EDGE X FOUNDRY™

TSC Meeting

May 29, 2019

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Meeting Logistics

Time: May 29, 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:

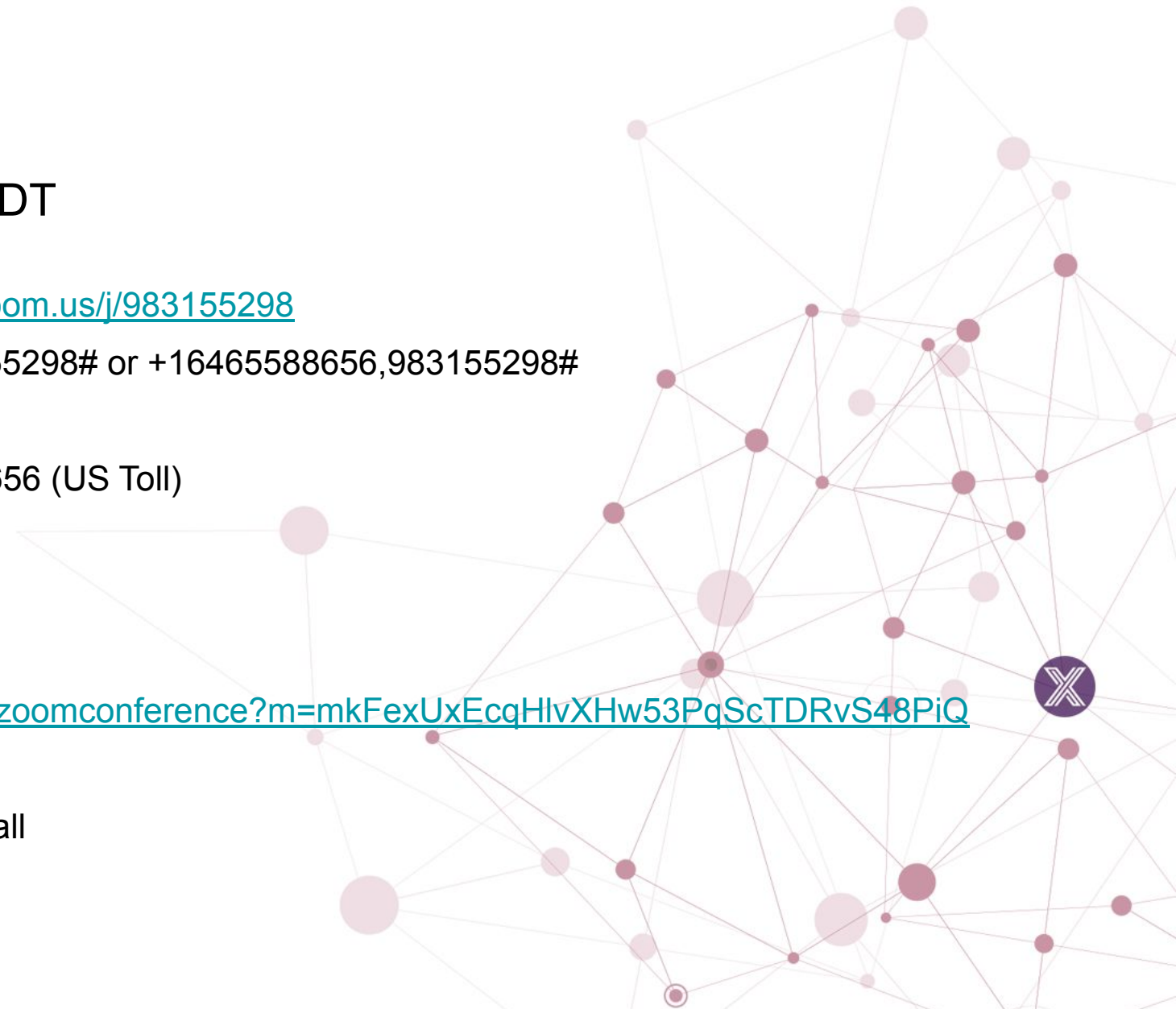Dial: +1 408 638 0968 (US Toll) or +1 646 558 8656 (US Toll)

+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/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ

