TSC Meeting

October 6, 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#

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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
- New Device Service review (UART/GPIO) as part of DS update
- ADR updates - including CLI ADR ready for vote
- Call to begin thinking about Kamakura planning
- LTS testing

Work Group Updates

Chairs

Working Group Chair Updates

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

Release Czar (10-6-2021)

Release Dates

- Freeze date: Oct 27th
- Release date: Nov 17th
- Kamakura planning (virtual): Nov 1-4th

- **Current Release Activity:**

- device-camera 2.0.1 - Pending Approval

Product Manager (10/6) - Jakarta

In Progress (10, -2/+3)

- **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**

- **Metrics ADR - WIP**

- **Commit go.sum & remote tidy script**
  - Remaining PRs staged

- **add a "make lint" target**
  - edgex-go - **DONE**
  - Other Go - **TBD**
  - C repos - **N/A??**

- **Request new Consul token on Auth failures**
  - go-mods - **WIP**
  - Go Services/SDKs - **TBD**
  - C Device SDK - **TBD**

- **Use generic interface in the Event Tagging value**
  - go-mod-core-contracts - **DONE**
  - App Services - **TBD**

- **Support complex object types in Reading**
  - go-mod-core-contracts - **DONE**
  - C Device SDK - **DONE**
  - edgex-go - **PR**
  - Go Device SDK - **PR**
  - App Services - **TBD**

- **Implement Generate/Inject passwords into Vault**
  - go-mod-bootstrap - **DONE**
  - all services/sdks - **TBD (DependaBot)**
  - C SDK/Service - **TBD**

Done (3, +2)
- Quotes in TOML files inconsistent
- **Upgrade Base Images to alpine3.14**
- **New PR template**

Backlog (1, -2/+1)
- **CORS for all (secure and non-secure)**

Icebox (0)

Applications WG Update (10/06/2021)

Completed
- None

WIP
- Enhance Batch to have option to unmarshal list of object when using Events
  - Currently JOSON is BASE64 encoded

eKuiper
- No update

Next
- Handle Tags with generic type for AddTags function

Next week's 9am meeting canceled

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

Next meeting **October 19th, 2021 @** 3:30pm Pacific

Application Services - Ireland

Functions (built into SDK)

- Add Tags
- Batch
- Compression (GZIP & ZLIB)
- Conversion (XML & JSON)
- PushToCore
- ~~MarkAsPushed~~
- Encryption (AES)
- 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

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Core WG Snapshot (06 Oct 2021)

- Jakarta:
  - TAF:
    The tests failures might relate to: issue #525 (binary resources) and issue #136 (profile permissions)
    - Functional test: 542 (505 pass + 37 fail)
    - Integration test: 36 (34 pass + 2 fail)
    - Performance test: Jenkins issue

Core Project Board Status

- 4 New Issues (+1)
- 13 Release Backlog (+2)
- 0 Bug Backlog (+0)
- 2 In Progress/QA (-1)
- 742 Done (+5)
- 4 Jakarta Stretch (+0)
- 9 Icebox (+0)

QA/Test Project Board Status

- 0 New Issues (+0)
- 3 Release Backlog (+0)
- 5 In Progress/QA (+5)
- 150 Done (+1)
- 9 Icebox (+0)

Next meeting Thursday October 7th @ 8am Pacific Time

Device Services WG Update (6-Oct-21)

- Patch release for camera DS pending validation
- Volunteers sought for reviewing new UART DS
- Support for Object type for Readings in progress
- Initial discussions re enhancements to CoAP functionality (HCL contribution)
- Future scope:
  - Dynamic addition of device resources
  - Documentation of pre-release testing
- Issues (New / Backlog) : 30 (-2)

Next meeting: October 11th

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
- LLRP / RFID in Go
- GPIO in Go

Open Source connectors (Future):

- UART 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 (10-06-2021)

