

EDGE X FOUNDRY™

TSC Meeting

Jun 3, 2020

edgexfoundry.org |  [@edgexfoundry](https://twitter.com/edgexfoundry)



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: Wednesdays 8am PDT – 9am 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/join?j=983155298>

** TSC calls are recorded and added to Wiki post-call



TSC – Members Present Today

<u>Company</u>	<u>Name</u>	<u>Email</u>
Intel	Camilo Dennis	camilo.a.dennis@intel.com
IOTech	Iain Anderson	iain@iotechsys.com
Intel	James Gregg	james.r.gregg@intel.com
IBM	Joe Pearson	joe.pearson@us.ibm.com
IOTech	Keith Steele (TSC Chair)	keith@iotechsys.com
VMware	Malini Bhandaru	mbhandaru@vmware.com
Intel	Mike Johanson	michael.johanson@intel.com
IOTech	Robin Chattergee	robin@iotechsys.com
Beechwoods	Rodney Hess	rodney@beechwoods.com
RSA	Tingyu Zeng	tingyu.zeng@rsa.com
Canonical	Tony Espy	espy@canonical.com
Dell	Trevor Conn	Trevor.Conn@dell.com
Dell	Michael Estrin	m.estrin@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

- Geneva Dot (1.2.1) Release
 - details and authorization
- WG Updates
- EdgeX Org 2.0 approved
- Elections
- November TSC Meeting
- May Stats
- Upcoming Events (Dev Advocate)



EDGE X FOUNDRY™

Geneva Release & Release Czar readout

Geneva Dot Release

- Known issues - resolved
 - Device Services and SDK (Go)
 - Related to URL check [#532](#)
 - 2 minor fixes in device-mqtt & device-modbus
 - Changes in UI to address gateway / security issues (addressing short term fixes for some of [#222](#), [#223](#), [#224](#), [#225](#) and [#226](#) in edgex-ui-go)
 - Changes to scheduler service to eliminate bug on removal of interval ([#2554](#) and associated to issue [#2520](#) and PR [#2552](#))
 - Changes to rules engine for remote logging URL ([#74](#))
- Known issues - not yet resolved
 - service/host configuration naming & Consul callback
- Compose file updates for above
- Device Services ready for release?
 - BACnet-C, Bluetooth-C, OPC-UA-C, ...
- Swaggerhub doc issue



EDGE X FOUNDRY™

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 - Michael Estrin
 - Open Horizon - Joe Pearson
 - Certification - Rodney Hess
 - Vertical Solutions - Camilo Dennis and Henry Lau
 - Updates from Release Czar - Lisa
 - Updates from Dev Advocate - Aaron

Core Working Group (2-Jun-2020)

- Thanks to those who've made contributions for the upcoming dot release.
- Visibility for first PR RE: API V2
 - <https://github.com/edgexfoundry/go-mod-core-contracts/pull/236>
 - Initial review comments (me, Tony, Lenny), but feel free to take a look
- Due to redirection of resources and expiration of Chair tenure, I don't have much to present here.
- Core WG call @ 10AM US/Central tomorrow
 - Above PR #236 has been requested as agenda item
 - Call for agenda items.

Applications WG Update (3-Jun-2020)

Complete:

- Documentation update for App Functions SDK, API Docs
- JSON Logic Examples
- Refactored Examples to remove unneeded code

WIP:

- Documentation update for Pipeline Config for ASC.
- Filter Out Device Transform

- App Working Group Meeting held on Fridays @ 9AM PDT
 - Next meeting June 5th, 2020

Application Services

Functions (built into SDK)

Current/Complete:

- AES Encryption
- GZIP Compression
- ZLIB Compression
- MarkAsPushed
- PushToCore
- Device Name Filter
- Value Descriptor Filter
- Batch
- JSONLogic Filtering
- XML Conversion
- JSON Conversion
- MQTT(S) Export
- HTTP(S) POST Export

NEW!

NEW!

Features

- Store and Forward
- Web Server
- Configurable App Service
- Vault Integration for Secrets
- MQTT Event triggers (via go-mod-messaging)

NEW!

NEW!

Reference/Example App Services (Geneva)

(built on top of SDK)

- Azure IoT Hub
- Amazon IoT Core
- IBM Watson IoT
- Cloud Event Transformation
- Secret Retrieval Example

AVAILABLE

AVAILABLE

NEW!

Device Services WG Update (3-Jun-20)

- Point releases of Go SDK (v1.2.2) and Device Services ready to cut
 - Was waiting for edgex-go #2579 to land
 - Includes fix for performance regression when using Consul

- New device service for RFID readers
 - Setting up repository in -holding

Device Services - current/coming (as of 5/7/20)

Open Source connectors (Current):

- Modbus (TCP/RTU) in Go
- Virtual Device in Go
- SNMP in Go
- MQTT in Go
- BACnet (IP & MSTP) in Go
- ONVIF Cameras in Go
- REST in Go (NEW!)

