

EDGE X FOUNDRY™

TSC Meeting

May 15, 2019



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Meeting Logistics

Time: May 15, 2019 7am PDT – 8am 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)

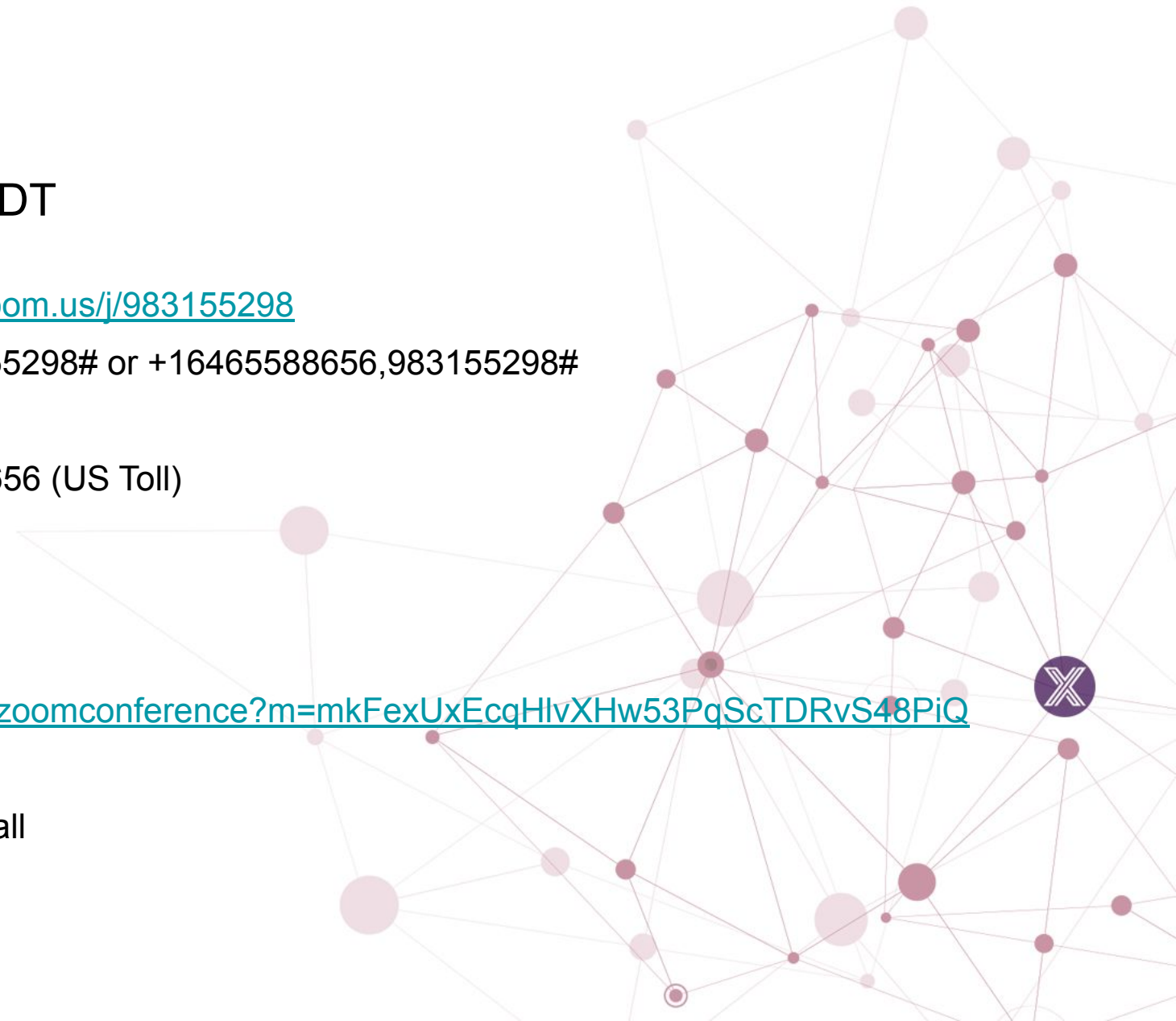
+1 855 880 1246 (US Toll Free)

