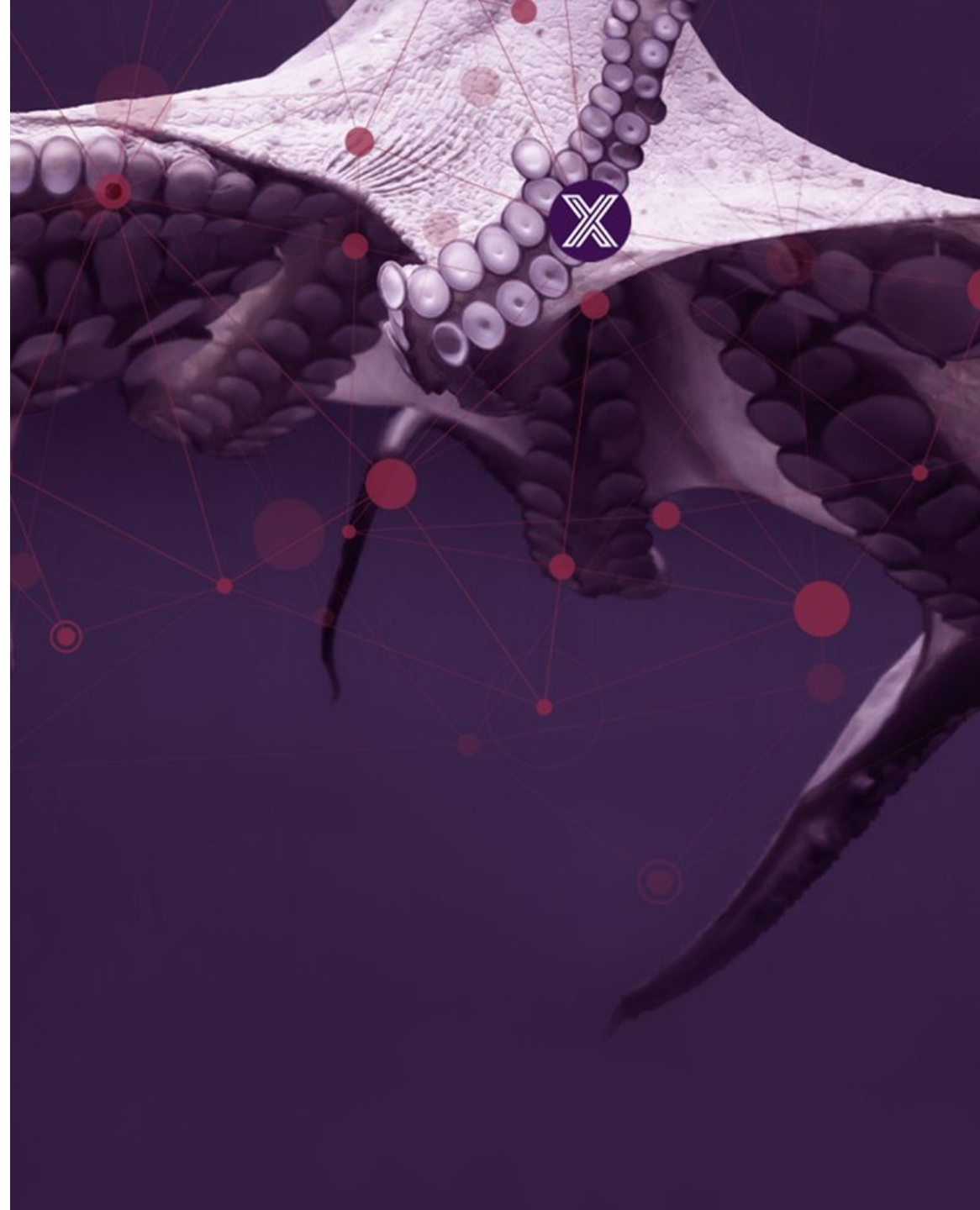# EDGE X FOUNDRY™

TSC Meeting

February 7, 2018

Meeting Logistics

Time: February 7, 2018 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/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ

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

LF Antitrust Policy Notice

EdgeX Foundry meetings involve participation by industry competitors, and it is the intention of the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws.

Examples of types of actions that are prohibited at EdgeX Foundry meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at http://www.linuxfoundation.org/antitrust-policy. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrove of the firm of Gesmer Updegrove LLP, which provides legal counsel to the Linux Foundation.

