EDGEXFOUNDRY™

TSC Meeting

December 19, 2018

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Meeting Logistics

Time: December 19, 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

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. Decisions by vote at a meeting require a majority vote, provided quorum is met.*

Today's Agenda

- WG Updates
- Process Misc
    - Release Tsar role (vote needed)
    - Attribution policy (vote needed)
    - Work ongoing
        - EdgeX Long/Short Term Support
        - Release, version, patches policy
- Next TSC F2F
- Upcoming Events
- AOB

Delhi Dot Release

Jim

Delhi Dot Release (0.7.1)

- Released Monday
  - docker-compose files available (see developer-scripts repo)
- Feature: Core, Metadata, Logging, Export Client Redis-based services
  - Work towards making EdgeX more database independent
  - Work towards making EdgeX more 32bit available
- Also include some new device services (from the new SDKs)
  - device-random
  - device-mqtt
  - device-modbus
- Work will include some bug fixes not captured in Delhi

Work Group Updates

Chairs

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
- Developer Outreach - Michael

Core Working Group (12-Dec-19)

- Mongo DB driver replacement
  - Confirming that we did merge PR #915 and are now using the GlobalSign driver
- Need to catch up on PRs
  - Vacation last two days
  - Blackbox testing methodology changes last Friday
- Tomorrow's Core WG call
  - Primary topics
    - Vault integration with core services
    - Service Registry abstraction

Applications WG Update (19-Dec-18)

- Performance comparison of:
  - Nuclio
  - OpenFaaS
- Looks like the performance is similar if go is used
- Footprint is good for the edge
- Features are very good
- CPU usage might be the problem
  - Demo was done on server with 64Gb of RAM and CPU with 16 Cores (if I'm not mistaken) and the CPU usage was 7-8%
  - Need to test on a lower end machine to understand if it is usable for Edge.
- Application WG face to face meeting is scheduled for January 24 and 25 in Boston. More details will be in wiki.

Device Services WG Update (19-12-18)

- Go SDK
  - Modify ValueDescriptor Id as a string #136
  - Replace mgo.v2/bson with globalsign/mgo/bson #140
  - Replace Replace ErrNotFound to NewErrServiceClient #145
  - Update put command to accept JSON parameter map #144
- General
  - Raised work packages for new Device addressable format
  - Discussing device profile changes in shared requirements doc

Test/QA WG Update (12-19-18)

- Improving black box test script to use general API to initialize and cleanup database in PR [#116](#)
  - Removed DataDumps folder and make every initial test data import by "$service-importer" collection via Postman/Newman
  - Moved test data clean up logic to "$service-cleaner" collection via Postman/Newman
  - Updated document in https://github.com/edgexfoundry/blackbox-testing/tree/master/docs
- Created draft performance test architecture and will discuss on next QA/Test WG meeting
- Have started implementing initial performance test cases

DevOps WG Update (12-12-18)

Delhi patch is out. WG leads make sure to adjust your versions appropriately.

I'll not be attending the DevOps/QA WG meeting tomorrow.

Security WG Update (12-12-18)

- Documentation work ongoing - should have API gateway doc this week
- Completed Delhi demo last week
- Finish presenting HW based secure storage document in today's WG meeting.

System Management WG Update (12-18-18)