+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>
IOTech	Andy Foster	andy@iotechsys.com
Mainflux	Drasko Draskovic	drasko@mainflux.com
Intel	James Gregg	james.r.gregg@intel.com
Mainflux	Janko Isidorovic	janko@mainflux.com
Dell	Jim White (TSC Vice Chair)	james.white2@dell.com
IOTech	Keith Steele (TSC Chair)	keith@iotechsys.com
Samsung	Moonki Hong	moonki1.hong@samsung.com
Dell	Randy Thompson	Randy.T@dell.com
IOTech	Steve Osselton	steve@iotechsys.com
Canonical	Tony Espy	espy@canonical.com
Dell	Trevor Conn	Trevor.Conn@dell.com

Current quorum = 6 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

- Strike Team updates
- WG Updates
- Fuji F2F Wrap up
 - Roadmaps updated
 - Backlog updated
- Edgex Process for Handling Security Issues (“CVE” process)
 - Review and vote of approval needed
- TSC Elections
 - Process
 - WG lead voter registry needed
- Upcoming Events
- AOB



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Strike Team Updates

Strike Team leads

- Freeze: May 28 (Tue after Memorial Day)
- Release date: June 20

Strike team Updates

- CBOR/binary support - **Toby** on point with Trevor and Janko to assist with core, supporting and export services changes
- **Redis implementations of DB services - Andre & Trevor**
- Initial performance (and load) testing infrastructure and results - **Andy**
 - LF support for TIG stack
- **Certification Program - Randy and Jim**
- SDK Unit testing (to the point short of any major refactoring) - **Steve**
- **LFTOOLS / SIGL enhancements - James**
- **Kong Upgrade - Tingyu**
- Device services (Edinburgh public availability of Modbus, MQTT, BACNet, BLE, Virtual Device, SNMP) - **Steve**
 - Dell to provide SNMP DS
- Security storing service secrets in Vault and protecting the master token - **Jim** and **Tingyu** with Intel resource assistance
- Documentation clean up - **Michael** with WG leads to nominate areas of need first and complete doc updates by deadline
- UI updates
 - IoTech UI - **Keith**
 - VMWare UI - **Jim** to check with Huaqiao
 - UIs not able to be updated will be archived to the Delhi release

Items in Green are believed to have been finished



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Work Group Updates

Chairs

Working Group Chair Updates

- Around the horn
 - Core/Supporting - Trevor
 - Applications - Janko
 - Device Services - Steve
 - Test/QA - Andy
 - DevOps - James
 - Security - Jim
 - System Management - Jim
 - Certification - Randy
 - Vertical Solutions - Moonki
 - Developer Outreach - Michael

Core Working Group (15-May-19)

- CBOR
 - core-data ingestion is complete
 - export-distro (issue #1217) -- currently being worked, expect PR shortly
- Bug fixes
 - Focus on this for Edinburgh code freeze
 - QA/Test team has been supplying us with issues
 - Particularly w/r/t support-notifications
 - Expected triage of issues from Allure report to start today
- Redis
 - Open item with Andre (edgex-go #1299) w/r/t enabling Redis in Edinburgh
 - Expectation for “out of the box” capability with Edinburgh release?
- Vault Integration for Credentials (edgex-go #1341)
 - Kind of late to be starting on this. I see this as a **RISK**.
- Core WG Call tomorrow (10AM CST)

Applications WG Update (15-May-19)

Edinburgh Release

Work in progress

- Documentation and tutorials for V1.0
- CBOR for existing Export Services

Fuji release Plan - Application services and export services

- With the Fuji release, the application services should be 100% functional replacements for export services (client and distro)
- An earlier decision not to support cloud IoT platforms directly was revisited. The feeling was that some examples at least needed to be provided to make connecting to cloud providers easier.
- Application services will now provide example services that get data to “the big 3” of :
 - Amazon IoT,
 - Azure IoT and
 - Google IoT Core
 - starting with Amazon and Azure for the Fuji release
- Adding support for Google or Chinese cloud providers (Tencent, Alibaba, etc.) is a stretch goal
- On the next App WG meeting IBM will present open horizon. <https://github.com/open-horizon/>

