EDGEX FOUNDRY™

TSC Meeting

August 29, 2018

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Meeting Logistics

Time: August 29, 2018 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
ForgeRock	**David Ferriera**	david.ferriera@forgerock.com
Analog Devices	Doug Gardner	doug.gardner@analog.com
Mainflux	Drasko Draskovic	drasko@mainflux.com
Mainflux	**Janko Isidorovic**	janko@mainflux.com
The Linux Foundation	**Jeremy Phelps**	jphelps@linuxfoundation.org
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
IOTech	**Steve Osselton**	steve@iotechsys.com
Canonical	**Tony Espy**	espy@canonical.com
Dell	**Trevor Conn**	Trevor.Conn@dell.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.*

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Today's Agenda

- WG Updates
- Delhi release dates/planning
- Edinburgh F2F Planning
  - Agenda items and topics
  - Logistics
- EdgeX Community Demo Update
- Developer Outreach
  - Tech Talks
  - Documentation
  - Walkthrough
- IIC/EdgeX Workshop
- Upcoming Events
- AOB

Delhi Release Planning

Jim

Release Dates and features

See https://wiki.edgexfoundry.org/display/FA/Delhi for feature list

   Still WIP - please provide updates/additions/corrections

Code freeze date: Oct 15th

Release date: Nov 9th

Allowing plenty of time between to better address DevOps and release related issues

California Release & Work Group Updates

Jim White

Working Group Chair Updates

- Around the horn
    - Core/Supporting - Trevor
    - Applications - Janko
    - Device Services - Steve
    - Test/QA - Andy
    - DevOps - Jeremy
    - Security - David
    - System Management - Jim
    - Vertical Solutions - Moonki
- Others & Misc

Core Working Group (29-Aug-18)

- GopherCon this week
- Config V2 Prototyping
  - Successful write/read using Consul and hierarchical, composed config types
  - First, merge config-seed into edgex-go (issue 517)
- Nearing completion of sys-mgmt-agent initial check-in (PR 498)
- Export refactoring to utilize /internal (PR 494)
  - Good learning for newer team member
  - Hope to have this wrapped by next TSC meeting
  - Subsequent to this, service resiliency during bootstrap needs to be implemented (Delhi deliverable)

Applications WG (8/29/18)

- Preparing the proposal for redesign of Export Services to make them more scalable and modular. (Mainflux)
  - Initial sync with Core (Trevor) and Sys. Management WG (Jim) done
  - Received good input, need update the proposal
  - Need to sync with Security WG and Vertical Solutions WG

Device Services WG Update (29 Aug 18)

- Meeting postponed
- Work on C and Go SDKs progressing

Security (8/29/18)

- Delhi work continues
- Snap related work continues
- Coordinating HRoT meeting
  - Targeting design complete in Delhi

System Management WG (8/29/18)

- ## Implementation underway
  - Initial management bits in under edgex-go master branch (thanks Akram!)
- ## Roadmapping future releases (Edinburgh, Fuji)
  - See work group page for details
  - To be reviewed / finalized with Edinburgh Face 2 Face

- ## Database Persistence WG update
  - Comparison matrix
  - Performance testing
  - Decisions on next steps

QA/Test WG Update (8/29/18)

- Current
  - Issued new PR [#73](#) "Modify support-notifications test script to meet the new API change in Go version"
  - Blackbox tests are passing for ARM builds on IOTech infrastructure (both 32 & 64 bit) - requires Newman build for ARM

- Next (Delhi)
  - Modify blackbox tests to support any RAML changes
  - Assist DevOps to setup better testing scoreboards
  - Draft Performance Test specification will be ready for review this week

DevOps WG (8/29/18)

1). Planning on release cycle, how long will we support for example.

2). ARM infra still in the works. Getting closer.

3). Released edgex-go and core-config-seed-go dot.

4). Snap concerns on dot release.

5). Jim/Keith updates on Java services?

6). Concerns over Oct 15th freeze.

