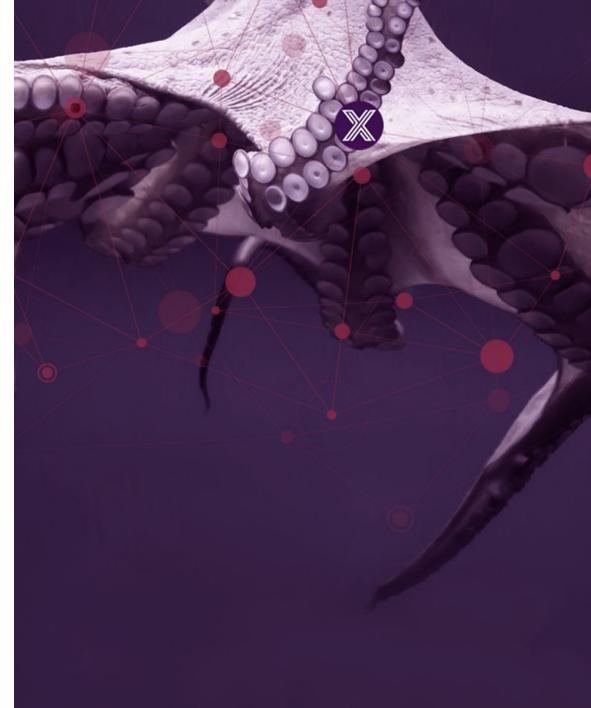


TSC Meeting

February 14, 2018





# Meeting Logistics

Time: February 14, 2018 7am PST – 8am PST

Join from PC, Mac, Linux, iOS or Android: <a href="https://zoom.us/j/983155298">https://zoom.us/j/983155298</a>

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: <a href="https://zoom.us/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ">https://zoom.us/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ</a>

\*\* 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 <a href="http://www.linuxfoundation.org/antitrust-policy">http://www.linuxfoundation.org/antitrust-policy</a>. 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

<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.con
Samsung	MyeongGi Jeong	myeong.jeong@samsung.con
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

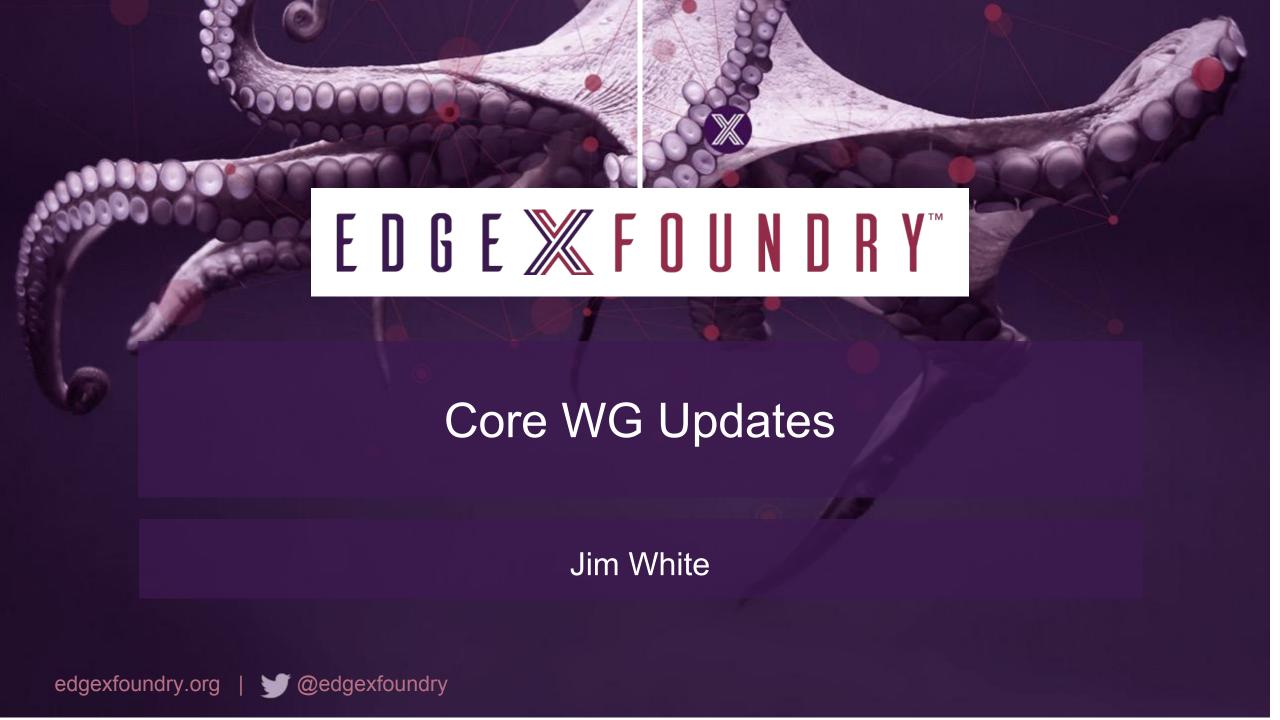
- TSC Vote: Code Contribution Process
- Core WG Updates
- Development Environment Requirements
- Security WG Updates
- System Mgmt WG Updates
- Vertical Solutions WG Updates
- IIC Liaison Updates & Opportunities
- Meetup Update
- Upcoming Events
- AOB

