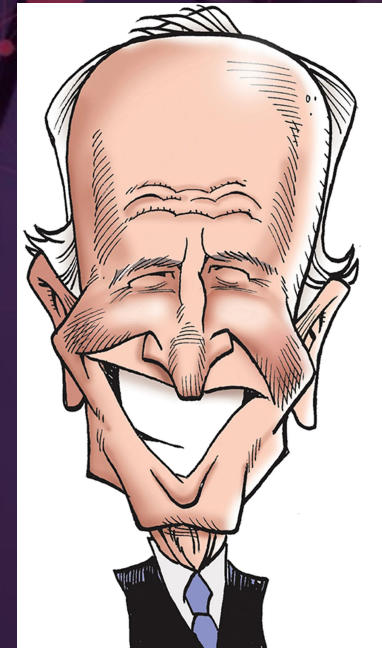
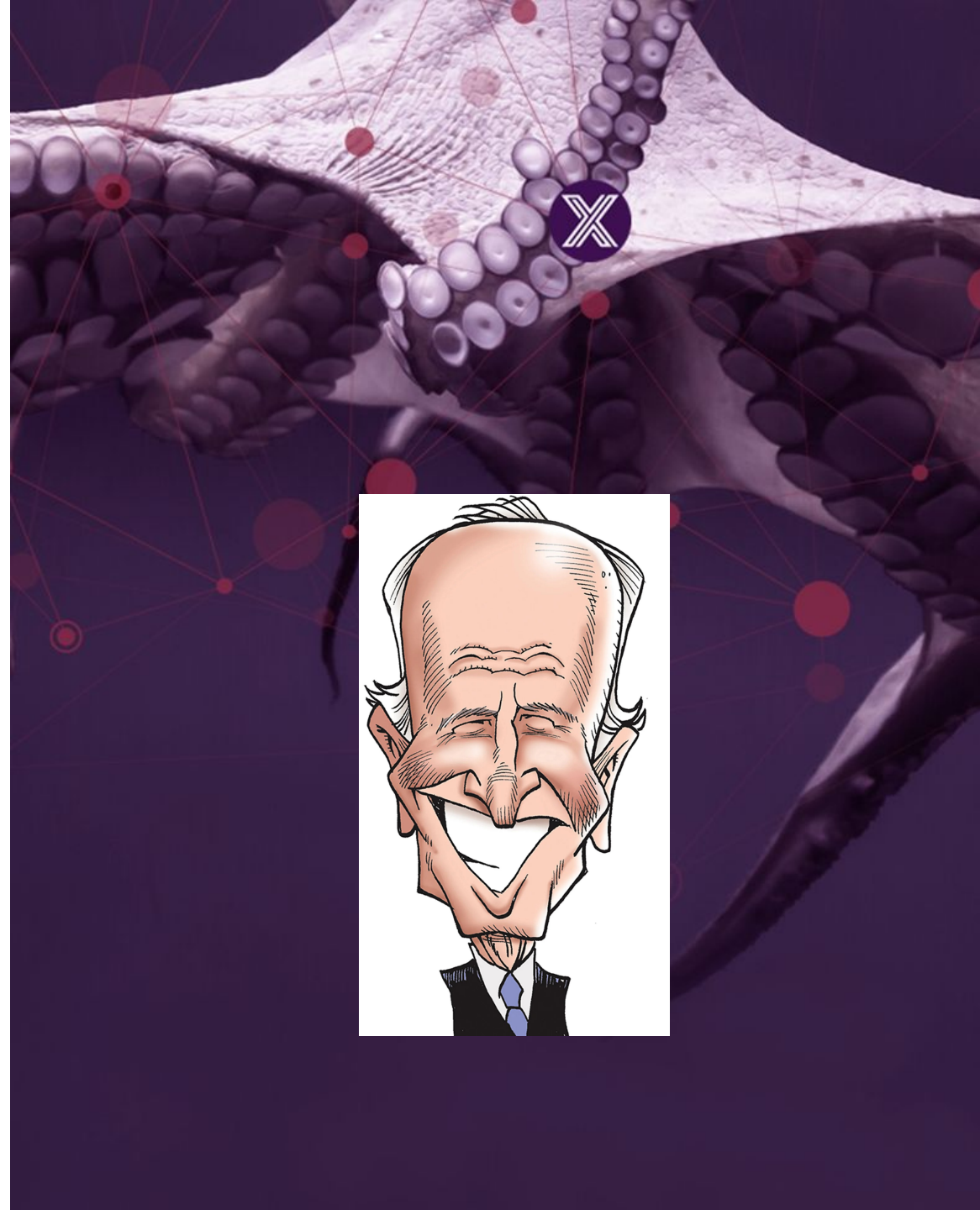


