

EDGE X FOUNDRY™

TSC Meeting

March 7, 2018



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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.

Meeting Logistics

Time: March 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

TSC – Members Present Today

<u>Company</u>	<u>Name</u>	<u>Email</u>
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 = 7 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
- Working Group Updates
- California Release Timing & Development Platform Needs
- Next TSC F2F Meetings
- EdgeX Test Beds
- ELC/OpenIoT Summit
- IIC Liaison Updates & Opportunities
- Upcoming Events
- AOB



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Welcoming New Members

Brett Preston

Welcoming New Members



<https://www.cip-project.org/about>



www.samsungds.com



<https://www.fiware.org/about-us/>



Working Group Updates

Jim White

Core WG Significant Updates

- Go Mono Repo in place
- Docker EULA
 - Good to use EdgeX Docker containers for personal use
 - Building a commercial offering, connect with Docker and probably want to use Docker EE
- New documentation repo to be available for review soon
- Review of Samsung contributions about to begin
 - Volunteers



California Release Timing & Development Platform Needs

Keith Steele

Required California Development Environment

Developer/QA Tools

Accounts and some amount of available cloud resources (number of storage, compute, etc. hours) for

- Google IoT Core
- Azure IoT Hub
- AWS IoT Core
- Watson IoT Platform
- Pivotal Cloud Foundry Instance
- Cloud provided MQTT broker for testing various parts of EdgeX MQTT use (export services, device services, etc.)

Virtual Lab

- Cloud-based environment that is cable of launching, running and monitoring thousands of instances of EdgeX for volume, scalability and performance concerns.
- Also allows testing system management functionality as it relates to multiple deployments

- Devices in this lab would be virtual devices simulated through software

Physical Device Lab

- Intel and Arm based gateway(s) to run EdgeX
- Devices (for those protocols already supported by EdgeX) connected to the gateway(s)
 - BACNet
 - Modbus
 - BLE
 - SNMP
 - Serial
 - OPC-UA
 - Other devices would be added as more protocols are handled by EdgeX
- A small local network may be necessary
- Internet connectivity and firewall protection
- Internet camera mounted over the devices to be able to see any physical actuation

Action

- Cost the environment (who)
- Board approval for release of Project Funds to set up the environment



Next TSC F2F Meetings

Keith Steele

EdgeX TSC F2F Meeting(s)

- Discussion on next TSC F2F Meeting(s)
- Developer/Contributor Conference - London
- Member host?
- April?
- June?
- October?
 - LF's [Open Source Summit EU](#) / [Embedded Linux Conference EU](#) is scheduled for October 22-24, 2018 in Edinburgh, UK



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ELC/OpenIoT Summit

Brett Preston

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 #26)
 - **Booth staff and Demos needed!**
 - Email info@edgexfoundry.org to volunteer! We have a few **free passes** we can provide the first couple volunteers.
 - Who is attending? Jim, Tony, Mainflux, [others?], Jeremy/Mae/Brett (LF)
 - Does the project want to demo anything at the booth?
- Schedule Announced:
<https://events.linuxfoundation.org/events/elc-openiot-north-america-2018/program/schedule/>
- EdgeX has 2 sessions + 1 lab (repeated twice)
 - 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 & Tony Espy](#)
 - Wednesday, March 13 @ 4:20pm: [Building Open Source IoT Ecosystems – Jim White & Trevor Conn](#)



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EdgeX Test Beds

Keith Steele

EdgeX Test Beds

- Discussion on EdgeX Test Beds
- Test Bed Collaboration



IIC Updates & Opportunities

Jim Clardy

IIC Liaison Updates and Opportunities

- Chicago F2F - September 12, 2018
 - Hosted by IIC Security WG (Point contact Email sven.schrecker@intel.com)
 - EdgeX Organizer/Quarterback: Jim Clardy
 - Kick-off call executed Friday, February 23. EdgeX members who would like to contribute to the planning of the EdgeX at IIC event, please email info@edgexfoundry.org to be added to EdgeX-IIC liaison mail list
 - Need to propose Agenda Topics/Speakers
 - Example: <http://www.iiconsortium.org/liaison-workshop.htm>
 - Primary goal: Educate people about what EdgeX is
 - Potential Agenda Items:
 - 1. Introductory presentation EdgeX (including architecture overview)
 - 2. IIC Reference Architecture
 - 3. System Management, Security
 - 4. Overview of Vertical Activities
 - 5. Presentations from IIC
 - 6. Representatives from member companies to present use cases; how they fit in, what they are contributing (examples: Samsung, RSA)
 - 7. Map EdgeX to IIC
 - Session length? **TBD** - (IIC/oneM2M workshop was 3.15 hours)