Pipeline Related

- [Complete] LTS artifact rebuild planning.
    - Potential pipeline/release changes required to accommodate rebuilding of artifacts.
- Go 1.17 released - [Release Notes](#)
- [In Progress] Implement pipeline changes for LTS
- [In Progress] Implement changes to Go repositories for LTS
- [In Progress] Many pipeline failures due to timeout issues. Have opened a ticket with the LF: https://jira.linuxfoundation.org/plugins/servlet/theme/portal/2/IT-23017
- [Resolved] Build Executors stacking up: https://jira.linuxfoundation.org/plugins/servlet/theme/portal/2/IT-23027

Other

- [Hold] Spike Developer Badge Program
    - Finalizing details of Credly implementation

Next DevOps WG Meeting Thursday, October 07, 2021 @ 9AM PDT

Security WG Update (10/5/21)

Next Meeting: Today

- Did major housekeeping on Snyk last week: left with one dependency with prototype pollution vulnerability in edgex-ui-go and false-positive for edgex-snap-hooks
- Today's topics
  - CORS (specifically, supporting it in common middleware)
  - Review work left for final stretch for Jakarta
  - Discuss switch in- and out- of insecure Consul mode in snaps if time permits

Security Project Board Status

- 1 New Issues (-1)
- 3 Release Backlog (0)
- 4 In Progress/QA (0)
- 3 In review (-1)
- ERR Done (err)

Secure Consul Project Board Status

- 2 Phase 1 To-do (0)
- 1 Phase 2 To-do (0)
- 7 Phase 3 To-do (0)

DOCS!

Updates on EdgeX in Chinese speaking regions

National holiday for PRC this week, no updates.

Outreach WG (10/6/21)

Certification

- Working on EdgeX Ready social media blitz to re-emphasize the program

Vertical Solutions

- Looking for next Adopter Series presenter(s)

Developer Badge Program

- Finalizing process and certification
- Draft Wiki page created - feedback welcome
- https://wiki.edgexfoundry.org/display/FA/EdgeX+Developer+Badges
-

EdgeX Challenge - Smart *

- Wiki page created - Feedback welcome
- Sponsors needed

ORRA

- LF Open Networking & Edge Summit (Oct 11-12): In LF Edge virtual booth slot
- LF Member Summit (Nov 2-4): 30 minutes speaking slot

Misc

- TopCoder - working
- Blog/Vlog for Sept
  - Performance Results and EdgeX Ready
  - Getting started with EdgeX 2.0 APIs

ADR review (in order of priority)

ADR name and PR number	Status	owner	Work Group
Metrics / #268	Updated - ready for review	Jim White	Core
ADR on dynamic service list / #377	Updating	Jim White	Core
ADR on unit of measure / #386	Needs review	Jim White	Core
ADR on V2 CLI/Client / #525	Ready for a vote	Siggi Skulason	Core
ADR for delay start service secret store token	Reviewed at last WG meeting	Bryon Nevis	Security

* - indicates some work this week

Miscellaneous

- I will be out on vacation Oct 20th. TSC meeting cancelled.
- "Done" column on Github project boards - reported to LF and issue sent to Github
- Additional LTS testing
  - Test any configuration not already handled by new TAF tests (manually if needed)
  - Test reboot of the system. Make sure EdgeX can come back up
  - Test device services (with real hardware where possible)
    - Working with service authors to identify minimal tests
  - Test different combinations/permutations of app functions in app services
  - Test on Windows
  - Test running with multiple services of same type (device service and app services)

Miscellaneous

- Kamakura planning meeting - Nov 1-4th
    - Any suggested changes to our virtual meeting format or schedule?
        - Monday and Wednesday early morning (US time); Tuesday and Thursday late morning/afternoon (US Time); Friday for non-conference
    - Features you would like to see addressed
    - Bugs/Issues sitting in backlog
    - Process/workflow that could be made better
    - LTS considerations
    - Learning/training you would like to see or offer (non-conference presentations)

Thank You