

EDGE X FOUNDRY™

# TSC Meeting

April 1, 2020

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

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

- KEEPING IT BRIEF - given architect's meeting later today
- Hanoi Planning
- Release Czar Readout
  - Geneva release info
- WG Updates
- March #'s
- EdgeX Awards
- ADR 0005 vote
- Hanoi planning
  - please discuss with your WG before next week's prewire
- Upcoming Events (Dev Advocate)



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# Hanoi Planning Conference

# Hanoi Planning Conference Tasks

- Survey Monkey on desire for training (done)
  - <https://www.surveymonkey.com/r/CLCLQ9V>
  - Read out next meeting
- Hanoi Planning Conference dates selected (done)
- Hanoi Registration Website (done)
  - <https://events.linuxfoundation.org/edgex-foundry-hanoi-release-planning-conference-spring/>
  - Email sent to all of you that have registered - please re-register for this virtual event!
  - Sponsorship opportunity (upcoming slide)
- Hanoi Wiki page updated (done)
  - Detailed agenda (jim to do on pre-wire completion)
- Training planning/schedule (depends on survey results)

# High level conference agenda

Monday, Apr 27: 7-11 AM - Introductions, Agenda & Logistics, Business Topics, Architecture topic tee-up

Tuesday, Apr 28: 7-11 AM - Cadence Check, Architectural discussion

Wednesday, Apr 29: 5-9 PM - Hanoi scoping (General, Core, Application, Device service, TestQA, UI, System Management, Security Devops, Certification,...)

Thursday, Apr 30: 7-11 AM - Hanoi scoping continued, Ireland roadmapping

Friday, May 1: 7-11 AM - Action item review, Lessons learned for next meeting, “Unconference” - open time for any topic





