TSC Meeting

September 11, 2019

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Meeting Logistics

Time: Wednesdays 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

EDGE X FOUNDRY™

Company	Name	Email
Intel	Brad Corrion	bradley.w.corrion@intel.com
IOTech	Iain Anderson	iain@iotechsys.com
Intel	James Gregg	james.r.gregg@intel.com
Dell	Jim White (TSC Vice Chair)	james.white2@dell.com
IBM	Joe Pearson	joe.pearson@us.ibm.com
IOTech	Keith Steele (TSC Chair)	keith@iotechsys.com
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RSA	Tingyu Zeng	tingyu.zeng@rsa.com
Canonical	Tony Espy	espy@canonical.com
Dell	Trevor Conn	Trevor.Conn@dell.com

Current quorum = 7 members

Note: Quorum for TSC meetings requires at least fifty percent of all voting members of the TSC to be present. The TSC may continue to meet if quorum is not met, but will be prevented from making any decisions at the meeting. Except as provided in Section 7.c. and 8.a, decisions by vote at a meeting require a majority vote of those in attendance, provided quorum is met. Decisions made by electronic vote without a meeting require a majority vote of all voting members of the TSC.

Today's Agenda

- WG Updates
- Fuji work status
- Upcoming Events
- AOB

Work Group Updates

Chairs

Working Group Chair Updates

- Around the horn
    - Core/Supporting - Trevor Conn
    - Applications - Mike Johanson
    - Device Services - Iain Anderson
    - Test/QA - Robin Chatterjee
    - DevOps - James Gregg
    - Security - Malini Bhandaru and Tingyu Zeng
    - System Management - Jim
    - Certification - Rodney Hess
    - Vertical Solutions - Brad Corrin
    - Updates from Release Czar - Lisa
    - Updates from Dev Advocate - Michael

Core Working Group (11-Sept-19)

- Security/core service integration
  - Mongo DB bootstrapping (PR #35) completed, merged
    - Didn't break the blackbox tests! Today's Allure report shows %100 passing.
  - Moving on to integration with Vault via go-mod-secrets
    - https://github.com/edgexfoundry/docker-edgex-mongo/issues/34
    - Mock secrets for now, will need security-secretstore-setup work completed for full integration
  - Implementation of Global Configuration for security enablement almost complete (decision from Core WG 15-Aug-2019)
- Core WG Topic for Tomorrow
  - Refactoring Core Service initialization to remove duplicate logic
  - See current init.go implementation, much is duplicated
  - Michael Estrin to review proposal with the group
    - Preliminary review already done within Dell

Applications WG Update (11-September-19)

- **In Progress**
  - AWS Export (Preliminary PR made - Under Review)
  - Store & Forward
    - PR open for Mongo Implementation
    - Decided to not leverage scheduler for retries
  - Expose Clients for use by developers (i.e. Lookup Metadata)

- **Merged**
  - Expose WebServer to Developers to add custom endpoints
  - Experimental Feature
    - Push To Core - function that allows pushing data to core data

Application Services

Functions (built into SDK)

Current/Complete:

Fuji
- AES Encryption
- GZIP Compression
- ZLIB Compression
- MarkAsPushed **NEW!**

Edinburgh
- Device Name Filter
- Value Descriptor Filter
- XML Conversion
- JSON Conversion
- MQTT(S) Export
- HTTP(S) POST Export

Coming Soon:

- Store and Forward
- Vault integration for secrets

Reference App Services (Fuji)
(built on top of SDK)

- Azure IoT Hub (Fuji) **AVAILABLE**
- Amazon IoT Core (Fuji) **WIP**
- Configurable AS (Fuji) **AVAILABLE**

Device Services WG Update (11-September-19)

- SDKs
  - 4 issues against C SDK for Fuji
  - ~20 against Go (7 PRs in process)
- Services
  - Bluetooth and BACnet progressing
  - OPCUA (in C) to be uploaded to -holding
- Geneva planning started

Device Services - current/coming

Open Source connectors (Current):
- Modbus (TCP/RTU)
- Virtual Device
- Random
- Grove C - ARM only
- SNMP
- MQTT

Open Source connectors (Future):
- BACnet (IP & MSTP) (Sept)
- OPC UA (Sept)
- GPS (Sept)
- Bluetooth (Sept)
- ONVIF Cameras (Oct)

Commercial connectors (Current):
- MQTT
- Modbus (TCP/RTU)
- BACnet (IP & MSTP)
- OPC UA
- GPS
- MEMS

Commercial connectors (Future):
- CAN SocketCAN, CANopen (Sept)
- EtherNet/IP (Sept)
- EtherCat (Sept)
- PROFINET (Sept)
- Siemens s5/s7 (Sept)

DevOps WG Update (09-11-19)

Fuji Scope

Static Code Analysis Tools

- Snyk Integration with Jenkins <mark>WIP</mark>
  - Create a new global library that will be used with Jenkins Pipeline stage that runs the Snyk CLI scan using the new Snyk build-agent image - <mark>DONE</mark>
  - SPIKE:
    - Need to figure out the way we want to integrate Open Source repos using a common / shared account to Snyk
    - Configure notifications to SIR team members