Open Source connectors (Future):

- Bluetooth in C (summer 2020)
- BACnet (IP & MSTP) in C (summer 2020)
- OPC-UA in C (summer 2020)
- Grove C (summer 2020)

Commercial connectors (Current):

- File Exporter in C
- BLE in C
- Zigbee in C
- GPS in C
- CAN in C
- MEMS in C
- EtherCat in C
- Profinet in C

There are additional commercial MQTT (Go), Modbus (Go), OPC-UA (in C) and BACnet (in C) that have added features over the community editions

Commercial connectors (Future):

- EtherNet/IP in C (summer 2020)
- CanOpen in C (summer 2020)
- OPC-UA Pub/Sub in C (summer 2020)
- ONVIF in C (summer 2020)

Test/QA WG Update (28-05-2020)

- Blackbox Test
 - Fixed issues
 - Issue [#457](#), to create Geneva branch and correct the compose file location.
- TAF
 - PR [ci-build-images#129](#), to reduce the size of compose image is waiting for merging.
 - Integration/functional test scenarios ([Introduce slide](#))
 - PR edgex-taf [#98](#) to implement support-scheduler tests is merged.
 - Issue [#18](#), to enable backward compatibility test, working in progress.
 - Fixed issues
 - Issue [#112](#), to create Geneva branch and correct the compose file location.
 - Issue [#19](#) and [#24](#), to set trigger time to 0000 and 0100 UTC.
- New Business
 - Modify the test execution schedule after Geneva released (Done)
 - Uploaded Device SDK and App SDK API document to SwaggerHub (Done)
<https://app.swaggerhub.com/apis-docs/EdgeXFoundry1/app-functions-sdk>
<https://app.swaggerhub.com/apis-docs/EdgeXFoundry1/device-sdk>
 - Create Device SDK and App SDK API document page on edgex-doc [PR#157](#)
 - Upper the version number of Swagger files in edgex-go [PR#2562](#), and upload v1.2 onto SwaggerHub

Postman Blackbox Test Cases

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Mongo	1312	0	0	0
		Redis	1312	0	0	0
x86_64 / CentOS	Security	Mongo	1342	27	0	27
		Redis	1342	0	0	0
arm64 / Ubuntu	Non Security	Mongo	1312	2	0	2
		Redis	1312	0	0	0
arm64 / Ubuntu	Security	Mongo	1312	0	0	0
		Redis	1342	0	0	0

TAF Functional Blackbox Test Cases

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Mongo	52	0	0	0
		Redis	52	0	0	0
x86_64 / CentOS	Security	Mongo	52	0	0	0
		Redis	52	0	0	0
arm64 / Ubuntu	Non Security	Mongo	52	0	0	0
		Redis	52	0	0	0
arm64 / Ubuntu	Security	Mongo	52	0	0	0
		Redis	52	0	0	0

TAF Integration Test Cases

Integration tests

OS		DB	Total TCs No.	Failed TCs No. of Past Week	Failed TCs No. of This Week	Fixed TCs No.
x86_64 / CentOS	Non Security	Mongo	4	0	0	0
		Redis	4	0	0	0
x86_64 / CentOS	Security	Mongo	4	0	0	0
		Redis	4	0	0	0
arm64 / Ubuntu	Non Security	Mongo	4	0	0	0
		Redis	4	0	0	0
arm64 / Ubuntu	Security	Mongo	4	0	0	0
		Redis	4	0	0	0

Compatibility tests

x86_64 / CentOS	Non Security	Mongo	12	0	0	0
		Redis	12	0	0	0

DevOps WG Update (06-03-2020)

Hanoi

- **Performance Optimizations**
 - Build Optimizations for edgex-go
 - Implementation of the optimizations for edgex-go - WIP
- **DevSecOps**
 - Continued explore of options for addressing Issue #1947 - vetting of OSS dependencies
 - Submitted for review and discussion after rewrite of the explore
 - Community Bridge Feature Requests
 - Transitive dependencies for Go modules - findings don't match other tools like Sonatype - ticket still open no updates
- **Other**
 - Refactor of the GitHub issue label automation to include milestones - WIP
 - Linux Foundation SSO updates completed - Report any login issues via JIRA support request if there's a problem
 - LFTools / Sigul latest version that supports Python 3.x
 - Need input from LF on alternative signing tool

Next DevOps WG Meeting 06/04/2020 @9:00AM PST

System Management WG Update (June 3, 2020)

- May 22nd meeting
 - “Better facilitating Kubernetes deployment/orchestration of EdgeX”
- May 29th meeting
 - No meeting -- nothing to discuss
- Next meeting: Friday, June 5th @ 10AM CST
 - No agenda items yet
 - Please reach out by EOD if you have an agenda item for the next meeting

Open Horizon Integration Update

- [PR 49](#) - separate Devices from Core in OH
- OH example [Kube Deployment Operator](#) now merged
- Will spin up sub-group in OH when governance approved and TSC constituted, ETA weeks



Security WG Update (06-03-2020)

- Hanoi release working items in progress & review
- SIR team update - No major issues found
- Security WG meeting - open agenda

Certification WG Update (6-1-20)

- Gathering requirements for device profile validation
- Investigating a template for launching an EdgeX instance in a cloud
- Reviewing [PR-139](#) in EdgeX-docs
- Next meeting is Monday, June 8th, 9 a.m. PDT

Vertical Solutions WG Update (Jun 3, 2020)

- Last meeting: May 26, 2020, 10am PST
 - AppCard - Use cases and challenges that can be solved with technology for grocery stores and quick serve restaurants
- Next meeting: Jun 9, 2020, 10am PST
 - RFRain - RFID reader manufacturer

Marketing update (5/6/20)

- Continue to drive Website project with El Roboto (3rd party)
 - Folder with key documents milestones and information at the Marketing WG wiki <https://wiki.edgexfoundry.org/display/FA/Marketing+WG>
- Topcoder challenge closed
 - <https://www.topcoder.com/challenges/3011>
 - 130 participants and a total of 28 submission
- Starting asset creation and planning for Geneva Release
 - PR
 -