- No big updates - work still in progress
  - Start/Stop redesign
  - Go C SDK API work to be done
  - Add CPU usage metrics (in addition to memory usage metrics)
  - Add health/status check of the services to the SMA
  - Stretch goal – provide a translation layer (with abstraction) to offer SMA API via other protocol (like LWM2M, SNMP, etc.)
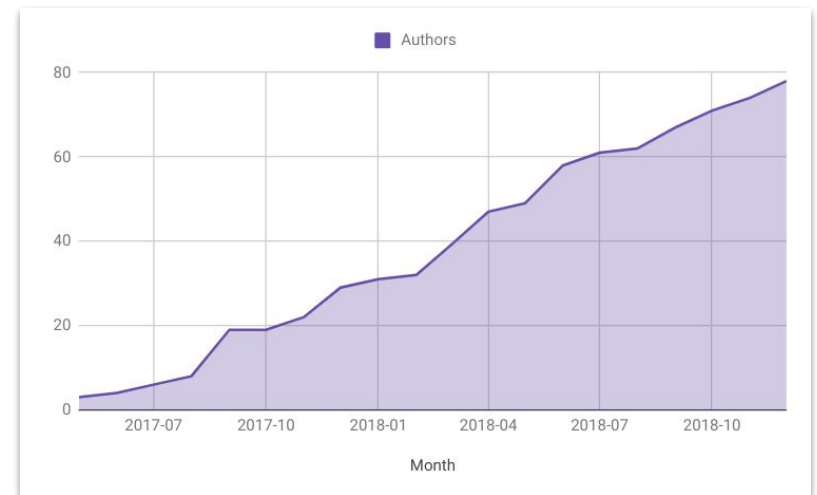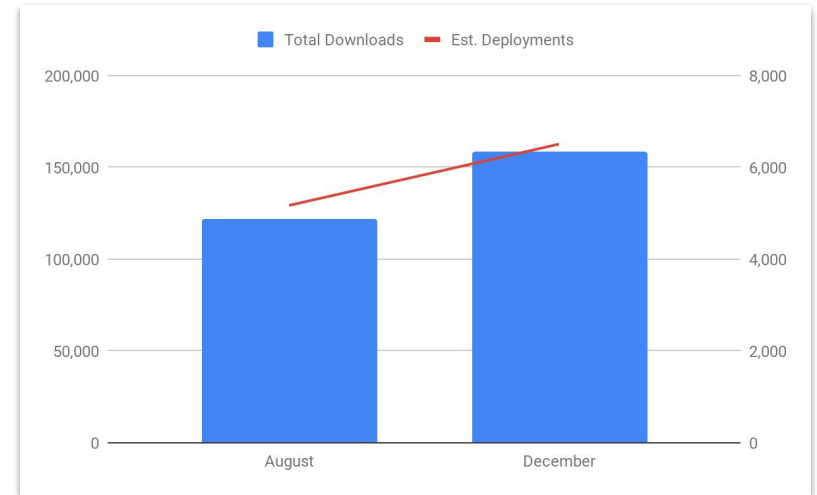
Vertical Solutions WG Update (12-12-18)

- WG calls to resume in the new year

Developer Outreach (12-19-18)

- Done
  - DevKits pages
  - New forum from Discourse
  - Updated LF CII project profile (41% coverage)
- In Progress
  - Tech writer onboarding
  - Understanding Device Profiles

Project Metrics (12-19-18)

- Dockerhub:
  - 158,000 total downloads (all images)
  - ~ 2,400 new EdgeX deployments since August
    - From ~1000 users in Getting Started documentation
- GitHub:
  - 4 new Authors this month
  - 33,000 lines of code* changed
- Website:
  - 3,496 users (2,712 new)
  - 22,226 pageviews
  - 12,050 docs pageviews
  - No significant change from November

EdgeX Process & Misc Items

EdgeX Process & Misc Items

- Committers & maintainers policy approved - awaiting board approval of definitions but otherwise done
- 2 votes needed
  - Release Tsar (aka manager) role: https://wiki.edgexfoundry.org/display/FA/Release+Tsar
    - Vote: Raised (Keith); Seconded (Jim); All voted in favor
  - License and Attribution policy: https://wiki.edgexfoundry.org/pages/viewpage.action?pageId=21823866
    - Vote: Raised (Jim); Seconded (Tony); All voted in favor
- Work still on going (see Wiki for current drafts)
  - Releases, versions, patches definitions & policies
  - LTS/STS still being reviewed & worked

EdgeX TSC F2F Meetings

Brett Preston

EdgeX TSC F2F Meeting(s)

