EDGEXFOUNDRY™

TSC Meeting

May 12, 2021

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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/zoomconference?m=mkFexUxEcqHlvXHw53PqScTDRvS48PiQ

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

TSC – Members Present Today

Company	Name	Email	Position
IOTech	Iain Anderson	iain@iotechsys.com	Device Services WG Chair
Intel	Ernesto Ojeda	ernesto.ojeda@intel.com	Dev Ops WG Chair
IOTech	Keith Steele	keith@iotechsys.com	Outreach WG Chair
Kong	Colin Hutchinson	colin@konghq.com	Security WG Chair
Intel	Mike Johanson	michael.johanson@intel.com	Applications & Analytics WG Chair
IOTech	James Butcher	james@iotechsys.com	Test/QA WG Chair
IOTech	Jim White	jim@iotechsys.com	Core WG Chair

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

- Changelog generator (as part of release czar update from Bill M)
- WG Updates
- ADR review
- Inconsistency in service naming issue wrap up
- Go 1.16 update
- Upcoming Jakarta planning
- Upcoming TSC elections
- Miscellaneous updates
- Upcoming Events (Dev Advocate)

Work Group Updates

Chairs

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Working Group Chair Updates

- Around the horn
  - Release Czar - Bill Mahoney
  - Product Manager - Lenny Goodell
  - Applications - Mike Johanson
  - Device Services - Iain Anderson
  - Test/QA - James Butcher
  - DevOps - Ernesto Ojeda
  - Security - Colin Hutchinson
  - Outreach - Keith Steele
    - Certification - Rodney Hess
    - Marketing - Camilo Dennis
    - Vertical Solutions (and LF Edge TAC) - Henry Lau
  - Core/Supporting - Jim White

Release Czar (May 12, 2021)

Ireland (2.0.0) Release - Key Dates

- Freeze Date:
  - Monday, June 21st, 2021 (5 weeks)
- Jakarta Virtual Planning Meeting:
  - June 21-24 (Monday - Thursday)
- Release Date:
  - Wednesday, June 30th, 2021 (7 weeks)
- EdgeX 2.0.1
  - ~ August 2021
- Jakarta Release:
  - ~ Early November 2021

Getting feedback on preliminary release sequencing/schedule.

Release Concerns:
Please let Lenny, Jim and myself be aware of issues as soon as possible.

Release Czar (May 12, 2021)

Automated Changelog Generator - Jenkins Job

x.y.z - 2021-05-05

Features ✨

- Use SecretProvider to get Config/Registry access tokens (#202) (#5d19aa5)
- Enable use of Registry & Config client access token (#195) (#f9d06ec)
- Add overwrite capability for custom configuration (#185) (#90b8a51)
- Add support for load/listen custom configuration (#180) (#f277873)
- Add config client in DIC (#178) (#ecde49d)
- v2: Add helper to query DIC and returns the DeviceServiceCommandClient instance (#162) (#c087e44)
- v2: Create Helper functions to retrieve client library instances through DIC (#158) (#3d89601)
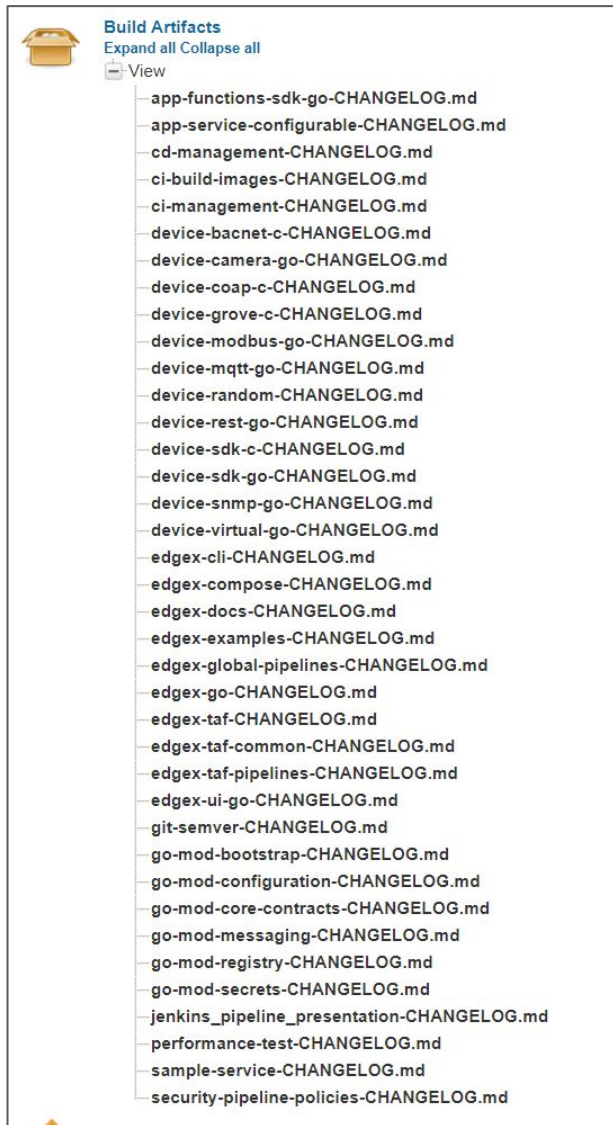
Bug Fixes 🐛