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# TSC Meeting

Jan 20, 2021



## Antitrust Policy Notice

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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	<a href="mailto:iain@iotechsys.com">iain@iotechsys.com</a>	Device Services WG Chair
Intel	Ernesto Ojeda	<a href="mailto:ernesto.ojeda@intel.com">ernesto.ojeda@intel.com</a>	Dev Ops WG Chair
IOTech	Keith Steele	<a href="mailto:keith@iotechsys.com">keith@iotechsys.com</a>	Outreach WG Chair
Kong	Colin Hutchinson	<a href="mailto:colin@konghq.com">colin@konghq.com</a>	Security WG Chair
Intel	Mike Johanson	<a href="mailto:michael.johanson@intel.com">michael.johanson@intel.com</a>	Applications & Analytics WG Chair
IOTech	James Butcher	<a href="mailto:james@iotechsys.com">james@iotechsys.com</a>	Test/QA WG Chair
IOTech	Jim White	<a href="mailto:jim@iotechsys.com">jim@iotechsys.com</a>	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
- Holding repository review
- Inclusive Language Survey
- 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 (1/20)

## Cross Cutting Issues

### In Progress (10, +2)

- V2 Implementations
  - Core Data APIs - WIP
  - Core MetaData APIs - WIP
  - TAF testing V2 APIs - WIP
  - Support Services - WIP
  - API Rework from MBUS ADR - DONE
- V2 Consumption
  - V2 Core Data Clients - WIP
  - V2 Core Metadata Clients - WIP
  - App SDK V2 Event DTO - WIP
- Secret Provider for All
  - DS SDK C - TBD
  - C Device Services - TBD
  - Vault Worker - TBD
  - MQTT Device Service - Pending PR
  - 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 - WIP
  - App SDK - WIP
  - ASC - WIP
- Metrics ADR ( In review)
- Registry Usage ADR ( In review)
- Drop Logging Service completely
  - Device SDK C - TBD
  - Individual DS - WIP
- Conventional Commits for all
  - Device Services - WIP
- Consume dependent V2 Go Modules
  - go-mod-bootstrap - DONE
  - go-mod-secrets - DONE
  - ASC - DONE
  - edgex-go - TBD
  - App SDK - TBD
  - Device SDK GO - TBD
  - Go Device Services - TBD

### Backlog (0, +/-0)

- 

### Done (5, +1)

- 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
  - go-mod-bootstrap - DONE
  - go-mod-configuration - DONE
  - go-mod-core-contracts - DONE
  - go-mod-messaging - DONE
  - go-mod-registry -DONE
  - go-mode-secrets - DONE
  - App SDK - DONE
  - Device SDK Go - DONE

- 

### Icebox (4, +/-0)

- EdgeX Metrics Collection & Control Plane Event Handling
- Update config.Clients usage for new naming scheme
- Secure Message Bus connection
- Implement Generate/Inject random passwords into Vault

# Release Czar (Jan 20th, 2020)

## Release Activity

- 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 2/10-2/17
- EdgeX Dot release on 2/17
- Device Services and Device SDK - Decoupled but similar release time.

## Misc

- ADR0700 updated for go-mod versioning and CLI release

# Applications WG Update (20-Jan-2021)

## Completed:

- App Functions SDK is now a V2 Go module

## WIP

- Set Response Type for Message Bus
- Accept V2 Event DTO from triggers - PR submitted
- 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 (13-Jan-20)

## Done:

- Defined process for new device services
- Conventional commits enforced

## WIP:

- SecretProvider use (MQTT DS) - in review
- Device Service AdminState implementation (C)
- Event Filtering ADR - in review
- Project Board: 54 issues backlog + 13 new (net +8)

Next meeting: January 25th - start review of GPIO, CoAP services

# 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 (19th January)

- Meeting was cancelled this week due to EdgeX Adopter Series
- TAF tests
  - Current Status - All tests passing
  - Fixed issues
    - Security tests: [edgex-go#3006](#), [#247](#), [taf-common#26](#)
    - V2 API test updates: [#261](#), [#258](#), [#266](#), [#269](#)
  - Working issues
    - Continuing with V2 API tests
- Next Meeting Tuesday 26th January, 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	192	0	0	0
x86_64 / CentOS	Security	Redis	192	186	0	186
arm64 / Ubuntu	Non Security	Redis	192	0	0	0
arm64 / Ubuntu	Security	Redis	192	186	0	186

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

Jenkins Job: [performance-test](#)

# DevOps WG Update (01-20-2021)

## Pipeline Enhancements

- [#102](#) [Ready for Merge] Docker image naming
- [#308](#) [Complete] Release an EdgeX code repo from a specific commit
- [#314](#) [Complete] Research and implement 2.0.0-dev.x pre-release tags for Go modules
- [Backlog] Clean up DevOps wiki pages

## Other

- Tag/Update description of Docker Hub images to indicate which are out of support
  - Working with Jim to get descriptions/overviews
  - Researching potential programmatic options to automate update
- Small outage yesterday caused jobs to get stuck. Worked with LF to resolve.