Miscellaneous (Jim)

- We are holding a survey to get feedback from the community and beyond with regard to our command line interface tool (CLI).
 - Please take a couple of minutes to fill it out when you receive the link
 - <https://www.surveymonkey.com/r/QWKHZZZ>
 - <https://bit.ly/EdgeXCLI>
- With Org 2.0 approved by TSC
 - Meetings underway to discuss Outreach (purpose and structure)
 - Can we hold discussion on PM role during upcoming Arch Meeting?
- Reminder - next week's TSC is at 7pm CDT (8am China time)
 - Guest speaker from LF Edge Glossary project



EDGE X FOUNDRY™

Elections

Jim White

Election Schedule (approved by TSC)

- Collection of voter registries (now to June 12)
- Nominations for any chair or TSC at-large positions (now to June 12)
- Chair and at-large elections (week of Jun 15-19)
- TSC Chair election (week of Jun 25-29)

Election Schedule (approved by TSC)

- Current Nominations (now to June 12)
 - DevOps: Ernesto Ojeda (Intel)
 - Application/Analytics: Mike Johanson (Intel)
 - Outreach: Keith Steele (IOTech)
 - TestingQA: James Butcher (IOTech)
 - Device Services: Iain Anderson (IOTech)
 - Core: Jim White (IOTech)
 - At Large: Lenny Goodell (Intel), Tony Espy (Canonical)
- Volunteer positions (non-TSC voting)
 - Release Czar: Lisa Ranjibar
 - PM: Lenny Goodell

Open Roles

- Security WG chair
- User Advocate



EDGE X FOUNDRY™

November TSC Meeting

Keith Steele

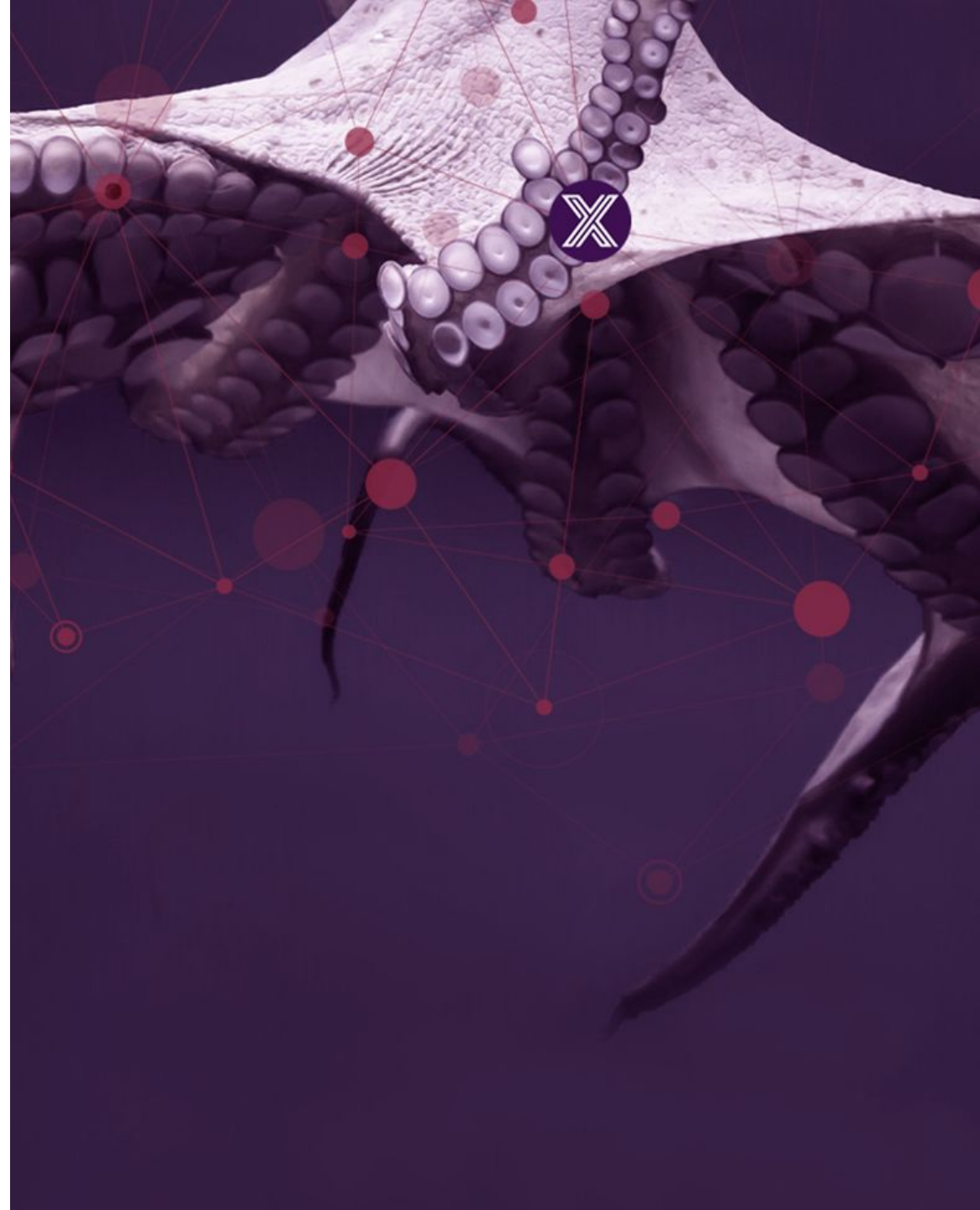
November TSC Meeting

- Intel have kindly offered to host the November TSC Meeting in Phoenix, AZ
- Offer is obviously conditional subject to easing of Covid-19 rules
- Proposed Dates week 2nd November
- April 2021 Meeting - Offer from Intel China to host