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# Release Tsar Readout

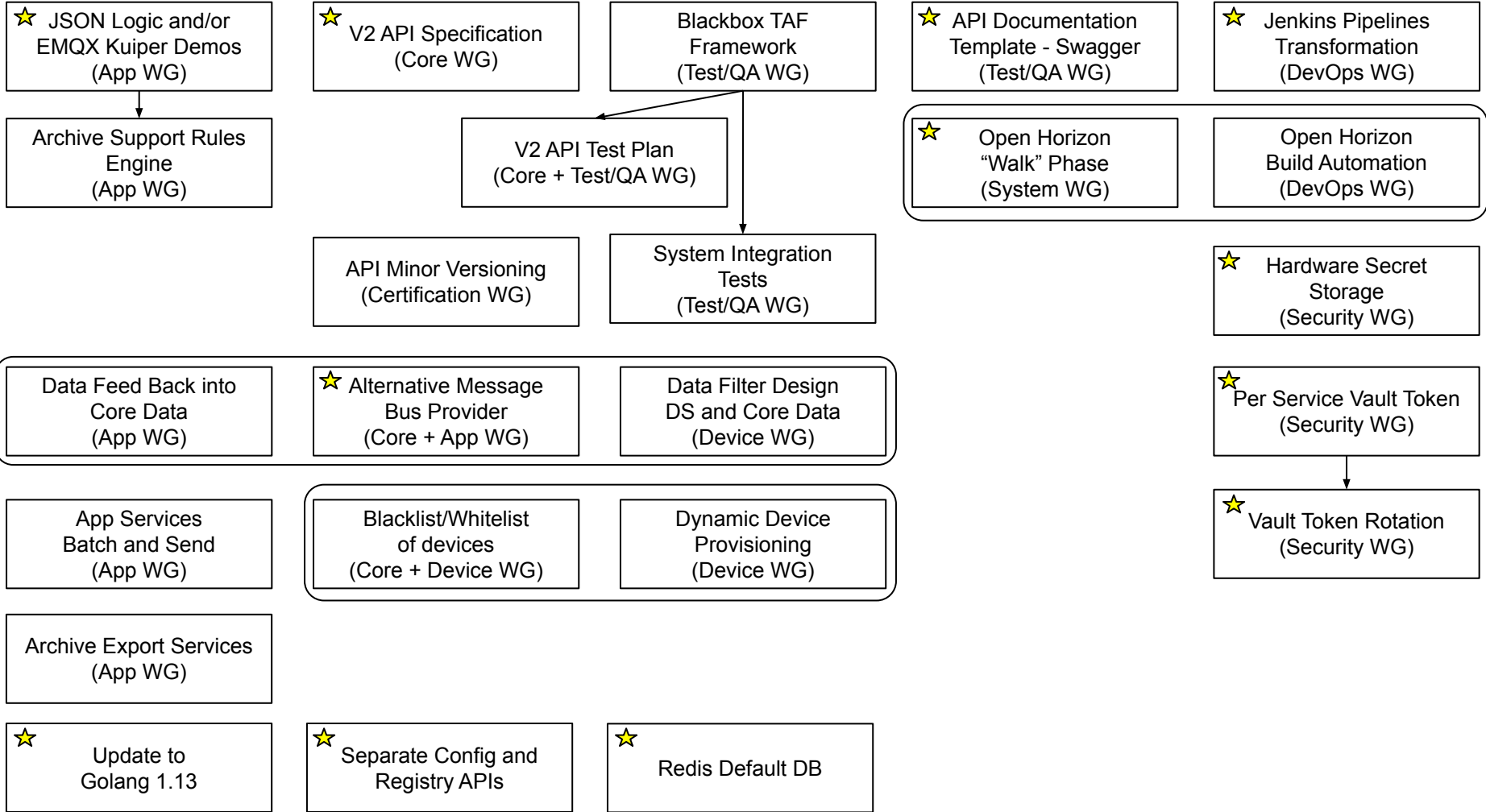
# Geneva Freeze and Release dates

TSC approved

- Freeze: 12pm GMT, April 22 (Wed, week before planning meeting)
- Release: 12pm GMT, May 13 (Wed two weeks after planning meeting)

See Geneva release notes for details (on Slack)

# EdgeX Geneva Release Overview





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# 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 (1-Apr-2020)

- Provision Watcher efforts completed.
  - Follow-on request from Device Services Team
  - <https://github.com/edgexfoundry/go-mod-core-contracts/pull/230>
    - Still evaluating this...
- Working through removal of Config-Seed
  - Thanks Lenny for your pro-active efforts
- Ongoing efforts from last week
  - Redis Streams (Anthony / Andre)
    - Feature delivery target for RedisConf (May 12-14)
    - PR has been delayed
- Tomorrow's Core WG is cancelled

# Applications WG Update

## In Progress:

- Updating App Service Configurable with MQTT message bus support, JSONLogic and BatchAndSend
- MQTT and HTTP Export w/ secret support (Draft PR open)
- 2nd SecurityStore client for service specific secrets
- Cloud Event Transform (To & From)

## Next up:

- Example of JSONLogic in app-service-examples
- Documentation update for edgex-docs
  
- Meeting with Kuiper Team - tomorrow; 3:30pm PDT
- App Working Group Meeting held on Fridays @ 9AM PDT
  - Next meeting Friday, Apr 3rd
    - Reviewing Hanoi items - bring your ideas!

# Application Services

## Functions (built into SDK)

Current/Complete:

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

## Features

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

## Reference/Example App Services (Fuji)

(built on top of SDK)

- Azure IoT Hub AVAILABLE
- Amazon IoT Core AVAILABLE
- IBM Watson IoT NEW!



# Device Services WG Update (1-April-20)

In progress:

- Dynamic discovery
  - Provision Watcher API clutter to be addressed
- Type information in Readings
  - Implemented in CSDK
- Array datatypes

To do:

- Startup registry/configuration changes (ADR0005)

# Device Services - current/coming

## Open Source connectors (Current):

- Modbus (TCP/RTU)
- Virtual Device
- Grove C - ARM only
- SNMP
- MQTT
- BACnet (IP & MSTP)
- ONVIF Cameras
- REST

## Open Source connectors (Future):

- OPC-UA (Geneva)
- GPS
- Bluetooth (Geneva)
- BLE in Go for Thingy 52 (Ian Johnson)

