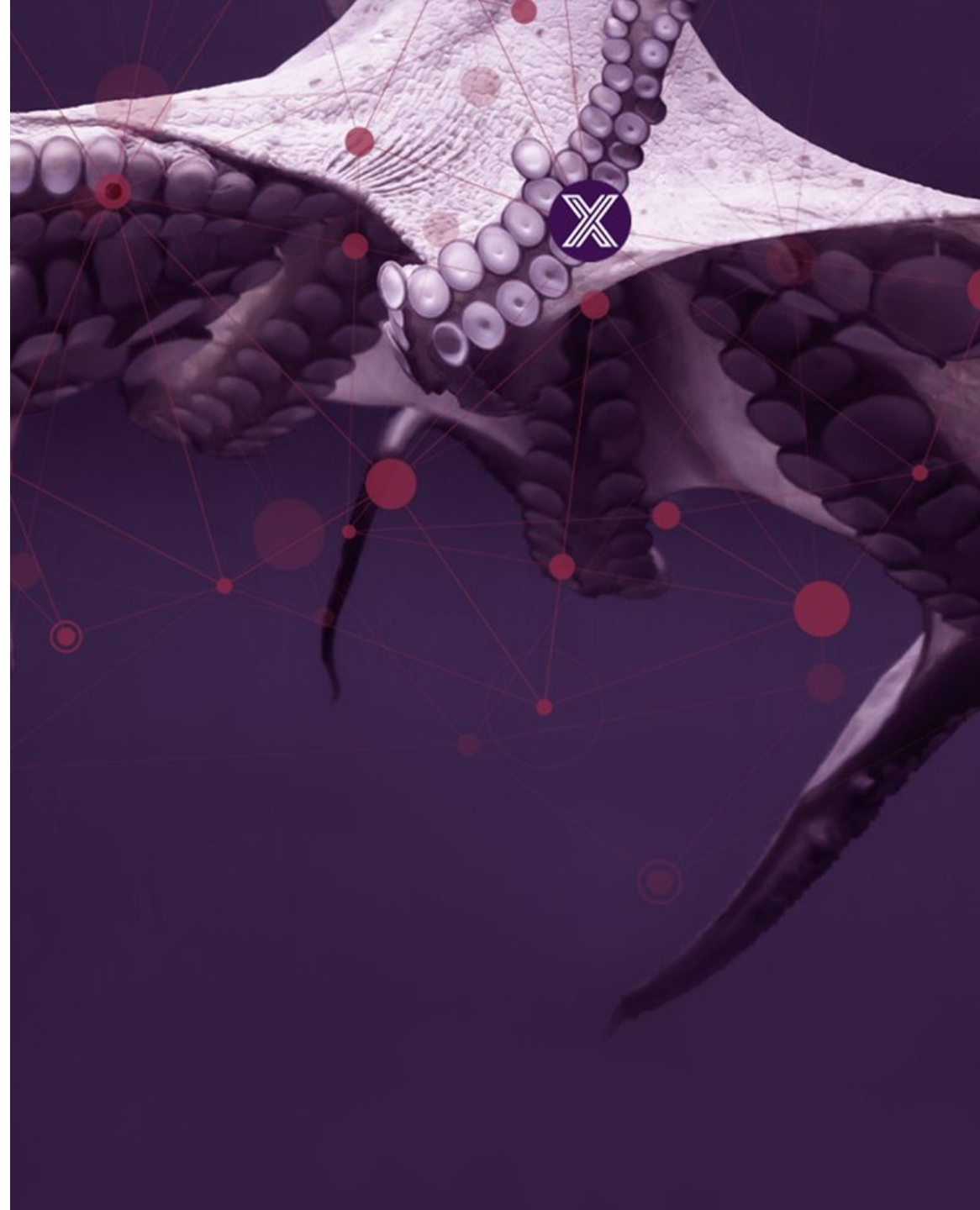


EDGE X FOUNDRY™

TSC Meeting

Jan 27, 2021

edgexfoundry.org |  @edgexfoundry



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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)