EDGE X FOUNDRY™

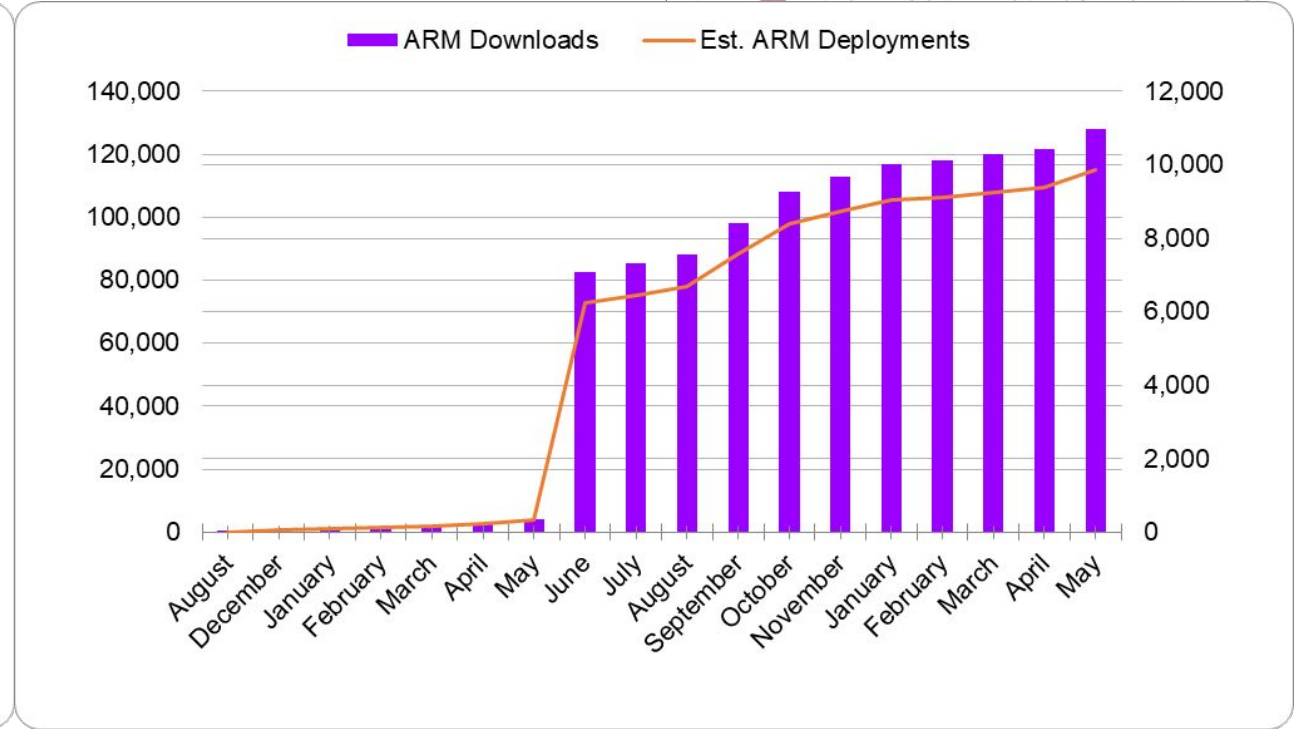
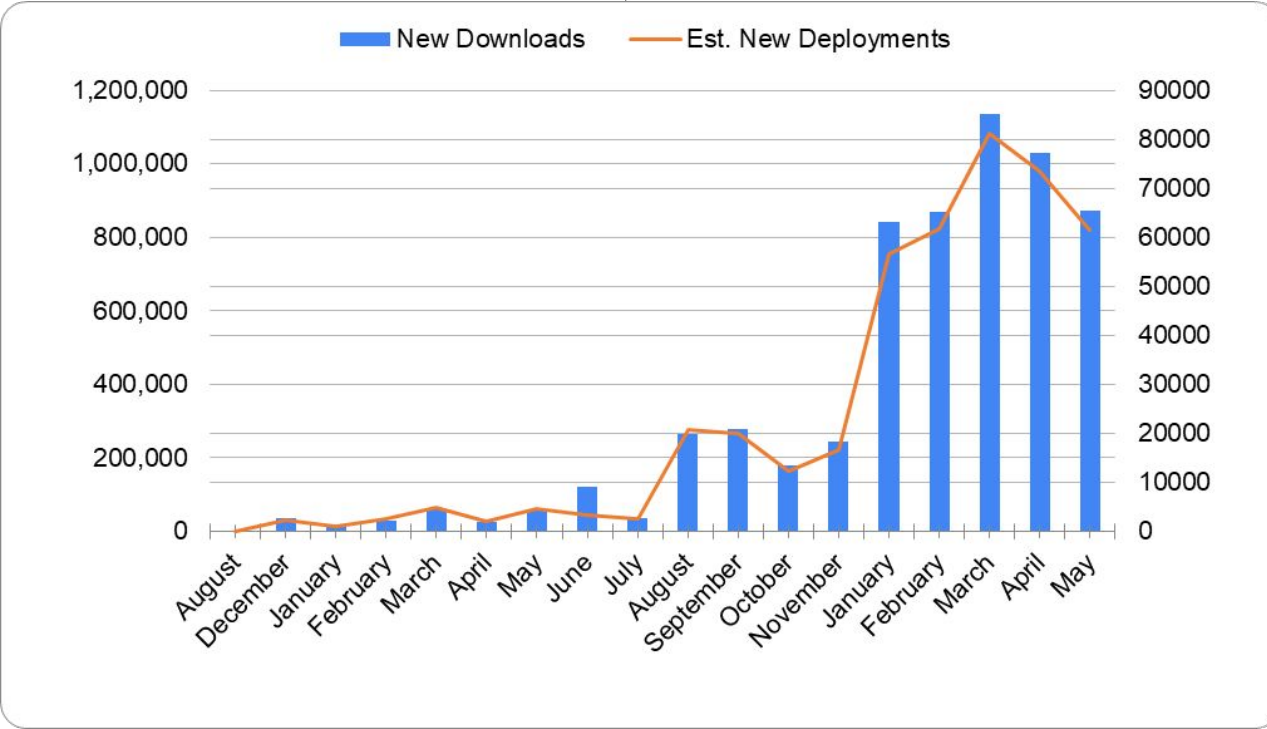
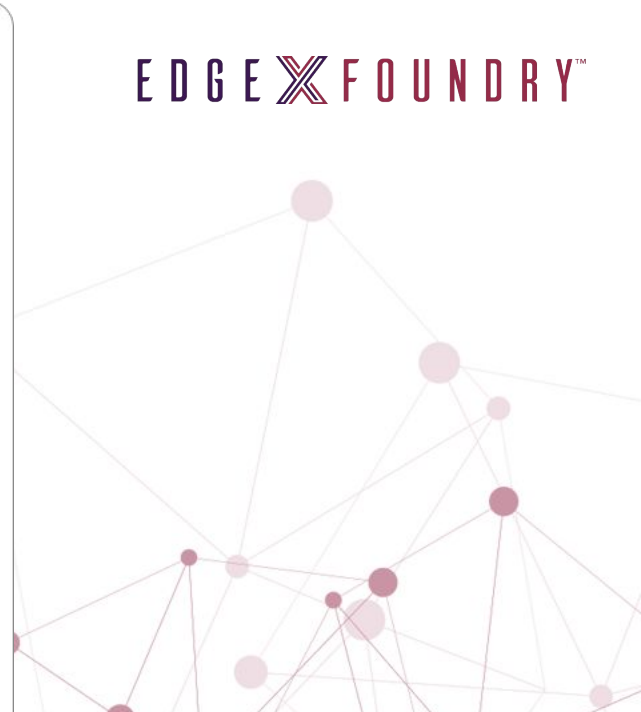
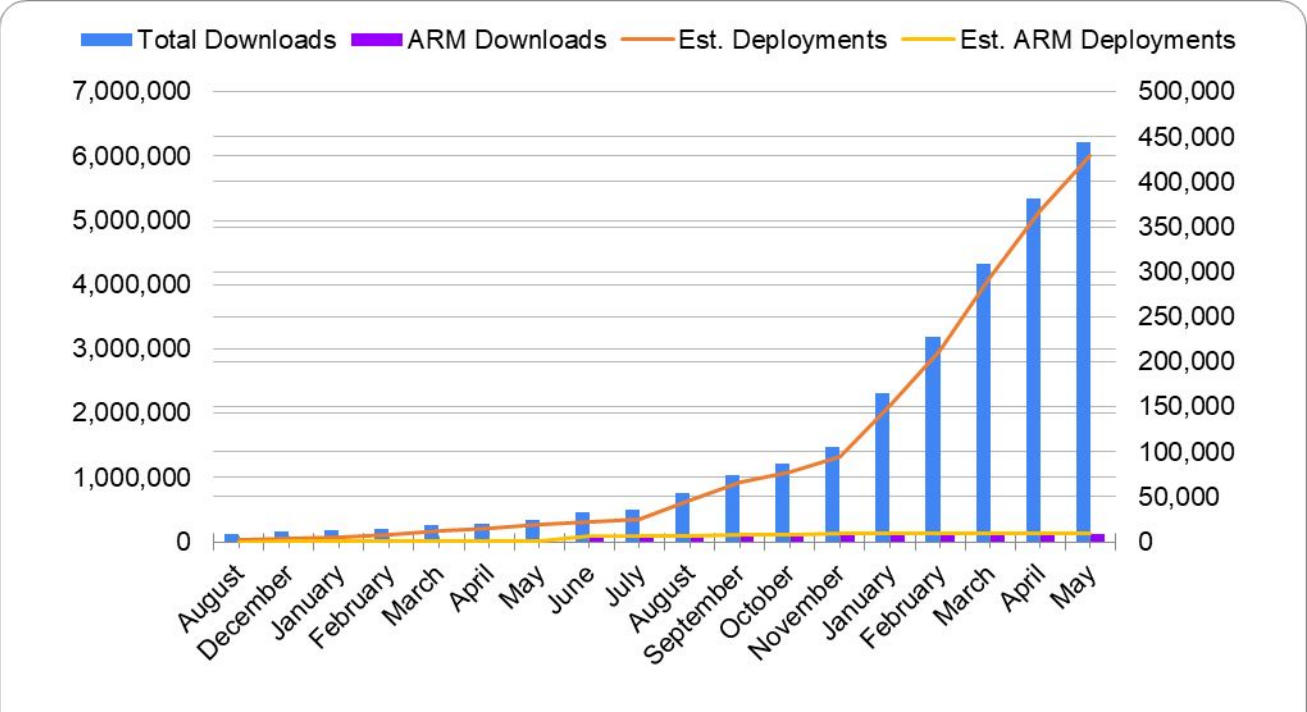
Monthly Stats

