

EDGE X FOUNDRY™

TSC Meeting

Feb 3, 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#

Or Telephone:

Dial: +1 408 638 0968 (US Toll) or +1 646 558 8656 (US Toll)

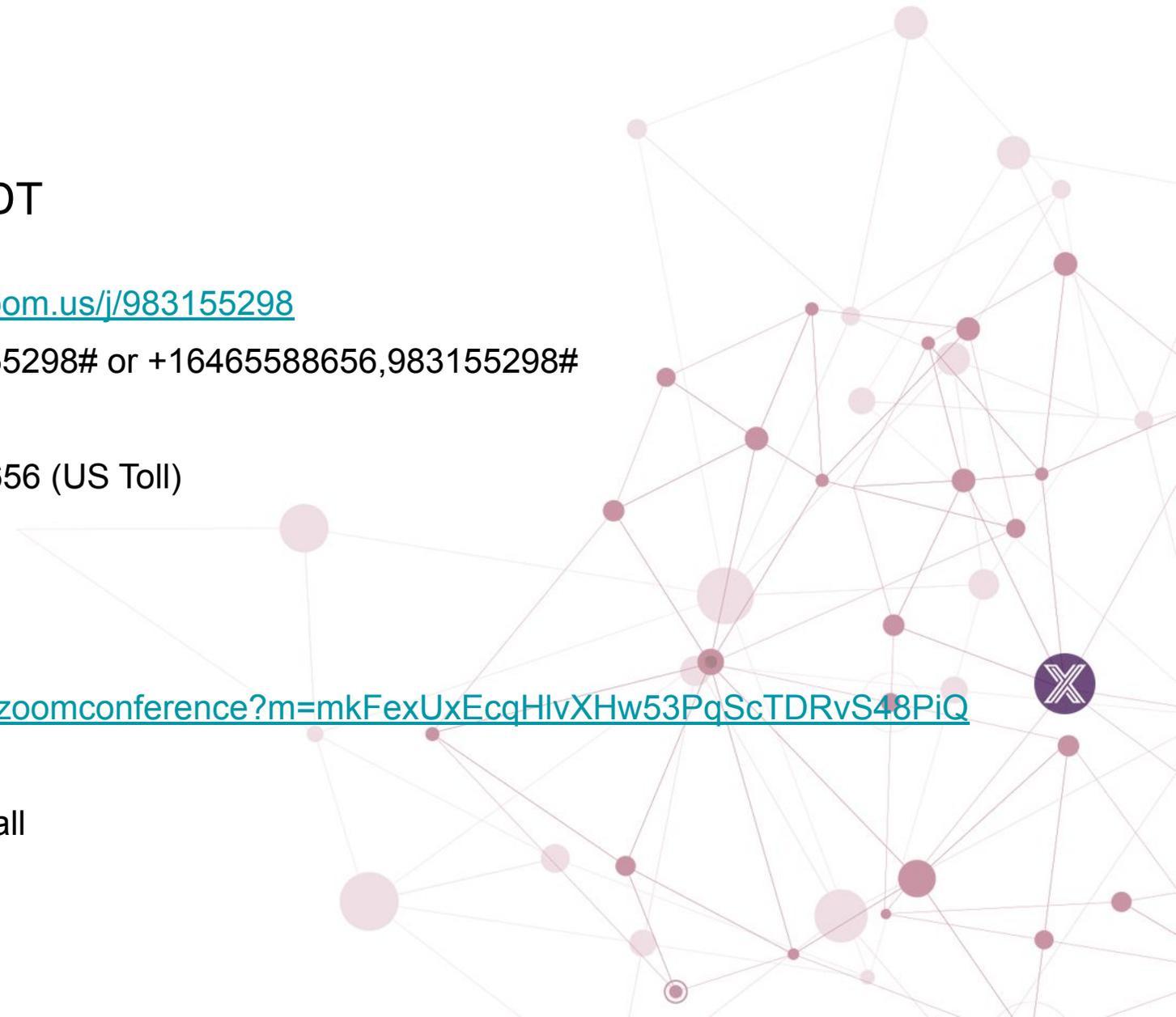
+1 855 880 1246 (US Toll Free)