## Commercial connectors (Current):

- GPS
- MEMS
- Zigbee
- Bluetooth
- EtherCat
- PROFINET

## Commercial connectors (Future):

- CAN SocketCAN, CANopen
- EtherNet/IP
- Siemens s5/s7

# Test/QA WG Update (01-04-2020)

- Blackbox Test
  - Issue opened for failed testcases
    - Issue [edgex-go#2421](#), for failed tests on core-command.
    - Issue [edgex-go#2448](#), support-notifications can't start up normally with mongo db non-security mode
    - Issue [device-sdk-go#465](#), for failed tests on core-data
    - Issue [edgex#2463](#), API Gateway can't work normally
  - Fixed issue
    - Issue [#417](#), to run mongo only on fuji release
  - New test
    - Add core-data reading test for new properties: [#415](#) and [#416](#) under review
- New Blackbox Test
  - PR [edgex-taf-pipelines#4](#), to enable security test is waiting for review.
  - PR [ci-build-images#129](#), to reduce the size of compose image is waiting for review
  - Core service compatibility test
    - PR edgex-taf [#63](#) still works in progress.
  - Integration/functional test scenarios ([Introduce slide](#))
    - PR edgex-taf [#56](#), [#58](#), [#60](#), [#62](#) to add robot files are ready for review

# Testcases Number Count (Master Branch)

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	1414	105	110	0
		Redis	1414	4	4	0
x86_64 / CentOS	Security	Mongo	1434	0	368	0
		Redis	1434	N/A	N/A	N/A
arm64 / Ubuntu	Non Security	Mongo	1414	105	108	0
		Redis	1414	4	4	0
arm64 / Ubuntu	Security	Mongo	1434	0	366	0
		Redis	1434	N/A	N/A	N/A

# DevOps WG Update (04-01-2020)

## Geneva

- Jenkins Transformation to Pipelines
  - Work continues on the transformation to Jenkins Pipelines
    - Multiple stories related to release automation for Geneva - WIP
      - Create global function to handle docker images for the automated release
    - Optimizations of edgex-global-pipelines
      - Completed migration from Maven to Gradle unit test runner in order to easily leverage jacoco test reports for code coverage
  - Started discussion with Open Horizon team
    - Shared documentation with David Booz/IBM
    - Meeting planned for 04/02/2020

Next DevOps WG Meeting 04/02/2020 @9:00AM PST

# System Management WG Update (Apr 1, 2020)

- CLI
  - Move from holding delayed pending requested changes
  - Jim to reach out to Malini/Diana
- Discussed Hanoi Road Map
- This Friday's (April 3rd) meeting has been cancelled
- Next meeting: Friday, April 10th @ 10AM CST

# Open Horizon Integration Update

- Walk Phase progress (two weeks left?):
  - [Showing](#) Device Random data
  - [Adding](#) SMA service
  - [Replacing](#) Device Random w/ModBus
  - [Documenting](#) configuration options
- TAC approved OH to Stage 1,  
Governing Board SPC now voting



# Security WG Update (04-01-2020)

- Ongoing work for Geneva release (160 items done, 4 items in progress, 4 items backlog )
- SIR team update - No major issues found
- Security WG meeting cancelled this week



# Certification WG Update (3-30-20)

- No meeting this week
- Activity has been quiet as we wait on progress on the v2 API effort
- Next meeting is Monday, April 6th, 9 a.m. PDT

# Vertical Solutions WG Update (Apr 1st, 2020)

- March 31 meeting cancelled
  - Did not get confirmation from Connexus
    - Connexus drives at convenience stores and top use cases in the c-store industry
- China webinars: <https://wiki.edgexfoundry.org/display/FA/China+Events>
  - Feb 28: Create new Device Service (VMWare)
  - Mar 6: Write export service and scheduling plan (VMWare)
  - Mar 13: Add device and service monitoring (ThunderSoft)
  - Mar 20: Use with NodeRed (IOTech)

# Marketing update 4/1

- Created sub-team 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. 85+ registrations as of 3/31
  - Launched on 3/21 <https://www.topcoder.com/challenges/3011>
  - Banner placed in EdgeX Foundry website
  - Submissions start 4/4

# Miscellaneous (Jim)

- EdgeX Awards
  - Nominations being accepted through this week
  - See <https://wiki.edgexfoundry.org/display/FA/EdgeX+Awards> for details
  - Winners to be notified at Hanoi planning meeting
- Asia time-zone friendly TSC meetings - starting in May after Geneva release (May 13)
  - Proposed once a month
  - Proposed time: 7pm EDT, 4pm PDT, midnight UK, 7am Beijing
- Slack archive project ongoing

