

EDGE X FOUNDRY™

TSC Meeting

February 20, 2019



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Meeting Logistics

Time: February 20, 2019 7am PST – 8am PST

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
ForgeRock	David Ferriera	david.ferriera@forgerock.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

- WG Updates
- Edinburgh Freeze/Release dates
- LTS final draft
- Next TSC F2F
- Upcoming Events
- AOB



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Work Group Updates

Chairs

Working Group Chair Updates

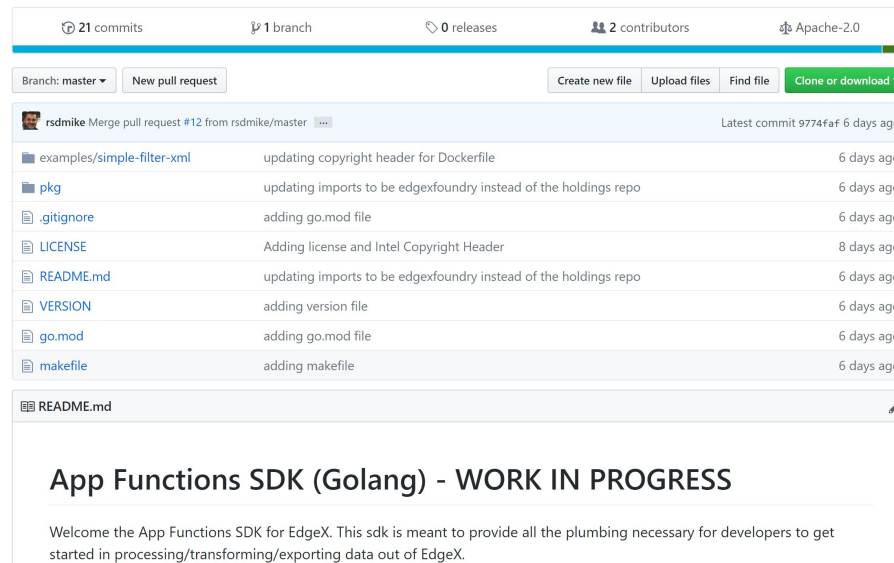
- Around the horn
 - Core/Supporting - Trevor
 - Applications - Janko
 - Device Services - Steve
 - Test/QA - Andy
 - DevOps - James
 - Security - David
 - System Management - Jim
 - Certification - Randy
 - Vertical Solutions - Moonki
 - Developer Outreach - Michael

Core Working Group (20-Feb-19)

- Edinburgh Status Update
 - Remove glide for dependency mgmt
 - edgex-go is now a module, glide has been removed
 - decomposition of some edgex-go functionality into reusable modules is in progress
 - Tracing
 - We agreed at last F2F to implement a correlation-id throughout all services
 - Completed
 - Includes passing correlation through ZeroMQ from core-data to export-distro
 - This facilitates lightweight querying via “grep” over consolidated logs
 - Perhaps for Fuji we can look at Zipkin or Jaeger which are more sophisticated
 - Scheduling
 - Moved scheduling logic out of metadata into scheduler service
 - Metadata endpoints yet to be deprecated
 - Metadata Device Blacklist -- deferred to Fuji
 - Consul - Preserve configuration
 - Config-seed will no longer overwrite existing settings with defaults

Applications WG Update (13-Feb-19)

- The First pieces of the EdgeX Application Functions SDK are in the holding repo. Thank you Mike Johnson (Intel). (<https://github.com/edgexfoundry-holding/app-functions-sdk-go>)