# EDGE X FOUNDRY Code Contribution Process Jim White

#### TSC Vote: Code Contribution Process

- Vote to approve proposed Code Contribution moved to email post-call
- Current Proposal: https://wiki.edgexfoundry.org/display/FA/Contributor%27s+Process
- Voting Requirements (Section 5c of <u>Project Charter</u>)
  - Quorum = 8 TSC members
  - Vote to Approve = Majority approval required

Large Contribution Process **EdgeX Governing** Board **Technical Steering** Committee Contributor Chair Ad Hoc Review 3 Group Working Group Chair 5b Vertical WG Chair edgexfoundry.org | 🕥 @edge



# Significant Updates

- California work tasks are now up in GitHub Projects
- Per last weeks meeting, a tools, lab equipment, cloud product connectors list provided to WG chairs for review/comment on 2/9
  - Provide me feedback by end this week in order to get wider input and provide to EdgeX board for consideration
- DS SDK requirements work for review (thanks Tony)
- Review of Samsung contributions about to begin

# Development Environment (Draft)

#### Developer/QA Tools

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

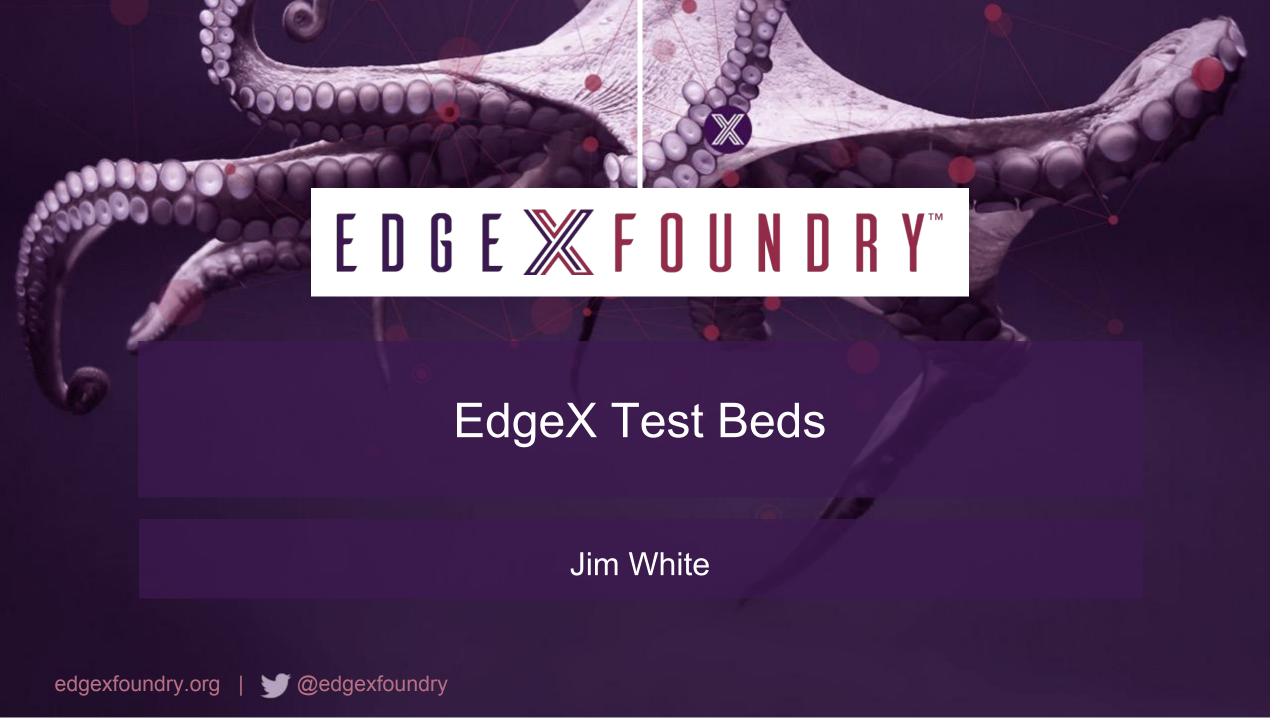
#### Virtual Lab

- 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

#### ullet

#### Physical Device Lab

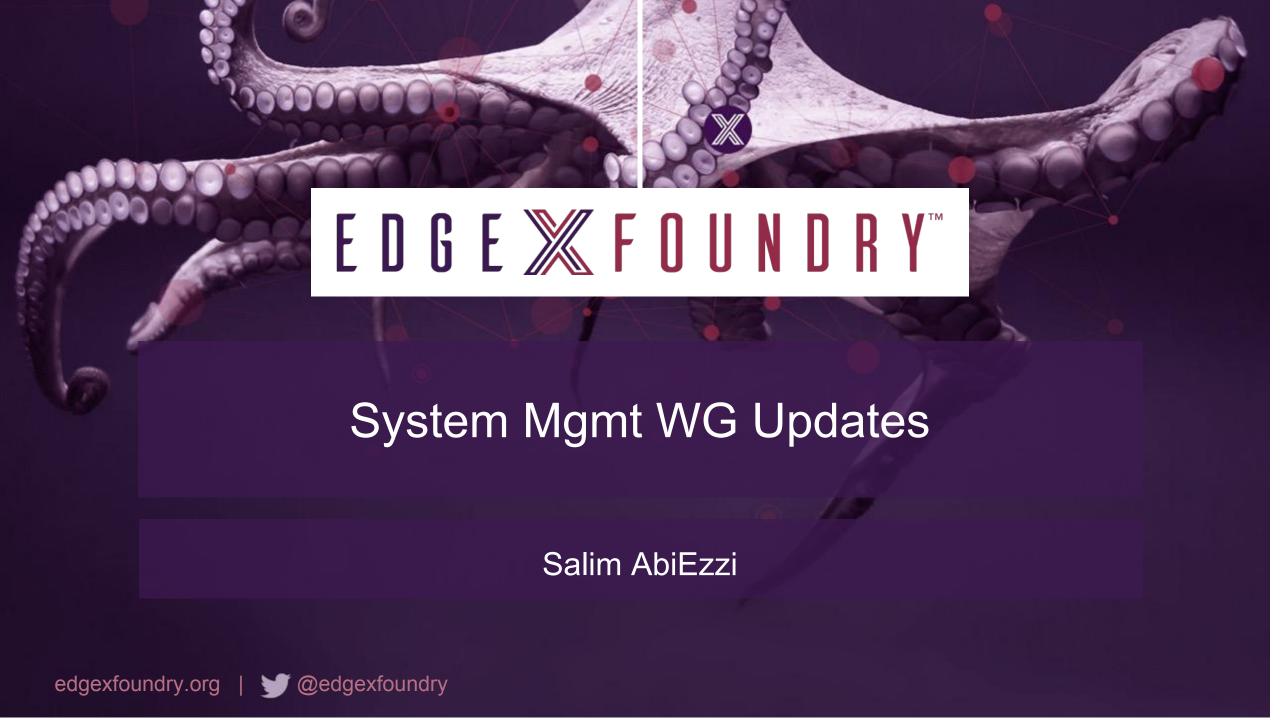
- Intel and Arm based gateway(s) to run EdgeX
- Devices (for those protocols already supported by EdgeX) connected to the gateway(s)
  - BACNet
  - Modbus
  - o BLE
  - SNMP
  - Serial
  - OPC-UA
  - Other devices would be added as more protocols are handled by EdgeX
- A small local network may be necessary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