TSC – Members Present Today

Company	Name	Email
IOTech	**Andy Foster**	andy@iotechsys.com
Analog Devices	**Doug Gardner**	doug.gardner@analog.com
Mainflux	**Janko Isidorovic**	janko@mainflux.com
Dell	**Jason Shepherd**	Jason.A.Shepherd@dell.com
The Linux Foundation	**Jeremy Phelps**	jphelps@linuxfoundation.org
Dell	**Jim White**	james.white2@dell.com
IOTech	**Keith Steele (TSC Chair)**	keith@iotechsys.com
Samsung	**Moonki Hong**	moonki1.hong@samsung.com
Samsung	MyeongGi Jeong	myeong.jeong@samsung.com
VMware	Salim AbiEzzi	salim@vmware.com
Canonical	**Tony Espy**	espy@canonical.com

Current quorum = 8 members

*Note: TSC meetings shall require a **quorum of two-thirds of the TSC total members to take a vote or make a decision.** If a TSC meeting fails to meet the quorum requirement, discussions may proceed, however there shall be no voting or decisions.*

Today's Agenda

- Welcoming New Members
- California Update
  - Supported Environment
- IIC and OpenFog Update
- Vertical Solutions WG Updates
- Code Contribution Process
- Meetup Update
- Upcoming Events
- AOB

New Member Update

Brett Preston

Welcome to the newest member of EdgeX Foundry!

- Wanxiang Group
- http://www.wanxiang.com.cn/en/
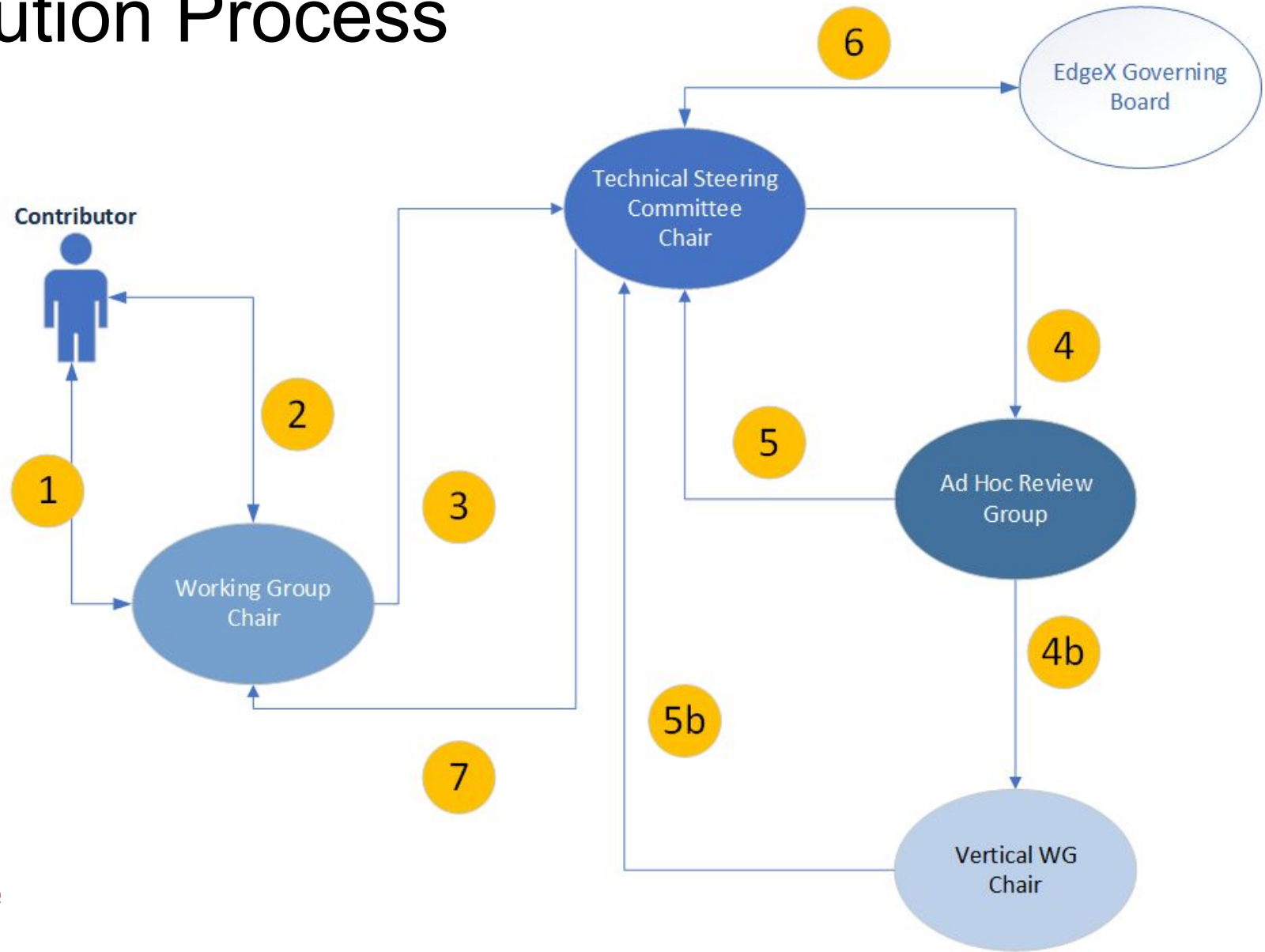- Car manufacturer