- Generate mock for latest SecretProvider interface (#206) (#359809f)
- Use /api/v2/ping for Registry healthchecks (#196) (#7d55b1a)
- Use V2 Ping for health check (#5bb40c1)

Code Refactoring ♻️

- update calling GenerateConsulToken (#212) (#e295a6e)
- Replace use of BurntSushi/toml with pelletier/go-toml (#6c8f2b4)
- Expose ConfigVersion so services can use if needed (#204) (#e966ad5)
- Set the Config Version when creating Config Client (#201) (#615e600)

```
BREAKING CHANGE:
Configuration in Consul now under the `/2.0/` path
```

Build Artifacts
Expand all Collapse all
☐ View

- app-functions-sdk-go-CHANGELOG.md
- app-service-configurable-CHANGELOG.md
- cd-management-CHANGELOG.md
- ci-build-images-CHANGELOG.md
- ci-management-CHANGELOG.md
- device-bacnet-c-CHANGELOG.md
- device-camera-go-CHANGELOG.md
- device-coap-c-CHANGELOG.md
- device-grove-c-CHANGELOG.md
- device-modbus-go-CHANGELOG.md
- device-mqtt-go-CHANGELOG.md
- device-random-CHANGELOG.md
- device-rest-go-CHANGELOG.md
- device-sdk-c-CHANGELOG.md
- device-sdk-go-CHANGELOG.md
- device-snmp-go-CHANGELOG.md
- device-virtual-go-CHANGELOG.md
- edgex-cli-CHANGELOG.md
- edgex-compose-CHANGELOG.md
- edgex-docs-CHANGELOG.md
- edgex-examples-CHANGELOG.md
- edgex-global-pipelines-CHANGELOG.md
- edgex-go-CHANGELOG.md
- edgex-taf-CHANGELOG.md
- edgex-taf-common-CHANGELOG.md
- edgex-taf-pipelines-CHANGELOG.md
- edgex-ui-go-CHANGELOG.md
- git-semver-CHANGELOG.md
- go-mod-bootstrap-CHANGELOG.md
- go-mod-configuration-CHANGELOG.md
- go-mod-core-contracts-CHANGELOG.md
- go-mod-messaging-CHANGELOG.md
- go-mod-registry-CHANGELOG.md
- go-mod-secrets-CHANGELOG.md
- jenkins_pipeline_presentation-CHANGELOG.md
- performance-test-CHANGELOG.md
- sample-service-CHANGELOG.md
- security-pipeline-policies-CHANGELOG.md

Product Manager (5/11) Cross Cutting Issues

In Progress (10, +/-0)

- **V2 Implementations**
  - **Support Notifications APIs - WIP**
  - **TAF testing V2 APIs - WIP**
  - **System Mgmt APIs - WIP**
  - Support Scheduler APIs - DONE
  - Device SDKs - DONE
  - Core Services - DONE

- **V2 Consumption**
  - Support Notification Clients - TBD
  - **Support Scheduler Clients - DONE?**
  - App SDK V2 Clients - TBD
  - **Device Camera - TBD**
  - Device Random - DONE
  - Device REST - DONE
  - Device ModBus - DONE