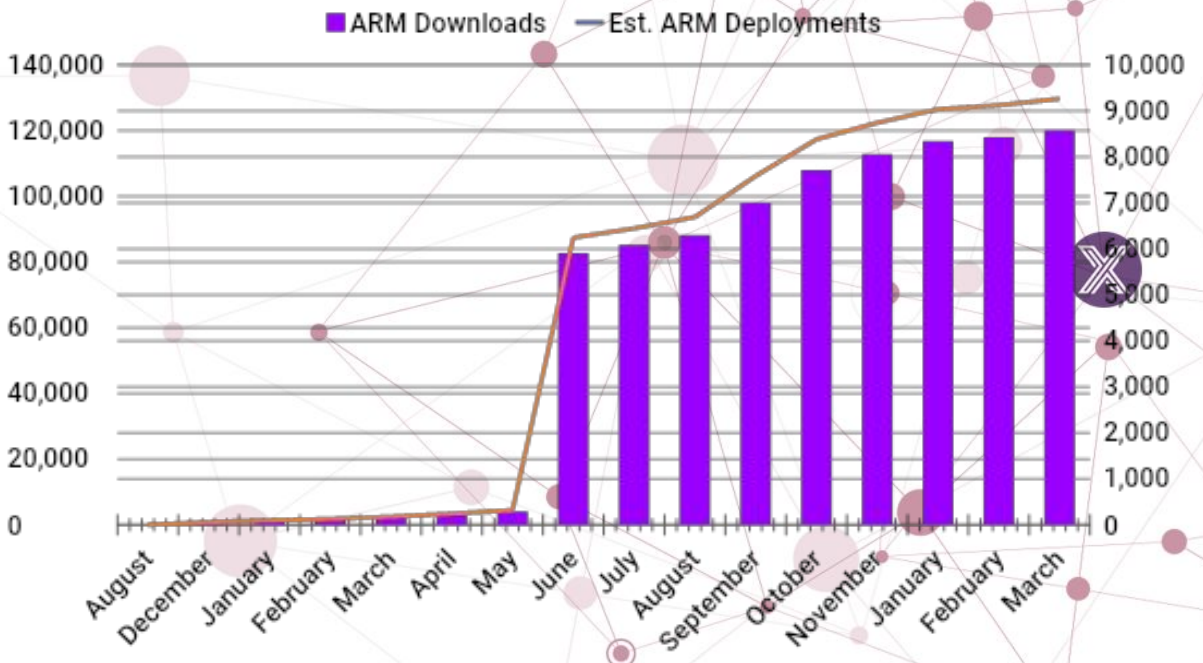
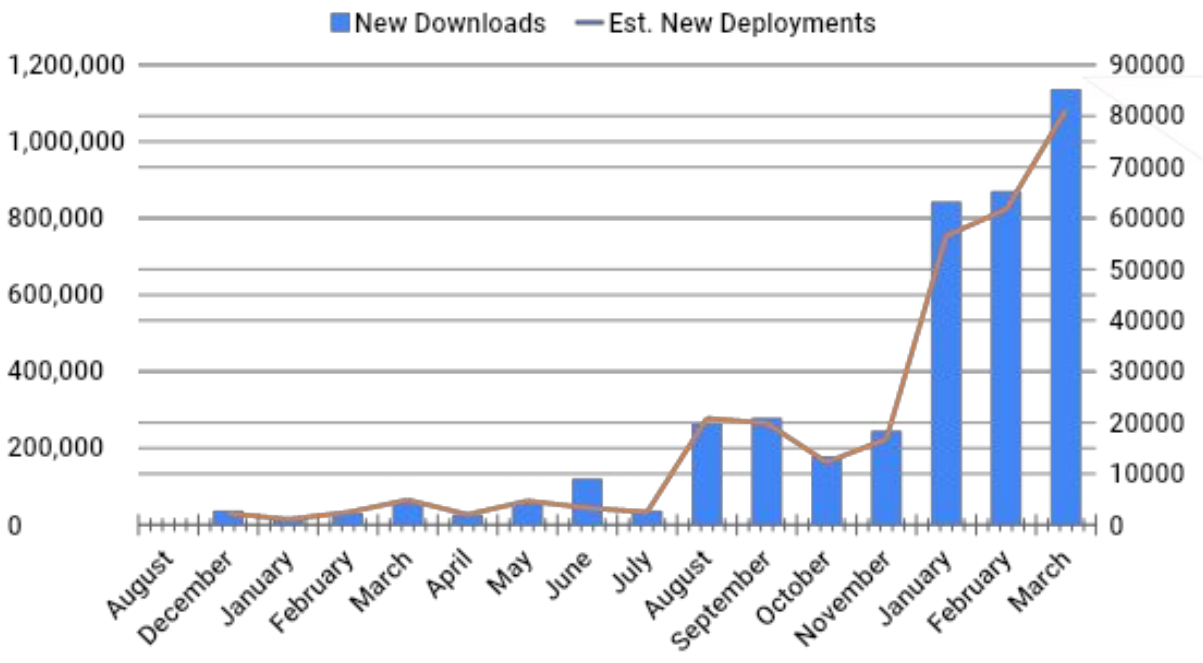
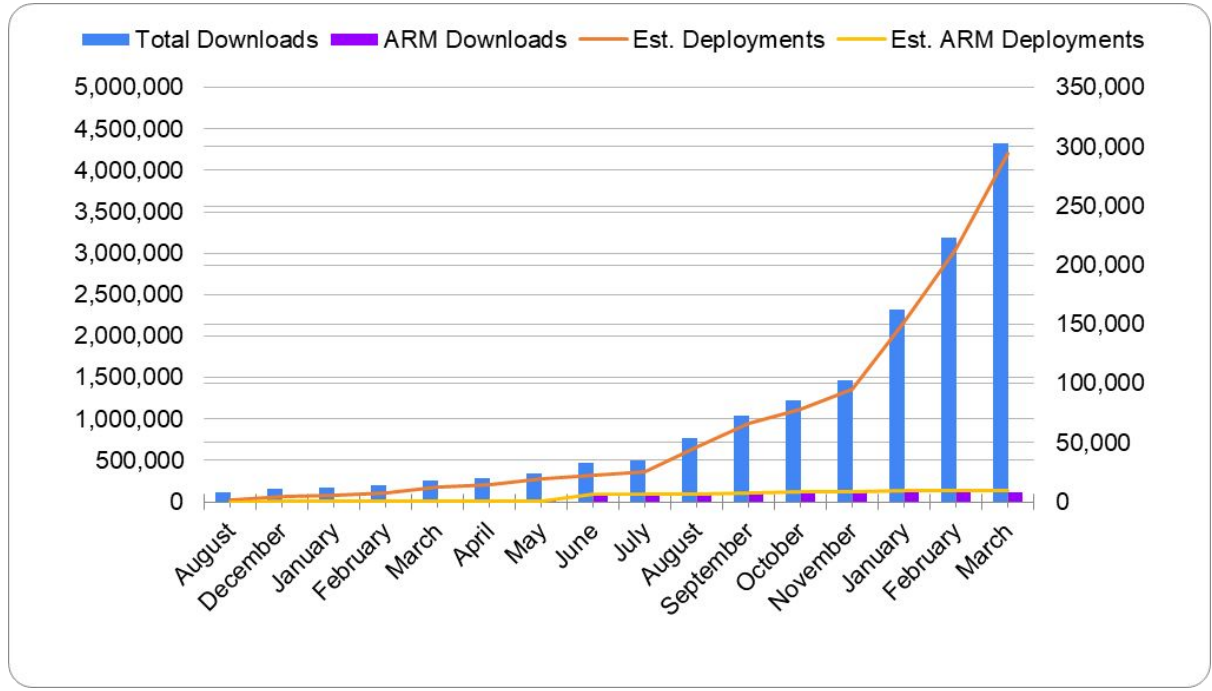


