TSC Meeting

February 16, 2022

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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:

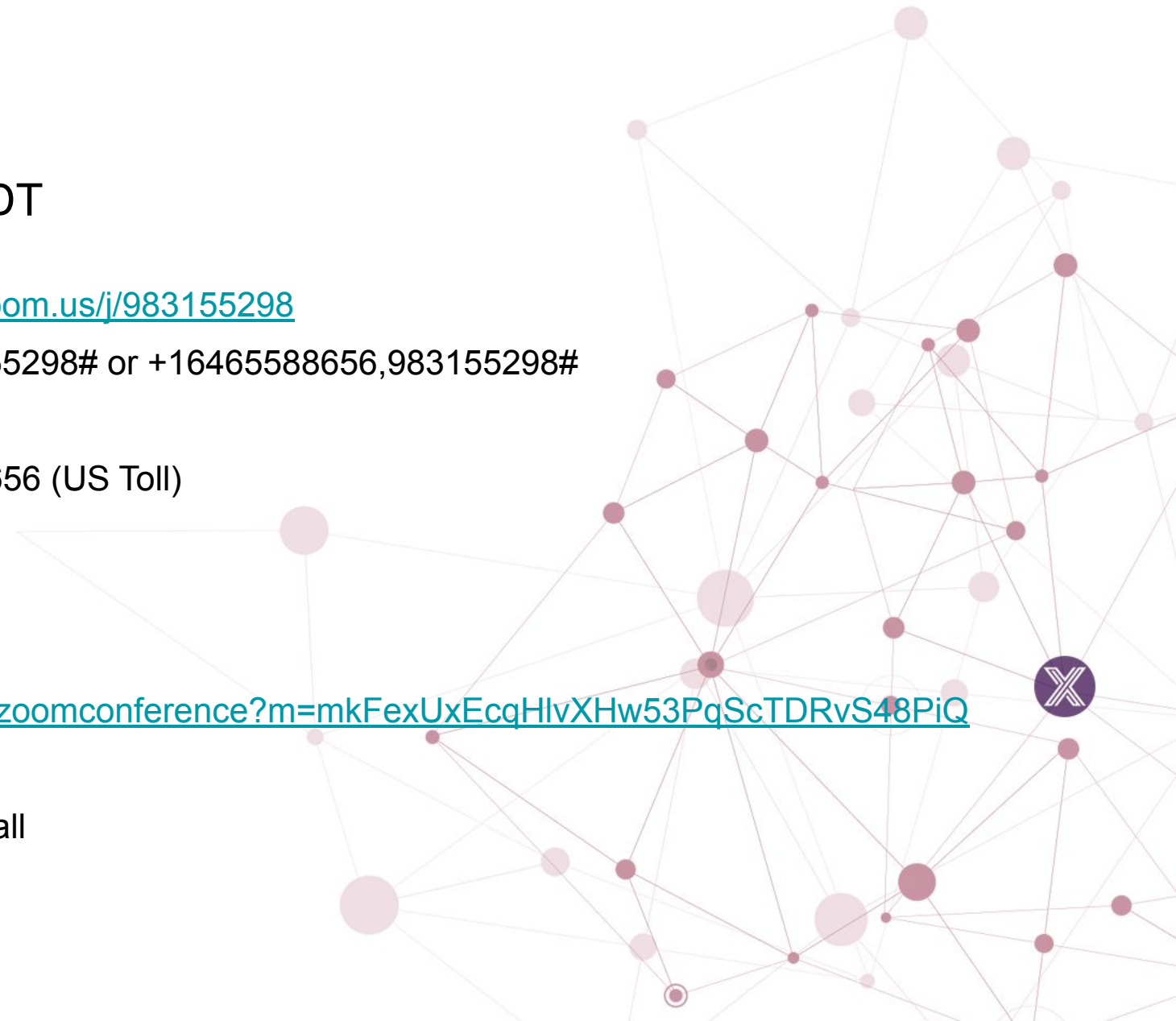Dial: +1 408 638 0968 (US Toll) or +1 646 558 8656 (US Toll)

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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	Jim White	jim@iotechsys.com	Outreach WG Chair
Intel	Bryon Nevis	bryon.nevis@intel.com	Security WG Chair
Intel	Lenny Goodell	leonard.goodell@intel.com	Applications & Analytics WG Chair
IOTech	James Butcher	james@iotechsys.com	Core/Test/QA WG Chair

Gavin Lu (VMWare), Tony Espy (Canonical), Melvin Sun (Intel)

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
- ADR updates
- Miscellaneous
    - LF Edge ask
    - Release planning & face to face survey
    -

Work Group Updates

Chairs

Working Group Chair Updates

- Around the horn
  - Product Manager - Lenny Goodell
  - Applications - Lenny Goodell
  - Core - James Butcher
  - Device Services - Iain Anderson
  - DevOps - Ernesto Ojeda
  - Release Czar - Bill Mahoney
  - Security - Bryon Nevis
  - PRC Updates
  - Outreach - Jim White
    - Certification - Rodney Hess
    - Marketing - Camilo Dennis
    - Vertical Solutions (and LF Edge TAC) - Henry Lau