- **22 - 25 April, 2019** -- Location Seoul, South Korea -- Wiki page
  - Technical Business Discussions + EdgeX 101 on Monday, April 22
  - Architect's Day / WG Breakout Sessions + Social Event on Tuesday, April 23
  - Technical F2F - Day 1 + Dinner Reception on Wednesday, April 24
  - Technical F2F - Day 2 on Thursday, April 25
- **RSVP at https://goo.gl/forms/oMptkNU90RRxhK5g1**
  - RSVP by EOD April 5
  - Current registration count: 4 in-person; 0 dial-in
- Hotel/Travel: Information coming soon

- **October, 2019** -- Location Chandler, Arizona (USA) @ hosted by Intel

Upcoming Events

Upcoming Events

- Emerging Computing Technology Conference, January 29-30, 2019, Houston
  - Akram Ahmad (Dell) - January 29 at 4:15 pm

- IoT Evolution Expo, January 29 - February 1, Fort Lauderdale
  - Jim White (Dell) - TBD - Edge Computing: Remotely acting on mission-critical decisions in the field

Upcoming CFPs

CFP Upcoming Deadlines:

- Open Source Leadership Summit , March 12-14, 2019, Half Moon Bay, CA
  - CFP Status: Closes January 28, 2019
  - https://events.linuxfoundation.org/events/open-source-leadership-summit-2019/program/cfp/

- Open Source Summit China, June 24-25, 2019 | Shanghai, China
  - CFP Status: Opens December 1, 2018 – March 10, 2019

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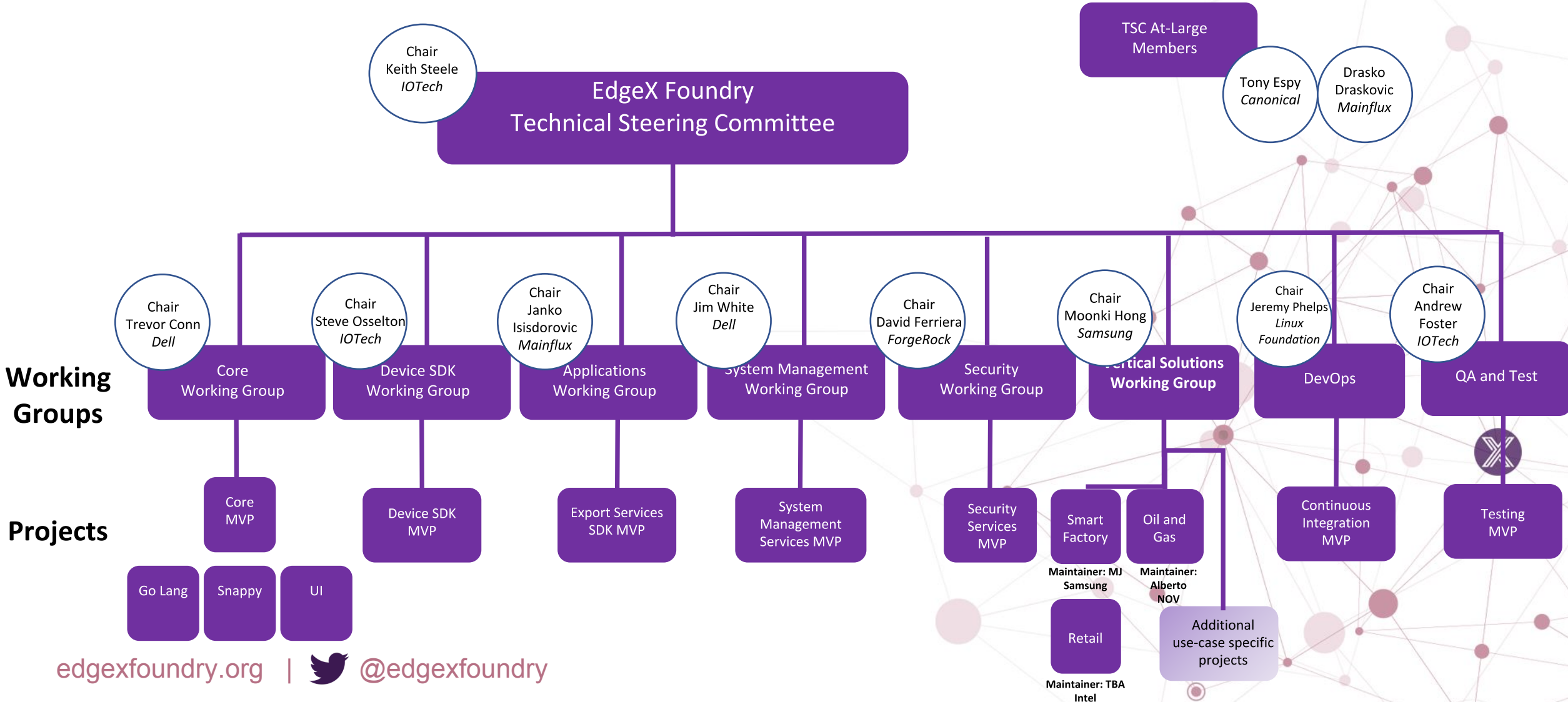
AOB / Reminders