Discuss in DevOps WG support timeline

Vertical Solutions WG (8/29/18)

1). x

Discuss in DevOps WG support timeline

Developer Outreach (8/27/18)

- Complete
  - [New documentation website](#) live & promoted
  - Refactored [API Walkthrough](#) PRs submitted (non-blocking issue [#505](#))

- In Progress
  - Website layout refresh in progress (keeping old homepage text)
  - DIY Demo on RaspberryPi 3B
    - Mongo dependency is a bocker on Raspbian and Ubuntu 16.04
  - Tech Talks relaunch
    - Jim on Sept 4th, Steve and Janko TBD

- Coming up
  - Device Service creation walkthrough

Edinburgh F2F Planning

Jim W & Brett

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Edinburgh F2F

- Oct 23 - Architect's Day
  - Which Work Groups need time on the 23rd?
  - System management (2-4 hours)
  - ???
- Oct 24-25: TSC meetings
- Planning Deck started
  - Please contact Jim W for agenda item requests & topic coverage
  - See https://wiki.edgexfoundry.org/display/FA/23-25+October+2018%3A+Edinburgh+Technical+Meeting

EdgeX TSC F2F Meeting(s)

- Wednesday & Thursday 24th/25th October -- Location Edinburgh, UK -- Wiki page
  - Working Group technical meetups on Tuesday, October 23
- **RSVP at https://goo.gl/forms/QR3WgP4ybB5KUT3w2**
  - Current registration count: 30 in-person; 3 dial-in (3 are Tuesday only)
  - Tuesday Working Group Counts
    - Applications: 5
    - Device: 10
    - Security: 7
    - Systems Mgmt: 2
    - QA/Test: 2
- Hotel/Travel: https://events.linuxfoundation.org/events/elc-openiot-europe-2018/attend/venue-travel/
- For Wednesday night dinner/activity, Scotch whisky tasting!!
  - RSVP is required. RSVP as part of TSC registration above.
  - Current dinner count: 26
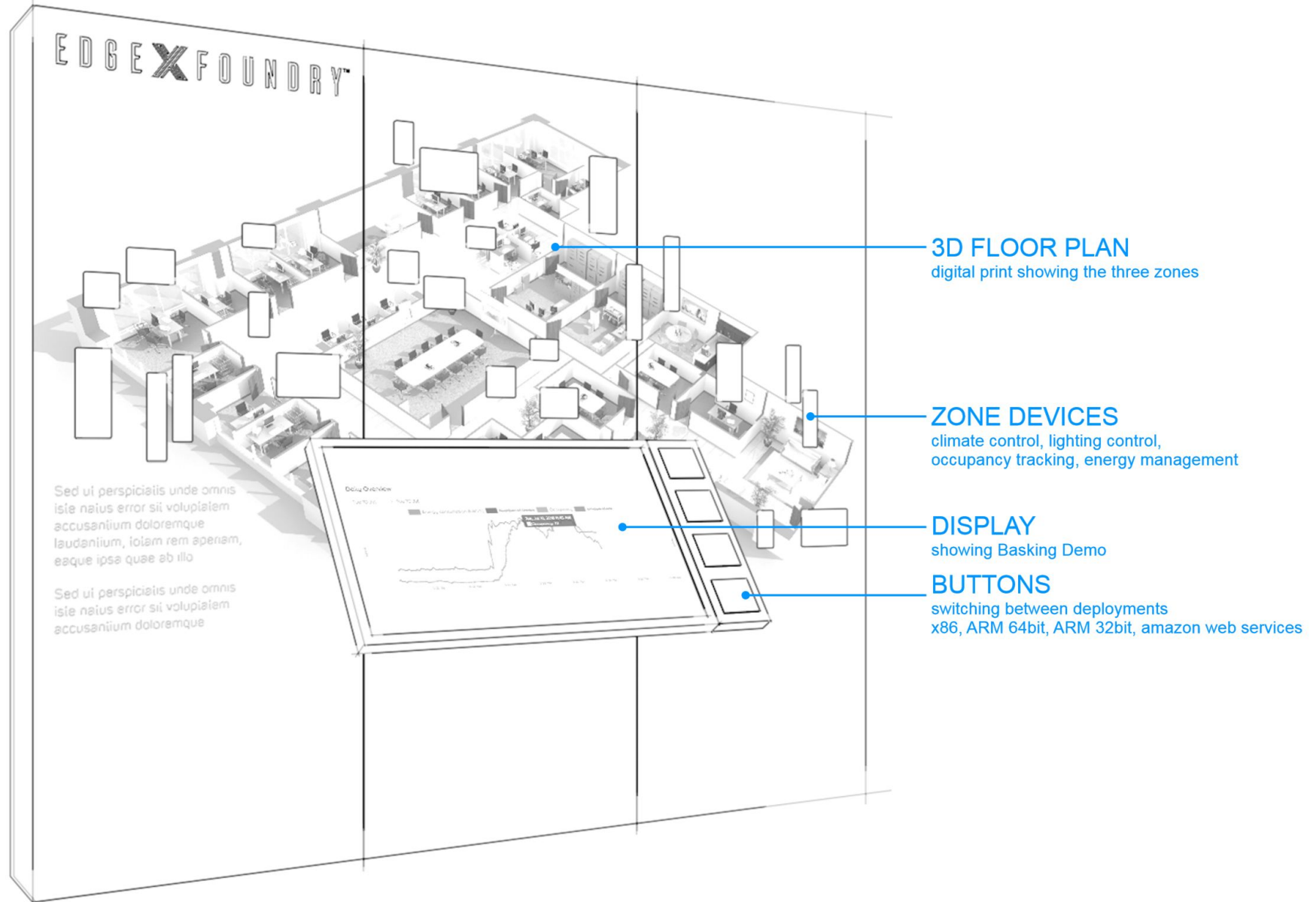