## EdgeX Test Beds

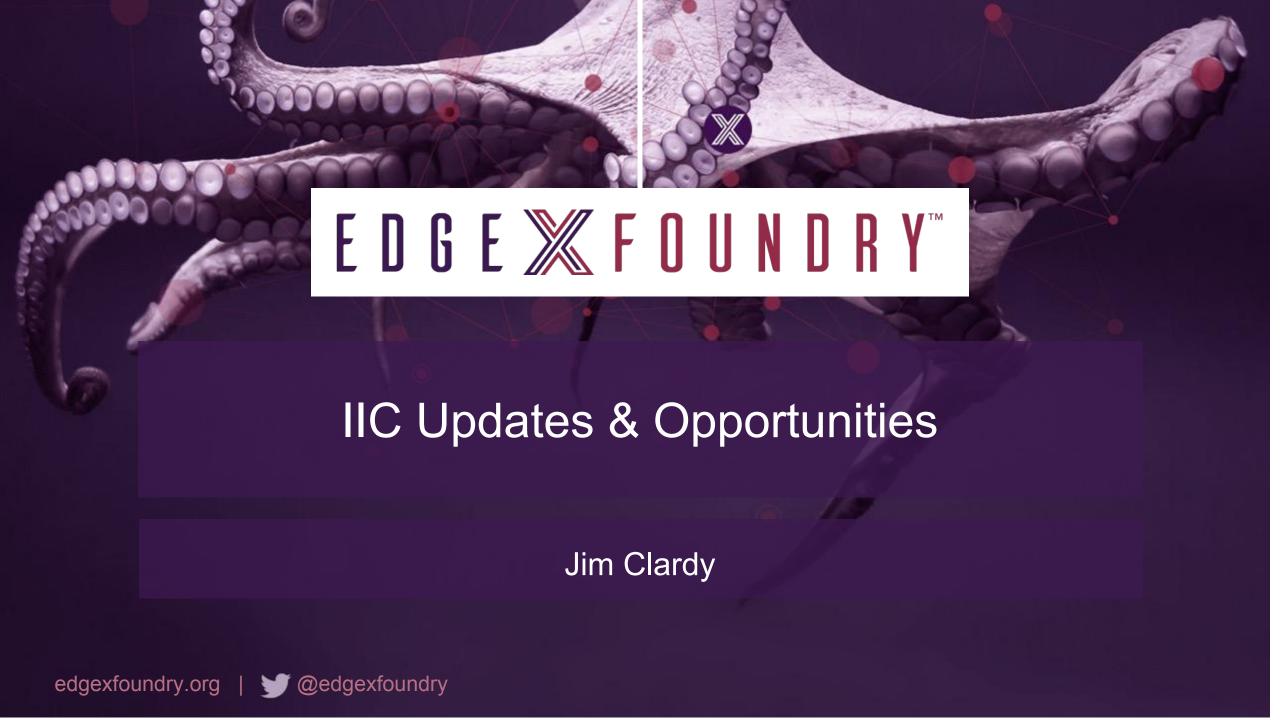
- Discussion on EdgeX Test Beds
- Test Bed Collaboration











#### IIC Liaison Updates and Opportunities

- Secured Opportunities
  - Chicago F2F September 12, 2018
    - Hosted by IIC Security WG
    - Needed: Volunteer to help co-pilot the planning
      - Raise hand now or Email <a href="mailto:james.clardy@netfoundry.io">james.clardy@netfoundry.io</a>
    - Need to propose Agenda Topics/Speakers



## 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 <u>pr@edgexfoundry.org</u> 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 - Confirmed**

- IoT Forum, February 21, 2018, Germany
  - Speakership Keith Steele (IOTech)
- <u>Embedded World</u>, February 27 March 1, 2018, Germany
  - Speakership Keith Steele (IOTech)
- 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