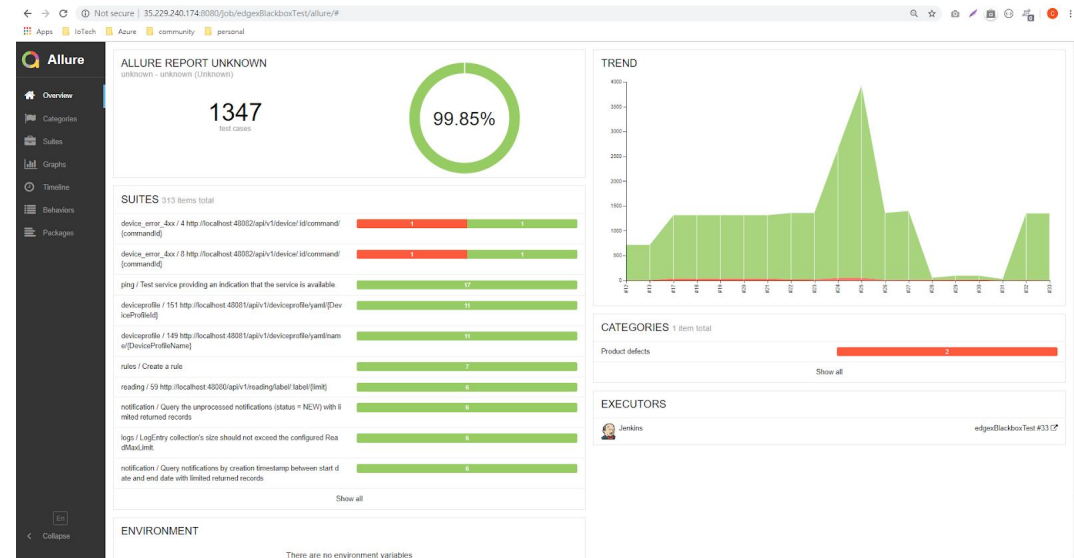
- Mike gave us a overview of the code on yesterday's Application Working Group meeting
- Question was raised how to handle separate configs for SDK and the User Function
- Recording of the meeting:
https://zoom.us/recording/share/Q9S0fRpObmlgBVII6aQHDwmIVzVK_O8p3ikt5IBTirSwlumeKTziMw
- We will try to move Application Functions SDK from holding to main EdgeX Repo as soon as possible.

Device Services WG Update (20-2-19)

- Triage of Go SDK issues complete
- Edinburgh Updates
 - Replacement of device addressable
 - Integration of Go SDK with new Go core contracts
 - Support for logging correlation id
 - Support for dynamic configuration (how much TBD)
 - Support for local auto events (polling of data from device)
 - Simplification of device profile
 - Various bug fixes and clean ups
 - SMA API support
 - No dynamic discovery
 - No readings cache

Test/QA WG Update (02-20-19)

- Fixed black box test issues [#146](#), [#148](#), [#150](#), [#152](#), [#155](#), [#157](#), [#161](#)
- Merged PR [#147](#), [#149](#), [#151](#), [#154](#), [#156](#), [#159](#), [#162](#)
- Reviewing PR [#153](#), [#160](#)
- Allure report of blackbox test shows two test failures (does not yet include new security tests yet) - Issue #1115 is created for 2 failed test cases
- Edinburgh objectives
 - Better visualization/dashboarding (Allure) of test results - complete
 - Automated capture of resource metrics to monitor performance - medium-high risk due to push back from LF for using TIG stack (Elk stack already in place and being reviewed)
 - Security test automation (Security WG) - on track
 - Code contributors will now be required to supply additional or updated blackbox tests - in place
 -
- Next QA/Test meeting Thursday 21st, 4pm PST



DevOps WG Update (02-20-19)

Several User Stories currently being worked in current sprint.

- Security Services Jenkins jobs created.
- Working on conversion of several device services (mqtt / modbus) and tagging to use go modules.
- Meeting scheduled last week with LF Infrastructure team regarding request landing new TIG stack resulted with some push back to use existing ELK stack. There is some risk that this could impact QA-Testing in terms of visualization of performance data from sandbox testing.

