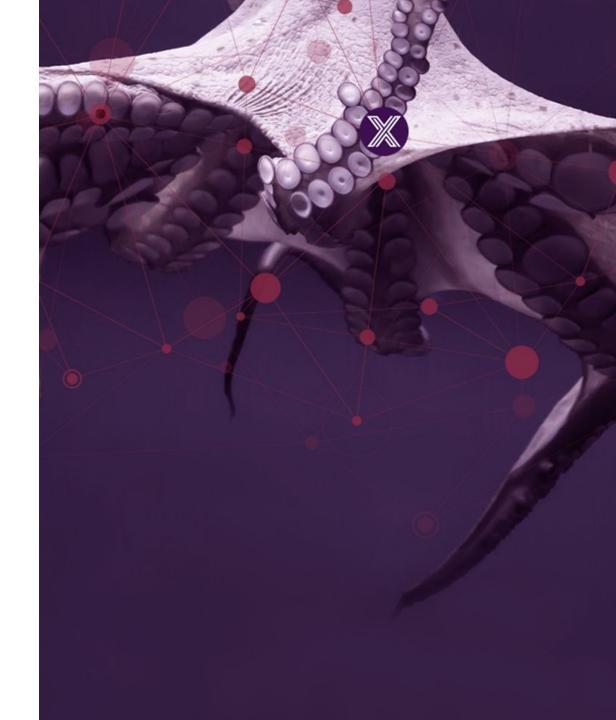
EDGE FOUNDRY

TSC Meeting

November 14, 2018



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.



Meeting Logistics

Time: November 14, 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

ForgeRock David Ferriera <u>david.ferriera@forgerock.com</u>

Analog Devices Doug Gardner <u>doug.gardner@analog.com</u>

Mainflux Drasko Draskovic <u>drasko@mainflux.com</u>

Mainflux Janko Isidorovic janko@mainflux.com

The Linux Foundation Jeremy Phelps <u>iphelps@linuxfoundation.org</u>

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 <u>espy@canonical.com</u>

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

- Delhi Release
- WG Updates
- Next TSC F2F
- Upcoming Events
- AOB



Delhi Release - Friday, 16 NOV

- What PRs, bug fixes, misc. is still outstanding for this release?
 - What is work plan and timeframe to meet the deadline
- Jeremy what does DevOps need from the dev community?



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
- Others & Misc

Core Working Group (14-Nov-18)

- Reviewed latest Redis code for Delhi 0.7.1 release
 - Support-notifications is committed, work not started.
 - IOTech has offered help, in discussion with Redis
 - Support-logging will not be included
 - Mongo still to be used here if Persistence == "Database"
 - All other services looking pretty good
- Starting POCs on a couple Edinburgh initiatives
 - GoKit use limited to logging (PR #787)
 - Mongo data model decoupling (PR #779)
 - Hoping to have more detailed progress report @ 15-Nov Core WG call

Applications WG Update (14-Nov-18)

- Applications WG Meeting on 13-Nov-18
- Continued discussion on Application Services
 - Need to decide on example Message Bus Implementation (0MQ vs NATS)
 - MEssage bus configuration should be registered to Sys-config or Consul
 - Need to decide on example Function as a service Implementation (nuclio vs OpenFaaS)
 - Leonard Goodell from Intel will help write down low level spec for development
 - We have discussed to develop following microservices:
 - Data Filter Service looking into using FaaS as an example
 - Transformation Service
 - Compression Service
 - MQTT Publisher Service
 - Connection Credentials will be pushed to Vauld
 - Sync with System Management (Agent) on additional metrics and logging

Device Services WG Update (14th Nov)

- Created Dehli branches for C/Go SDKs
- C SDK Consul integration to be done in 0.7.1 update
- Go MQTT and Modbus Device Services are both in the holding area and ready to publish
- Adding new simple Go "random" service
- Michael doing some getting started guides for services
- Work started on SDK documentation

QA/Test WG Update (14th Nov)

- Merged PR #104 removed sleep when starting the services to speed up the black box test
- There are some test scripts for core service that don't detect failures opened two issues to improve it #97 and #98
- Have issued PR #102 for issue #97
- After the script improvement, we found additional failed test cases (the response code doesn't match the statement in RAML) - will open new issues in edgex-go
- Continuing to review testing tools and frameworks
 - Intel will demo their work with Telegraf+InfluxDB+Granfana for metrics gathering at tomorrow's combined QA/Test WG meeting (Nov 15th)

DevOps WG (7-NOV-18)

Delhi release risks:

- edgex-ui-go build failure (go vet)
- last minute commits to delhi branch (device-sdk-go seems most risk)
- all services need to have version rev on master branch ASAP

Security (14-Nov-18)

- Some last minute Delhi issues being worked. Should be done this morning.
 - Thanks to Ian and Tony for their help!
 - Thanks Tingyu and Alain for the extra hours
- Delhi Security Demo next meeting in the Security WG meeting
- HW Secure storage design document review after Thanksgiving
- Edinburgh work begins tomorrow:)

System Management WG (14-Nov-18)

- Delhi wrapped up
 - Some issues with start/stop punted to Edinburgh (Jim fail)
- Demo of Delhi System Management functionality (thanks Akram)
 - www.youtube.com/watch?v=tlEnEo6whas&feature=youtu.be
- Organizing plans / work tasks for Edinburgh
 - Redesign/implement SMA start/stop [First priority]
 - Integrate with Security
 - Incorporate with SDKs/DS
 - Add metrics
 - Add service status health check
 - Create initial transformation (stretch goal)