Device Services WG Update (15-5-19)

- Go SDK
 - CBOR support progressing
 - Callbacks for device addition / removal would help MQTT device service
 - Discussion on issue #276
- C SDK
 - Correlation IDs added for logging
 - Dynamic configuration updates from Registry
 - Remaining work for Edinburgh: CBOR, alignment checks vs Go SDK
- General
 - Trevor C to raise issues relating to Commands (CoreCommands in device profile) at the Core WG

Test/QA WG Update (05-15-19)

- Blackbox tests - focus on c
 - Merged PR #221
 - Reviewing PR #216
 - The following outstanding issues are causing blackbox testing failures
 - Transmission issue #1338
 - Scheduler issue #1308
 - Failed device-virtual testcases are just fixed today by PR #223
- Edinburgh objectives
 - Better visualization/dashboarding (Allure) of test results (complete)
 - Automated capture of resource metrics to monitor performance (test running successfully on Sandbox - waiting for PR #338 to be approved so that tests can be moved to main LF jenkins)
 - Security test automation - tests running on x86, requires Kong docker image for ARM (work by Security team in progress)
 - Code contributors will now be required to supply additional or updated blackbox tests (complete)
- Next QA/Test meeting Thursday 23rd April, 4pm PDT

DevOps WG Update (05-15-19)

Several User Stories currently being worked in current sprint.

- Jenkins Pipelines built for go-mod-core and go-registry-core - [PR#95](#) and [PR#10](#)
 - Note: both Pipelines were created without LFTOOLS / Sigul
- Catalog of Basebuild Docker images now being built using Jenkins Pipelines with images successfully pushed to Nexus
 - Includes Kong-ARM64 basebuild image for blackbox security testing
- New automation built to take the human factor out of needing LF infrastructure team's help for manually creating Jenkins Pipelines webhooks

Issues:

- LFTOOLS / Sigul defects not addressed by Linux Foundation
- Roadmap for addressing technical debt not understood by Linux Foundation for build dependencies (python version)

Next DevOps WG meeting - Thursday 7AM PDT

System Management WG Update (5-15-19)

- Working additional tests but all Edinburgh items complete
- Starting next meeting - begin work on Fuji items (Scope per F2F below)
 - Start/stop/restart all done by the executor to include stop/restart of SMA
 - Executor tracks completion and returns results
 - Executor for metrics collection
 - Setting configuration
 - SMA Translation layer (stretch)
 - Pick one protocol to start (SNMP, LWM2M, ...)

Security WG Update (5-15-19)

- Edinburgh work...
 - Vault initialization program (to store db secrets) - done and testing
 - Mongo init script (to use db secrets) - done and testing
 - Go Vault Client Module - done and testing
- Fuji work starting soon (scope per F2F below)
 - Generation of PKI
 - Distribution of per service Vault secrets
 - HW secure storage abstraction layer (design only)
 - How to protect the Vault Master Key
 - Ensuring the services running are those expected (and authorized)
 - Renew/refresh threat assessment
 - Need document defining what security is/does and can/will do

Certification WG Update (5-13-19)

- TSC consensus
 - Device services first
 - Self-assessment package by end of year
 - Plan of Record available on Wiki
 - Will need to find new WG chair - my role changing within Dell
-
- Meetings are on Mon at 7am PDT
 - Link to plan doc, minutes, and recording available on wiki

Vertical Solutions WG Update (4-9-19)

- Reviewed potential connection with OMG Retail Standards
- Upcoming Commerce Project call : Apr. 24th 4pm in PST
 - Zoom Meeting : <https://zoom.us/j/975881686>
 - Mobile
 - +1 669 900 6833 (San Jose)
 - +1 646 558 8656 (New York)
 - +1 855 880 1246 (US Toll-free)
 - +1 877 369 0926 (US Toll-free)
 - Meeting ID : 975 881 686
 - Find your local number : <https://zoom.us/u/aA4GBJBi8>

Developer Outreach (05-15-19)