** TSC calls are recorded and added to Wiki post-call

TSC – Members Present Today

Company	Name	Email
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

- Release Planning
- WG Updates
  - Couple of TSC Votes needed
  - 1 - Vote to move device-snmp-go to edgexfoundry
  - 2 - Dot release for security services in July/Aug
- EdgeX Marketing Group Update
- TSC Elections
  - Voting Rosters
  - WG Chair nominations and elections
- Upcoming Events
- AOB

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Release Planning

Release Update

Release status: Trevor/James/Lenny

Branching status: same

Issues, comments, concerns: all

What is missing (what didn't make it)?: all

Release target: June 20

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 (29-May-19)

- Edinburgh
  - All edgex modules tagged as v0.1.0 (registry, messaging, contracts)
  - The above have been consumed in edgex-go and PR merged
  - Jenkins job definitions for new branch created
  - Pending -- Need LF/DevOps to create the new branch
  - Reminder: Bug fixes happen in two places -- master & edinburgh
  - Issues tagged as "Fuji" can start, PR against master
- Core WG Call tomorrow (30-May @ 10AM CST)
  - Review of Fuji deliverables
    - Sequencing, further definition, prioritization
  - Any items of business from the community?

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 (29-5-19)

- No meeting this week due to UK bank holiday
- All features complete for Go/C SDKs (including CBOR support)
- SDK repositories branched
- Device services being rebuilt

Test/QA WG Update (05-29-19)

- Blackbox Tests
  - Fixed issue #226, #232, #235
  - Merged PR #233, #234, #236
  - Currently all tests passing across jobs (x86, x86+Security and ARM)
- Performance Tests
  - Merged PR #30
- Edinburgh objectives
  - Better visualization/dashboarding (Allure) of test results (complete)
  - Automated capture of resource metrics to monitor performance - complete subject to final validation
  - Security test automation
    - Tests running on x86 successfully
    - Problems with new Kong docker image for ARM - requires native 64 bit ARM build and will not make code freeze
  - Code contributors will now be required to supply additional or updated blackbox tests (complete)
- Next QA/Test meeting Thursday 30th May, 4pm PDT

DevOps WG Update (05-29-19)

Code Freeze 5/28

- Help Needed for repo owners to create edinburgh branch - permissions issues
- Assumes all PRs are merged ahead of 5/28 that will make it into the release
- Developers / DevOps Excellent collaboration / patience observed - THANK YOU

Issues:

- Roadmap for addressing technical debt not understood by Linux Foundation for build dependencies (python version)
- Fuji Scope - Container Scanning Needs Architecture
  - AWS hosted solution may have some $$
  - No update as of WW22 from LF Infrastructure team

Next DevOps WG meeting - Thursday 7AM PDT

System Management WG Update (5-28-19)

- Open Horizon discussion
- Fuji Focus
  - Starting design work on setting configuration
    - Designing 3rd party API for request
    - Designing Agent request of services and handling results
    - Designing service handling of set request with Consul and reloading config
      - Not dealing with local config file in crawl phase
  - Next items
    - Start/stop/restart all done by the executor to include stop/restart of SMA
      - Executor tracks completion and returns results
    - Executor for metrics collection
  - SMA Translation layer (stretch)
    - Pick one protocol to start (SNMP, LWM2M, ...)

Security WG Update (5-28-19)

- "Dot" release current work
  - Release date and whether part of Fuji or dot release TBD
  - Integrating and refactoring (abstraction) go-mod-core-security into core to get database username/passwords
  - Refactor Secret Store service (abstraction, conforming to Go standards)
- Security Issue Process (Malini - thank you)
  - working Wiki/doc presenting issues
  - Collecting issues
  - SIR team formulation
- Initial Fuji work has been assigned out (scope per F2F below)
  - Generation of PKI – Bryon/Jim Wang have started
  - HW secure storage abstraction layer (design only) – Bryon/Jim Wang & Malini
  - Ensuring the services running are those expected (and authorized) - Malini
  - Renew/refresh threat assessment - Tingyu
  - Need document defining what security is/does and can/will do – Jim White/ Tingyu
  - Potentially replacing mongo shell script with Go code – Dell Team

Certification WG Update (5-27-19)

- Plan of Record available on Wiki
  - Self-assessment for Device services first
- Self-assessment package by end of year based on Fuji release