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Upcoming Events

Brett Preston

Upcoming Events - Confirmed

- [Symposium on Securing the Internet](#), March 6-7, 2018, San Francisco
 - Speakership - May Wang (Zingbox)
- [Industry of Things World USA](#), March 8-9, 2018, San Diego
 - Speakership - Philip DesAutels (Linux Foundation - EdgeX Foundry)
- [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
- [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 - Noah Harlan (Two Bulls), Deb Noller (Switch Automation), Rod Schultz (Rubicon Labs)

Upcoming Events - Confirmed (continued)

- [Hannover Messe](#), April 23-27, Germany
 - Member booth - confirmed so far: Canonical, Dell, IoTium, RSA, Software AG, VMware (3 other members in progress)
- [Internet of Things World](#), May 14-17, 2018, Santa Clara
 - Panel - Philip DesAutels (Linux Foundation - EdgeX Foundry)
- [LinuxCon + ContainerCon + CloudOpen China](#), June 25 - 27, 2018, Beijing
 - Community Partner
- [Open Source Summit North America](#), August 29 - 31, 2018, Vancouver, Canada
 - Community Partner: Save 15% on Attendee Registration with discount code OSSNA18COM15
 - CFP open through April 29 / Submit your EdgeX talk [here](#)
- [EdgeX / IIC Workshop](#), September 12, 2018, Chicago, IL
 - Hosted by the IIC Security Working Group (Chair: Sven Schrecker, Intel)

Upcoming Events - Confirmed (continued)

- [Open Networking Summit Europe](#), September 25 - 27, 2018, Amsterdam, Netherlands
 - Community Partner: Save 15% on Attendee Registration with discount code ONSEU18COM15
 - CFP open through June 24 / Submit your EdgeX talk [here](#)
- [Open Source Summit Europe](#), October 22 - 24, 2018, Edinburgh, UK
 - Community Partner: Save 15% on Attendee Registration with discount code OSSEU18COM15
 - CFP open through July 1 / Submit your EdgeX talk [here](#)

Event Participation Opportunities

IOT Solutions World Congress

- <http://www.iotsworldcongress.com/>
- October 16-18, 2018
- Barcelona
- [Call For Papers](#)
 - Submitted: ---
- [Call For Testbeds](#)
 - Submitted: ---
- Email info@edgexfoundry.org if you submit for CFP or Testbeds so that we can track



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AOB / Reminders

Brett Preston

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](#) 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](#)

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

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:



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

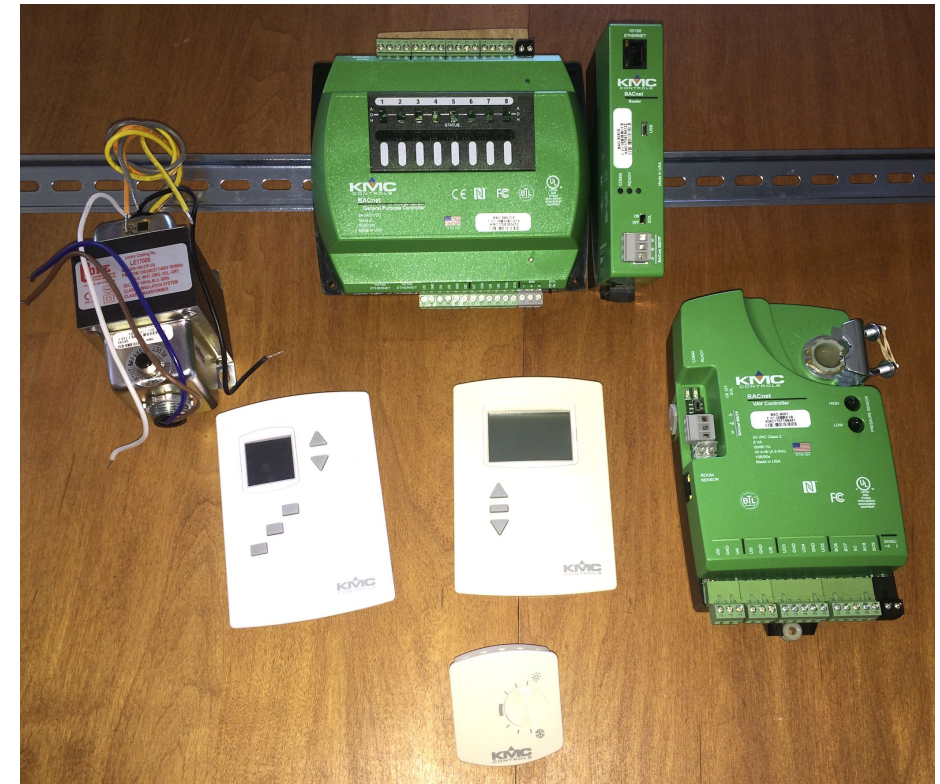
What is the Device Exchange?