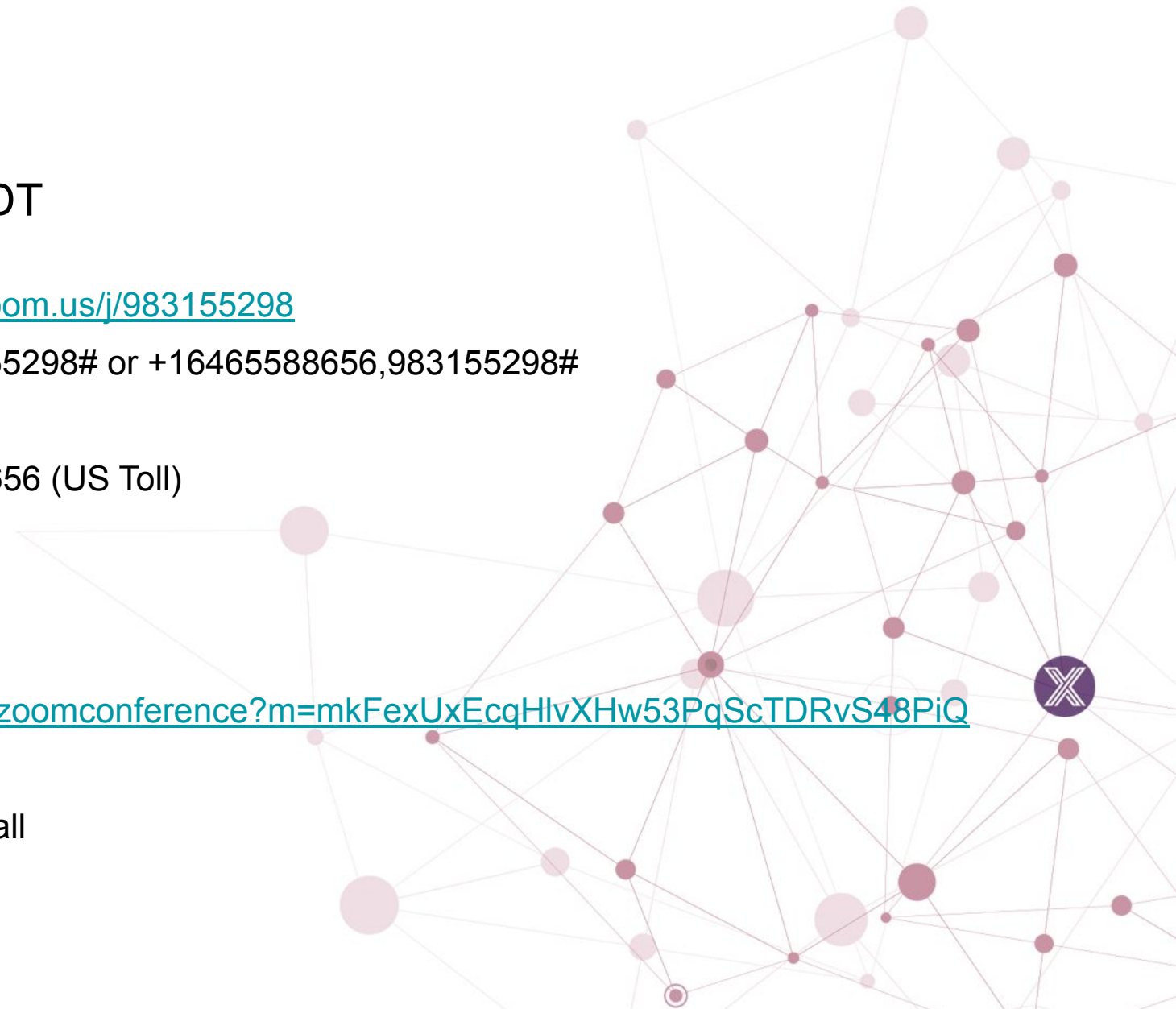
+1 855 880 1246 (US Toll Free)

+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	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.

