, documentation, etc.
 - Go for release??
- WG Updates
- ADR updates
- Misc
 - Approval of Wiki pages
 - Jakarta LTS page draft
 - Project Board for design decisions (and wiki) draft
 - Release planning policy/rules Wiki page draft
 - SwaggerHub issue
 - Thanksgiving week



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Work Group Updates

Chairs

Release Czar (11-17-2021)

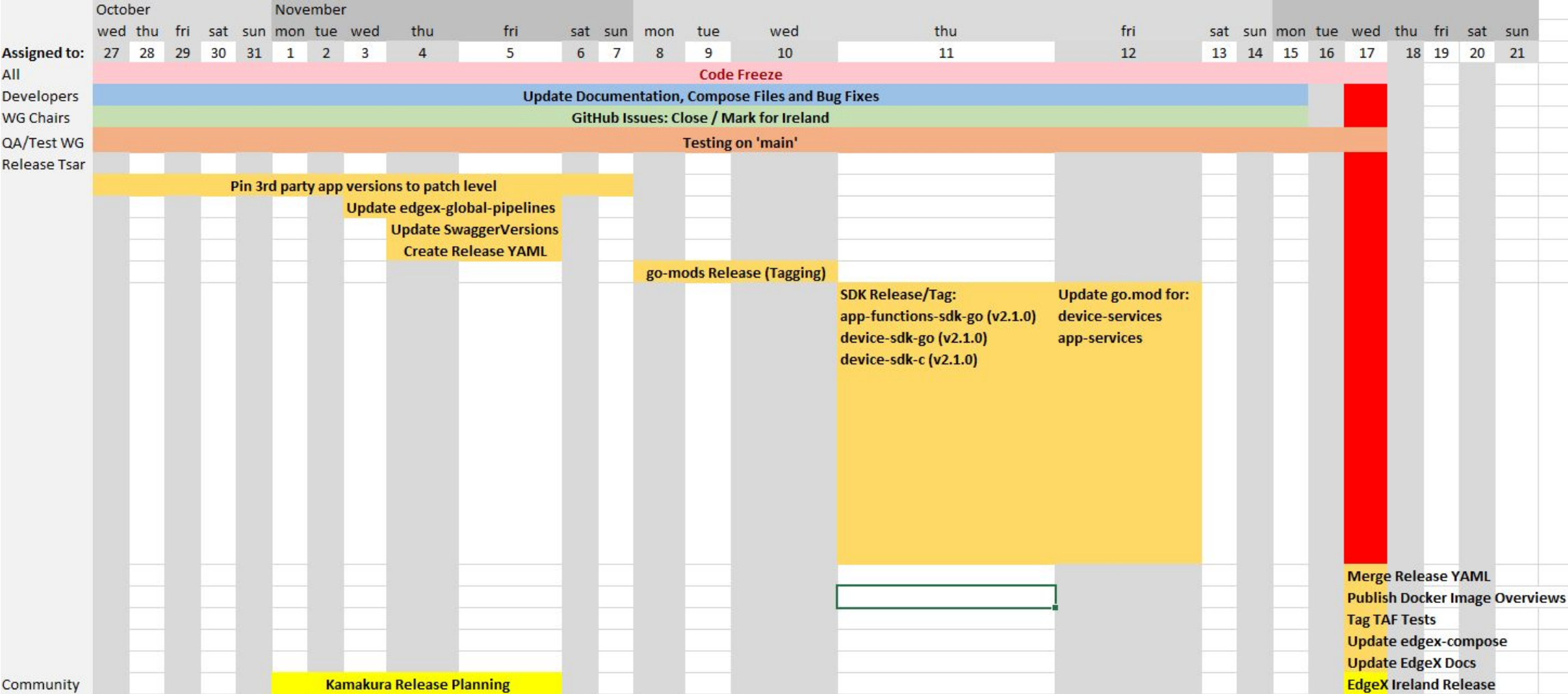
Release Dates

- Freeze date: Oct 27th
- Release date: Nov 17th

Jakarta CHANGELOG.md Updates

- [Download, Update and Commit](#)