- April 2019 -- Location Seoul or Suwon (South Korea)

Stand Design

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3D FLOOR PLAN
digital print showing the three zones

ZONE DEVICES
climate control, lighting control,
occupancy tracking, energy management

DISPLAY
showing Basking Demo

BUTTONS
switching between deployments
x86, ARM 64bit, ARM 32bit, amazon web services

IOTech

IIC Updates

Riaz Zolfonoon

IIC/EdgeX Workshop

Sept 10-14

Chicago, IL

- Tuesday, Sept 11, 2018 @ 2:00 - 5:30 PM Central Time
- Hyatt Regency O'Hare in Chicago
- https://www.iiconsortium.org/member-meetings.htm

Next Steps:
- Content Planning (see Agenda on next slide)
- EdgeX Members planning to attend
  - David Ferriera, Dean Mocana, Doug Gardner, James Clardy, Jason Shepherd, Jim White, Keith Steele, Mario Comaj, Riaz Zolfonoon, Salim AbiEzzi, Todd Edmunds
  - **All non-IIC members need guest-pass to attend.** Please contact Brett for details.

Note: Just FYI and for planning considerations for those traveling to Chicago: At the same time as IIC meeting, there are also IMTS and Hannover Messe/USA shows in Chicago. On Friday 9/15, IIC and HMI/USA are planning a joint activity: Intelligent Transportation Forum. https://hannovermesseusa.com/

Agenda

1. **Introductions and Workshop Overview** **(10 min)**

   Speakers: Sven Schrecker, SWG Chair, Wael William Diab, Liaison WG Chair, Jason Shepherd: EdgeX (title)

2. **Overview of the IIC Liaison Working Group** **(10)**

   Speaker: Wael Diab, Senior Director, Huawei Technologies

3. **Overview of EdgeX Foundry Initiatives/Activities** **(10)**

   Speaker: Keith Steele (title)

4. **IIC Security Initiatives** **(30)**

   Speakers:

5. **EdgeX Architecture/Security Overview** **(30)**

   Speakers: Jim White/ David Ferriera

6. **Break** **(15)**

7. **Joint IIC/EdgeX Activities** **(15)**

   Speakers: TBD

8. **Panel Discussion & Q/A on Collaboration/Way Forward(55)**

   Moderator: Sven Panelists: all presenters

9. **Closing** **(5)**

Total: 3 hrs

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Upcoming Events

Upcoming Events

- Open Source Summit North America, August 29 - 31, 2018, Vancouver, Canada
  - Community Partner: Save 15% on Attendee Registration with discount code OSSNA18COM15
- EdgeX / IIC Workshop, September 11, 2018, Chicago, IL -- Information
- Edge Computing Congress, September 18 - 20, 2018, Berlin
  - September 20 - 12:20 pm: Janko Isidorovic - Panel (Open Source communities and how EdgeX works with the Akraino Project)
  - September 20 - 12:50 pm: Janko Isidorovic - Overview of EdgeX Foundry
- Open Networking Summit Europe, September 25 - 27, 2018, Amsterdam, Netherlands
  - Community Partner: Save 15% on Attendee Registration with discount code ONSEU18COM15
- IoT Scotland Meetup, September 27, 2018, Scotland
  - 6:30pm: Keith Steele - EdgeX Foundry overview
- IOT Solutions World Congress, October 16-18, 2018, Barcelona
  - Exhibiting: Booth location - Gran Via, Hall 2, Level 0, Street B, Stand 271
  - Community Demo debut
  - Who is planning to be on-site?
    - Andy Foster (IOTech), Brett Preston (LF), Eldar Gizzatov (Basking), James Butcher (IOTech), Keith Steele (IOTech), Martina Ronca (IOTech), Michael Hall (LF), Mo Chehab (Basking) ...others?