May



Docker Downloads

- Total Downloads: **6.2 million**
- Estimated Deployments: 429K
- Estimated New Downloads: 870K
- Estimated New Deployments: 61K
- Slight uptick in ARM downloads/deployments
 - 5% of containers vs 1 or 2% prior 6 months

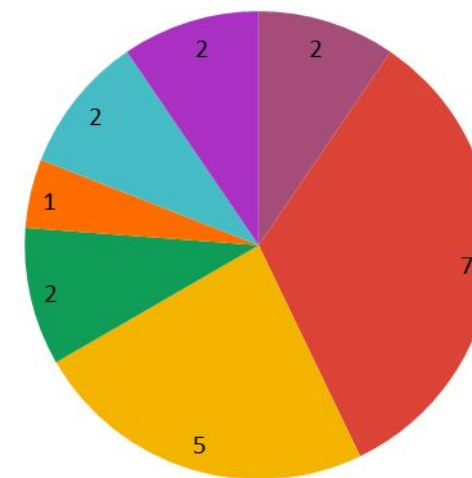


Contributions/Authors (May 2020)

- 23 active repositories in May
- 24 Contributors in May
 - Slight drop due to Hanoi planning, freeze and release
- 3 new authors
 - Decline for reasons stated above
- 112 commits in May
 - About half a normal dev month
 - Due to Freeze and Release period
- 11864 LoC added in May