Explore work continues related to additional tooling to support QA / Test to include cost analysis

- Codecov.io (SaaS)
- SonarQube (OSS)

Next DevOps WG meeting - Thursday 7AM PST

Security WG Update (02-20-19)

Feature	Status for Edinburgh
Automated Testing	Green
Delhi fixes	Green
Vault/Kong Documentation	Green
Vault paths/policies	Yellow
HW based secret storage	Red
Service to service authn/authz design proposal	Red
Kong/Vault upgrade	Yellow

System Management WG Update (2-20-19)

- Start/stop/restart wrapping up
- Current work
 - Add CPU usage metrics (in addition to memory usage metrics)
 - Platform dependent
 - Demo impl next meeting
 - Go & C SDK (and device services) incorporation work to be done
 - Demo impl next meeting
 - Additionally need to look at adding to application services (functions SDK)
 - Add health/status check of the services to the SMA
 - ~~Stretch goal~~ provide a translation layer (with abstraction) to offer SMA API via other protocol (like LWM2M, SNMP, etc.)

Certification WG Update (2-18-19)

- Project definition document has been started (Google docs)
- Targeting TSC F2F in Seoul to present plan
- Link to doc, minutes, and recording available on wiki
- Next meeting Mon Feb 18, 7am PST

Edinburgh

- Do not expect to be far enough along to make a formal announcement about certification process

Vertical Solutions WG Update (2-20-19)

- 3pm PST Commerce Project Bi-Weekly Meeting (Feb. 27th)
 - <https://www.edgexfoundry.org/calendar/>
- Upcoming : Wiki updates targeting Seoul F2F (April)
 - Smart Factory Project : Features from EdgeX-holding GitHub
 - Commerce Project : Use cases & requirements presented to members
 - Oil & Gas Project : Updates
 - Other domains (collaborating with other projects in LF Edge)
 - Akraino, Home Edge, EVE, etc.
 - Approach to collaborate / integrate, harmonized use cases, requirements, etc.

Developer Outreach (02-20-19)

- Device-grove-c on [Docker Hub](#)
- Fixed [Modbus/MQTT tutorial](#) device profile download links
- Updated [API Walkthrough](#) for Delhi
- Updated EdgeX data on [OpenHub](#)
- Updated EdgeX data on [Core Infrastructure Initiative](#)
- Began [forward-porting](#) Delhi docs changes to Edinburgh



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Edinburgh Release

Proposed timeline

- Freeze: April 1
 - Create new branch; update version numbers on master, etc.
 - Testing and bug fixes between 4/1 and 4/22 (21 days)
- Release date: April 22 (Monday)
- EdgeX F2F: April 29 - May2
 - Fuji planning

Delivery Risks/Assessment

- Edinburgh = v1.0
- Current list of delivery items (from Nov mtg) in jeopardy
 - Purple- some risk of missing; Red - high risk of missing
 - CBOR/binary support (from DS to Export)
 - DS replacement implementations for all Java DS
 - Rules Engine
 - Metadata device blacklist
 - DS reading cache

Delivery Risks/Assessment (cont)

- Improved/simplified Device Profile
- some initial secrets (DB username/password) obtained from Vault
- HRoT abstraction
- SMA translation layer in some other protocol like LWM2M (stretch)
- Performance/load testing
- additional blackbox tests for any new code
- Swagger documentation (stretch)
- Release Manager
- 12 factor apps guide

LTS

Policy doc near complete

See final draft:

<https://wiki.edgexfoundry.org/pages/viewpage.action?pageId=25297015>

Last review during DevOps this week

Vote next week



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EdgeX TSC F2F Meetings

EdgeX TSC F2F Meeting(s)

- **29 April - 2 May, 2019** -- Location Seoul, South Korea -- [Wiki page](#)
 - Technical Business Discussions + EdgeX 101 on Monday, April 29
 - Architect's Day / WG Breakout Sessions + Social Event on Tuesday, April 30
 - Technical F2F - Day 1 + Dinner Reception on Wednesday, May 1
 - Technical F2F - Day 2 on Thursday, May 2
 - **RSVP at <https://goo.gl/forms/oMptkNU90RRxhK5g1>**
 - RSVP by EOD April 12
 - Current registration count: 18 in-person; 0 dial-in
 - Hotel/Travel: Recommended hotels listed on [Wiki](#)
-
- **4 November - 8 November, 2019** -- Location Chandler, Arizona (USA) @ hosted by Intel