Product Manager (02/16/22) - Kamakura

Icebox (0)

Backlog (0)

In Progress (8, -1)

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

- **Secure Message Bus connection**
  - C Device SDK - **TBD**
  - C Device Services - **TBD**

- **CORS for all (secure and non-secure)**
  - Go services - DONE
  - C SDK/Services- **TBD**

- **Request new Consul token on Auth failures**
  - Go Services - DONE
  - C SDK/Services - **TBD**

- **Implement Generate/Inject passwords into Vault**
  - Go Services - DONE
  - C SDK/Services - **TBD**

- **Add a "make lint" target**
  - Go Device Services - **WIP**
  - LLRP App Service - **DONE**
  - edgex-go - DONE
  - App Services - DONE
  - go-mods - DONE
  - Go Device SDK - DONE
  - C Device Services - N/A

- **Use of Registry when create Clients**
  - go-mod-bootstrap - **DONE**
  - edgex-go - **PR Pending**
  - App SDK - **DONE**
  - Device SDK - **DONE**

- **Metrics ADR - WIP**

Done (6, +1)

- **Secret Provider for All**
  - C Device Services - **DONE (COAP)**
- Add service name to common response DTOs
- Switch to Go 1.17
- Update Swagger publishing to use version 2.2.0 (docs to point to 2.2.0)
- No ZMQ on Windows
- Secret store tokens for delayed-start services ADR

Applications WG Update (02/16/2022)

Completed
- Location of client service obtained from the registry #1032

WIP
- [LLRP] use background publisher instead of Push to Core
- App SDK Controller tests not actually run
- [LLRP] Update snaps for a Jakarta Release

New
- Issue overriding AppCustom settings with environment variables #1043

Protocol App Services
- Defining high level requirements
  - https://docs.google.com/document/d/1TXFg5tkbDlFa2tj0yf
    TZcQ4NPNfo-Y8c/edit?usp=sharing&ouid=104667835989
    061964851&rtpof=true&sd=true

Next
- Metrics once ADR is approved

Project Board: https://github.com/orgs/edgexfoundry/projects/23

eKuiper

- No update this week

> **Reminder**: Bi-weekly morning App Service WG meetings are now being used for Eaton's discussions on C++ Protocol App Service. These discussions will continue on **February 29th, 2022 @ 9am PST**

Next meeting **February 22th, 2022 @** 2:30pm Pacific

Application Services - Ireland

Functions (built into SDK)

- Add Tags
- Batch
- Compression (GZIP & ZLIB)
- Conversion (XML & JSON)
- PushToCore
- ~~MarkAsPushed~~
- Encryption (AES256)
- Encryption (AES) ** DEPRECATED**
- Export
  - MQTT
  - HTTP POST & PUT
- Filtering
  - By Profile Name
  - By Device Name
  - By Source Name
  - By Resource Name
- JSONLogic
- Set Response Data

Features

- Store and Forward
- Batch and Send
- Web Server
- Configurable App Service
- Vault Integration for Secrets
- MQTT Event triggers
- Filter by Topics
- Custom Triggers
- Publish Topics and URL Placeholders
- Structure Custom Configuration
- Background Publishing

- Received Topic
- Context Storage
- Clients
  - Logging, Event
  - Command
  - ~~Device, DeviceService~~
  - DeviceProfile
  - Notification
  - Subscription
  - Registry

Reference/Example App Services
(built on top of SDK)

- Simple Filter
- Simple Filter and MQTT Export
- Simple Filter and HTTP Export
- Simple CBOR
- Azure IoT Hub
- Amazon IoT Core
- Cloud Event Transformation
- Secret Retrieval
- JsonLogic

- Send Command
- Convert & Publish
- Custom Target Type
- IBM Watson IoT (ASC Profile)
- Custom Trigger
- Influx DB Export
- Fledge Export

Core WG Snapshot (16 Feb 2022)

- Kamakura:
  - TAF - All tests passing
    - Functional tests: 545
    - Integration tests: 43
    - Performance tests: 10
  - Generally moving towards Kamakura release; fixing minor bugs and issues as we go
  - New: Redis concurrency bug needs assessing: #133

Core Project Board Status

- 6 New Issues (-2)
- 9 Release Backlog (+0)
- 0 Bug Backlog (+0)
- 4 In Progress/QA (+2)
- 39 Done (+2)
- 2 Kamakura Stretch (+0)
- 12 Icebox (+0)

QA/Test Project Board Status

- 0 New Issues (+0)
- 1 Release Backlog (+0)
- 0 In Progress/QA (+0)
- 7 Done (+1)
- 0 Icebox (+0)

Next meeting Thursday February 17th @ 8am Pacific Time

Device Services WG Update (16 Feb 2022)

Device Services

- GPIO: PR for v2.x - needs rebase + go.mod update
- CoAP: Secret Store enabled, potential release?