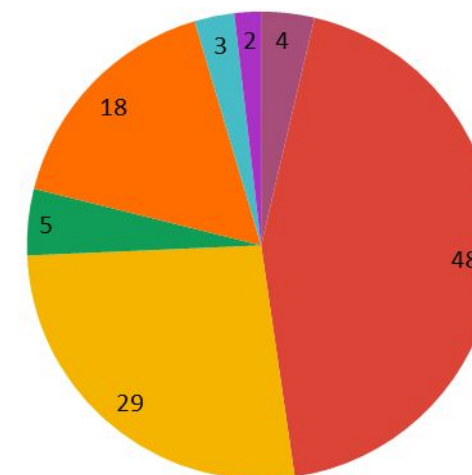
Authors by Company

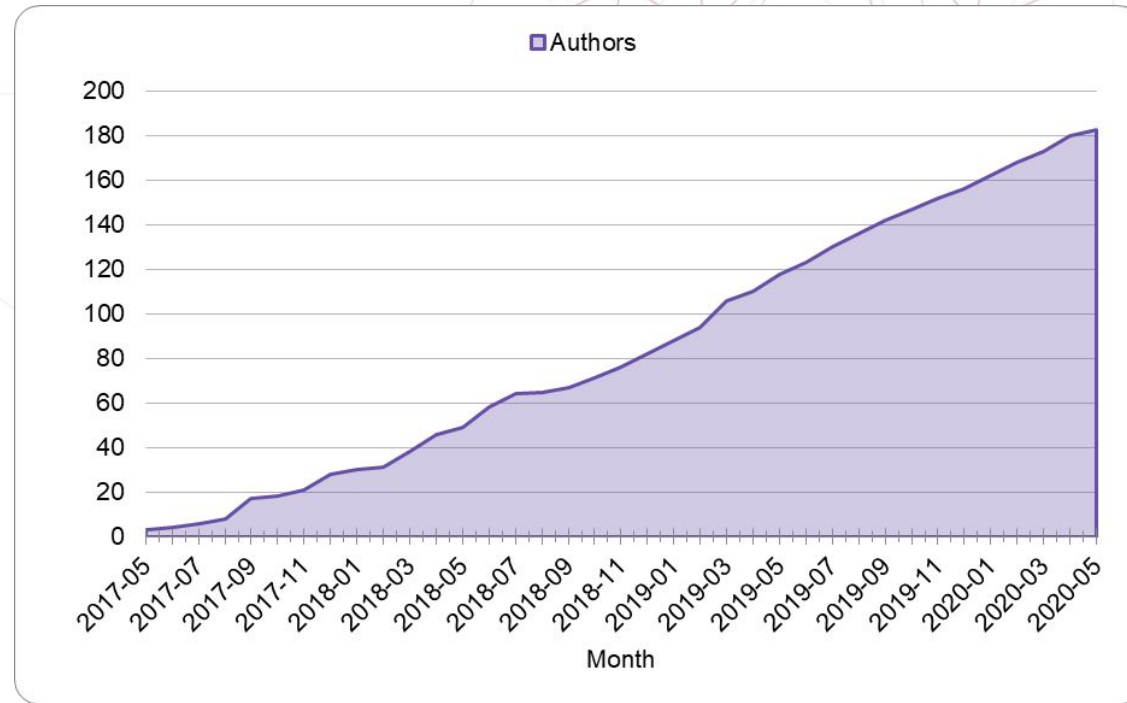
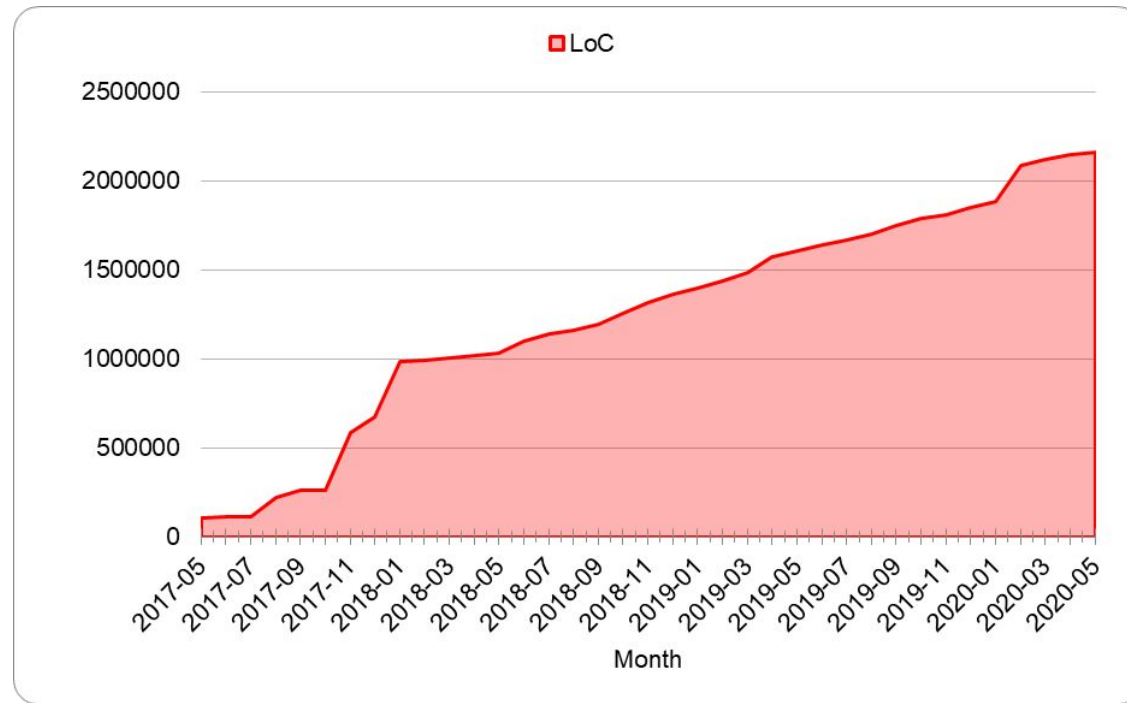