- Meetings are on Mondays at 7am PDT (1500 CET)
  - No meeting May 27 due to US Holiday
  - Considering change to biweekly for summer

Vertical Solutions WG Update (5-29-19)

- Upcoming Commerce Project call : Tuesday June 4th 8AM PST
  - Guest Speaker: Andy Laudato, CTO of Vitamin Shoppe
  - 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

Marketing Group Update

Keith

EdgeX Marketing Group

- Established to drive Marketing strategy and Implementation plan for EdgeX (V1 launch and Marketing plan thru 2020)
- Meetings are open - Next meeting Friday 31st May - 4.30pm UK time (830am Pacific)
  - 1st Report back from Marketing sub group led by Dennis Camilo assisted by Steve Jennis IOTech and the LF Edge Team
- To register to get invites to the Marketing Group meetings please join the Marketing Mailing list at https://lists.edgexfoundry.org/g/EdgeX-Marketing and subscribe to the calendar

TSC Annual Elections

General Schedule

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

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

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

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

Current Election Activities

- **Nominees - please respond to Brett's note to accept your nomination**

- **One at large position still has no-nominees**

- Workgroup and general contributors lists being finalized
  - Lists available (spreadsheet form) in the TSC email forum and the Wiki
    - https://wiki.edgexfoundry.org/display/FA/2019+TSC+and+WG+Elections
  - In order to vote, you must be on this list (consult your WG chair if you don't see your name)
  - Taking nominations for WG chairperson or TSC at-large seats
    - Contact Brett Preston, Keith or Jim to nominate yourself or other

- WG Chairs - hold your chairperson election next week if necessary (by June 7th)

- TSC at-large seat community wide election to take place week of June 10-14

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Upcoming Events

Upcoming Events

› EdgeX Meetup: 19 June, 2019 - Austin, Texas
  › Brandon Forster from Dell will give an EdgeX overview and answer questions
› IoT Tech Expo Europe 2019: 19-20 June, 2019 - 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 2019: 24-26 June, 2019 - Shanghai
  › June 25: Arpit Joshipura - LF: Keynote on Edge Computing
  › June 25: Yachen Wang - Tencent: LF Edge: Open Source to Enable 5G, IOT and AI Development
  › June 25: Drasko/Janko - Mainflux: Integration of Edge & Cloud IoT Platforms
  › June 25: Xuan Jia - China Mobile: 5 Biggest Issues in Edge Computing
  › June 25: LF Edge Panel: Edge Computing in the IoT
  › June 26: Tina Tsou - Arm: Your Path to Edge Computing
› IoT Meetup - Shanghai: 25 June, 2019 - Shanghai
  › Hosted by VMware
  › Speakers from LF, VMware, Arm, Baidu, Tencent, Huawei

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Upcoming Events continued

› Open Source Summit Japan: 17-19 July, 2019 - Tokyo, Japan
  › July 17: BoF - Getting the Edge in Edge Computing
  › July 19: Tiejun Chen, VMware - Build Edge Computing with EdgeX Foundry over Kubernetes
  › July 19: Hyde Sugiyama, Red Hat - Kubernetes Native Infrastructure and CoreOS Operator Framework for 5G Edge Cloud Computing
› Embedded Linux Conference (ELC): 21-23 August, 2019 - San Diego
  › August 20: LF Edge Mini-Summit - Half-day, single-track event on the topic of IoT and Edge Computing
  › August 21: Tingyu Zeng, Dell: An Agile Approach to Threat Modeling for Securing Open Source Project EdgeX Foundry
  › August 22: Malini Bhandaru, VMware & Trevor Conn, Dell - IoT Action at the Edge - EdgeX Foundry 1.0 Released!
  › August 23: Alexandre Courouble, VMware - Easy as a pi: EdgeX on Raspberry Pi for Automotive IoT

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

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Upcoming CFP Due Dates

› Open Networking Summit Europe: Sept. 23 - 25, 2019, Antwerp
  › CFP Due: June 16
    › https://events.linuxfoundation.org/events/open-networking-summit-europe-2019/program/cfp/
› Open Source Summit Europe: Oct. 28 - 30, 2019, Lyon
  › CFP Due: July 1
    › https://events.linuxfoundation.org/events/open-source-summit-europe-2019/program/cfp/
› Embedded Linux Conference (Co-located w/ OSS Europe): Oct. 28 - 30, 2019, Lyon
  › CFP Due: July 1
    › https://events.linuxfoundation.org/events/embedded-linux-conference-europe-2019/program/cfp/