+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
- 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 (2/3)

Cross Cutting Issues

In Progress (7, -1)

- V2 Implementations
 - Core Data APIs - (Just CBOR)
 - Core MetaData APIs - WIP (Done?)
 - Core Command APIs - WIP
 - Support Notifications Services - WIP
 - Support Scheduler Services - WIP
 - TAF testing V2 APIs - WIP
 - C Device SDK/Services - TBD
- 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
 - C Device SDK/Services - TBD
- Drop Logging Service completely
 - Device SDK C - DONE?
 - Individual DS - TBD after release
- Registry Usage ADR (In review)
- Metrics ADR (In review)

- 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 Subscribe - TBD
 - Core Data Publish topic - DONE
 - App SDK multi-subscriptions - DONE
 - ASC multi-subscriptions - DONE
- Secret Provider for All
 - Secret Store Setup - WIP
 - MQTT Device Service - Pending PR
 - Camera Device Service - TBD
 - DS SDK C - TBD (stretch)
 - C Device Services - TBD (stretch)
 - DS SDK Go - DONE
 - go-mod-bootstrap - DONE
 - edgex-go - DONE
 - App Srvs - DONE
 - go-mod-secrets - DONE

Backlog (2, +/-0)

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

Done (8, +1)

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

Icebox (2, +/-0)

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

Release Czar (Feb 3rd, 2021)

Release Activity

- Feb 2 - Device Services Released (except device-grove-c)
 - device-modbus-go v1.3.1
 - device-mqtt-go v1.3.1
 - device-random v1.3.1
 - device-virtual-go v1.3.1
 - device-snmp-go v1.3.1
 - device-bacnet-c v1.3.1
 - device-rest-go v1.2.1
 - device-camera-go v1.2.1

- [Hanoi Release Manifest PR](#) is in draft and pending TSC release vote.

Dot Release Schedule

- Code Freeze -- Feb - 5 to Feb - 17
- EdgeX Dot Release -- Feb - 17

Applications WG Update (3-Feb-2021)

From last week:

OpenVino Model Serving demo w/ EdgeX -- Thanks Brad Corrion (Intel)!

Completed:

- Added debug logging of Event details
- Renamed TAF App Service blockbox-tests to functional-tests
- Disabling of secret-store via config hook for Snaps

WIP

- Documentation updates for MakeItStop, ResponseType support (PRs OPen)

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 (3-Feb-21)

Most services re-released yesterday

WIP:

- SecretProvider use (MQTT DS) - ready
- CoAP, GPIO services - in review
- Grove DS
 - some late fixes
 - demo moves to examples repo
- support-logging removal
- Project status: 53 issues backlog + 4 new (net -8)

Next meeting: February 8th

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 (2nd February)

- TAF tests - Security tests on x86_64 failing (#292 below)
 - Fixed Issues
 - Security test fixes
 - Issue [#286](#), update the startup sequence for security-enable tests.
 - Issue [PR#372](#), bootstrapping test case fixes.
 - V2 API testing
 - Issue [#288](#), Base on v2 API event models changing to update test for event exported
 - Issue [#290](#), ApiVersion now required on all DTOs.
 - Inclusive Language:
 - Issue [#284](#), app-service-blackbox-tests service renamed to app-service-functional-tests.
 - Issue [taf-pipelines#51](#), renamed variable SLAVE to NODE.
 - New and Working Issues
 - Issue [#291](#), Implement core-metadata provision watcher API tests.
 - Issue [#292](#), remove token got out of memory error.
- Other Business
 - Completed the full tests for Hanoi dot release v1.3.1

Next Meeting Tuesday 9th 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	221	14	221
arm64 / Ubuntu	Non Security	Redis	221	0	0	0
arm64 / Ubuntu	Security	Redis	221	221	0	221

Jenkins Job: [functional-test](#)

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

Jenkins Job: [integration-test](#)

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

Jenkins Job: [performance-test](#)

