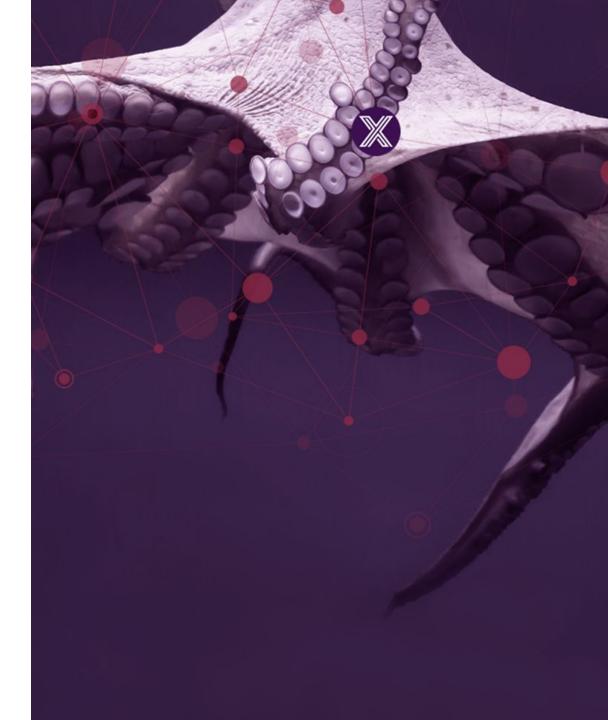
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TSC Meeting

Jun 24, 2020

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LF Antitrust Policy Notice

EdgeX Foundry meetings involve participation by industry competitors, and it is the intention of the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws.

Examples of types of actions that are prohibited at EdgeX Foundry meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at http://www.linuxfoundation.org/antitrust-policy. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrove of the firm of Gesmer Updegrove LLP, which provides legal counsel to the Linux Foundation.

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Meeting Logistics

Time: Wednesdays 8am PDT – 9am PDT

Join from PC, Mac, Linux, iOS or Android: <u>https://zoom.us/j/983155298</u> 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/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ

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



TSC – Members Present Today

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<u>Company</u>	<u>Name</u>	<u>Email</u>	Position
IOTech	lain Anderson	iain@iotechsys.com	Device Services WG Chair
Intel	Ernesto Ojeda	ernesto.ojeda@intel.com	Dev Ops WG Chair
IOTech	Keith Steele	keith@iotechsys.com	Outreach WG Chair
Kong	Colin Hutchinson	colin@konghq.com	Security WG Chair
Intel	Mike Johanson	michael.johanson@intel.com	Applications & Analytics WG Chair
IOTech	James Butcher	james@iotechsys.com	Test/QA WG Chair
IOTech	Jim White	jim@iotechsys.com	Core WG Chair

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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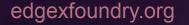
Today's Agenda

- WG Updates
- Outreach structure/organization
- Fledge/EdgeX collaboration project
- TAC representative
- Repository access needs
- Upcoming EdgeX User presentations
 - Accenture June 30
 - Jaingxing Intelligence July 28
- Upcoming Events (Dev Advocate)

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Work Group Updates

Chairs





Working Group Chair Updates

- Around the horn
 - Product Manager Lenny Goodell
 - Release Czar Lisa Ranjbar
 - Applications Mike Johanson
 - Device Services Iain Anderson
 - Test/QA James Butcher
 - DevOps Ernesto Ojeda
 - Security Colin Hutchinson
 - Outreach Keith Steele
 - Certification Rodney Hess
 - Marketing Camilo Dennis
 - Vertical Solutions Henry Lau
 - Core/Supporting Jim White

Product Manager (6/24/20)

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EdgeX Foundry Project

Repositories 100 🕜 Packages 🔗 People 75 🔗 Teams 100

- Closed old and unused Project Boards
- Working with WGs on using their Project Boards
 - Weekly Kunban review.
 - Reconciled all open issues assigned a project
- Created Cross Cutting Issues Project Board
 - Tracks issues across repos
 - Populated with items from Hanoi vF2F