New Jenkins jobs for Fuji

- The following repos have new build automation slotted for Fuji but are currently still in holding - <mark>BLOCKED</mark>
  - device-bacnet-c, device-bluetooth-c, device-gps, regression-test
- docker-edgex-mongo has a bootstrap application (Go) - <mark>DONE</mark>

Geneva scope

- Major CI transformation is the focus - Jenkins Pipelines
- We received a response from Andy Grimberg and determined that scope for shared infrastructure changes on top of transformation of the Jenkins pipelines, would be too much for Geneva scope

Next Meeting 9/12/19 @7:00 PST

Test/QA WG Update (11-09-19)

- Blackbox Test
  - Merged PR #267, #269 to fix issue #266, #268
  - PR #263 for new tests of APP Function SDK is under review
- New Blackbox Test
  - PR #8 on edgex-taf and #5 on edgex-taf-common are under review
- RAML -> Swagger conversion
  - Waiting for swaggerhub account
  - Updating PR #357 for Device-SDK API document
- Certification Support
  - Testcases for device service are under review
  - Test Plan v0.2 for device service is under review
  - Developing test script for device service

System Management WG Update (9-11-19)

- I'm out this week. No WG meeting was held this week
- Ongoing efforts
  - Open Horizon POC
  - Fuji Release Items
    - Metrics collection
    - Set configuration

Security WG Update (09-04-19)

1) Project of merging security-secretstore-setup into EdgeX: Issue-1673 & Issue-1675 work in progress. Discussion on 1673 expected in today's security WG meeting - possible change of the project structure.
2) Samsung interested in sharing their penetration testing learnings from OPNFV to apply to EdgeX
3) Should we bring out EdgeX 1.2 to release a patch to PKI setup from Jim Wang/Intel? It fixes the bug where PKI materials for Security Gateway were created at build time making it same for all deployments versus at launch time to have unique ones per instance. (Trevor/Dell: security has not been widely adopted yet. Tony/Ubuntu: It works correctly for Ubuntu snaps)

Certification WG Update (9-9-19)

- Slow progress on the Swagger implementation for Device Services SDK and on the Robot Framework-based QA tests

- Next meeting this Monday, September 16th, 10 a.m. EDT

Vertical Solutions WG Update (9-10-19)

- Next meeting, today at 4PM:

- When: Wednesday, 11 September 2019, 4:00pm to 5:00pm, (GMT-07:00) America/Los Angeles

- Where:https://zoom.us/j/975881686

- Tentative Agenda:

  - Hackathon tech prep discussion

  - Review some change requests coming from Intel projects

Hackathon Update

- Held at TechNexus in Chicago on Oct7/8th (Mon/Tue).
- Event landing page launched:
  https://www.lfedge.org/event/edgex-foundry-hackathon/
- Slack channel is #edgexgames
- Estimating a total of 100 participants, ~20 teams of 5
- Sponsors providing software or hardware should also expect to provide people and supporting materials both pre-event and during the event
- Team has been reviewing terms and conditions. Target to have registration site go live end of this week. Agency selected for audience recruiting
- Team also working on sponsors list. Current sponsors are: Dell, HP, Intel, RILA, IOTech
- Intel HP and Dell contributing PCs and GWs for hackathon teams

Would this help: https://data.world/datasets/retail

Release Update 9-11-19

Lisa

- Sent out the original Fuji scope document. Please review and mark items either complete or at risk
-
- Code freeze and release date discussion. Are we looking at early or late October release?

Fuji work items

Fuji Deliverables at risk or not going to be delivered

At Risk

- Security area: Secret Store, dependency check wrapper apps
- Self-cert process for device services (Dec 2019, many dependencies)

Not Gonna Happen

- go-mod-registry refactor
- System Management start/stop/restart (architecture issue and non-backward compatible - pushed to Geneva)

EDGE X FOUNDRY™

Geneva F2F

Registration now open

EdgeX TSC Face-to-Face meeting (semi-annual)

- Capacity of 90. Currently with ~45. (HALF FULL!!)
- If you want to attend Architect's day, send Jim White, Dennis Camilo or a WG chair an email or slack message
  - Architect's day is invite only - any contributor is automatically invited but we request RSVP
  - WG Chairs - will soon be organizing topics for consideration with you.
- Planning for the Geneva release (and lessons learned on Fuji)
- Nov 4-7th
  - Nov 4th - Architects' topics must be a contributor (have at least one Git contribution) or have invitation of WG chair
  - Located @ Galvanize Phoenix at 515 E Grant St, Phoenix, AZ
  - Hotel and other logistical info available on the Wiki
- Register now at http://www.cvent.com/d/b6qcr0

Architect's Day RSVPs

- Open to all EdgeX contributors or by invitation of TSC member; but does require RSVP
- Assuming all WG chairs, TSC members unless I hear otherwise
- Other RSVPs (4)
    - Lisa (Intel)
    - Lenny (Intel)
    - Eno (Intel)
    - Diana (VMWare)

Planning

Work Group Chairs

    - please provide me your list of Geneva features and requirements (scope) for F2F planning purposes

    - provide me your architecture topics (items that may fit on architect's day of F2F)

All

    - please provide any training topics you'd like to see @ the F2F

Marketing Committee Meeting

Marketing Committee Meeting

EdgeX Marketing Committee

- Hackathon
- EdgeX Budget priorities and requirements 2020
- Maintenance and Update of EdgeX Website

Meeting date: Thursday September 12th 3pm UK time, 7am US Pacific Time

Where:
https://zoom.us/j/722119691
Organizer:
Camilo Dennis camilo.a.dennis@intel.com
Details:
EdgeX Foundry is inviting you to a scheduled Zoom meeting.