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## March stats

# Docker Downloads

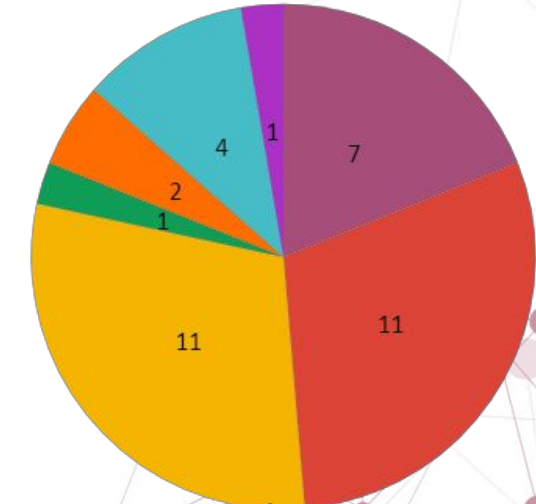
- Total Downloads: **4,319,823**
  - **36% growth** since last reported in Feb 2020 (38% last month)
  - ARM growth just 2% (tiny uptick)
- Estimated Deployments: 294K
- Estimated New Downloads: 1.13M
- **Estimated New Deployments: 81K (31% growth v 9% last month)**



# Contributions/Authors (Mar 2020)

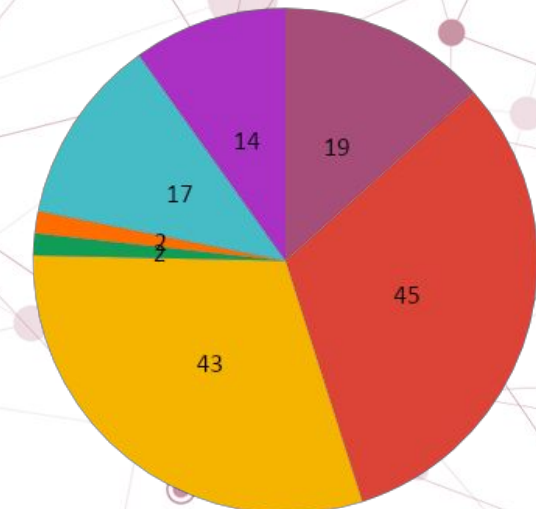
- 24 active repositories in Mar
- 36 Contributors Mar (1 less than Feb)
- 3 new authors (3 fewer than Feb)
- 141 commits in Mar
- 23948 LoC added in Mar