		3 In Progress	+ …	0 Done	
Drop Logging Service completely Added by lenny-intel		V2 API Implementations (no consumption Core Contracts WIP edgexfoundry/go-mod-core-	n) ***		
 deprecate Mongo Added by lenny-intel 		contracts#235 Edgex Core services No issues created, yet			
 Allow device services to be distributed to alternate hosts Added by lenny-intel 		Device SDKs TBD edgexfoundry/device-sdk-go#529 WIP edgexfoundry/device-sdk-c#257 App Function SDK			
 Generate/Inject random passwords into Vault Added by lenny-intel 		WIP edgexfoundry/app-functions-sdk- go#368 Added by lenny-intel			
Message Bus from Device Service to App Services TBD edgexfoundry/device-sdk-go#530 TBD edgexfoundry/device-sdk-c#258 Added by lenny-intel 2 References		 Refactored Compose files WIP - edgexfoundry/developer-scripts# WIP - edgexfoundry/blackbox-testing#4 WIP - edgexfoundry/clgex-taf#122 DONE - edgexfoundry/cl-management# WIP edgexfoundry/cl-build-images#135 	 281 52 610		
			~		
		Remove Client Monitoring WIP edgexfoundry/edgex-go#2594 TBD edgexfoundry/device-sdk-go#542 TBD edgexfoundry/device-sdk-ce#272 WIP edgexfoundry/gop-functions-sdk- go#385 TBD edgexfoundry/go-mod-core- contracts#245 TBD edgexfoundry/go-mod-bootstrap#4 Once all these are complete the device service and app service configurable nee issues to update with latest SDKs and remove ServiceInfo.ClientMonitor from a configs.	d		
	 deprecate Mongo Added by lenny-intel Allow device services to be distributed to alternate hosts Added by lenny-intel Generate/Inject random passwords into Vault Added by lenny-intel Message Bus from Device Service to App Services TBD edgexfoundry/device-sdk-go#530 TBD edgexfoundry/device-sdk-c#258 Added by lenny-intel 	 deprecate Mongo Added by lenny-intel Allow device services to be distributed to alternate hosts Added by lenny-intel Generate/Inject random passwords into Vault Added by lenny-intel Message Bus from Device Service to App Services TBD edgexfoundry/device-sdk-go#530 TBD edgexfoundry/device-sdk-c#258 Added by lenny-intel 	Added by lenny-intel WIP edgexfoundiy/go-mod-core- contract#235 Edgex foundiy/device-sdk-go#529 Edgex foundiy/device-sdk-go#529 Added by lenny-intel Device SDKs TBD edgexfoundiy/device-sdk-go#529 WIP edgexfoundiy/device-sdk-go#529 WIP edgexfoundiy/device-sdk-go#529 WIP edgexfoundiy/device-sdk-go#529 WIP edgexfoundiy/device-sdk-go#529 Added by lenny-intel Image: Services TBD edgexfoundiy/device-sdk-go#530 TBD edgexfoundiy/device-sdk-go#530 WIP - edgexfoundiy/device-sdk-go#532 Added by lenny-intel Image: Services Image: Zreferences V Image: Zreferences Image: Service Se	Added by lenny-intel WIP edgexfoundty/go-mod-core-contracts#235 Edgex Core services No issues created, yet Added by lenny-intel Edgex Core services Added by lenny-intel Blo edgexfoundty/device-sdk-go#529 WIP edgexfoundty/device-sdk-go#529 WIP edgexfoundty/device-sdk-go#529 Added by lenny-intel WIP edgexfoundty/device-sdk-go#529 Added by lenny-intel Added by lenny-intel Added by lenny-intel Added by lenny-intel Added by lenny-intel Refactored Compose files TBD edgexfoundty/device-sdk-go#530 WIP - edgexfoundty/degex-taf#122 DONE - edgexfoundty/deigex-taf#122 DONE - edgexfoundty/deigex-taf#122 DONE - edgexfoundty/deigex-taf#122 DONE - edgexfoundty/deigex-taf#122 DONE - edgexfoundty/deigex-taf#122 DONE - edgexfoundty/deigex-taf#122 DONE - edgexfoundty/deigex-taf#122 WIP edgexfoundty/deigex-taf#122 DONE - edgexfoundty/deigex-taf#122 WIP edgexfoundty/deigex-taf#122 DONE - edgexfoundty/deigex-taf#122 WIP edgexfoundty/deigex-taf#122 DONE - edgexfoundty/gemed-core-contracts#245 TBD edgexfoundty/go-mod-core-contracts#245 TBD edgexfoundty/go-mod-core-contracts#245 TBD edgexfoundty/go-mod-core-contracts#245 TBD edgexfoundty/go-	Added by lenny-intel WIP edgerfoundity/go-mod-core-contracts#235 Edger Core services Contracts#235 EdgerCore services Contracts#235 Contracts#235 EdgerCore services Contracts#235 Contracts#

Projects 10

Release Czar (6/23/20)

- Testing frameworks have been tagged for the Geneva dot release (1.2.1)
- Release of device-grove-c (1.2.0) has been completed as well

- Open PR for Release Artifacts ADR (0010)
 - <u>https://github.com/edgexfoundry/edgex-docs/pull/165</u>
- Incoming Updates to the Release Automation ADR (0007)
 - This is to address the problems with releasing the dev versions of docker images and snaps

Let's get started on Hanoi!