Today's Agenda

- Dot release(s)
- WG Updates
- ADR review
- Monthly Architect's Meeting Review
- Upcoming Events (Dev Advocate)

Dot Release

To include (edgex-go services, AS SDK and services, CLI)

- metadata updates of admin/op status
- ZMQ issue
- CLI missing configuration.toml
- May also include EdgeX Ready announcement

Proposed Schedule

- Identify and ready fixes by 2/5
- Dot release on 2/17
- DS and DS SDK to release on their own schedule around this time



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Work Group Updates

Chairs

Working Group Chair Updates

- Around the horn
 - Product Manager - Lenny Goodell
 - Release Czar - Bill Mahoney
 - 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 (and LF Edge TAC) - Henry Lau
 - Core/Supporting - Jim White

Product Manager (1/27)

Cross Cutting Issues

In Progress (8, -2)

- V2 Implementations
 - Core Data APIs - WIP
 - Core MetaData APIs - WIP
 - TAF testing V2 APIs - WIP
 - Support Services - WIP
- V2 Consumption
 - V2 Core Data Clients - WIP
 - V2 Core Metadata Clients - WIP
 - App SDK V2 Event DTO - DONE
 - App SDK V2 Clients - TBD
 - Device SDK V2 Clients - TBD
- Secret Provider for All
 - Secret Store Setup - TBD
 - MQTT Device Service - Pending PR
 - DS SDK C - TBD (stretch)
 - C Device Services - TBD (stretch)
 - DS SDK Go - DONE
 - go-mod-bootstrap - DONE
 - edgex-go - DONE
 - App SDK - DONE
 - ASC - DONE
 - go-mod-secrets - DONE

- Device Service send Events via MessageBus implementation
 - Device SDK C - WIP
 - C Device Services - TBD
 - Device SDK Go - TBD
 - Go Device Services - TBD
 - Core Data Publish topic - DONE
 - Core Data Subscribe - TBD
 - App SDK multi-subscriptions - DONE
 - ASC multi-subscriptions - DONE
- Metrics ADR (In review)
- Registry Usage ADR (In review)
- Drop Logging Service completely
 - Device SDK C - TBD
 - Individual DS - WIP

Backlog (2, +2)

- Use service keys constants for Clients config
- Implement Generate/Inject passwords into Vault

Done (7, +2)

- LoggingClient DIC bug fix
- ADR Message Bus from Device Service to App Services
- ADR Secret Provider for All
- Remove Mongo code
- Change go-mod-x & Go SDKs to be V2 Go Modules
- Conventional Commits for all
- Consume dependent V2 Go Modules

Icebox (2, -2)

- EdgeX Metrics Collection & Control Plane Event Handling
- Secure Message Bus connection

Release Czar (Jan 27th, 2020)

Release Activity

- Jan 22 - `device-sdk-c` released - (v1.3.1)
- Jan 13 - `hanoi` branches created for dot release (v1.3.1)
- Jan 8 - `device-sdk-go` released - (v1.4.0)

Dot Release Schedule

- Ensure work intended for dot release gets placed into `hanoi` branch
- Code Freeze -- Feb-10 to Feb-17
- EdgeX Dot Release -- Feb-17

Applications WG Update (27-Jan-2021)

Completed:

- Consumption of v2 go-modules
- Updated v2 API /secrets to /secret
- ZMQ Fix for Hanoi
- Set Response Type for Message Bus
- Accept V2 Event DTO from triggers

WIP

- Documentation updates for MakeItStop, ResponseType support

Application Services

Functions (built into SDK)

Current/Complete:

- AES Encryption
- GZIP Compression
- ZLIB Compression
- MarkAsPushed
- PushToCore
- Device Name Filter
- Value Descriptor Filter
- Batch
- AddTags
- JSONLogic Filtering
- XML Conversion
- JSON Conversion
- MQTT(S) Export
- HTTP(S) POST Export
- HTTP(S) PUT Export

NEW!

NEW!

Features

- Store and Forward
- Web Server
- Configurable App Service
- Vault Integration for Secrets
- MQTT Event triggers

NEW!

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

Device Services WG Update (27-Jan-20)

Done:

- CSDK 1.3.1 released, all services now ready for .1 release

WIP:

- SecretProvider use (MQTT DS) - will land following point release
- Event Filtering ADR - in review
- CoAP, GPIO services in review for adoption into EdgeX
- Project Board: 53 issues backlog + 12 new (net -2)

Next meeting: February 1st

Device Services - current/coming (as of 11/4/20)

Open Source connectors (Current):

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

Open Source connectors (Future):

- Bluetooth Low Energy in C (2021) - contributed
- OPC-UA in C (2021) - under dev
- CoAP (2021) - contributed
- GPIO (2021) - contributed
- UART (2021) - contributed