■ Dell ■ Intel ■ IoTech ■ LF ■ RSA ■ VMWare ■ Canonical



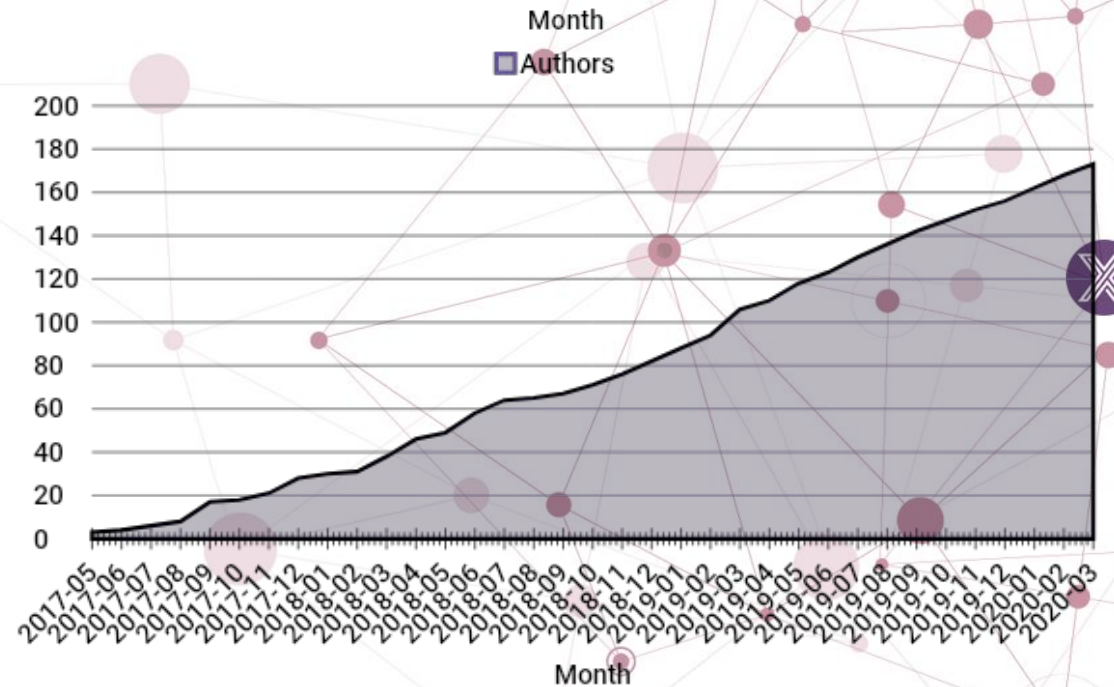
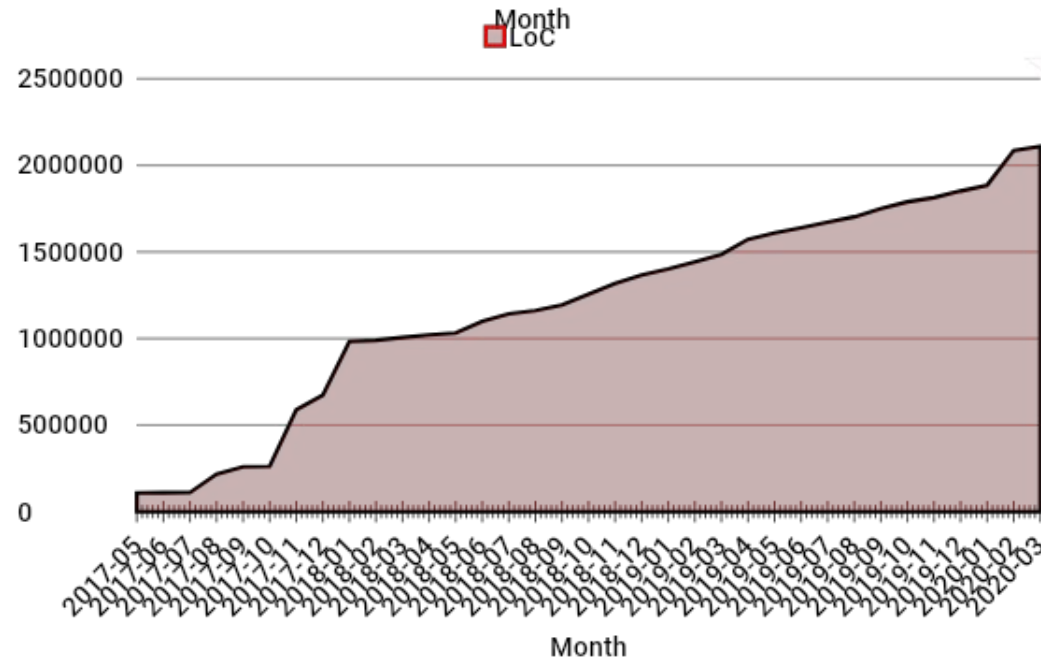