Upcoming Events (continued)

- Open Source Summit Europe / ELC / OpenIoT Summit Europe, October 22 - 24, 2018, Edinburgh, UK
  - Community Partner: Save 15% on Attendee Registration with discount code OSSEU18COM15
  - Schedule announced
    - EdgeX Sessions:
      - Getting Started with EdgeX Foundry Workshop, Sunday October 21 at 1:30-5:15 pm, Jim White, Dell
      - Extending Cloud-Native Principles to the Edge to Enable Scalable IoT Solutions, October 23 at 9-9:40 am, Jason Shepherd, Dell
      - Building an Open IoT Solution with EdgeX Foundry and the Zephyr Project, October 23 at 12:20-1 pm, Michal Hall, EdgeX Foundry and Thea Aldrich, Zephyr Project
      - Getting Lean and Distributed at the Edge, October 24 at 5:05-5:45 pm, Jim White, Dell
    - Member sessions (for amplification)
      - Can we Build a Safety Integrity Level System with Linux? October 22 at 11:15-11:55 am, Tiejun Chen, VMware
      - A Hybrid Solution to Address Real Time Virtualization, October 22 at 5:05-5:45 pm, Tiejun Chen, VMware
      - Any other member presentations?
- EdgeX Edinburgh Technical Meetings, October 23 - 25, 2018, Edinburgh, UK
- Internet of Things Congress, October 24, 2018, Nuremberg, Germany
  - 2pm: Matthias Schorer - EdgeX presented in session on how to use microservice approach to IoT edge computing.

Upcoming CFP Deadline/ Need a Volunteers

CFP Upcoming Deadline:

- Embedded World, February 26-28, 2019, Germany
  - Deadline - August 31, 2018
  - https://www.embedded-world.eu/home.html
- FIWARE Summit, November 26-28, Malaga Spain
  - Deadline - September 14, 2018
  - https://docs.google.com/forms/d/e/1FAIpQLSdr2ban4yHdP1O1STEBHDD-e2GOIy_RmNkgLZ3Aw5ZpDH4t5Q/viewform

Mae secured speaking opportunities - please email maemalynn@linuxfoundation.org if you would like to volunteer:

- Members interested in joining the EdgeX Speakers Bureau, please email pr@edgexfoundry.org
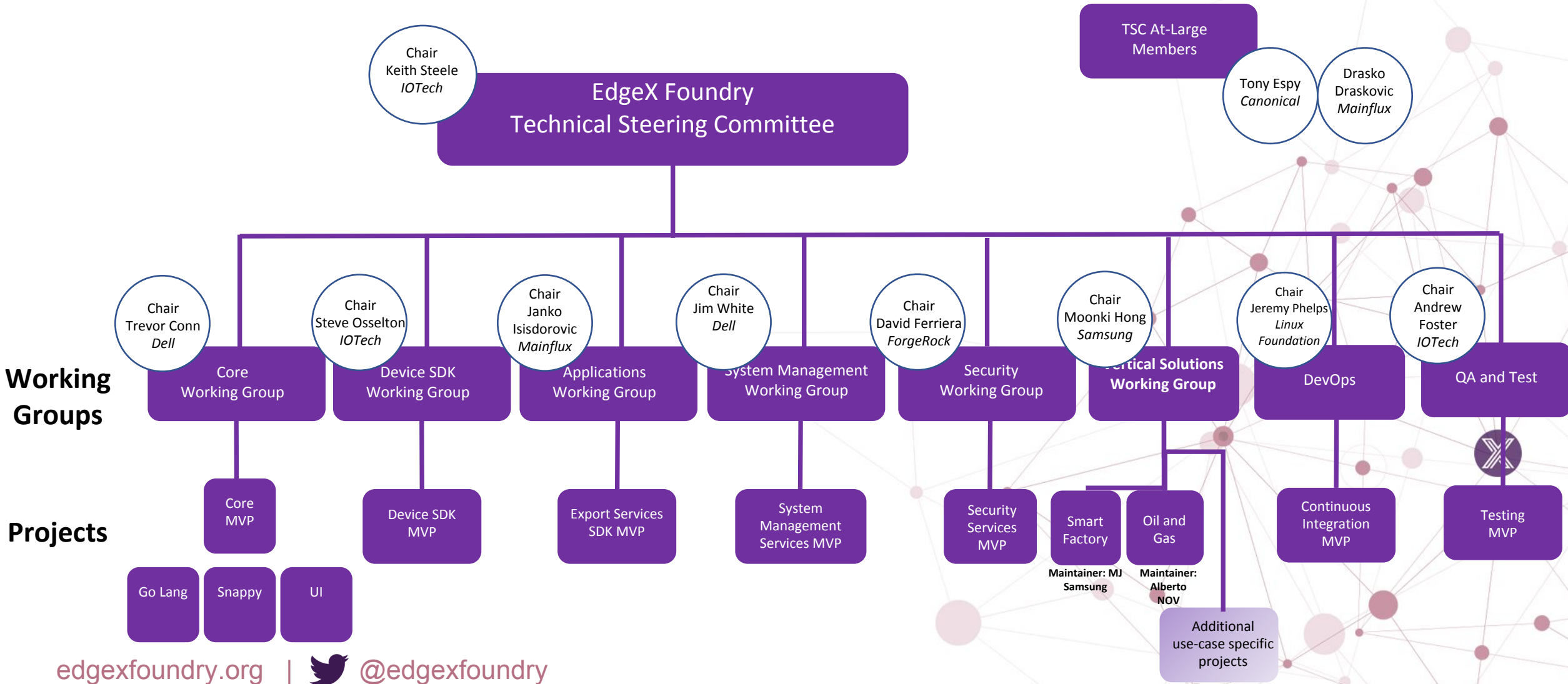
AOB / Reminders