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EdgeX TSC F2F Meeting(s)

4 November - 8 November, 2019 -- Location Phoenix, Arizona (USA) -- <u>Wiki page</u>
- Latest agenda available on the <u>Wiki</u>

Venue
- Galvanize – 515 E. Grant Street, Phoenix, AZ 85004

Coming Soon (before EoM June):
- **RSVP:** Links to register will be available on <u>Wiki</u>. Will include registration for each section.
- **Hotel/Travel**: Recommended hotels

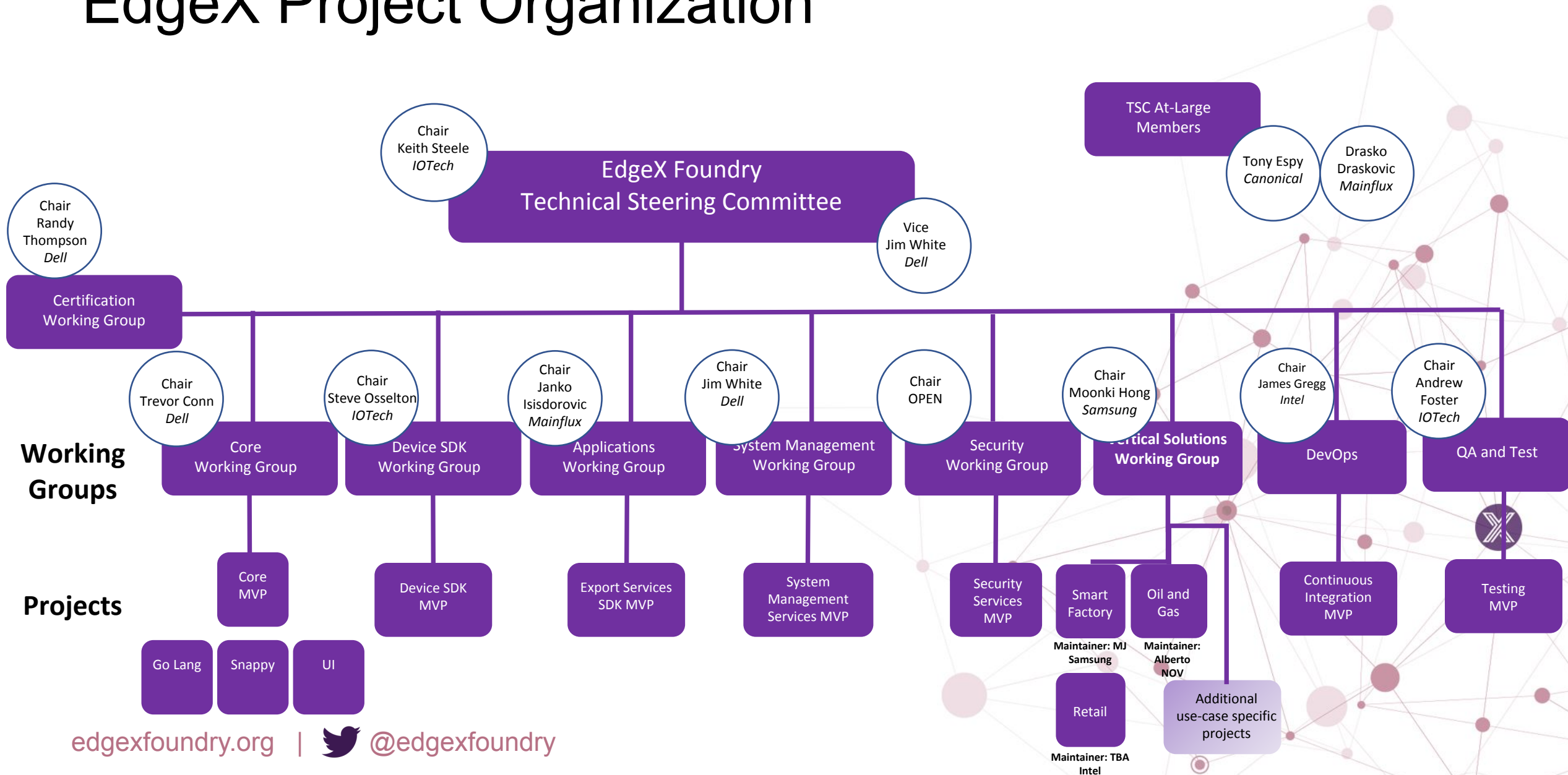AOB / Reminders

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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: June 5, 2019**