Applications WG Update (24-Jun-2020)

Complete:

- Examples updated to default to redis instead of mongo
- Examples updated to default to non-secure mode

WIP:

• Conforming to V2 API Spec

App Working Group Meeting held on Fridays @ 9AM PDT
 Next meeting June 26th, 2020

Application Services

Functions (built into SDK) Current/Complete:

- AES Encryption
- GZIP Compression
- ZLIB Compression
- MarkAsPushed
- PushToCore
- Device Name Filter
- Value Descriptor Filter
- Batch

NEW!

- JSONLogic Filtering
- XML Conversion
- JSON Conversion
- MQTT(S) Export
- HTTP(S) POST Export

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Features

NEW!

NEW!

- Store and Forward
- Web Server
- Configurable App Service
- Vault Integration for Secrets
 - MQTT Event triggers (via go-mod-messaging)

Reference/Example App Services (Geneva) (built on top of SDK)

- Azure IoT Hub
- Amazon IoT Core
- IBM Watson IoT
- Cloud Event Transformation
- Secret Retrieval Example



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Device Services WG Update (24-Jun-20)

- Grove DS (C) released
- Updating requirements documentation
- Setting up project for Hanoi work

Next WG meeting June 29th



Device Services - current/coming (as of 5/7/20)

Open Source connectors (Current):

- Modbus (TCP/RTU) in Go
- Virtual Device in Go
- SNMP in Go
- MQTT in Go
- BACnet (IP & MSTP) in Go
- ONVIF Cameras in Go
- Grove in C
- REST in Go (NEW!)

Open Source connectors (Future):

- Bluetooth in C (summer 2020)
- BACnet (IP & MSTP) in C (summer 2020)
- OPC-UA in C (summer 2020)

Commercial connectors (Current):

- File Exporter in C
- BLE in C
- Zigbee in C
- GPS in C
- CAN in C
- MEMS in C
- EtherCat in C
- Profinet in C

Commercial connectors (Future):

- EtherNet/IP in C (summer 2020)
- CanOpen in C (summer 2020)
- OPC-UA Pub/Sub in C (summer 2020)
- ONVIF in C (summer 2020)

There are additional commercial MQTT (Go), Modbus (Go), OPC-UA (in C) and BACnet (in C) that have added features over the community editions

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Test/QA WG Update (06-23-2020)

- Postman blackbox test
 - \circ Working issues
 - Issue <u>#452</u>, update to use new multi-file compose file
 - \circ Fixed
 - Issue <u>#127</u>, switched test images to use the Geneva dot release on Geneva branch
- TAF blackbox test
 - \circ Working issues
 - Issue <u>#122</u>, update to use new multi-file compose file
 - PR <u>ci-build-image#135</u>, pending to build compose image DevOps to assist please
 - \circ Fixed
 - Resolved permission denied and docker issues on CentOS boxes. All tests now pass
- New Business
 - Agreed to drop backward compatibility tests in security mode not valid usage
 - Agreed to remove Mongo testing from the Postman Blackbox tests will reduce test load

Postman Blackbox Test Cases

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS Non Securit	Non Security	Mongo	1312	0	0	0
		Redis	1312	0	0	0
x86_64 / CentOS Security	Security	Mongo	1342	0	0	0
		Redis	1342	0	0	0
arm64 / Ubuntu Non Security	Mongo	1312	0	0	0	
	Redis	1312	0	0	0	
arm64 / Ubuntu Securi	Socurity	Mongo	1342	0	0	0
		Redis	1342	0	0	0



TAF Functional Blackbox Test Cases

os		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Redis	52	52	0	52
x86_64 / CentOS	Security	Redis	52	52	0	52
arm64 / Ubuntu	Non Security	Redis	52	0	0	0
arm64 / Ubuntu	Security	Redis	52	0	0	0