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: September 5, 2018**

EdgeX Project Organization

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EdgeX Foundry Technical Steering Committee

Chair
Keith Steele
IOTech

TSC At-Large Members

Tony Espy
Canonical

Drasko Draskovic
Mainflux

Working Groups

Chair
Trevor Conn
Dell

Chair
Steve Osselton
IOTech

Chair
Janko Isisdorovic
Mainflux

Chair
Jim White
Dell

Chair
David Ferriera
ForgeRock

Chair
Moonki Hong
Samsung

Chair
Jeremy Phelps
Linux Foundation

Chair
Andrew Foster
IOTech

Core Working Group

Device SDK Working Group

Applications Working Group

System Management Working Group

Security Working Group

Vertical Solutions Working Group

DevOps

QA and Test

Projects

Core MVP

Device SDK MVP

Export Services SDK MVP

System Management Services MVP

Security Services MVP

Smart Factory

Oil and Gas

Continuous Integration MVP

Testing MVP

Go Lang

Snappy

UI

Maintainer: MJ Samsung

Maintainer: Alberto NOV

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@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
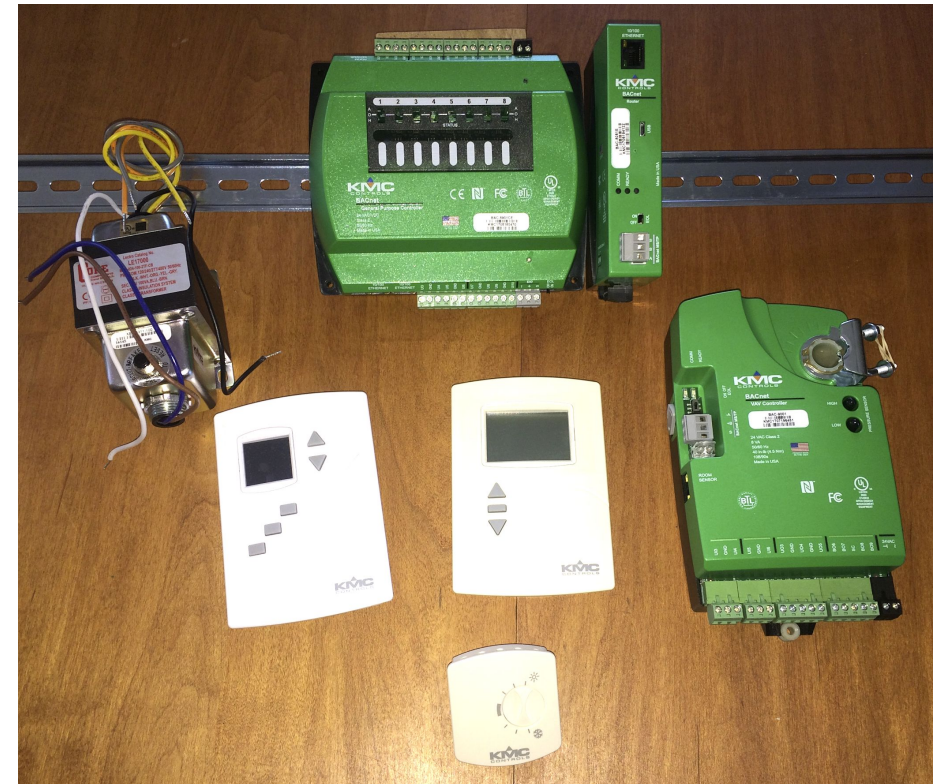
  Call recordings are available on the Wiki

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

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

Thank You