- **V1 Code removal**
  - Core/Support Services - TBD
  - App Services - DONE
  - Device Services - DONE

- **Securing Consul with Access Token**
  - C Device SDK - TBD
  - C Device Services - TBD
  - **Security Services - DONE**

- **Device Service send Events via MessageBus implementation**
  - Device SDK C - **PR**
  - **Kuiper password inject - WIP**
  - C Device Services - TBD
  - Core Data Subscribe - TBD
  - **Device Camera - TBD**
  - Device REST - DONE
  - Device Random - DONE

- **Secret Provider for All**
  - **DS SDK C - WIP**
  - Camera Device Service - **TBD**
  - C Device Services - **TBD**
  - Secret Store Setup - DONE
  - Go Device Services - DONE
  - App Services - DONE

- **Switch to Go 1.16**
  - CI pipeline - DONE
  - **Update Core/Support files - DONE**
  - **Update App SDK files - DONE**
  - **Update ASC files - DONE**
  - **Update Device SDK Go files - DONE**
  - Update Go Device Service files - **WIP**

- **Clients Config overrides `-` => `_`**
  - **go-mod-bootstrap - PR**
  - **Compose files - PR**
  - All other services - TBD

- **Secure Message Bus connection**
  - **Core Data - DONE**
  - **App Services - DONE**
  - **Go Device SDK - WIP**
  - **Go Device Service - WIP**
  - C Device SDK - TBD
  - C Device Services - TBD

- **Metrics ADR - WIP**

Done (13, +1)

- **Docker image renaming - DONE**
- See project board for more...

Backlog (1, +/-0)

- Implement Generate/Inject passwords into Vault

Icebox (0, +/-0)

Applications WG Update (12-May-2021)

Done:

    Update SDK and ASC to use secure MessageBus capability

    Updated to go 1.16 for SDK and ASC

WIP:

    Started looking at Multiple Export Capability

    Working with Kuiper on injecting secrets (Proof of concept done, working on making more robust)

Old WIP :)

- Reviewing edgexfoundry-holding/rfid-llrp-inventory-service - Changes in-progress
- Documentation Updates

Next meeting **May 13th, 2021** @ 330 PM AZ

Application Services

Functions (built into SDK)

Current/Complete:

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

Features

- Store and Forward
- Web Server
- Configurable App Service
- Vault Integration for Secrets
- MQTT Event triggers

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

Device Services WG Update (12-May-21)

Done

- Attribute typing - implemented in device-modbus

WIP

- MessageBus for C (in review)
- device-rest v2 (in review)
- GPIO, RFID service reviews: GPIO down to last few issues
- Go 1.16
- Secure MessageBus (supported in Go SDK)

New
- CORS support
- Event Tagging

Project status: 20 issues backlog + 8 new (net -2)

Next meeting: May 24th

Device Services - current/coming (as of v2.0)

Open Source connectors (Current):

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

Open Source connectors (Future):
- Bluetooth Low Energy in C (2021) - contributed
- OPC-UA in C (2021) - under dev
- GPIO (2021) - contributed
- UART (2021) - contributed
- GPS

Commercial connectors (Current):

- File Exporter in C
- BLE in C
- Zigbee in C
- GPS in C
- CAN in C
- CANOpen in C
- MEMS in C
- EtherCat in C
- EtherNet/IP in C
- Profinet in C
- OPC-UA Pub/Sub in C
- ONVIF in C
- Siemens S7 in C

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

Commercial connectors (Future):

- ZeroMQ (Q1 2021)
- RFID (Q1 2021)

QA/Test WG Update (11th May)

- TAF tests
  - Status: 4 failing TAF tests (Kong) #403
  - Fixed Issues - General Maintenance
    - #395, [Security] Admin API Token Generation
    - #401, [Security] Change deploy-edgex.sh to deploy all security services together
    - #406, [V2] Update script for the DTO changing on scheduler and notification
    - #392, [Performance Metrics] Remove threshold setting for consul, redis, and kuiper
  - Working issues
    - #408, [V2] Metadata: add testcases for GET /deviceresource profile

