

EDGE X FOUNDRY™

TSC Meeting

January 19, 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)

+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>	<u>Position</u>
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
 - Monthly Architect's meeting agenda
 - EdgeX Smart * Challenge - status and call for help



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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 (01/19/22) - Jakarta [Cross Cutting Issues](#)

In Progress (9)

- [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**
- [Secret Provider for All](#)
 - DS SDK C - **DONE**
 - C Device Services - **TBD**
- **CORS for all (secure and non-secure)**
 - Go services - **DONE**
 - C SDK - **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 - **TBD**
 - LLRP App Service - **TBD**
 - edgex-go - **DONE**
 - App Services - **DONE**
 - go-mods - **DONE**
 - Go Device SDK - **DONE**
 - C Device Services - **N/A**
- **Metrics ADR - WIP**
- **Switch to Go 1.17 - WIP**

Done (3)

- 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

Backlog (0)

Icebox (0)

Applications WG Update (01/18/2022)

Completed

- Migration of LLRP App Service
 - A few addition PRs before release

eKuiper

- No Update

WIP

- None

New


- [LLRP] use background publisher instead of Push to Core
- [LLRP] Refactor to use time.UnixMilli() instead of own helper
- [LLRP] Update snaps for a Jakarta Release
- [LLRP] Remove Mock CommandClient (Kamakura)

Protocol App Services

- Defining high level requirements
 - <https://docs.google.com/document/d/1TXFg5tkbDIFa2tj0yfTZcQ4NPNfo-Y8c/edit?usp=sharing&oid=104667835989061964851&rtpof=true&sd=true>
 - **Jim White** hosted meeting today, any updates?

Next

- Metrics once ADR is approved

Project Board: <https://github.com/orgs/edgexfoundry/projects/23> Next meeting **January 25th, 2022 @ 2:30pm Pacific**
edgexfoundry.org |  @edgexfoundry

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 1st, 2022 @ 9am PST ??**

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 (19 Jan 2022)

- Kamakura:
 - TAF
 - Functional tests: 545 - 2 fails due to [#366](#) Fail to deploy app-service with external-mqtt-trigger profile
 - Alex Ullrich acknowledged as a recently added regression/bug
 - Integration tests: 43 - 1 fail due to [#1019](#) HTTP Trigger with invalid event returns 500
 - Alex Ullrich also on this one
 - Performance tests: 10 (all passing)
 - ADR discussions ongoing - [#605](#) Device Profile changes

Core Project Board Status

- 10 New Issues (+3)
- 8 Release Backlog (+0)
- 0 Bug Backlog (+0)
- 1 In Progress/QA (+0)
- 28 Done (+3)
- 2 Kamakura Stretch (+0)
- 14 Icebox (+0)

QA/Test Project Board Status

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

Next meeting Thursday January 20th @ 8am Pacific Time

Device Services WG Update (19 Jan 2022)

In progress

- RFID device service for v2.1 release
- Device Functions ADR
- North-South MessageBus ADR
- ADR for modifying existing Device Profiles

New Device Service proposal

- LoRa / LPWA - presentation now scheduled for Jan 24th

Next meeting: January 24th

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 (01-19-2022)

Pipeline Related

- [Complete] [#371](#) Go 1.17 released - [Release Notes](#)
- [Complete] [#370](#) Spike: multi-arch builds with buildx (spin up less nodes, speed up builds)
- [In Progress] [#59](#) Spike: rewrite git-semver in python
- [Backlog] 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

Other

- [In Progress] Slight inefficiency found in Dockerfile with Go modules in regards to local docker builds. Will need to update all Go based Dockerfiles to fix.

Next DevOps WG Meeting: Thursday, January 27, 2021 @ 9AM PST

Release Czar (2022-1-19)

No Updates This Week.

Security WG Update (1/19/22)

Next Meeting: Today

- Securing north-south message bus communication
<https://github.com/edgexfoundry/edgex-docs/pull/656>
- Start discussion on base image patching policy