- 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!!



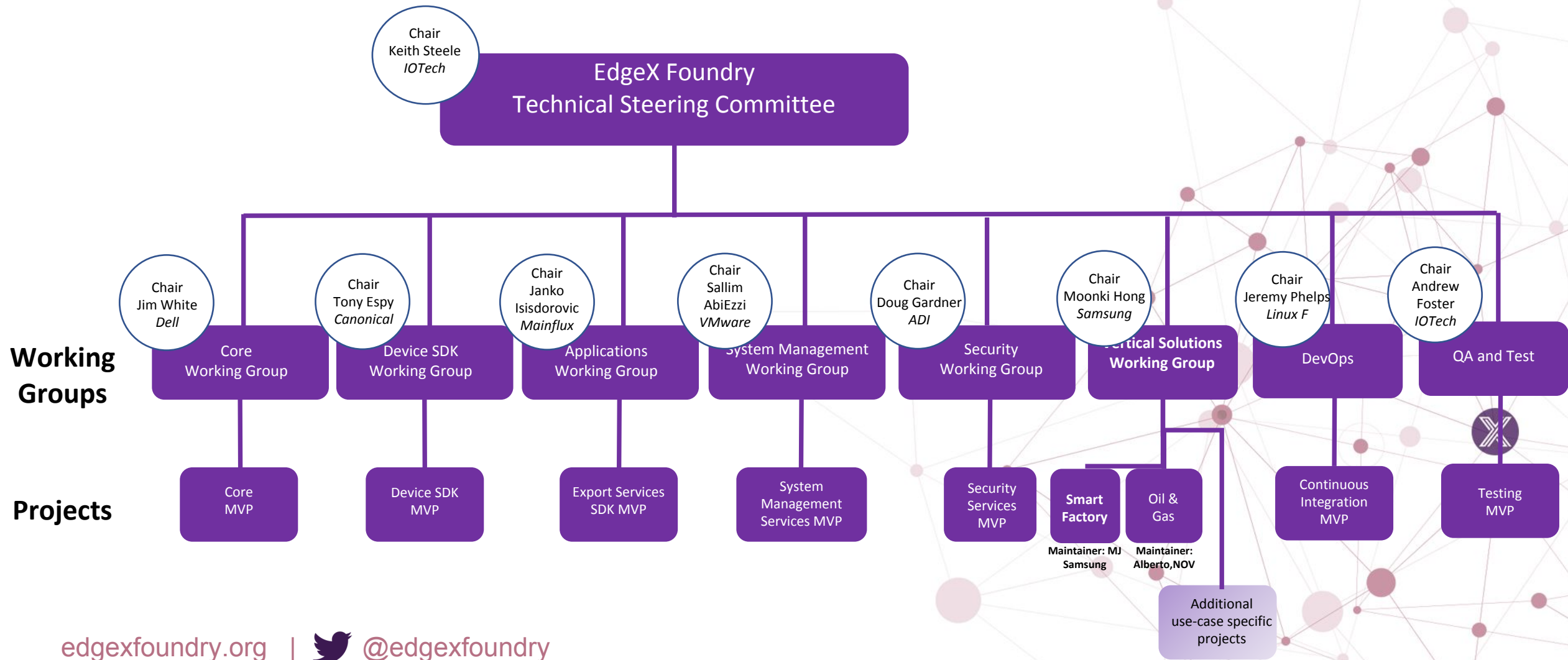
Hackathon Events

- 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: March 14, 2018 (keep as is? ELC/OpenIoT)**



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Thank You