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TAF Integration Test Cases

Integration tests

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Redis	6	6	0	6
x86_64 / CentOS	Security	Redis	6	6	0	6
arm64 / Ubuntu	Non Security	Redis	6	0	0	0
arm64 / Ubuntu	Security	Redis	6	0	0	0

Compatibility tests

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Redis	12	12	0	12
x86_64 / CentOS	Security	Redis	12	12	0	12
arm64 / Ubuntu	Non Security	Redis	12	0	0	0
arm64 / Ubuntu	Security	Redis	12	0	0	0





DevOps WG Update (06-24-2020)

Hanoi

• WIP

- Build Optimizations for edgex-go
 - git-semver support
 - Opens around cleanup of "-dev" tags
- edgex-global-pipelines new features:
 - SwaggerHub global library
 - Code and unit tests written, Functional testing with sample-service
 - Parallelized docker build global library
 - Code and unit tests written, currently functionally testing on the LF sandbox

• DevSecOps

- James wrapping up explore for Issue #1947 vetting of OSS dependencies
 - Recommendation is to drop FOSSA and keep using Snyk + CB Advanced Snyk reports
 - James will post write up here when ready: <u>https://github.com/jamesrgregg/1947-explore</u>
- Community Bridge Feature Requests
 - Transitive dependencies for Go modules findings don't match other tools like Sonatype No Update "crickets"

• Other

- James working with LF to add PR Template as part of the repo creation process, using app-functions-sdk-go's as base template
- Code Signing Iftools /sigul replacement
- LFTools / Sigul latest version that supports Python 3.x
 - LF is now considering an alternative signing tool clarified that this is a future roadmap item uncommitted
 - LF encountered some of the challenges within their fork trying to refactor sigul to support the latest Python 3.x WIP

Next DevOps WG Meeting 06/24/2020 @9:00AM PST

Security WG Update (06-24-2020)

- New working group chair
- Hanoi release working items in progress/review
- SIR team update No major issues found
- Security WG meeting
 - Remote service demo by Jim Wang of Intel



Outreach WG Updates (6/23/20)

Certification Team

Vertical Solutions Team

Marketing Team



Certification WG Update (6-15-20)

- Determining documentation requirements for the cloud templates
- Discussion on marketing needs for the Endorsement program
- Next meeting is Monday, June 29th, 9 a.m. PDT

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Vertical Solutions WG Update (June 17, 2020)

- Next meeting: 6/30, Tues, 10:00am CDT
 - Accenture AIP+ adoption of EdgeX
- Recent meetings: Use cases, and opportunities for EdgeX community
 - 5/12 <u>Conexxus</u>: Convenience stores technology standards and use cases
 - 5/26 <u>Appcard</u>: Customer Engagement solutions ISV, use cases for grocery stores and QSRs
 - 6/9 <u>RF Rain</u>: RFID ODM, use cases across various verticals
- Last 2 meetings with 30+ attendees

Marketing update (6/10/20)

- Continue to drive Website project with El Roboto (3rd party)
 - Folder with key documents milestones and information at the Marketing WG wiki <u>https://wiki.edgexfoundry.org/display/FA/Marketing+WG</u>
- Geneva landing page created (Thank you Andy!)
- Topcoder Challenge
 - Working to secure SME(s) for second topcoder challenge
- Pulse with meeting participants. Start, Stop, Continue for Marketing meeting.

Core Working Group (23-Jun-2020)

- Decision was made to remove client monitoring (see issue <u>2594</u>)
 - Decision listed in the release scope decisions and arch notes wiki
- Work continues on V2 API
 - DTO PR still under review
 - Controller/Handler Events PR pending completion of DTO PR
- Next call 6/25/20 @ 10AM US/Central tomorrow
 - Please send any agenda items
 - Topics this week:
 - API V2 close out DTO PR?
 - Review Hanoi scoping (core, sys mgmt, UI)

	Closed Issues	Working Issues	New Issues
edgex-go	2557 (PR)	2594, 2584	
contracts mod	243	235	245
bootstrap mod			38

Miscellaneous Issues/Topics

- EdgeX elections
 - TSC at-large (done today)
 - TSC Chair
- Outreach structure/organization
 - General charter, goals, org structure has been achieved (thanks Camilo, Henry, Rodney, Keith)
- TAC representative
 - Henry Lau has been nominate to take EdgeX's TAC position
 - Need TSC approval
- New chairs send me a list of repositories you need committer rights to
 - TSC chair automatically get committer rights
 - You can nominate additional committers need 2 add'I TSC approvals
 - Wiki, Zoom, Slack, etc. access should be available let me know if you run into issues
- Upcoming EdgeX User presentations
 - Accenture June 30
 - Jaingxing Intelligence July 28