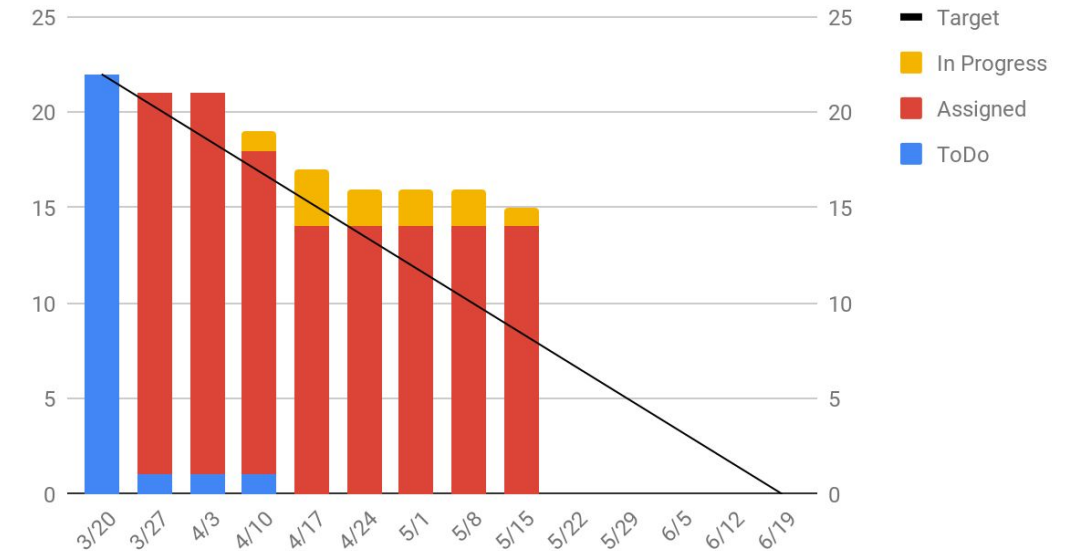
- 2019 EdgeX Foundry Award Winners
 - Innovation
 - Trevor Conn
 - Cloud Tsai
 - Contribution
 - Lenny Goodell
 - Mike Johanson
- New Marketing Committee kick-off
- Michael on-boarding with Akraino and EVE



Developer Outreach (05-15-19)

- [Edinburgh Documentation Striketeam](#)
 - Core Services
 - [#1069](#), [#1168](#), [#1158](#)
 - Support Services
 - [#803](#), [#804](#), [#1000](#)
 - Application Services
 - [#1164](#), [#1163](#), [#1092](#), [#1162](#)
 - Device Services & SDKs
 - [#1193](#), [#1180](#), [#1179](#), [#1182](#), [#93](#)

Edinburgh Documentation Progress





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Fuji F2F Wrap up

Fuji F2F Wrap

- Thanks to all attendees and participants!
- Summary of the discussions and action items are on the Wiki (under TSC, F2F Meetings) here: [Seoul Deck](#)
- Fuji and Geneva Release Roadmap pages have been updated
 - [Fuji Release](#)
 - [Geneva Release](#)
- Backlog has been updated and cleaned up
 - [Long Term Backlog](#)
- **Opinions - should these pages be moved to Docs??**

Fuji Scope - High Level Summary

- Based on Seoul meeting – **subject to change**
- Improved performance testing and measuring.
- Improved security to include better PKI management, storing service secrets in separate secret stores, and ensuring services running are those expected/trusted.
- In the first step toward offering 3rd party service certification, we will offer a self-assessment program (delivered by EOY 2019)
- Complete the EdgeX store and forward capability.
- Finish implementation of application services and archive the existing export services (they did not scale)
- Provide connectivity to the top cloud providers (Azure and Amazon IoT).
- Improve unit testing and overall harden the services and SDKs (many of them just created for Edinburgh)
- Restart the EdgeX marketing work group – which we lost when LF Edge was formed

Congrats to Trevor, Cloud, Lenny & Mike as our 2019 EdgeX award winners!