SDKs

- Further updates re: registry use for client endpoints
- Array reading data format
    - C SDK made consistent with Go
    - ADR 0002 to be updated
- ProtocolProperties validation - in review (Go)

Project board

- 29 issues New+Backlog (-1)
- 8 In Progress+Review (+1)

Next meeting: February 28th

Device Services - current/coming (as of v2.1)

Open Source connectors (Current):

- Modbus (TCP/RTU) in Go
- Virtual Device in Go
- SNMP in Go
- MQTT in Go
- BACnet (IP & MSTP) in C (v1 only)
- ONVIF Cameras in Go
- REST in Go
- Grove in C
- CoAP in C
- LLRP / RFID in Go
- GPIO in Go

Open Source connectors (Future):

- UART in Go
- OPC-UA in Go

Commercial connectors (Current):

- 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 in C
- OPC-UA Pub/Sub in C
- Siemens S7 in C
- File reader in C

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

DevOps WG Update (02-16-2022)

Pipeline Related

- [Complete] #59 Spike: rewrite git-semver in python
- [In Progress] Linux Foundation will be working on Ubuntu 20 based build agents for use in the pipelines
  - Will also be migrating away from CentOS due to EOL
- [Backlog] edgex-docs release automation
- [Backlog] Setup bi-weekly builds for less active repos for Snyk vulns

Other

- N/A

Next DevOps WG Meeting: Thursday, February 17, 2021 @ 9AM PST

Release Czar (2022-2-02)

No Updates This Week.

Upcoming:

Kamakura - ½ way to May 2022

Security WG Update (2/16/22)

Next Meeting: Today, next

- Delayed service start ADR status
  - Good progress. Have spire server, spire-agent, and security-spiffe-token-provider samples out in forks of edgex-compose and edgex-go. Mocking out go-mod-secrets support. No blocking issues so far
- Inherited base image vulnerabilities status
  - Synk scan findings root caused to buggy Dockerfile (fixed, thanks Ernesto!)

Security Project Board Status

- 5 New Issues (+1)
- 4 Release Backlog (-1)
- 3 In Progress/QA (+1)
- 1 In review (-1)
- 16 Done (+1)

Secure Consul Project Board Status

- 0 In-review
- 0 In-progress
- 2 Phase 1 To-do
- 1 Phase 2 To-do
- 4 Phase 3 To-do

Updates on EdgeX China Project

- Reviewing the request from IoTDB (An Apache project on lightweight Database), on X-community collaboration with EdgeX

- Upcoming event: Q1 meetup in middle March in Chengdu (the city with 4th largest dev population in PRC).
  - day 1: product & solution speeches
  - day 2: hands-on training

EdgeX China community channels:

- Website: https://cn.edgexfoundry.org/
- OSChina: https://www.oschina.net/group/edgex-foundry
- CSDN: https://blog.csdn.net/edgexfoundry
- Zhihu: https://www.zhihu.com/people/edgex-foundry
- Bilibili: https://space.bilibili.com/550595847

Outreach WG (2/2/22)

Certification

- New EdgeX Ready applicant

Web Site

- January Stats available

ADR review

ADR name and PR number	Status	owner	Work Group
Device profile changes / #605	DONE!	Jim White	DS
Metrics / #268	**2 approvals - will put a vote out this week if there is no other feedback**	Jim White	Core
ADR on unit of measure / #386	Rewrite complete; awaiting additional review **Cover in Core WG and Monthly Architect's meeting**	Jim White	Core
Device functions / #644	discussed in last DS Working Group; awaiting N/S	Iain Anderson	DS
North-south message bus / #656	Rewritten; discussed with Lenny; review needed **Cover in Core WG and Monthly Architect's meeting**	Jim White	Core
Microservice Authentication / #659	discussed in security WG On hold for the moment	Bryon Nevis	Security
control plane events	Needed per planning meeting (low priority this release)		
cmake options to optimize dependencies	Needed per planning meeting	Eaton	
Global config	Needed per planning meeting (low priority this release)		
Securing the EdgeX message bus when using MQTT	Needed per planning meeting		
device parent/child relationship	Needed per planning meeting (labels vs other option)	Eaton	

Miscellaneous

- work continues on Eaton App Service/Device Service design
  - WIP: https://docs.google.com/document/d/1oT2za9_CeFIuESritp7VRmIO-Enc5owZMCsJBzvrzlk/edit
- LF Edge survey request
  - Need: what are the top 1-3 things the LF Edge community (and TAC specifically) could do to help our project
- Reminder next Monday is President's day in the US (holiday)
  - No EdgeX meetings
  - Check your calendars for ghost meetings
  - Monthly Architect's meeting moved to 28th Feb

Release and F2F planning

- Planning
  - Per our new [planning schedule policy](#)
- If release was May 4th (Wednesday)
  - Freeze would begin April 20th (Wednesday - 2 weeks for minor release)
  - Pre-wire would be April 14th (Thursday)
  - Planning meeting would be
    - May 9-12 (if virtual; M-Thur)
    - May 10-12 (if live)
- Should we consider a live F2F meeting for Spring?
  - Appetite, restrictions, etc.
  - Survey the community about F2F for Spring, Fall, 2023, never or beyond?

Thank You