- GPS

Commercial connectors (Current):

- File Exporter in C
- 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 Pub/Sub in C
- ONVIF in C
- Siemens S7 in C

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

Commercial connectors (Future):

- ZeroMQ (Q1 2021)
- RFID (Q1 2021)

QA/Test WG Update (26th January)

- TAF tests - Security test cases failing, tracked in [PR#372](#) - dockerize utility unavailable on ARM64
 - Fixed issues
 - Issue [#256](#), change docker scripts to use generated TAF compose files from nightly builds.
 - Issue [#269](#), implement core-data GET and DELETE event V2 API testcases.
 - Issue [#271](#), update the service name to consistent with docker-compose file.
 - Issue [#273](#), change the compare footprint from Geneva to Hanoi for performance metrics test.
 - Issue [#275](#), [V2] Update app-service secret API tests.
 - Issue [#279](#), implement Core Data reading V2 API testcases.
 - Issue [#281](#), App-service-configurable now outputs V2 Event/Reading DTOs.
 - New issues
 - Issue [#278](#), create Core Metadata V2 API Test Cases - provisionwatcher.
 - Issue [taf-pipelines#46](#), update TAF_COMMOM_IMAGE image names.
- Other Business
 - Hanoi Performance Report and accompanying website blog ready to be published

Next Meeting Tuesday 2nd Feb, 8am PST

TAF Functional 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	221	0	0	0
x86_64 / CentOS	Security	Redis	221	0	221	0
arm64 / Ubuntu	Non Security	Redis	221	0	0	0
arm64 / Ubuntu	Security	Redis	221	0	221	0

Jenkins Job: [functional-test](#)

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	0	0	0
x86_64 / CentOS	Security	Redis	6	0	6	0
arm64 / Ubuntu	Non Security	Redis	6	0	0	0
arm64 / Ubuntu	Security	Redis	6	0	6	0

Jenkins Job: [integration-test](#)

TAF Performance test

Performance test Number Count

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	10	0	1	0
arm64 / Ubuntu	Non Security	Redis	10	0	2	0

Jenkins Job: [performance-test](#)

DevOps WG Update (01-27-2021)

Pipeline Enhancements

- [#102](#) [Hold] Docker image renaming
- [#113](#) [Complete] DockerHub image overview code migration to cd-management
- [#103](#) [In Progress] Automate Update of DockerHub descriptions/overviews
- [#312](#) [In Progress] Add email notifications on build failures
- [#313](#) [In Progress] Weekly Snyk scans

Other

- [#104](#) [In Progress] Clean up EdgeX DevOps Wiki pages

Next DevOps WG Meeting **Jan 28th, 2021 @ 9:00 AM PST**

Security WG Update (Jan 27)

- Next Meeting: Cancelled last minute (sick) & Feb 3
- In Design
 - [Service Registry](#)
- Design Review
 - [Upload Threat Model](#)
- In Backlog: 18 (+1)
- In Development: 6 (0) In Progress / 3 (0) In Review
 - [Secret Provider](#)
 - [EdgeX OCI Bootstrapping](#)
 - [Docker Container Guidelines](#)
 - [Secret Creation & Distribution](#)
- Done 42 (+4)
 - [EdgeX TLS Usage](#)

Outreach WG Updates (1/27/21)

Certification Team

- EdgeX Ready User Program
 - Presented to LF Edge board
 - Working through process alternative requests from LF Edge

Vertical Solutions Team

- Open Retail Reference Architecture sub-project:
<https://wiki.edgexfoundry.org/display/FA/Open+Retail+Reference+Architecture>

Marketing Team

- Website in Chinese

Core Working Group (1-27-2020)

- V2 API work
 - 3 more APIs on core command to do
 - Support service work underway
 - TAF tests
 - CBOR work
- status
 - 21 in backlog (-8)
 - 18 in bug backlog (+2)
 - 1 in progress (+1)
 - 69 done (+16)
- Next call - 1/28/21 @ 10AM US/Central
 - Profile Get/Set command naming and coreCommand defaults
 - Array datatypes
 - Client keys in configuration

ADR review (in order of priority)