Thanks to James, Lenny and Mike for naming April 2021 release “Ireland”



Security Issue Process

“CVE” process

Addressing Security Issues for Edinburgh and beyond

- How EdgeX will address security issue (CVE style processes and planning) document ready for TSC review and approval.
 - Document is here (on the Secty WG wiki page): [Process doc](#)
- This document has been reviewed and approved by the Security WG.
- Seeking approval of the TSC



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TSC Annual Elections

Proposed Election Schedule

Now - Monday, June 3: Establish list of Contributors, WG Chair Nominations

Week of June 3 – June 7: WG Chairs elected by their perspective WGs

Now – Friday, June 7: TSC At-large nominations

Week of June 10 – June 14: TSC At-large Elections

Week of June 17 – June 21: TSC Chair & Vice Chairman Nominations (by newly elected WG Chairs and TSC At Large members)

Monday, June 24: End of current TSC term

Tuesday, June 25: 1st day of new TSC

Week of June 24 – June 28: TSC Chair Voting

Roster of work group contributors coming soon

Send nominations to Brett Preston : bpreston@linuxfoundation.org



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Upcoming Events

Full list of LF events available at
<https://events.linuxfoundation.org/>

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

Upcoming Events

- [Internet of Things World, May 13-16, 2019](#) | Santa Clara, CA
 - LF Edge will have a 20x20 booth
 - 4 booth demos confirmed:
 - Akraino Blueprints
 - EdgeX Building Automation (Community Demo)
 - Beechwoods EdgeX Demo
 - Project EVE

Discussions around upcoming events occur in the LF Edge Outreach Committee.
Members may subscribe at: <https://lists.lfedge.org/g/outreach-committee>

Additional Events & Speaking Opps

Full list of LF events available at <https://events.linuxfoundation.org/>

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

- [IoT Tech Expo Europe](#), June 19-20, 2019 | RAI, Amsterdam
 - Janko Isidorovic from Mainflux will give a presentation on EdgeX Foundry & participate in an IoT panel.
 - EdgeX is the media sponsor for the event and is providing a 20% off discount code “EDGEX20”
- [Open Source Summit China](#), June 24-26, 2019 | Shanghai
 - Arpit giving a keynote on LF Edge
- [Embedded Linux Conference \(ELC\)](#), August 21-23, 2019 | San Diego
 - Tingyu and Trevor (Dell) have applied for talks (Notifications May 13)
- [Open Source Summit](#) / [Embedded Linux Conference Europe](#), October 28-30, 2019 | Lyon
 - CFP due July 1
- [IoT Solutions World Congress](#), October 29-31, 2019 | Barcelona
 - [Call for Testbeds](#) is Open
 - January 7 - April 30: Submission
 - May 1 - June 20: Review
 - June 20 - June 30: Notification
 - July 5: Publication



