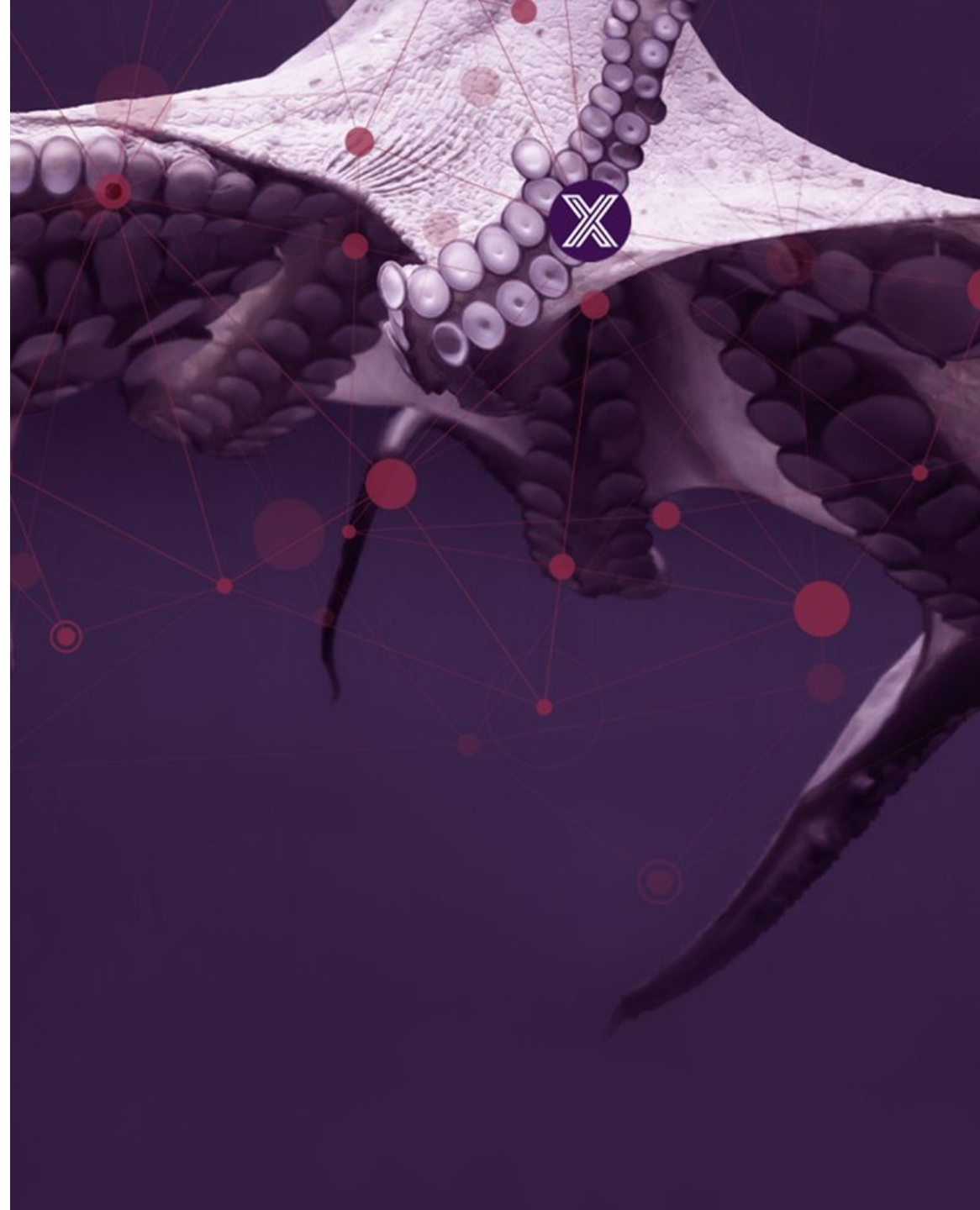


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# TSC Meeting

January 29, 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)