Next Meeting May 18th, 8am PST

TAF Functional 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	Redis	419	0	0	0
x86_64 / CentOS	Security	Redis	419	0	0	0
arm64 / Ubuntu	Non Security	Redis	419	0	0	0
arm64 / Ubuntu	Security	Redis	419	0	0	0

Jenkins Job: functional-test

TAF Integration 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	Redis	6	0	0	0
x86_64 / CentOS	Security	Redis	6	0	0	0
arm64 / Ubuntu	Non Security	Redis	6	0	0	0
arm64 / Ubuntu	Security	Redis	6	0	0	0

Jenkins Job: integration-test

TAF Performance 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	Redis	10	0	0	1
arm64 / Ubuntu	Non Security	Redis	10	0	0	1

Jenkins Job: performance-test

DevOps WG Update (05-12-2021)

Pipeline Enhancements

- [#102](#) [Complete] Docker image renaming. On hold until 30 days before Ireland release.
- [#335](#) [Complete] Update Go pipelines to use Go 1.16

Other

- [#327](#) [Complete] Automated CHANGELOG creation
- [#332](#) [Complete] edgex-compose .env file automation
- [Backlog] Developer Badging Program
- [Backlog] DockerHub Overviews for new docker images

DevOps WG Meeting May 13, 2021 @ 9:00 AM PST

Security WG Update (May 12)

- Next Meeting: Today & May 19
- Backlog
  - Security Board: 8 (-2)
  - Consul Board: 3 (0)
- Development
  - Security Board: 0 (0)
  - Consul Board: 0 (-2)
- In Review
  - Security Board: 2 (+1)
  - Consul Board: 0 (0)
- Done
  - Security Board: 80 (+4)
  - Consul Board: 38 (+2)

Outreach WG Updates (5/12/21)

Combining meetings going forward

Certification Team

- Internal testing of infrastructure started

Vertical Solutions Team

- Open Retail Reference Architecture sub-project:
  https://wiki.edgexfoundry.org/display/FA/Open+Retail+Reference+Architecture

- Next call tomorrow (5/13/21) at 10 a.m. PDT

Marketing Team

- Website stats available

- Working to respond to LF Edge Outreach survey

Core Working Group (5-11-2020)

- Ireland
  - Support services (notifications)
  - TAF tests (work underway)
  - System Management service
  - Integration / use of V2 APIs (work underway)
  - Documentation
  - Message bus support (work underway)
  - CLI to V2 (underway)
- UI may slip to 2.0.1 (with a partial "beta" release in June)
- status
  - 15in backlog (-6)
  - 12 in bug backlog (-4)
  - 1 in progress or QA(-1)
  - 182 done (+11)
- Next call - 5/13/21 @ 8AM PDT
  - New Metrics ADR review
  - timeouts issue
  - edgex-go 915 issue

Service naming

we have inconsistency in the names we are using for service keys that should be fixed for Ireland

      edgex-go service's have the `edgex-` prefix

      App service configurable has just the `app-` prefix

      Devices services have a mix of prefix and postfix.

This naming inconsistency has become an issue in secure mode now that we are using the service key for the Consul ACL and SecretStore.

Propose we drop the `edgex-` prefix and postfix like `-go` , so the names are like this:

      core-data

      core-metadata

      support-scheduler

      security-secretstore-setup

      app-rules-engine

      device-mqtt

      device-rest

      device-virtual

Go 1.16 migration

edgex-go and modules have been moved to Go 1.16

Snapcraft update to be done

DS and AS SDKs and services to be done (or may be done)

Developers to move at their leisure

Note to all about Go builds and use of go mod tidy

    Builds no longer automatically pull in the dependency libs you need!!

ADR review (in order of priority)

ADR name and PR number	Status	owner	Work Group
Metrics / #268	Refreshed - needs review	Jim White	Core
ADR on dynamic service list	Added - to be covered at upcoming Monthly architect meeting	Jim White	Core

* - indicates some work this week

Miscellaneous Issues/Topics

- TSC approval of dot release 3rd party packages (go-kit, validator, redis)
- China TSC - May 28th
  - Topic/speaker
- Adopter series - May date open
- Jakarta F2F planning meeting (hopefully the last of our virtual F2F??)
  - Proposed timeline
    - Planning meeting to also start June 21st (same date as the freeze)
      - ½ days, Monday - Thursday with ½ Friday for education/non-conference presentations
      - Monday 7am-11am PST
      - Tuesday 10am - 1pm PST
      - Wednesday 7am-11am PST
      - Thursday 10am-1pm PST
      - Friday 8am - 11am PST (non-conference)
    - Topic list forthcoming - send Jim a note if you have ideas or considerations

Working with China team to see if we can hold an update call with them versus have China friendly session in this schedule.