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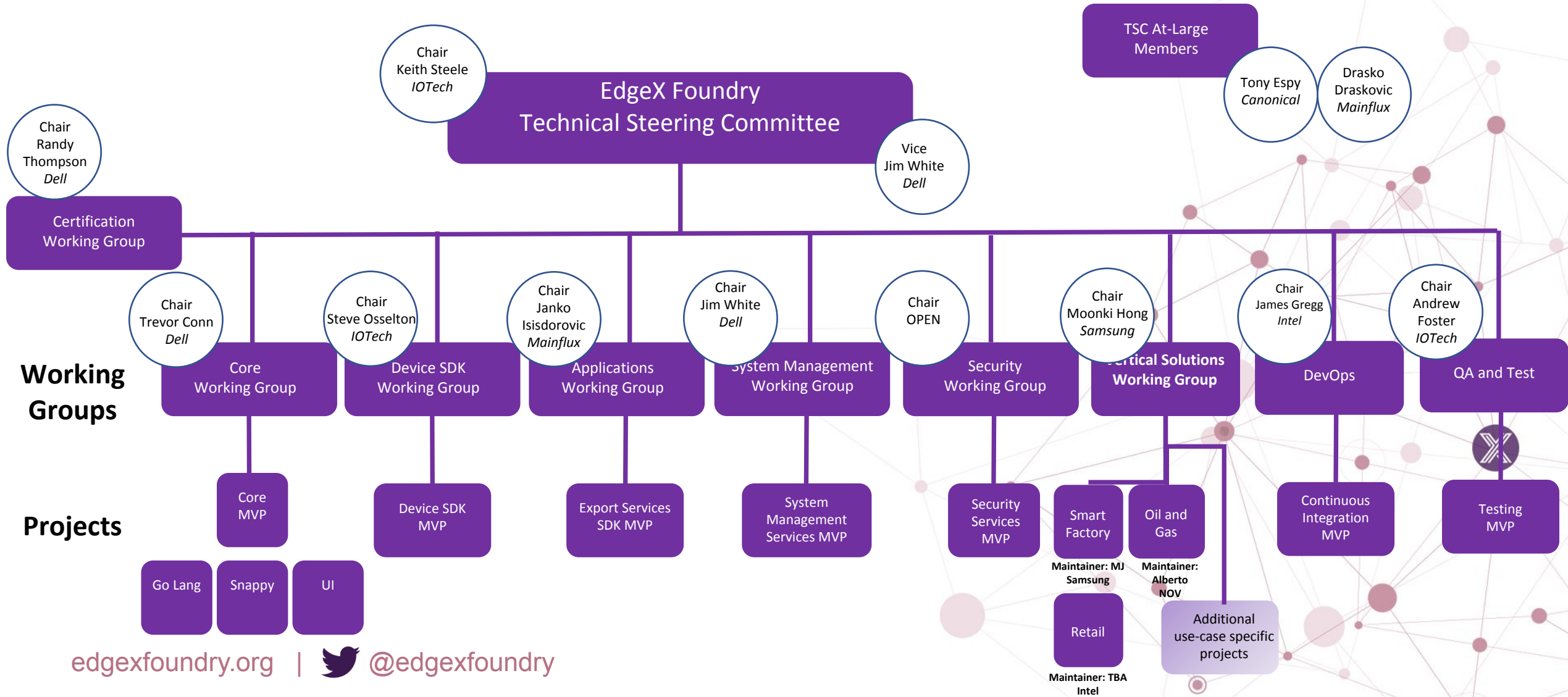
AOB / Reminders

AOB/Cadence

- Meeting Cadence Reminder
 - Currently held weekly at 7am PDT on Wednesday's
 - Calls without TSC quorum will still be used to review issues

- **Next Meeting: TSC F2F Meetings - Week of April 29**

EdgeX Project Organization



Marketing

- **CTA:** If your company will be presenting EdgeX at an upcoming event/webinar/other, please email pr@lfedge.org so that we can help promote

EdgeX in Market

- Page showcases momentum in the project, including solutions already available
- <https://www.edgexfoundry.org/edgex-in-market/>
- Email info@edgexfoundry.org if you have any additions

Project Contributions Welcome!

- Our objective is to make EdgeX use & deployment pervasive!
- EdgeX success is 100% dependent on the vibrancy of a proactive community
- Getting Involved
 - Project membership growing - want to join contact Mike Woster at LF (mwoster@linuxfoundation.org)
 - First Priority is the MVP - potential contributors please contact keith@iotechsys.com (people, equipment, technology)
 - If interested in adding new projects please contact the relevant working group chair

Project Resources

Quick links to most commonly used Community Resources

- Code: <https://github.com/edgexfoundry>
- Documentation: <https://wiki.edgexfoundry.org/>
- Discussion: <https://slack.edgexfoundry.org/>
- Mail Lists: <https://lists.edgexfoundry.org/mailman/listinfo>
- Twitter: <https://twitter.com/EdgeXFoundry>
- LinkedIn: <https://www.linkedin.com/company/22298339/>
- YouTube: <https://www.youtube.com/c/EdgeXFoundry>

EdgeX - Where to learn more

- EdgeX Foundry Wiki

<https://wiki.edgexfoundry.org/display/FA/EdgeX+Foundry+Project+Wiki>

- EdgeX Foundry Slack

<https://slack.edgexfoundry.org/>

- [Weekly EXF Technical Spin up calls](#)

30 minute deep-dive topics followed by 30 minute open Q&A

Call recordings are available on the [Wiki](#)