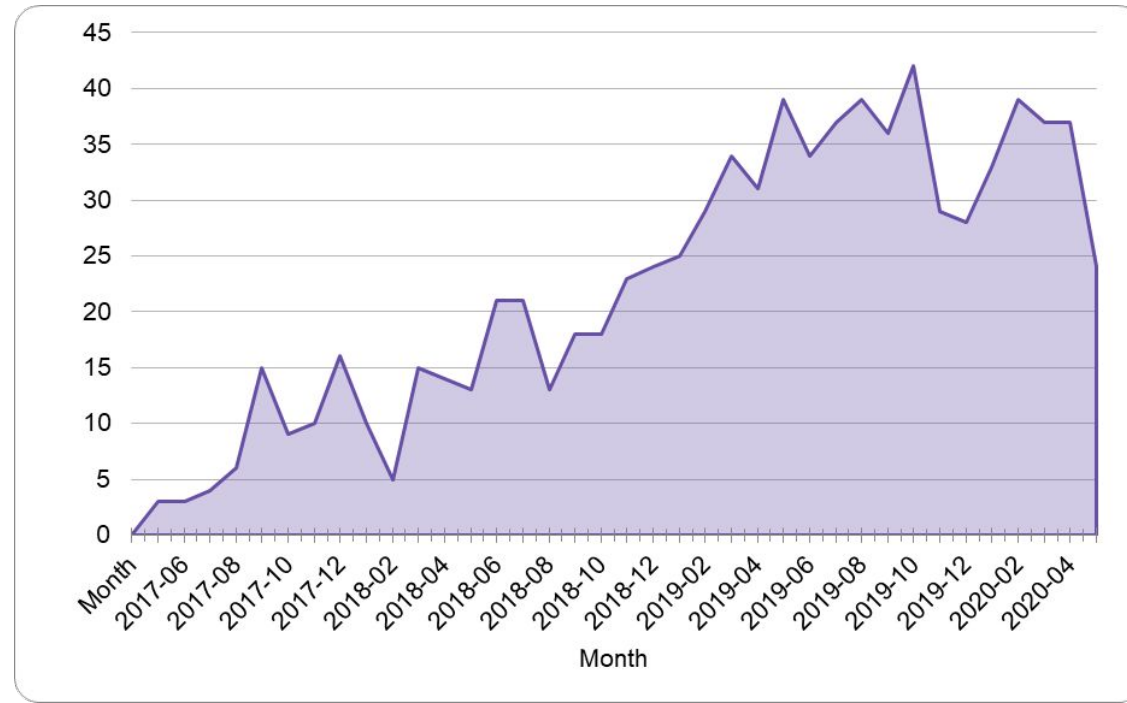
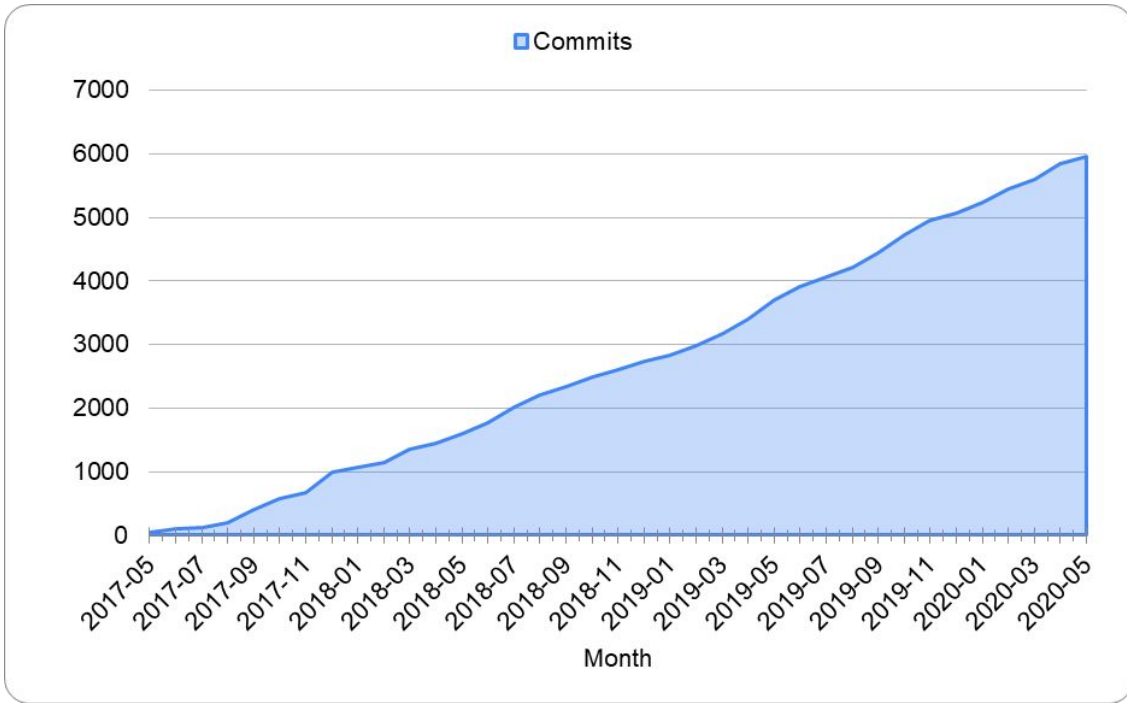
■ Dell ■ Intel ■ IoTech ■ VMWare ■ Canonical ■ Redis ■ Unknown