Release Schedule



Jakarta Manual Testing for LTS

Test	Owner/Actions
Test any configuration not already handled by new TAF tests	<ul style="list-style-type: none"> Persistence on/off (running without core data and with persistence = false pass through) may be covered DS REST vs Message Bus (Redis) – test REST with Virtual DS Test CORS support – check headers there if enabled (both ways secure/non secure) Jim Action - Done
Test reboot of the system. Make sure EdgeX can come back up	Containerized - Lenny Action - Done Snap reboot test – Tony Action - Done
Test device services (with real hardware where possible)	Test something that uses C SDK Bacnet update – simulator - Iain Action Modbus, SNMP, GPIO – real device – Jim Action - Done CoAP, RFID, Grove – in process of port to V2; address when ported
Working with service authors to identify minimal tests	Start requiring contributions of DS to include this Kamakura task – add MD page to each DS (create issues – Jim Action)
Test different combinations/permutations of app functions in app services	MQTT and HTTP export are important ones – covered TAF Use sample config to drive this – Jim Action - Done
Test on Windows Native	Kamakura Arch topic
Test running with multiple services of same type (device service and app services)	App service – done in TAF DS – should be done in all; not a blocker Generic test – 2 DS running simultaneous Jim Action – try MQTT, Modbus - Done

Jakarta Docs and Misc

Remaining Docs?

<https://github.com/orgs/edgexfoundry/projects/43>

Jim to create release blog/marketing announcement

Include dev badge program

James - performance blog (Ireland and Jakarta or combined)

Are we go for release??

TSC approval required

Working Group Chair Updates

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

Product Manager (11/17/21) - Jakarta

Cross Cutting Issues

In Progress (8)

- Securing Consul with Access Token

- C Device SDK - TBD
- C Device Services - TBD

- **Secure Message Bus connection**

- C Device SDK - TBD
- C Device Services - TBD

- Secret Provider for All

- DS SDK C - DONE
- C Device Services - TBD

- **CORS for all (secure and non-secure)**

- Go services - DONE
- C SDK - TBD

- **Request new Consul token on Auth failures**

- Go Services - DONE
- C SDK/Services - TBD

- **Implement Generate/Inject passwords into Vault**

- Go Services - DONE
- C SDK/Services - TBD

- **add a "make lint" target**

- edgex-go - DONE
- App Services - DONE
- go-mods - TBD
- Go Device SDK - TBD
- Go Device Services - TBD
- C Device Services - N/A

- **Metrics ADR - WIP**

No change for this week

- consistent
- Commit gofmt and remote tidy script
- Upgrade Base Images to alpine3.14
- New PR template
- Use generic interface in the Event Tagging value
- Support complex object types in Reading

Backlog (0)

Icebox (0)

Applications WG Update (11/17/2021)

Completed

- Change Logs for 2.1.0 completed
- App SDK released
- ASC read for release

WIP

- Release of ASC 2.1.0
- Migration of LLRP App Service

eKuiper

- Working on release of 1.4 on Dec 2nd
- <https://github.com/lf-edge/ekuiper/milestone/3>
- <https://github.com/lf-edge/ekuiper/milestone/3?closed=1>

Next

- Kamakura!!!

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

Application Services - Ireland

Functions (built into SDK)

- Add Tags
- Batch
- Compression (GZIP & ZLIB)
- Conversion (XML & JSON)
- PushToCore
- ~~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

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)

- Simple Filter
- Simple Filter and MQTT Export
- Simple Filter and HTTP Export
- Simple CBOR
- Azure IoT Hub
- Amazon IoT Core
- Cloud Event Transformation
- Secret Retrieval
- JsonLogic

- Send Command
- Convert & Publish
- Custom Target Type
- IBM Watson IoT (ASC Profile)
- Custom Trigger
- Influx DB Export
- Fledge Export

Core WG Snapshot (17 Nov 2021)

- Jakarta:
 - TAF - all passing
 - Functional test: 541
 - Integration test: 37
 - Performance test:10
- Kamakura
 - No updates yet

Core Project Board Status

- 5 New Issues (-3)
- 7 Release Backlog (+0)
- 0 Bug Backlog (+0)
- 1 In Progress/QA (+0)
- 87 Done (+5)
- 4 Jakarta Stretch (+0)
- 16 Icebox (+0)

QA/Test Project Board Status

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

Next meeting Thursday November 18th @ 8am Pacific Time

Device Services WG Update (17-Nov-21)

Jakarta

- Doc updates complete
- Initial services ready for release
 - Modbus, SNMP, REST, MQTT, Virtual, Camera (non-LTS)
 - To follow: BACnet, Grove, RFID, CoAP, GPIO

Kamakura

- Expect initial outline of ADR for combination Device/App service in December

Next meeting: November 29th

Device Services - current/coming (as of v2.1)

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

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 (11-17-2021)

Pipeline Related

- [Hold] Go 1.17 released - [Release Notes](#) - On hold until Kamakura

Other

- Support Jakarta Release
- [In Progress] Developer Badge Program
 - Finalizing details of Credly implementation

Next DevOps WG Meeting Thursday, December 2, 2021 @ 9AM PST

Security WG Update (11/17/21)

Next Meeting: Today

- Last week:
 - Reviewed Kamakura backlog
 - Finish exploration of Delayed Service Start ADR w.r.t. C SDK
- Today's topics
 - Review findings w.r.t. use of GRPC from C

Security Project Board Status

- 0 New Issues
- 14 Release Backlog (kk)
- 0 In Progress/QA (-1)
- 1 In review (-3/+1)
- 45 Done (to archive)

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 in Chinese speaking regions

- EdgeX Challenge China 2021: Awarding ceremony on Nov 18th.
- No other updates this week.