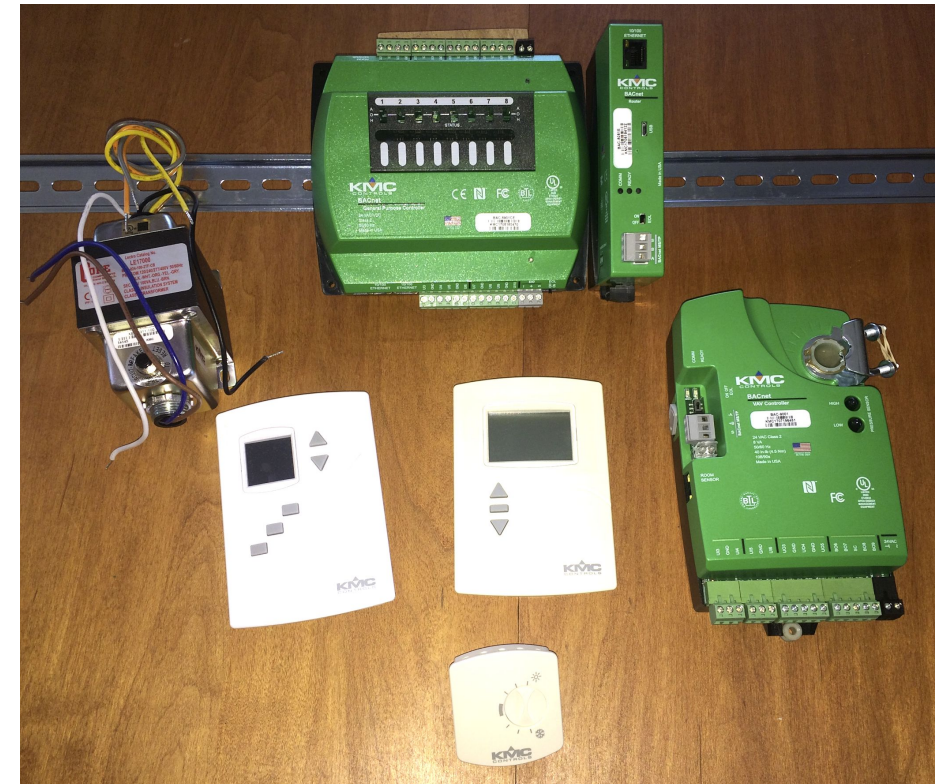
What is the Device Exchange?

- A great way to put your products in the hands of other members so they can help build a better EdgeX!

- <https://wiki.edgexfoundry.org/display/FA/Device+Exchange>



Special thanks to [Dave Bohlman](#) and [KMC Controls](#) for making this awesome kit and how-to guide available to members!!



Meetups

- Help us grow awareness!
- Present, and Tag, EdgeX in your local IoT Meetups
- <https://www.meetup.com/topics/edgex/>
- Email info@edgexfoundry.org for assistance

Related topics

New Technology Open Source Interoperability Smart Home Internet of Things

Open Standards Mobile Development Internet of Everything EdgeX

EdgeX ▾

Find out what's happening in EdgeX Meetup groups around the world and start meeting up with the ones near you.

Related topics:



Meetups: Reimbursement Program

- <https://wiki.edgexfoundry.org/pages/viewpage.action?pageId=7602724>
- Wiki page built for the community to leverage
- Encourage community to begin introducing EdgeX in your local Meetup groups
- EdgeX Foundry will fund/sponsor the talk in which EdgeX is scheduled to be presented
 - Up to \$250 for F&B, once per Meetup group, per quarter
- Let us help drive traffic to your event! Email pr@lfedge.org once Meetup has been scheduled
- Post-event, please consider doing a blog about the event

Hackathons: How can you help?

- <https://wiki.edgexfoundry.org/display/FA/Hackathons>
- Provide any local volunteers onsite to help with technical work, potentially help judge, etc. (see list below of known hackathons coming up and locations)
- Sponsor breakfast/lunch/dinner for the participants (usually things like donuts/coffee, pizza lunch or cater sandwiches)
- Sponsor \$ rewards (incentives) for teams that successfully implement projects (these could even be projects that particular sponsors want to see accomplished - we just need them scoped appropriately so as to be something that can be accomplished in a 2 day period)
- Help provide or resource hackathon winner prizes
- Sponsor or provide any swag (t-shirts, mugs, etc.)
- Provide marketing assistance



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Thank You