Code Contribution Process

Jim White

Code Contribution Process

- Per the Orlando F2F - we needed a new process to take in large code contributions
- Draft of that process has been completed and reviewed by WG chairs
- Find it here: https://wiki.edgexfoundry.org/display/FA/Contributor%27s+Process
- We welcome community feedback over the next week
- We would like to get TSC approval of the process at next week's TSC meeting (2/13) so we can start to take in many waiting contributions

Large Contribution Process

Core WG Updates

Jim White

Significant Updates

- California Preview available
  - Wiki has release page
  - News and performance numbers blog set to publish
- Go Lang preview micro services in Docker Hub (big thanks to Jeremy)
  - Docker compose file ready
  - Development moving to mono repo soon (thanks Cavium, Mainflux, LF, others)
- DS SDK requirements work underway (thanks Canonical)
- Roadmaps updated significantly per F2F (see Wiki)
- New South bound MQTT documentation/how to guide (see wiki)
- Tech Talks - on the radar. Just need some bandwidth

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

Thoughts on a "Need it" or "up for grabs" type of page?
One that might even offer a bounty?

Security WG Updates

Doug Gardner

System Mgmt WG Updates

Salim AbiEzzi

Vertical Solutions WG Updates

Moonki Hong

Executive Summary

- WG Ad-hoc call

- Smart Factory : Progress on the Testbed establishment

- Oil & Gas : Gap analysis and feature suggestions

- Liaison discussion

WG Ad-Hoc Call : Logistics

Time: Topic-based ad-hoc call, basically on Monday afternoon in PST

Join from PC, Mac, Linux, iOS or Android: https://zoom.us/j/455750502

Or iPhone one-tap (US Toll): +16465588656,,455750502# or +16699006833,,455750502#

Or Telephone:

Dial: +1 646 558 8656 (US Toll) or +1 669 900 6833 (US Toll)

+1 855 880 1246 (US Toll Free)

+1 877 369 0926 (US Toll Free)

Meeting ID: 455 750 502

International numbers available: https://zoom.us/zoomconference?m=C43RI2DoHEKX09Ccmt8YVuYg1Qr1xKHM

** Vertical Sol. WG calls are recorded and added to Wiki post-call

Smart Factory: Testbed

- Goal: EdgeX-based testbed under IIC in 2018 (and beyond…)

- Current parties : Samsung, Schneider-Electric
  - IIC Membership req : Samsung is IIC member, so no problem.
  - EdgeX Membership req : Start as IIC model (i.e. no problem now…)
  - We prefer to leverage all parties as EdgeX members for better operations

- Current status : Consensus on the top in a high-level
  - "Software-defined" Edge for Smart Factory
  - Testbed accessibility in public : Not decided yet, but prefer to be open!
  - Infra for testbed : have several options, not decided yet.

Smart Factory : Testbed

- Execution Plans – We need your feedback and support! ☺
  - Re-engage the designated group as Special Interest Group if necessary.
  - Expose EdgeX as many as possible to IIC (like regular IIC F2F).
  - Partnership with Top-tier orgs as many as possible (like Open Group).
  - Publish technical/marketing whitepaper as intermediate milestone.
  - Go through a regular process of testbed establishment in IIC.
  - Set-up a viable laboratory infrastructure for testbed.