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Securing Consul / #318 (HOT)	review * (target this week)	Bryon Nevis	Secty
Service Registry / #283 (HOT)	review (target next week)	Tony Espy	Core
Upload threat model / #259 (quasi ADR)	review	Bryon Nevis	Secty
Metrics / #268	refactored/cover in Core WG re-review	Jim White	Core
DS Filters / #282	re-review/cover in DS WG	Jim White	DS

* - indicates some work this week

Miscellaneous Issues/Topics

- Monthly Architect's meeting recap
 - Decision to maintain CBOR for binary data in Ireland (but stretch goal to use CBOR for everything as option out of DS going forward - thanks to performance data captured by Iain)
 - Decision to use service keys in configuration.toml files and defined in contracts (clients/constants)
 - Decision to work on templates for DS and AS first before looking at tool to use those templates to create new services
- Docker hub image review - adding descriptions/overview/"archive" label
- 2021 Budget approved
 - \$10K discretionary for Web site, UX consulting, China project, etc.
 - Community members are asked to submit any needs (or ideas) to the Outreach WG (send them to Camilo Dennis) by Feb 1. Team to review and plan expenditures at that meeting
- Docker hub limits and open source "licensing" to escape some limit issues
 - LF working
- Mattermost is no longer an option. Contract negotiations fell through.
 - We'll look at Github discussions and other issues through the spring
 - Looking for tool that allows unlimited Slack style discussions and can be harvested for FAQs



Upcoming Events & Dev Advocate Update

Aaron's updates

Upcoming External Events

- › [IOT Hub meetup](#)
 - › Jim to present Thur (28th) @4:45 MST
 - › Looking for other presenters
- › [The Linux Foundation Spring Member Meeting](#): 9 March, 2021 - Virtual
- › [Open Networking & Edge Executive Forum](#): 10-12 March, 2021 - Virtual
- › [Open Source Summit North America](#): 3-6 August, 2021 - Vancouver, Canada
- › [Open Source Summit Europe](#): 28 Sept - 1 Oct, 2021 - Dublin, Ireland
- › [IoT Solutions World Congress](#): 5-7 October, 2021 - Barcelona, Spain
- › [Open Networking & Edge Summit North America](#): 11-12 October, 2021 - Los Angeles, CA

- › Discussions around upcoming events occur in the LF Edge Outreach Committee
- › Members may subscribe at: <https://lists.lfedge.org/g/outreach-committee>
- › [IoT Hub](#)- Meetup group



LF Edge Webinar Series

Akraino Edge Stack

Held Thursday, April 2 - [Your Path to Edge Computing with Akraino Edge Stack](#)

› On-demand recording available at: https://zoom.us/webinar/register/WN_Zjdo4-5fTQSIqH7pL8iHrQ

EdgeX Foundry

› Held Thursday, April 23 - [EdgeX Foundry 101: Intro, Roadmap and Use Cases](#)

› On-demand recording available at: https://zoom.us/webinar/register/4515850788014/WN_xCd6YPjEQrCwLiFhBWPkug

Project EVE

› Held Friday, May 29 - [Building the “Android of the IoT Edge”](#)

› On-demand recording available at: https://zoom.us/webinar/register/6415888722675/WN_35oZJ3hrQE69snMaiJUTPg

White Paper

› Held Thursday, July 9 - [Demystifying the Edge with the new LF Edge Taxonomy and Framework](#)

› On-demand recording available at: https://zoom.us/webinar/register/WN_icv5h6wFTcuw9O0xvMpgLw

Fledge

› Held Thursday, August 13 - [How Google, OSIssoft, FLIR and Dianomic use Fledge to implement Industrial 4.0](#)

› Recording available at: <https://www.youtube.com/watch?v=6JXNv3AJWog>

State of the Edge

› Held Thursday, September 17 - [State of the Edge: Exploring the Intersection of IoT, AI, 5G and Edge Computing](#)

› On-demand recording available at: https://zoom.us/webinar/register/8115959695936/WN_4rt-MmP1RI6Vkzn3ULpiAA

Home Edge

› Held Thursday, October 15 - [Home Edge: How Your Home Devices Get Deployed in An Edge Computing Services Ecosystem](#)

› On-demand recording available at: https://zoom.us/webinar/register/WN_uSlgb-R5Q4etkDhxoSXISQ

› More to follow...





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Thank You