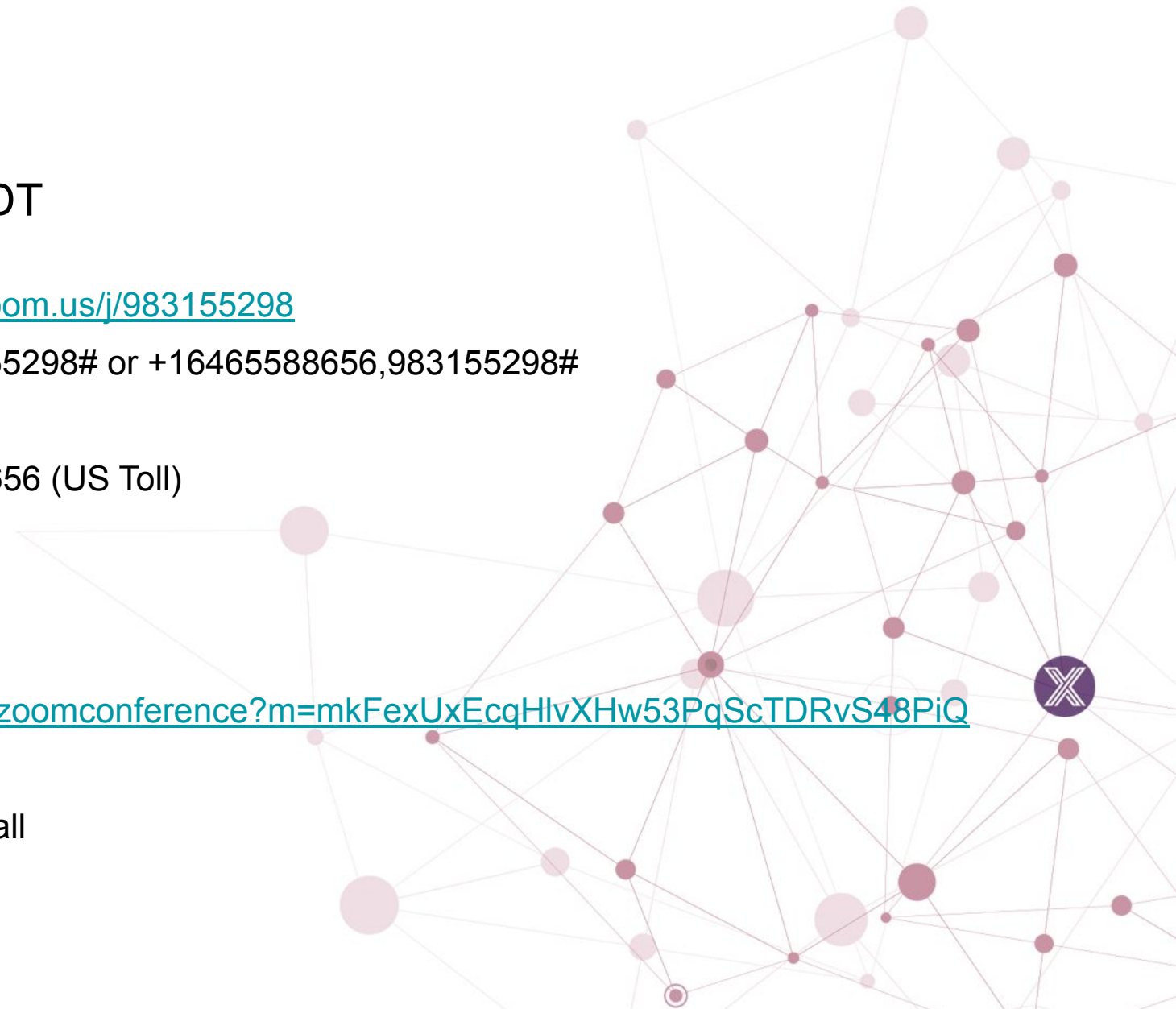
+1 855 880 1246 (US Toll Free)