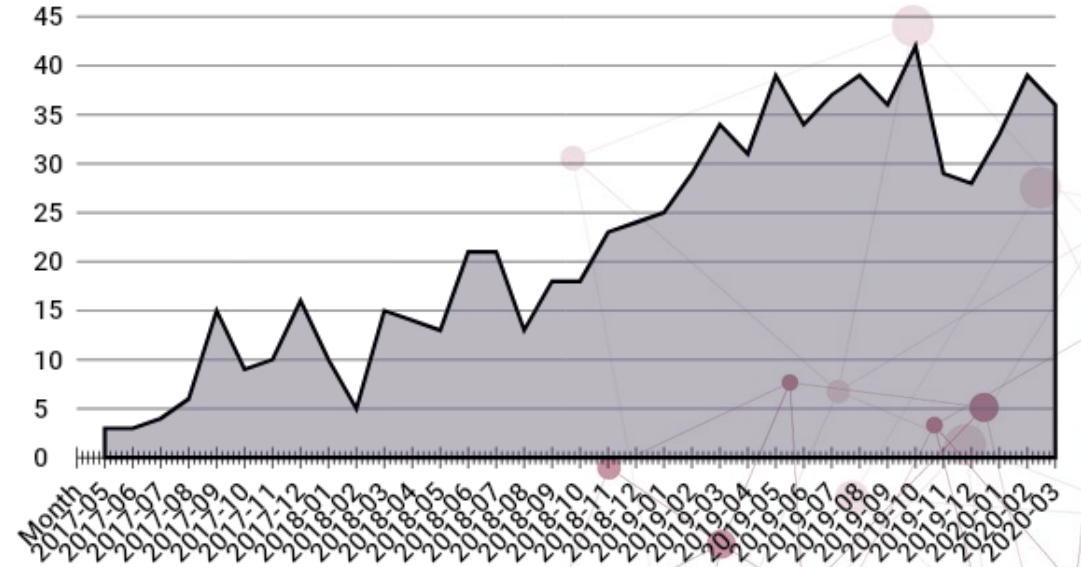
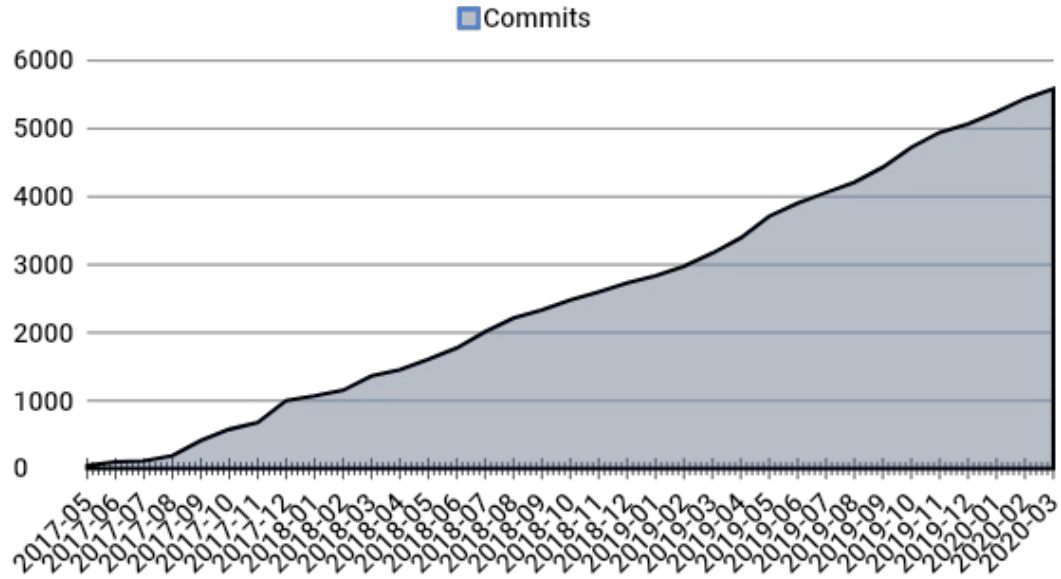
Commits by Company