EdgeX China community channels:

- Website: <https://cn.edgexfoundry.org/>
- OSChina zone: <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 (11/16/21)

Certification

- EdgeX Ready social media blitz

Developer Badge Program

- Announcement part of release
- Good demo from Ernesto recorded
- Wiki page created - feedback welcome
- <https://wiki.edgexfoundry.org/display/FA/EdgeX+Developer+Badges>

EdgeX Challenge - Smart *

- Wiki page created - Feedback welcome
- Sponsors needed
 - Intel, BSI committed
 - Still looking for a few others

Topcoder

Contest now underway

Next meeting Monday Nov 28th at 9am PDT

ADR review

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Metrics / #268	Review - trying to get approved by EOY	Jim White	Core
ADR on unit of measure / #386	Needs review	Jim White	Core
ADR for delay start service secret store token	Bryon researched C support Ready for review and vote	Bryon Nevis	Security
Device profile changes / #605	Needs review - trying to get approved by EOY	Jim White	DS

* - indicates some work this week

Miscellaneous

- TSC approval on the following
 - Jakarta LTS page draft (<https://wiki.edgexfoundry.org/pages/viewpage.action?pageId=70948690>)
 - Seeking TSC review and approval
 - Project Board for project decisions (and Wiki page describing process) have been set up and ready for review
 - <https://github.com/orgs/edgexfoundry/projects/45>
 - <https://wiki.edgexfoundry.org/pages/viewpage.action?pageId=73663048>
 - Release Planning Policy/Rules page on the wiki created
 - <https://wiki.edgexfoundry.org/display/FA/Release+and+Planning+Scheduling>
 - Seeking LTS review and approval
 - Developer Badge program and EdgeX Challenge pages will also be moved out of Draft next week as well.

Miscellaneous

- SwaggerHub account got turned off on Nov 4 from a “paid” account to free
 - should be fixed now
- Thanksgiving week - Nov 22-26: I am going to ask all WG leads to give everyone a week off of meetings unless there is objection

Jakarta Action Items

- CORs enablement needs to be documented with information on how to pick/select secure (Kong) or unsecure CORs enablement
 - **Jim** to create doc issue (Done✓)
- One more update to Bootstrap
 - **Lenny** (Done✓)
- App service AES problem
 - Leave old transform in place to keep backward compatibility
 - Have fix in place that people can opt to use (Done✓)
 - New feature to be merged (**Bryon and Lenny and Alex**) (Done✓)
 - **Bryon** will publish CVE once we have remediation in place
 - Issue for docs created (pending PRs)
- New issue in Provision Watcher (Lenny discovered)
 - Watcher is trying to pull it from cache when it has not been added there
- Docs
 - Need binary data sending/consuming example (**Jim** to create issue) (Done✓)
 - **Jim/Lenny** to clean up Jakarta docs project board; determine what is in scope (Done✓)
 - URLs in repository READMEs and TOML files point to different versions (**Jim** to search and create issues or fix) (Done✓)
 - Add and improve device service docs (**Iain** to lead discussion about what is needed in next DS WG meeting) (Done✓)
 - Getting started guide – possibly replace HiveMQ with EMQ Xbroker (**Jim** to explore; create issues as necessary)
 - Take care of to-do in GUI with Snaps (<https://docs.edgexfoundry.org/2.1/getting-started/tools/Ch-GUI/#snaps>) (**Tony** & Canonical to work)

General Action Items

- Update Calendar times to standard time (Done✓)
- Wiki document on tracking project decisions - **Jim** Action (Done✓)
- Add release and planning meeting timing to Wiki - **Jim** Action (Done✓)
- Research alternatives to big 3rd party enterprise components (Kong, Vault, Consul)
 - Tyk, Consul API Gateway, NginX, ...
- Check poor 3rd party dependencies for any updates/better support (Done✓)
 - **Jim** action
- What is required to trigger performance tests from edgex-taf? (Done✓)
 - Is this already being done?
 - **James** action
- Have conversation with eKuiper team (Done✓)
 - Steer eKuiper to offer a separate credentials file (versus their general configuration file)
 - **Lenny** action
- **Jim** to update Wiki Backlog and Github issues with status of decisions per pre-wire and planning meeting



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Thank You