+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          | Brad Corrion             | <a href="mailto:bradley.w.corrion@intel.com">bradley.w.corrion@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

- Weekly arch decisions/actions summary
- WG Updates
- Upcoming Events



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# Weekly Architecture/Action Summary

Per Phoenix F2F

# Architecture Decisions / Discussions Summary

## Device Services WG

- design for auto provisioning/dynamic device discovery on going
- Bluetooth device service - still in holding; review requested
- New V2 SDK API draft available:  
<https://github.com/edgexfoundry/device-sdk-c/pull/225>  
(backward compatible)

## Core

- 1st in series of reviews of API V2 was done this past week. Great intro to terms/models/etc for new API set
- [https://wiki.edgexfoundry.org/display/FA/Core+Working+Group?preview=/329472/37913292/APIV2\\_20200123.pdf](https://wiki.edgexfoundry.org/display/FA/Core+Working+Group?preview=/329472/37913292/APIV2_20200123.pdf)
- Highly recommend a listen and a view of the deck

## Application WG

- Decision on not to make change on support of command line option flag for registry.
- Rules engine option using EMQX Kuiper to be pursued
  - Mike to provide update

## Security

- Working on regular convening of SIR - to review Snyk reports and other security related issues
- Working on Mongo container startup issue - use an environment variable, setting it to a default such as “changeme” for password
- Working on app (and other) service secrets and how those are made available in secure and non-secure mode

# Architecture Decisions / Discussions Summary

## Test/QA WG

- No meeting

## DevOps

- 2nd Commit Linter explored

## System Management

- CLI review still ongoing; feature commitment for V2 API (stretch)
- Spec'ing out V2 APIs

## Certification WG

- no meeting

## Architecture Meeting

- Decisions
  - Issue Management Standard finalized
    - <https://wiki.edgexfoundry.org/display/FA/Issue+Management+Standard>
    - **Need vote** (coming up later)
  - Release Checkpoints - Lisa going to own this summary going forward and try to uplevel it a bit and provide larger picture of release dependencies
  - PR Template - approved by architects
    - <https://github.com/edgexfoundry/app-functions-sdk-go/pull/272>
    - **Need vote** (coming up later)
  - Feature Flag - recommendation not to use





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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
  - Certification - Rodney Hess
  - Vertical Solutions - Brad Corrion
  - Updates from Release Czar - Lisa
  - Updates from Dev Advocate - Michael

# Core Working Group (29-Jan-20)

- V2 API Ongoing Scaffolding Work
  - Draft PR below, targeting merge this week
  - <https://github.com/edgexfoundry/edgex-go/pull/2285>
  - ETA for initial use-case specific service endpoint == 2 weeks
    - e.g. AddAddressable, AddDevice, etc
- Go-mod-registry refactoring
  - We have a slight bottleneck between three PRs that we're working to unravel
    - go-mod-registry #38 (merged)
    - go-mod-bootstrap #34
    - edgex-go #2317
  - This follows from the extraction of configuration functionality into go-mod-configuration
- Core WG tomorrow @ 10AM Central/US

# Applications WG Update (29 Jan 2019)

- EMQ X Kuiper Demo Last Week
  - Overall -- well received
  - Still a few open questions re: Performance, and Roadmap
  - Plan is to continue to move forward as primary recommendation for Rules Engine replacement pending opens
- (From Core WG) Decision to keep -r/--registry flag as is
- Implementing GetSecrets functionality for App Function SDK
  - using go-mod-secrets
- App Working Group Meeting held on Fridays @ 9AM PST
  - Next meeting Friday, Jan 24th

# Application Services

## Functions (built into SDK)

Current/Complete:

### Fuji

- AES Encryption
- GZIP Compression
- ZLIB Compression
- MarkAsPushed
- PushToCore

EXPERIMENTAL

### Edinburgh

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

## Features

- Store and Forward
- Web Server
- Configurable AppService

## Reference/Example App Services (Fuji)

(built on top of SDK)