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Upcoming Events

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

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

Upcoming Events

- [Hannover Messe, April 1-5, 2019](#) | Hannover, Germany
 - EdgeX will have a presence in the Dell booth, including the EdgeX Community Demo
- [Open Networking Summit, April 3-5, 2019](#) | San Jose, CA
 - LF Edge will have a booth
- [Internet of Things World, May 13-16, 2019](#) | Santa Clara, CA
 - EdgeX will have a booth

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Additional LF Edge events available at
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Upcoming CFPs

CFP Upcoming Deadlines:

- [Open Source Summit China, June 24-26, 2019](#) | Shanghai, China
 - CFP Status: Extended -- Closes **February 22, 2019**
 - https://linuxfoundation.smapply.io/prog/open_source_summit_china_2019/



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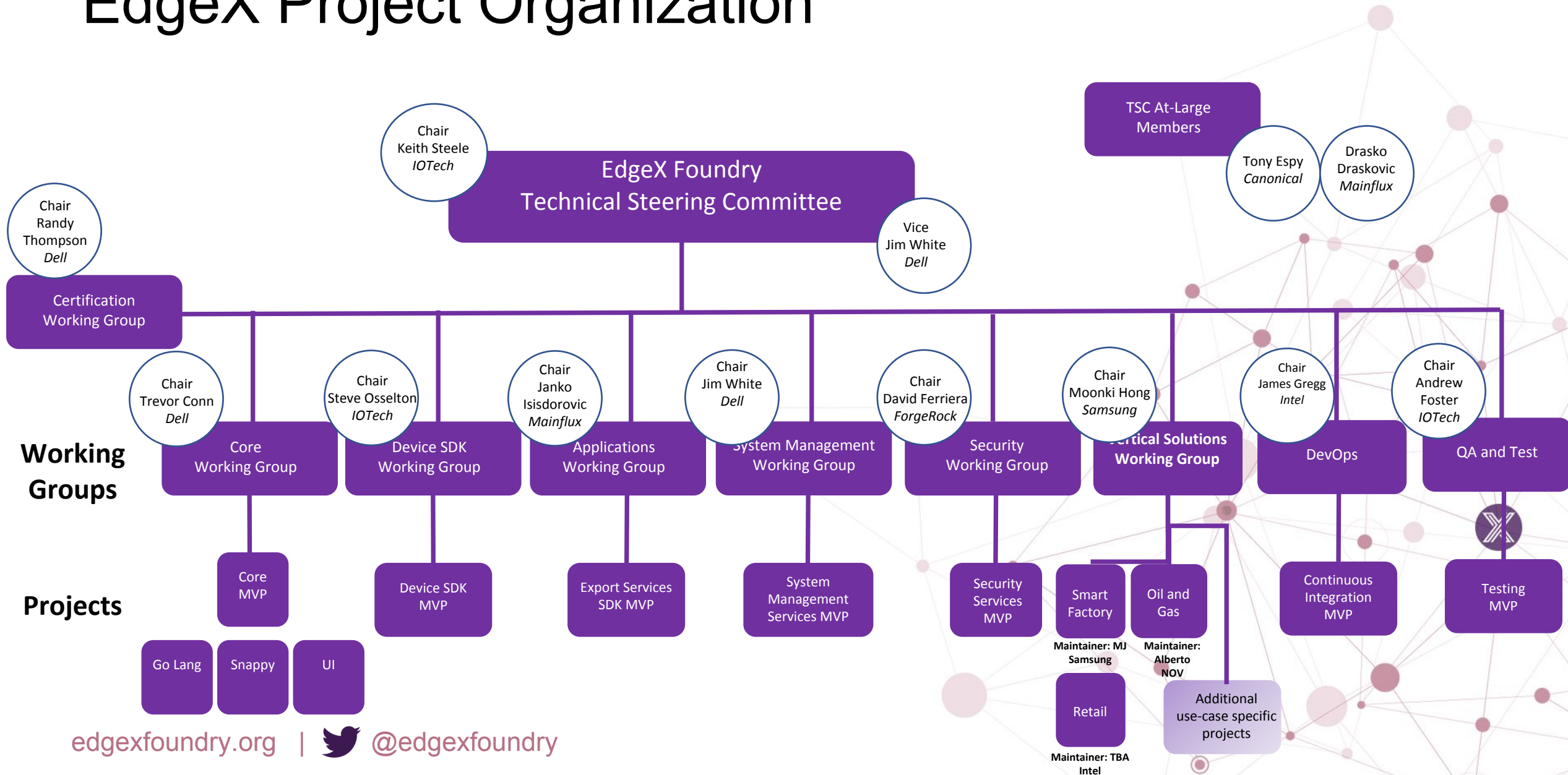
AOB / Reminders