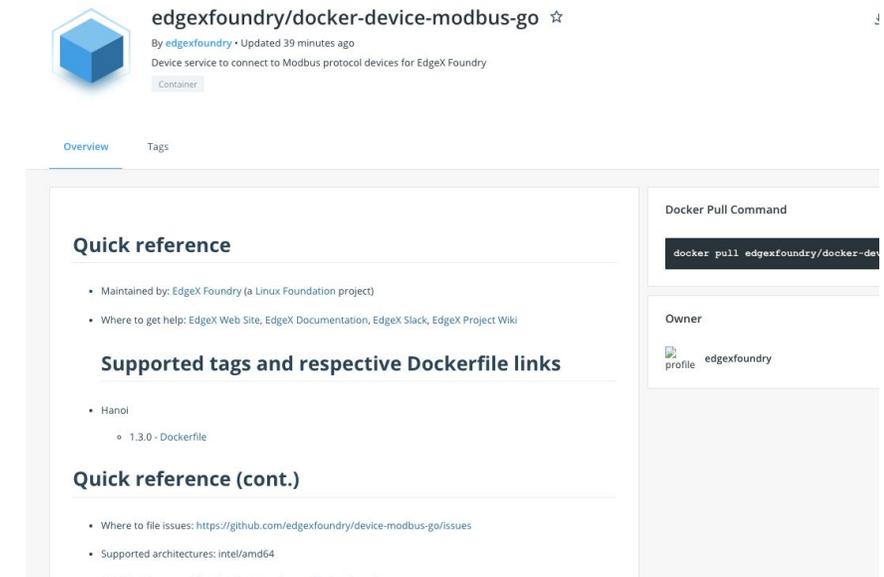
DevOps WG Update (02-03-2021)

Pipeline Enhancements

- [#102](#) [Hold] Docker image renaming. On hold until end of Ireland release
- [#103](#) [Completed] 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



The screenshot shows the Docker Hub page for the image `edgexfoundry/docker-device-modbus-go`. The page includes a blue cube icon, the repository name, and a star icon. Below the icon, it says "By edgexfoundry • Updated 39 minutes ago" and "Device service to connect to Modbus protocol devices for EdgeX Foundry". There are tabs for "Overview" and "Tags". The main content area has a "Quick reference" section with bullet points: "Maintained by: EdgeX Foundry (a Linux Foundation project)", "Where to get help: EdgeX Web Site, EdgeX Documentation, EdgeX Slack, EdgeX Project Wiki", and "Supported tags and respective Dockerfile links" with a sub-bullet "1.3.0 - Dockerfile". Below that is a "Quick reference (cont.)" section with "Where to file issues: https://github.com/edgexfoundry/device-modbus-go/issues" and "Supported architectures: intel/amd64". On the right side, there is a "Docker Pull Command" section with a code block containing `docker pull edgexfoundry/docker-de` and an "Owner" section with a profile icon and the name "edgexfoundry".

Next DevOps WG Meeting **Feb 4, 2021 @ 9:00 AM PST**

Security WG Update (Feb 3)

- Next Meeting: Today & Feb 10
- Design Review
 - [Service Registry](#)
 - [Upload Threat Model](#)
- In Backlog: 16 (-2)
- In Development: 4 (-2) In Progress / 3 (0) In Review
 - [Secret Provider](#)
 - [EdgeX OCI Bootstrapping](#)
 - [Docker Container Guidelines](#)
 - [Secret Creation & Distribution](#)
- Done 51 (+9)
 - [EdgeX TLS Usage](#)

Outreach WG Updates (2/3/21)

Certification Team

- EdgeX Ready User Program
 - 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 (2-2-2020)

- V2 API work
 - last bits of core (command, CBOR) wrapping up this week
 - Support notifications under way
 - Support scheduler under way later this week
- status
 - 25 in backlog (-4)
 - 17 in bug backlog (-1)
 - 0 in progress (-1)
 - 76 done (+7)
- Next call - 2/4/21 @ 10AM US/Central
 - V2 API update
 - Consul to 1.8.1

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

- Docker name changes - delayed
- Docker hub limits and open source “licensing” to escape some limit issues
 - LF working
- Docker descriptions and overviews now live!
 - ARCHIVED images are marked
 - Example: <https://hub.docker.com/r/edgexfoundry/docker-edgex-mongo>



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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