- Azure IoT Hub
- Amazon IoT Core

AVAILABLE

WIP

# Device Services WG Update (29-January-20)

- Discovery design updated following feedback
- BLE device service progressing again
  - Only current known issue is running containerised with SELinux
- Investigating edgex-go #2272 and if there are any DS implications
- Metrics collection to be discussed Feb 10th
- Draft PR #225 raised for new CSDK API

# Device Services - current/coming

## Open Source connectors (Current):

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

## Open Source connectors (Future):

- OPC-UA (Feb 2020)
- GPS
- Bluetooth (Feb 2020)
- REST (Jan 2020)
- 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 (29-01-2020)

- Blackbox Test
  - Issue opened for failed testcases
    - Issue [#372](#) on blackbox-testing for SMA operation “restart” failure, the issue is still investigating
    - Issue [#2237](#) on edgex-go will fix core-command test failure
  - Reviewing PR
    - Draft PR [#371](#), sending tests through kong. It’s waiting for more verification on sandbox
    - Draft PR [#374](#), run blackbox test on both database, mongo and redis
- New Blackbox Test
  - PR [#14](#) on edgex-taf for how to run edgex-taf document, needing to update for new folder structure
  - PR [#16](#) on edgex-taf for adding edgex-cli testcases, reviewed and added comments, waiting for response
  - Processing f/b on draft PR [#28](#) on edgex-taf for changing file structure ([edgex-taf-file-structure-v2](#))
- Swagger
  - The following work will be resumed once the swagger file location is confirmed. [edgex-go#2309](#) is checking in the V2 swagger files
  - Opened draft PR [#3](#) on edgex-api-docs repository under review
  - Opened draft PR [#531](#) on ci-management repository under review



# DevOps WG Update (1-29-2020)

## Geneva

- Jenkins Transformation to Pipelines
  - Work continues on the transformation to Jenkins Pipelines
    - Issue #547 - Lisa completed the work to add the additional environment variable needed to support APIv2 tests
    - Completed a lot of cleanup of legacy JJB templates
    - Worked with Snyk regarding recent message about *“approaching your limit of private tests this billing period”* - *increased the limits with Snyk support help and adjusted frequency of scans*
      - *Identified need to associate project as Open Source not private*
    - Started dialog regarding Snap release and need for Jenkins Pipeline to support snap release for Geneva
    - Given decision regarding use of PR Templates, closing explore work related to additional bots which automate and provide governance over the commit process.

## CommunityBridge - Advanced Snyk Reporting

- EdgeX Foundry added to the CommunityBridge Vulnerability Reporting
  - Ticket still open with Heather Willson / CommunityBridge team
    - *“we are consolidating services and redeploying to a different region. Sorry for the extended delay.”*

Next Meeting 1/30/2020 @9:00 PST

# System Management WG Update (01-29-2020)

- System Management Service
  - Reviewed Geneva Deliverables.
    - Asynchronous API (and restart operation for agent) delayed for APIv2.
  - Stretch goal for Geneva -- implement APIv2.
- CLI
  - Still need to review prior to TSC recommendation to move out of holding.
  - Alex currently focused on TAF and testing.
  - He will refocus on APIv2 support when implementation in core available.
- EdgeX-specific system-wide metrics follow up
  - Jim on agendas (core, device services) to gather input.
- Next meeting: January 31st @ 10AM CST
- Open Horizon Integration subgroup meeting on Mondays @ 1PM CT/2PM ET

# Security WG Update (01-29-2020)

- Ongoing work for Geneva release ( 96 items done, 14 items in progress, 11 items backlog )
- SIR team triage on snyk scanning reports
- Next security WG meeting focusing on security enhancement in API V2 design & discussion for PR-45 of go-mod-secrets

# Certification WG Update (1-27-20)

- No meeting this week
- Proposal from Michael Estrin for rules on minor API versioning
  - <https://lists.edgexfoundry.org/g/EdgeX-TSC-Certification/message/95>
- At next week's QA/Test WG meeting, will discuss the need for testing backwards compatibility across minor versions
- Within Core WG, PR 2285 needs review and feedback
  - Add Skeletal Support for API V2 Implementation:  
<https://github.com/edgexfoundry/edgex-go/pull/2285>
- Next meeting Monday, February 3rd, 9 a.m. PST