AOB/Cadence

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

- **Next Meeting: February 20, 2019**

EdgeX Project Organization



Marketing

- **CTA:** If your company will be presenting EdgeX at an upcoming event/webinar/other, please email pr@edgexfoundry.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 Brett Preston at LF (bpreston@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://chat.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 Rocket Chat

<https://chat.edgexfoundry.org/home>

- [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](#)

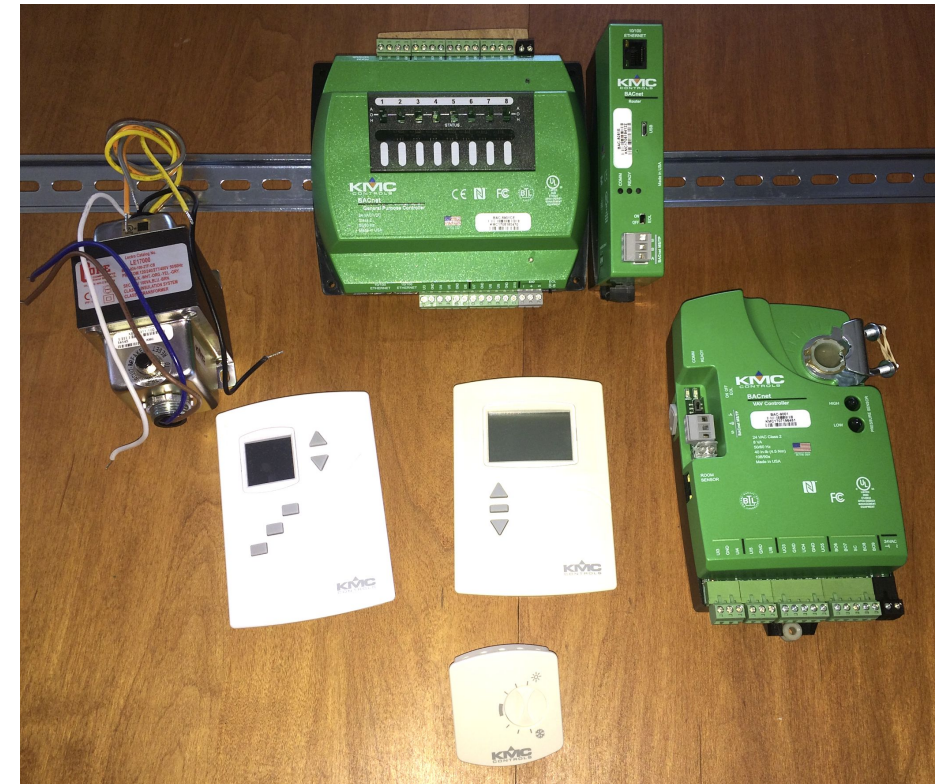
What is the Device Exchange?

- 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@edgexfoundry.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