Developer Outreach (14-NOV-18)

- In Progress
 - New "Quick Start" guide for Delhi
 - Styling docs website to be on-brand
 - Deployment Patterns docs on the website
- Coming up
 - Revised "Get Started" webpage
 - DevKits & Ecosystem webpages
 - Migrating chat to Slack
 - Device Service usage guides



Miscellaneous

- Hanoi naming approved by TSC (Oct 2020 release name)
- Tools budget approved by TSC (Keith moving it forward with board)
- Release Manager meeting later today
- Any Edinburgh Scope Changes since meeting with your work groups?
 - Wiki has been updated with Edinburgh road map (as well as updating backlog)
 - I'll add Issues to Github after this week



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: 1 in-person; 0 dial-in
- Hotel/Travel: Information coming soon

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



Upcoming Events

Additional EdgeX events available at https://www.edgexfoundry.org/events/

- <u>loT Build Europe</u>, November 13-14, London
 - Keith Steele November 13 <u>Defining Edge and its role in the Internet of Things</u>
- <u>FIWARE Global Summit</u>, November 27-28, Malaga
 - Janko Isidorovic (Mainflux) Keynote on November 27 Enabling a Cloud-Native Edge for IoT Scale
- International Congress on Management and Technologies, December 8-13, Brazil
 - Dalton C G. Valadares (Federal University of Campina Grande) Edgex Foundry: plataforma baseada em serviços para aplicações IoT
- Emerging Computing Technology Conference, January 29-30, 2019, Houston
 - Keith Steele (IOTech) and Jim White (Dell) January 29 at 4:15 pm
- <u>loT Evolution Expo</u>, January 29 February 1, Fort Lauderdale
 - Jim White (Dell) TBD Edge Computing: Remotely acting on mission-critical decisions in the field

Upcoming CFPs

Additional EdgeX events available at https://www.edgexfoundry.org/events/

CFP Upcoming Deadlines:

- Internet of Things World, May 13-16, Santa Clara, CA (USA)
 - Deadline November 16, 2018
 - https://get.knect365.com/iot-world/speaking-submission-2019/?_ga=2.218061782.1372769890.153676958
 1-2081958547.1534262136
- 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 <u>Speakers Bureau</u>, please email <u>pr@edgexfoundry.org</u>

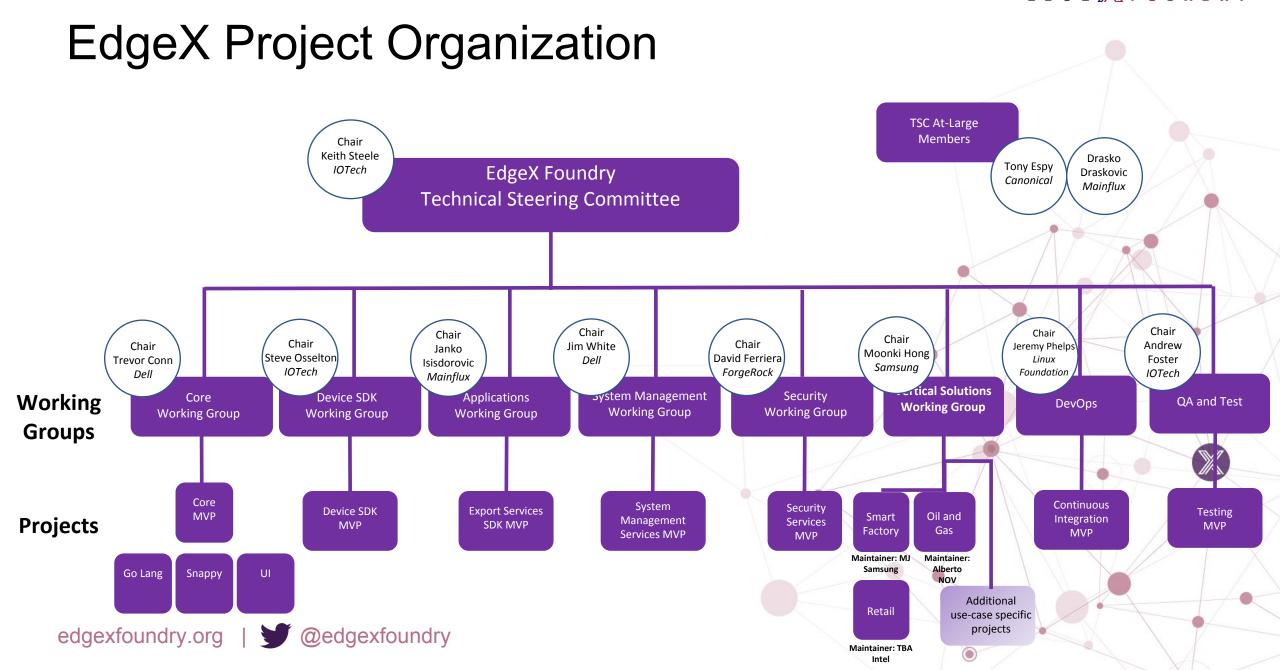


AOB/Cadence

- 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: November 28, 2018





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 <u>info@edgexfoundry.org</u> 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 <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

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 <u>Dave Bohlman</u> and <u>KMC Controls</u> 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 <u>pr@edgexfoundry.org</u> 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