# Vertical Solutions WG Update (1/22)

- China EdgeX Hackathon Apr 2-3 in Shanghai
  - Melvin (Intel) and Gavin (VMware) leading logistics
  - Looking for members to Sponsor and/or contribute
  - Verticals: Industrial and Commerce (Retail, Banking Hospitality, Education)
- NRF Loss Prevention Demos showcasing EdgeX
  - NRF Jan 12-14: Biggest global retail tradeshow (40k attendees)
  - Intel Booth: Flooid (POS SW), Edgify (CV model/SW), Shekel (Scale), Intel (RFID), IOTech (Analytics) and HP/Intel HW (gateway)
  - HP Booth: Flooid (POS SW), Edgify (CV model/SW), Shekel (Scale), IOTech (Analytics) and HP/Intel HW (gateway)
  - Story of ease of sensor integration and data fusion with a modular approach for applications/devices

# Release Czar - 01/29/20

- No new updates

# Miscellaneous (Jim)

- Yocto project/community overture
- Face-to-Face meeting in Ireland
  - Registration now up. Please register early so that we can get an early indication of #'s
  - <http://www.cvent.com/d/nhqhc8/4W>
- Developer Advocate update
  - LF working out some California contract law. Announcement soon
- Vertical Solutions WG Chair
  - Camilo and Henry co-chairing for the remainder of this term
- Next week - look for updated dev advocate stats
  - SPOILER ALERT - we are now > 2 million docker container downloads!!

# TSC Votes

- Issue Management Standard finalized
  - <https://wiki.edgexfoundry.org/display/FA/Issue+Management+Standard>  
[d](#)
  - **Architects recommend approval of this new process**
- PR Template - approved by architects
  - <https://github.com/edgexfoundry/app-functions-sdk-go/pull/272>
  - **Architects recommend approval of this template for PRs going forward**





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## Upcoming Events

# Hanoi TSC

Arrangements for the spring TSC meetings has been finalized

- **WG Chair/Architects Pre-Wire meeting will be March 31st (Tue)**
  - Dell EMC office , Research Triangle Park, 62 T.W Alexander Dr., Durham, NC 27709, Room: Aspen Cedar, first floor, Capacity: 50
- **Hanoi TSC F2F will be April 27-30**
  - Dell IOT Lab, Limerick Ireland
  - April 27 - Architect's day (invite only)
  - April 28-29 - General planning sessions with business topics to lead off
  - April 30 - Training day (additional hackathon or other planning meetings as necessary)

## Upcoming External Events

- › [Embedded World](#): 25-27 February - Nuremberg, Germany
  - › Jim White: **Extending EdgeX Foundry– How to Build an IoT Solution from an open source, platform independent framework**
- › [Industry of Things World](#): Mar 12-13 - San Diego CA
- › [IoT Tech](#): Mar 17-18 - London, UK
- › [KubeCon EU 2020](#): 31 March - 2 April, 2020 - Amsterdam
  - › CFP closed 22 November
- › [IoT World](#): Apr 6-9 - San Jose, CA
- › [Hannover Messe](#): April 20-24 - Hannover GE
- › Open Networking & Edge Summit North America: 20-21 April, 2020 - Los Angeles, CA
  - › CFP Status: open til Feb 3
- › Open Source Summit North America: 22-24 June, 2020 - Austin, TX
  - › CFP Status: open til Feb 16



## Upcoming External Events

- › [IIOT 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 2019
- › 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 2019
- › [IOT SWC](#): 27-29 Oct, 2020 - Barcelona, Spain
- › Discussions around upcoming events occur in the LF Edge Outreach Committee
- › Members may subscribe at: <https://lists.lfedge.org/g/outreach-committee>





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Thank You