■ Dell ■ Intel ■ IoTech ■ LF ■ RSA ■ VMWare ■ Canonical





# Code Stats





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# Upcoming Events & Dev Advocate Update

Aaron's updates

# Events

- LF Events through April are postponed
  - LF is trying to reschedule events but there isn't much public information

## Upcoming External Events

- › Open Source Summit North America: 22-24 June, 2020 - Austin, TX
- › IOT World Day: Jun 30-Jul 1
  - › Call for papers until March
- › Open Source Summit Japan: 15-16 September, 2020 - Tokyo, Japan
  - › CFP Status: Details Available Late 2020
- › Open Networking & Edge Summit Europe: 30 September - 1 October, 2020 - Antwerp, Belgium
  - › CFP Status: Open til Jun 7, 2020
- › Open Source Summit Europe: 26-28 October, 2020 - Dublin, Ireland
  - › CFP Status: Details Available Late 2020
- › IOT SWC: 27-29 Oct, 2020 - Barcelona, Spain
  - › **Looks like we will do what we did last year. Looking for sponsors**
- › Discussions around upcoming events occur in the LF Edge Outreach Committee
- › Members may subscribe at: <https://lists.lfedge.org/g/outreach-committee>



# Other Items

- Speaker's Bureau- Are you interested in speaking on behalf of EdgeX or LF Edge? Looking for developers/Architects  
<http://bit.ly/LFEdgeSB>
- EdgeX Awards
- TopCoder Event
- LF LinkedIn Post on [learning](#) Linux, if you would like to learn Linux or know people bored at home.
- EdgeX FAQ- on Slack if you see something that should be added to a FAQ, mark it with #add\_to\_faq
  - Any ideas on how to improve this, please let me know



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Thank You