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Additional Topics

Fledge/EdgeX collaboration



Fledge/EdgeX Collaboration

- Background
 - Fledge project seeking to move from LF Edge Stage 1 to Stage 2
 - As part of that process collaboration with EdgeX suggested would be beneficial to their case
 - High degree of overlap between the projects
 - Initial discussions led to following suggestion
- Preferred Option "Basic Interoperability"
 - The ability to exchange data between our projects
- Next Steps
 - Form small group from TSC to assist Fledge
 - Initial call tomorrow evening 6pm UK time

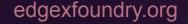
LF Edge TAC/ Project Recognition Process

- Update on TAC
 - Jim White stepped down as the EdgeX TAC representative to focus on EdgeX activities
 - Henry Lau has volunteered to take over TAC role Thanks Henry
- TAC Recognition Process
 - Recent events in the TAC have again highlighted issues with LF Edge stage recognition process
 - Process for stage recognition and advancement unclear and open to interpretation
 - This is important because stage dictates resources project receives from LF Edge and marketing focus
 - Also important because LF Edge has permitted projects with large overlap with EdgeX to be admitted to LF Edge
 - Stage process was 'home grown' by the TAC, and support from LF Edge for process has appeared to be lukewarm often leads to 'conflict' between projects rather than stated aim of harmonization and collaboration
 - Stages not very descriptive (ie Stage 1-4) and have only recently been added to LD Edge website with no explanation
 as to what stages mean
 - Do we want to propose changes?
- Possible Answers
 - LF Edge and TAC should be aligned on rules, and should be as one in following them
 - LF Edge are the ones with experience of running umbrella projects, should they not be the ones to construct the advancement rules and provide the resource to determine if a project qualifies?
 - Make stages more descriptive e.g. Stage 1 = Incubation, Stage 2 = Developing, Stage 3 = Premier

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Upcoming Events & Dev Advocate Update

Aaron's updates





Upcoming External Events

Additional LF Edge events available at: <u>https://www.lfedge.org/events/</u>

- "On the Edge with LF Edge" Webinars
 - > Project EVE Webinar (May 29 at 9 am PDT):
 - > Register for the webinar!
 - https://zoom.us/webinar/register/8815888722994/WN_35oZJ3hrQE69snMaiJUTPg
- > Open Source Summit North America: 29 June 2 July, 2020 Virtual
 - > 90 minute session(s) July 2 at 12-1:30pm CST
- > <u>IIOT World</u>: 30 June 1 July, 2020 Virtual
 - > Arpit Joshipura: "Uniting the Edge for Tomorrow's Demands."
 - > Jim White: "Using Open Source Technology to Manage IoT/Edge Solutions."
- > Open Source Summit Japan: 15-16 September, 2020 Tokyo, Japan
 - CFP Open: <u>https://events.linuxfoundation.org/open-source-summit-japan/program/cfp/</u>

Upcoming External Events

Additional LF Edge events available at: <u>https://www.lfedge.org/events/</u>

- > Open Networking & Edge Summit North America: 28-29 September, 2020 Los Angeles, CA
 - ONES Unconference Track- Virtual
- > Open Source Summit Europe: 26-28 October, 2020 Dublin, Ireland-
 - > CFP Open: <u>https://events.linuxfoundation.org/open-source-summit-europe/program/cfp/</u>
- > IoT Solutions World Congress: MOVED 11-13 May, 2021 Barcelona, Spain
 - > Call for Testbeds Open: <u>https://www.iotsworldcongress.com/activities/testbeds/</u>
- > Open Networking & Edge Summit Europe: TBD Q4, 2020 Antwerp, Belgium- Cancelled
 - > CFP Open: <u>https://events.linuxfoundation.org/open-networking-edge-summit-europe/program/cfp/</u>
- > Discussions around upcoming events occur in the LF Edge Outreach Committee
- > Members may subscribe at: <u>https://lists.lfedge.org/g/outreach-committee</u>

Upcoming Project Events

> none

 Projects can add their events to this list by sending the Wiki page listing the information to info@lfedge.org

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Thank You