AOB/Cadence

- Meeting Cadence Reminder
  - Currently held weekly at 7am PST on Wednesday's
  - Calls without TSC quorum will still be used to review issues

- **Next Meeting: January 9, 2018**

Calls December 26 and January 2 canceled - Holidays

EdgeX Project Organization

EDGE X FOUNDRY™

Chair
Keith Steele
IOTech

EdgeX Foundry
Technical Steering Committee

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

Retail

Maintainer: TBA Intel

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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
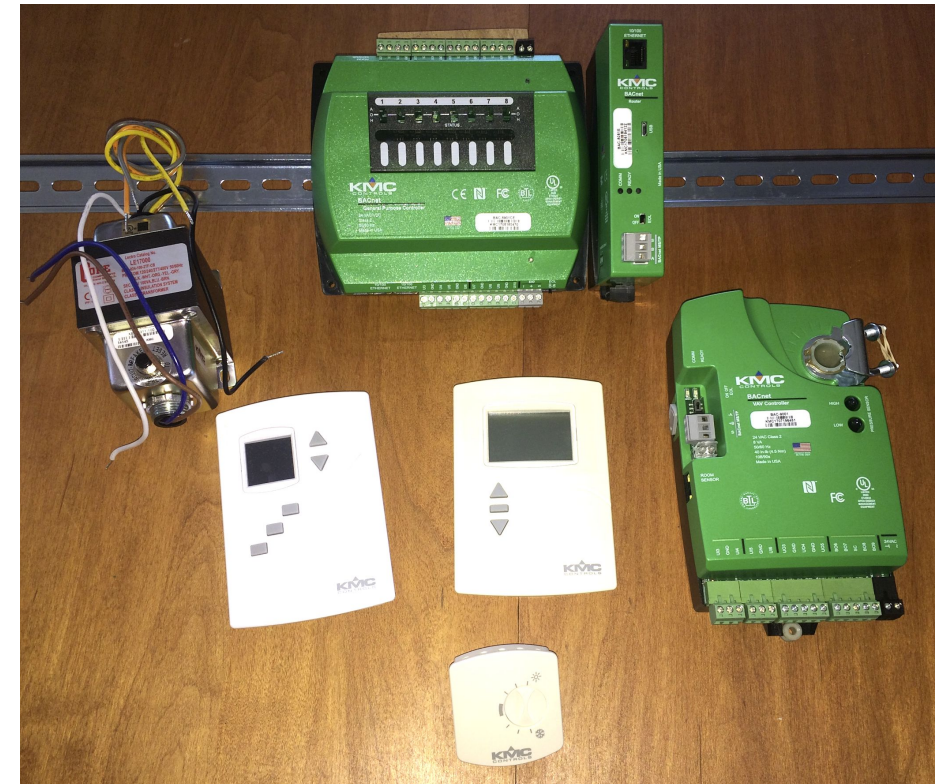
  Call recordings are available on the Wiki

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

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