- Details on the attached Meeting Minutes (Feb. 5th – Slide #10~14):
  https://wiki.edgexfoundry.org/download/attachments/2785490/EdgeX%20Foundry%20Vertical%20Sol.%20WG%20Meeting%20Feb%205th_2018.pdf?version=1&modificationDate=1517849972000&api=v2

Oil & Gas : Gap Analysis & Feature Suggestions

- Gap analysis : Currently 15 gaps have been reported.

  https://wiki.edgexfoundry.org/pages/viewpage.action?pageId=7602886

  - Summary: OPC-UA, OPC-DA, Modbus Device Services,
    UI for configuration, Logging, Export Service for Osisoft PI and Influx DB

- Feature proposition : Export service to Osisoft PI & InfluxDB

  https://wiki.edgexfoundry.org/display/FA/Export+Service+to+Osisoft+PI

  https://wiki.edgexfoundry.org/display/FA/Export+Service+to+InfluxDB

- Next step: Start discussion in the regarding WG first.

  - Following the existing draft of "Contribution Process".

Liaison

- Currently in progress
  - Open Group (Industrial in General: Manufacturing, Oil&Gas, etc…)
    - Also be beneficial for the existing Projects in Vertical Sol. WG.
  - FIWARE (Smart City)
    - Better to have leading (potential) members in Vertical Sol. WG as well…

- Anything else?

Meetup Update

edgexfoundry.org | @edgexfoundry

Meetup Update: Introducing 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

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

Upcoming Events

Upcoming Events - Confirmed

- IIC Members Meeting - Progress update in Test Bed Track, February 5-8, 2018, Virginia [Salim]
- IoT Forum, February 21, 2018, Germany
  - Speakership
- Embedded World, February 27 - March 1, 2018, Germany
  - Speakership Keith Steele
- Symposium on Securing the Internet, March 6-7, 2018, San Francisco
  - Speakership
- Industry of Things World USA, March 8-9, 2018, San Diego
  - Speakership
- OpenIoT Summit, March 12 - March 14, 2018, Portland
  - Bronze Sponsorship, including booth presence
  - Schedule announced - 2 sessions + lab
  - EdgeX Participants Save 20% on Attendee Registration with discount code ELCNA18SPN20

Upcoming Events - Confirmed (continued)

- [Open Networking Summit North America](), March 26 - 29, 2018, Los Angeles
  - Community Partner: Save 15% on Attendee Registration with discount code ONSNA18COM15
- [IoT Build,]() March 27-28, 2018, San Francisco
  - Speakership and panel
- [Hannover Messe](), April 23-27, Germany
  - Member booth - confirmed so far: Dell, RSA, VMware (3 other members in progress)
- [Internet of Things World,]() May 14-17, 2018, Santa Clara
  - Panel
- [Open Source Summit North America](), August 29 - 31, 2018, Vancouver, Canada
  - Community Partner: Save 15% on Attendee Registration with discount code OSSNA18COM15
- [Open Networking Summit Europe](), September 25 - 27, 2018, Amsterdam, Netherlands
  - Community Partner: Save 15% on Attendee Registration with discount code ONSEU18COM15
- [Open Source Summit Europe](), October 22 - 24, 2018, Edinburgh, UK
  - Community Partner: Save 15% on Attendee Registration with discount code OSSEU18COM15

Event Participation Opportunities

Embedded Linux Conference / OpenIoT Summit 2018

- https://events.linuxfoundation.org/events/elc-openiot-north-america-2018/
- March 12-14, 2018
- Portland, OR (USA)
- EdgeX Foundry Project has secured a Bronze sponsorship
  - **Booth staff and Demos needed!** Sign up to volunteer here
- Schedule Announced:
  https://events.linuxfoundation.org/events/elc-openiot-north-america-2018/program/schedule/
- EdgeX has 2 sessions + 1 lab (potential opportunity for a 2nd lab)
  - Monday, March 12 @ 5:10pm: Using Microservices to Create a Flexible IoT Software Platform – Jim White, Dell
  - Tuesday, March 13 @ 10:40am + 2pm: Getting Started With EdgeX Foundry – a Hands-on Lab – Jim White, Dell
  - Wednesday, March 13 @ 4:20pm: Building Open Source IoT Ecosystems – Jim White, Dell

Would be good to replace Jim with a member from the community for at least one of the sessions! Email info@edgexfoundry.org and/or Jim to volunteer.

edgexfoundry.org | @edgexfoundry

AOB / Reminders

Project Contributions Welcome!