Topic: EdgeX Marketing Committee - Sub team check in
Time: September 12, 2019 7:00 AM Pacific

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Upcoming Events

Upcoming External Events

➢ IoT Summit Bulgaria (http://www.iotsummit.tech) Sept 14

Nikolay S to talk on EdgeX performance testing

Diana A to talk on EdgeX and Microservices at the Edge

➢ Open Networking Summit EU: 23-25 September, 2019 - Antwerp, Belgium
   ○ LF Edge Members receive a 20% discount on registration. Email info@lfedge.org for code.
   ○ Jason Shepherd talk accepted
➢ Open Source Summit EU / ELC: 28-30 October, 2019 - Lyon, France
   ○ October 31: LF Edge Mini-Summit - Half-day, single-track event on the topic of IoT and Edge Computing
   ○ Microservices at the Edge - Best Practices: Diana and Malini
   ○ From API to CLI. Designing and building a CLI for EdgeX: Alex and Nikolay S
   ○ Securely Store IOT Data with IPFS and Distributed Ledger - Trevor Conn
➢ IoT SWC: 29-31 October, 2019 - Barcelona, Spain
   ○ LF Edge/EdgeX booth
➢ Embedded World: 25-27 February - Nuremberg, Germany
   ○ Call for papers closed, booth opportunities
➢ Industry of Things World: Mar 12-13 - San Diego CA
➢ IoT Tech: Mar 17-18 - London, UK
➢ IoT World: Apr 6-9 - San Jose, CA

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Upcoming CFP Due Dates

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AOB / Reminders

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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: June 26, 2019**

Marketing

- **CTA:** If your company will be presenting EdgeX at an upcoming event/webinar/other, please email pr@lfedge.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 Mike Woster at LF (mwoster@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://slack.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 Slack

  https://slack.edgexfoundry.org/

- Weekly EXF Technical Spin up calls

  30 minute deep-dive topics followed by 30 minute open Q&A
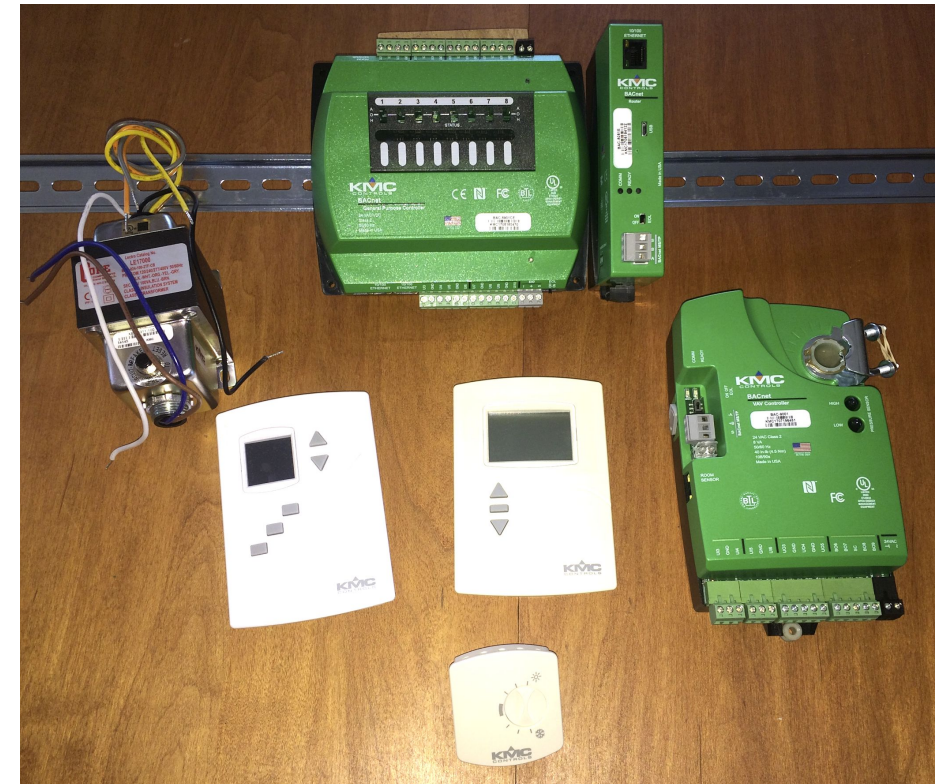
  Call recordings are available on the Wiki

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@lfedge.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