# 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
- <u>loT Build</u>, March 27-28, 2018, San Francisco
  - Speakership and panel Noah Harlan (Two Bulls), Deb Noller (Switch Automation), Rod
     Schultz (Rubicon Labs)
- <u>Hannover Messe</u>, April 23-27, Germany
  - Member booth confirmed so far: Dell, RSA, Software AG, VMware (4 other members in progress)
- Internet of Things World, May 14-17, 2018, Santa Clara
  - Panel Philip DesAutels (Linux Foundation EdgeX Foundry)
- <u>LinuxCon + ContainerCon + CloudOpen China</u>, June 25 27, 2018, Beijing
  - Community Partner
  - CFP open through March 4 / Submit your EdgeX talk <u>here</u>
- 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 <u>here</u>

# Upcoming Events - Confirmed (continued)

- <u>EdgeX / IIC Workshop</u>, September 12, 2018, Chicago, IL
  - Hosted by the IIC Security Working Group (Chair: Sven Schrecker, Intel)
- 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 <u>here</u>
- 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 <u>here</u>

#### EDGE X FOUNDRY

#### **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/schedu
- 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





#### 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 <u>keith@iotechsys.com</u> (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 <u>info@edgexfoundry.org</u> 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 <u>Dave Bohlman</u> and <u>KMC Controls</u> for making this awesome kit and how-to guide available to members!!



#### Hackathon Events

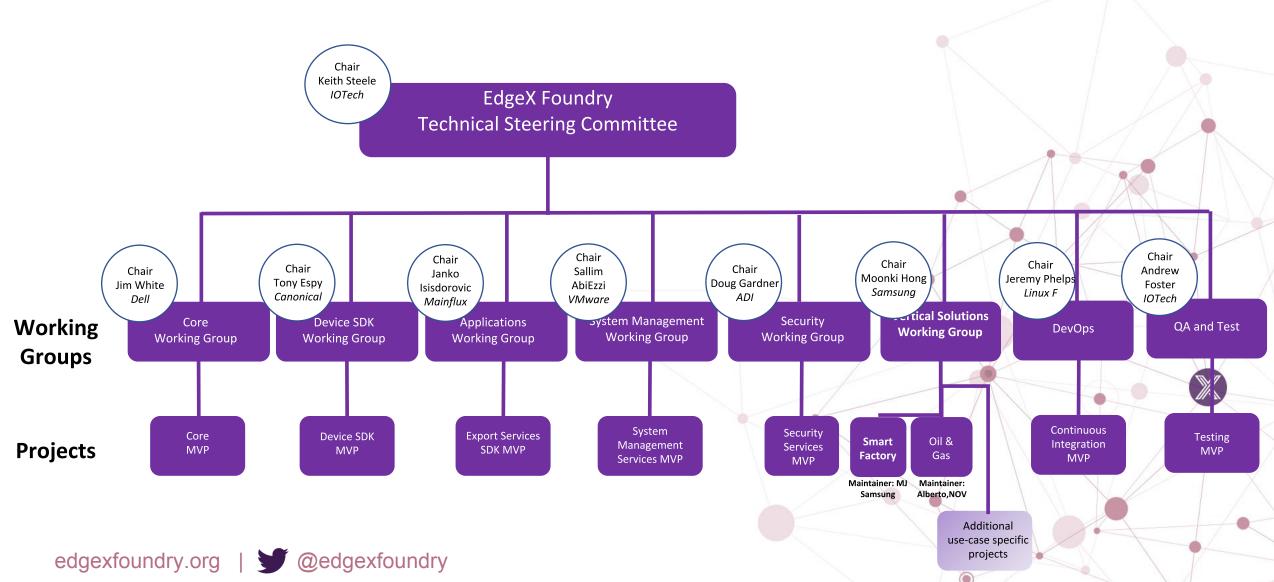
- Jim White and Tyler Cox putting together hackathon starter kit.
- More coming

#### 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







# 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 <a href="https://www.edgexfoundry.org/events/">https://www.edgexfoundry.org/events/</a>

 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 21, 2018