- Our objective is to make EdgeX use & deployment pervasive!
- EdgeX success is 100% dependent on the vibrancy of a proactive community
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  - 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 by Jim White, Dell (james_white2@dell.com)

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

  Call recordings are available on the Wiki

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

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!!

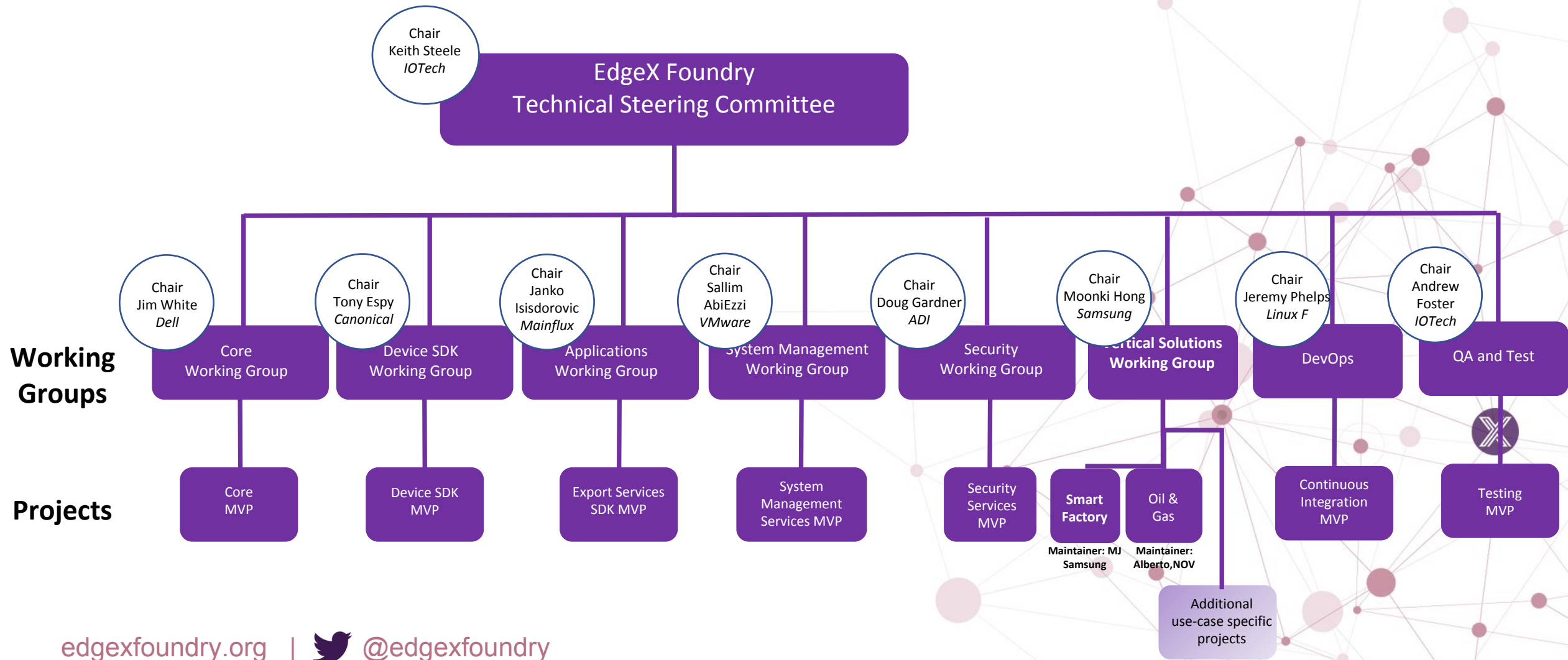# Hackathon Events

- Jim White and Tyler Cox putting together hackathon starter kit.
- More coming

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

EdgeX Project Organization

Marketing

- **CTA:** If your company will be demoing technologies that utilize the EdgeX framework, please email events@edgexfoundry.org so that we can add to https://www.edgexfoundry.org/events/

- **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

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 14, 2018**

Thank You