Security Project Board Status

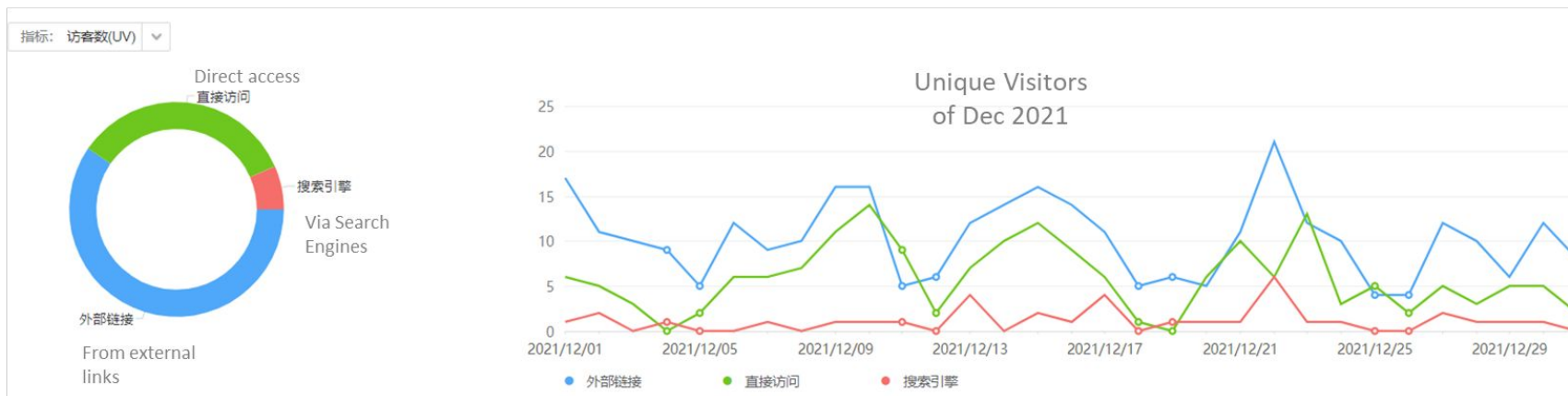
- 3 New Issues (+1)
- 6 Release Backlog (-1)
- 1 In Progress/QA (+1)
- 1 In review ($\Delta=0$)
- 14 Done ($\Delta=0$)

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-website stats of Dec 21

	Page view	Unique visitor	IP#	Bounce Rate	Average access time
New users	浏览量(PV) 1,315	访客数(UV) 368	IP数 357	跳出率 38.85%	平均访问时长 00:05:50
Returning users	浏览量(PV) 703	访客数(UV) 167	IP数 168	跳出率 37.62%	平均访问时长 00:06:31



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 (1/19/22)

Next meeting Monday Jan 24 at 9am PST

Certification

- V2 API support for EdgeX Ready program

Marketing Efforts

- Working on new tech talks
 - V2 API video
 - Message Bus video

Topcoder

- Message Monitor Tool now available in holding
 - <https://github.com/edgexfoundry-holding/edgex-message-monitor>
 - PR on this repo provides slightly different 2nd version
- Next step - create it into some sort of example project

ADR review

<i>ADR name and PR number</i>	<i>Status</i>	<i>owner</i>	<i>Work Group</i>
Device profile changes / #605	Almost there - should be out for a vote this week	Jim White	DS
Metrics / #268	Updated with resolution to latest comments Some approvals - looking for others Cover in Monthly Arch Meeting	Jim White	Core
ADR on unit of measure / #386	Target Jan 2022 - ready for re-review/Monthly Arch Meeting	Jim White	Core
Device functions / #644	discussed in last DS Working Group; Under review	Iain Anderson	DS
North-south message bus / #656	Being updated and under review Should be ready for re-review later this week	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	

Monthly Architect's Agenda (Jan 24th)

@11 am MST

Topics

- EdgeX message bus topic naming (to prefix or not to prefix)
- Metrics ADR
- Unit of Measure ADR
- Discussion on possible registry ADR items to be worked
- Device functions ADR??

EdgeX Smart * Challenge - Kick off Jan 24

Done

Wiki site

Sponsors/funding

Pre-registration social media

Web site with registration

Social media announcement

To Be Done or in process

Training material

Judges read-in

Miscellaneous

- Eaton requirements
 - <https://docs.google.com/document/d/1TXFg5tkbDIFa2tj0yfTZcQ4NPNfo-Y8c/edit>
- Intel is looking for speakers to front their Edge Software Hub Hackathon
 - “The talks we are looking for are anything to drive excitement among developers about three themes “AI”, “Infrastructure”, “Realtime”. We give our speakers quite some flexibility in what you’d like to speak on. However, if you can link your talk to some of our softwares on Edge Software Hub, such as EII, OpeVINO, or Edge Insights for Fleet, etc, to talk about the synergies you see between EdgeX and Intel’s edge softwares, that’ll be great.
 - <https://page-preview.instapage.com/preview/702116c242a8d4ddcb4ffe6de1a08f4de9e8cf145e97b69905d31dd69c82fdcd?displayMode=0&variation=A&shared=yes&featureMode=0>



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Thank You