Miscellaneous Topics Part II

- EdgeX Award Ceremony to be announced
  - Waiting or trophies to get made and delivered
- EdgeX TSC Elections
  - Terms end June 24 - recommend the terms be extended 1 week to allow for the release
  - Proposed schedule
    - Nominations for WG chairs and at large TSC seats May 19 until June 4 (June 11 for at large)
    - WG chair elections week of June 7-11 (if needed)
    - TSC at-large elections week of June 14-18 (if needed)
    - TSC chair nominations week of Jun 21-25
    - TSC chair election June 28th (if needed)

Upcoming Events & Dev Advocate Update

Aaron's updates

Upcoming External Events

› [Kubernetes on Edge Day](#): 4 May, 2021 - Virtual
› [Think 2021](#): 11-12 May, 2021 - Virtual ([ORRA](#) presentation)
› [Open Source Summit Europe](#) / [Embedded Linux Conference](#): **27-30 September, 2021 - Seattle, WA** (and Virtual)
  › [CFP](#) Deadline: 13 June, 2021
› [OSPOCon](#): **27-29 September, 2021 - Seattle, WA** (and Virtual)
  › [CFP](#) Deadline: 13 June, 2021
› [The Global Open Source Technology Conference (GOTC)](#): 9-10 July, 2021 - Shenzhen/Shanghai
› [IoT Solutions World Congress](#): 5-7 October, 2021 - Barcelona, Spain
  › [CFP](#) closed (notifications in June)
  › [Call for Testbeds](#) is open (closes 20 May)
› [Open Networking & Edge Summit North America](#): 11-12 October, 2021 - Los Angeles, CA + Virtual
› [KubeCon + CloudNativeCon North America](#): 12-15 October, 2021 - Los Angeles, CA + Virtual
  › [CFP](#) is open (closes 23 May)
› Discussions around upcoming events occur in the LF Edge Outreach Committee
› Members may subscribe at: https://lists.lfedge.org/g/outreach-committee

LF Edge Webinar Series

Akraino Edge Stack

    Held Thursday, April 2 - Your Path to Edge Computing with Akraino Edge Stack

    › On-demand recording available at: https://zoom.us/webinar/register/WN_Zjdo4-5fTQSIqH7pL8iHrQ

EdgeX Foundry

    › Held Thursday, April 23 - EdgeX Foundry 101: Intro, Roadmap and Use Cases

    › On-demand recording available at: https://zoom.us/webinar/register/4515850788014/WN_xCd6YPjEQrCwLiFhBWPKug

Project EVE

    › Held Friday, May 29 - Building the "Android of the IoT Edge"

    › On-demand recording available at: https://zoom.us/webinar/register/6415888722675/WN_35oZJ3hrQE69snMaiJUTPg

White Paper

    › Held Thursday, July 9 - Demystifying the Edge with the new LF Edge Taxonomy and Framework

    › On-demand recording available at: https://zoom.us/webinar/register/WN_icv5h6wFTcuw9O0xvMpgLw

Fledge

    › Held Thursday, August 13 - How Google, OSIsoft, FLIR and Dianomic use Fledge to implement Industrial 4.0

    › Recording available at: https://www.youtube.com/watch?v=6JXNv3AJWog

State of the Edge

    › Held Thursday, September 17 - State of the Edge: Exploring the Intersection of IoT, AI, 5G and Edge Computing

    › On-demand recording available at: https://zoom.us/webinar/register/8115959695936/WN_4rt-MmP1Rl6Vkzn3ULpiAA

Home Edge

    › Held Thursday, October 15 - Home Edge: How Your Home Devices Get Deployed in An Edge Computing Services Ecosystem

    › On-demand recording available at: https://zoom.us/webinar/register/WN_uSlgb-R5Q4etkDhxoSXISQ

› More to follow...

Thank You