Next DevOps WG Meeting **Jan 21th, 2021 @ 9:00 AM PST**

# Security WG Update (Jan 20)

- Next Meeting: Today & Jan 27
- In Design
  - [Service Registry](#)
- Design Review
  - [Upload Threat Model](#)
- In Backlog: 17 (0)
- In Development: 6 (-1) 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 (1/20/21)

## Certification Team

- EdgeX Ready User Program
  - In progress: Documentation, i's and t's

## Vertical Solutions Team

- Next presentation: IOTech Tuesday Jan 19th'21 8AM US Pacific
- Go to EdgeX website Adopter Series section to register: <https://www.edgexfoundry.org/ecosystem/adopter-series/>
- Open Retail Reference Architecture sub-project: <https://wiki.edgexfoundry.org/display/FA/Open+Retail+Reference+Architecture>

## Marketing Team

- Hanoi press release <https://bit.ly/2JQDDxZ>
- New Hanoi Release section in website <https://www.edgexfoundry.org/software/releases/>
- Hanoi blog <https://bit.ly/3m3fSzQ>
- Ongoing Social Media campaign: Please promote by retweeting, sharing, like....
  - RT [https://twitter.com/LF\\_Edge/status/1337074612908273664](https://twitter.com/LF_Edge/status/1337074612908273664)
  - LinkedIn <https://www.linkedin.com/feed/update/urn:li:activity:6742845656555225088>

# Core Working Group (1-20-2020)

- V2 API work
  - Core data/metadata complete with clients
  - Underway command service and also scheduler
- Heads up - “ID” methods being removed in favor of “name” methods
- status
  - 28 in backlog (+4)
  - 16 in bug backlog (-1)
  - 0 in progress (-2)
  - 53 done (-9)
- Next call - 1/21/21 @ 10AM US/Central
  - Big part of the meeting will be to review support APIs



# ADR review (in order of priority)

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Update ADR 11 (Device Service REST API) / # 247	<b>MERGED</b>	Iain Anderson	DS
<b>Securing Consul / #318 (HOT)</b>	review *	Bryon Nevis	Secty
<b>Service Registry / #283 (HOT)</b>	review *	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: Now Tuesday 26th, noon EST, 9am PST**
  - CBOR for V2 important part of the discussion
  - See link below for topic list details:
  - <https://wiki.edgexfoundry.org/display/FA/Monthly+Architects%27+Meeting#MonthlyArchitects'Meeting-OpenTopics>
- New edgex-compose repository created
  - Eventually moving compose files and compose builder tool there
- 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 Jan 18th. 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

# Holding Repository Cleanup

## Archiving later today unless objection

- core-data-refactor
- device-mindsphere-python
- device-mqtt-go
- device-opcua-java
- edgex-api-docs
- edgex-mongo-init
- edgex-ui
- edgex-ui-go
- performance-summary-collection
- plugin-exploration-go
- protocol-opcua-c
- protocol-opcua-java
- support-notifications-go
- support-scheduler-go

## Removing later today unless objection

- edgex-rasp-pi
- external-device-security-examples
- regression-test

# Inclusive Language Summary (so far)

Thanks to James, Tony, Lenny for the responses

Current collection of potential issues

- Github: renaming master branch (to main)
- Testing: blackbox tests (repo name, code, documentation, etc.) - IETF says "blackbox" is ok term; is the term even relevant with TAF testing?
- blacklist/whitelist: in device auto provisioning (code and documentation) - it is already removed in Kong newer versions
- blackbox-tests: profile name in app service configurable (and TAF compose file)
- whitelist: in configuration of Gateway ACL, proxy-setup service (and associated docs)

Proposed action item owners and schedule

- Rename master branches - post Ireland - Ernesto
- Remove blackbox test names - James (via Ireland release if possible) and Mike for app srv config
- Blacklist/whitelist name changes in DS and DS SDKs - Iain (via Ireland release if possible)
- Whitelist naming in gateway ACL; proxy setup - Colin (via Ireland release if possible)



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# Upcoming Events & Dev Advocate Update

Aaron's updates

## Upcoming External Events

- › [LF Edge: Building an Open Source Framework for the Edge](#) Jason Shepherd-  
20 Jan- Virtual
- › [Open Source Edge Development, Orchestration & Security with LF Edge Project Eve](#)- Roman Shaposhnik- 21 Jan - virtual
- › [IoT Solutions World Congress](#): 11-13 May, 2021 - Barcelona, Spain
- › Embedded World Conference: March 1-7, 2021 Nuremberg but now virtual
  - › Using Visual Inference in Edge Computing, Jim White
- › FOSDEM 2021- CFP for the [Developer Rooms](#)
  
- › Discussions around upcoming events occur in the LF Edge Outreach Committee
- › Members may subscribe at: <https://lists.lfedge.org/g/outreach-committee>
- › [IoTHub](#)- 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](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](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](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](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](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](https://zoom.us/webinar/register/WN_uSlgb-R5Q4etkDhxoSXISQ)

› More to follow...







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Thank You