EdgeX Project Organization

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EdgeX Foundry Technical Steering Committee

Chair
Keith Steele
IOTech

Vice
Jim White
Dell

TSC At-Large Members

Tony Espy
Canonical

Drasko Draskovic
Mainflux

Chair
Randy Thompson
Dell

Certification Working Group

Working Groups

Chair
Trevor Conn
Dell

Core Working Group

Chair
Steve Osselton
IOTech

Device SDK Working Group

Chair
Janko Isisdorovic
Mainflux

Applications Working Group

Chair
Jim White
Dell

System Management Working Group

Chair
OPEN

Security Working Group

Chair
Moonki Hong
Samsung

Vertical Solutions Working Group

Chair
James Gregg
Intel

DevOps

Chair
Andrew Foster
IOTech

QA and Test

Projects

Core MVP

Device SDK MVP

Export Services SDK MVP

System Management Services MVP

Security Services MVP

Smart Factory

Maintainer: MJ Samsung

Oil and Gas

Maintainer: Alberto NOV

Continuous Integration MVP

Testing MVP

Go Lang

Snappy

UI

Retail

Maintainer: TBA Intel

Additional use-case specific projects

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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
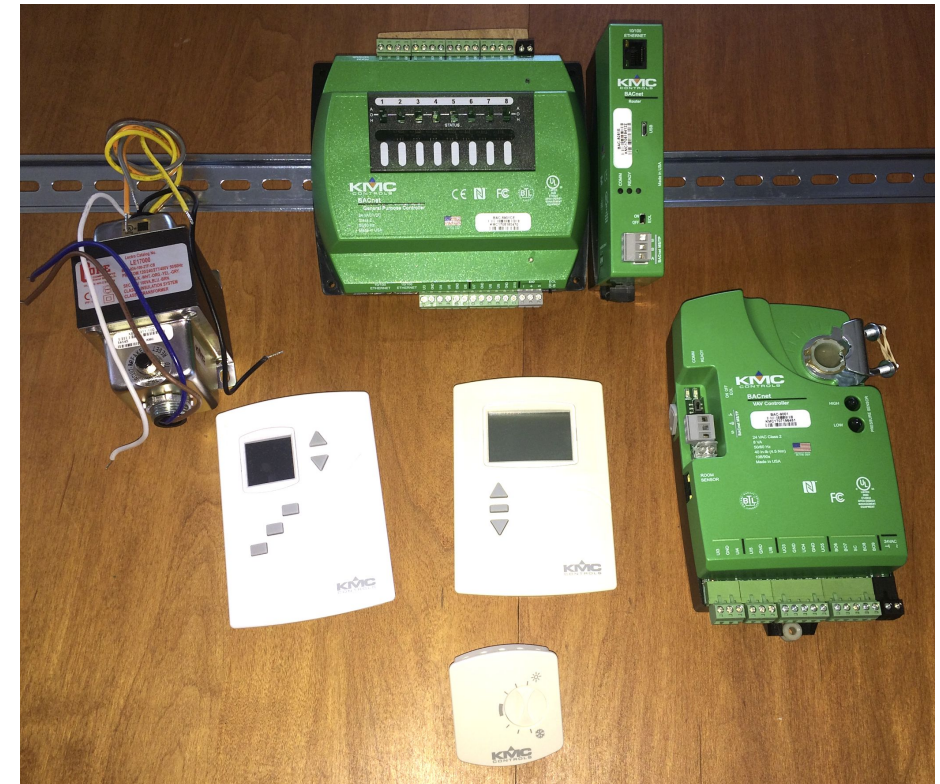
    Call recordings are available on the Wiki

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

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

Thank You