Commits by Company

■ Dell ■ Intel ■ IoTech ■ VMWare ■ Canonical ■ Redis ■ Unknown







Upcoming Events & Dev Advocate Update

Aaron's updates

Next F2F/conferences/events

- Companies with travel restrictions to the end of year
 - Dell
 - Intel
 - HP
- Please keep us informed of your company's travel policy changes
- Decision on China or other F2F meeting for fall still pending but looking less likely
 - (i.e. don't make travel plans yet)

New/Updated Events

- › **[Hyperledger June Virtual Event - LF Edge](#)**
 - › On June 11 at 9 am PDT, the Hyperledger Telecom SIG is hosting a virtual event that will cover the application of Blockchain to improve deployment and management of 5G...
- › CFPs for OSS Japan and OSS ELC Europe have be extended
 - › [Open Source Summit Japan](#): 15-16 September, 2020 - Tokyo, Japan
 - › CFP Open: <https://events.linuxfoundation.org/open-source-summit-japan/program/cfp/>
 - › [Open Source Summit Europe](#): 26-28 October, 2020 - Dublin, Ireland
 - › CFP Open: <https://events.linuxfoundation.org/open-source-summit-europe/program/cfp/>

Upcoming External Events

- › [Open Source Summit North America](#): 29 June - 2 July, 2020 - Virtual
 - › 90 minute session(s) - July 2 at 12-1:30pm CST
- › [IIOT World](#): 30 June - 1 July, 2020 - Virtual
 - › Arpit Joshipura: "Uniting the Edge for Tomorrow's Demands."
 - › Jim White: "Using Open Source Technology to Manage IoT/Edge Solutions."
- › [Open Source Summit Japan](#): 15-16 September, 2020 - Tokyo, Japan
 - › CFP Open: <https://events.linuxfoundation.org/open-source-summit-japan/program/cfp/>

Upcoming External Events

- › [Open Networking & Edge Summit North America](#): 28-29 September, 2020 - Los Angeles, CA
 - › [ONES Unconference Track](#)
- ›
- › [IoT Solutions World Congress](#): **MOVED** 11-13 May, 2021 - Barcelona, Spain
 - › Call for Testbeds Open: <https://www.iotsworldcongress.com/activities/testbeds/>
- › [Open Networking & Edge Summit Europe](#): TBD Q4, 2020 - Antwerp, Belgium
 - › CFP Open: <https://events.linuxfoundation.org/open-networking-edge-summit-europe/program/cfp/>
- › Discussions around upcoming events occur in the LF Edge Outreach Committee
- › Members may subscribe at: <https://lists.lfedge.org/g/outreach-committee>
- ›

Upcoming Project Events

- › none

- › Projects can add their events to this list by sending the Wiki page listing the information to info@lfedge.org



EDGE X FOUNDRY™

Thank You