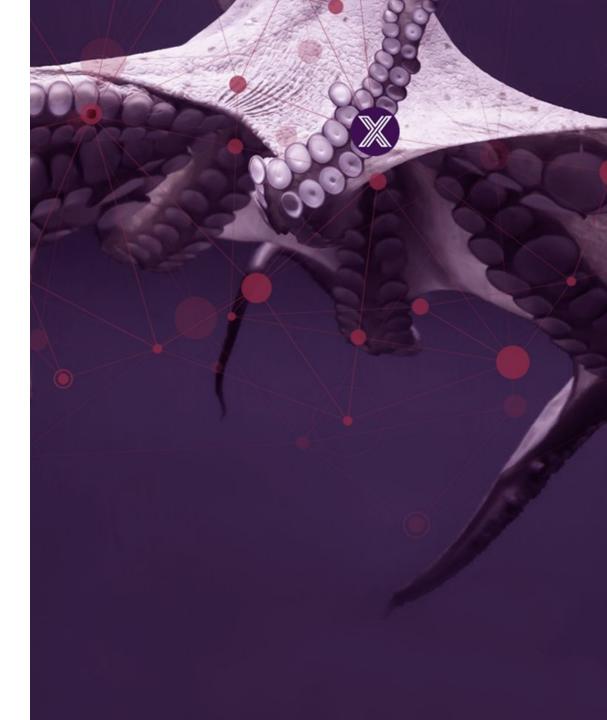
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TSC Meeting

October 13, 2021





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Meeting Logistics

Time: Wednesdays 8am PDT – 9am PDT

Join from PC, Mac, Linux, iOS or Android: <u>https://zoom.us/j/983155298</u> 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

CompanyNameIOTechIain AndersonIntelErnesto OjedaIOTechJim WhiteIntelBryon NevisIntelLenny GoodellIOTechJames Butcher

Email iain@iotechsys.com ernesto.ojeda@intel.com jim@iotechsys.com bryon.nevis@intel.com leonard.goodell@intel.com james@iotechsys.com

Position

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Device Services WG Chair Dev Ops WG Chair Outreach WG Chair Security WG Chair Applications & Analytics WG Chair 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

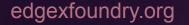
- WG Updates
- ADR updates
- Monthly Architect's meeting
- Kamakura planning pre-wire
- LTS testing



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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 (10-13-2021)

Release Dates

- Freeze date: Oct 27th (2 weeks away)
- Release date: Nov 17th (5 weeks away)
- Kamakura planning (virtual): Nov 1-4th

Current Release Activity:

• device-camera 2.0.1 - Released - Oct 8th

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Product Manager (10/13) - Jakarta

Cross Cutting Issues

In Progress (9, -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
- Secret Provider for All
 - DS SDK C DONE
 - C Device Services TBD
- Metrics ADR WIP
- add a "make lint" target
 - edgex-go DONE
 - Other Go **TBD**
- **Request new Consul token on Auth failures**
 - go-mods WIP
 - all services/sdks TBD (DependaBot
 - C Device SDK TBD
- Use generic interface in the Event Tagging value
 - go-mod-core-contracts DONE
 - App Services PR

- Support complex object types in Reading ٠
 - go-mod-core-contracts DONE
 - C Device SDK DONE
 - edgex-go DONE
 - Go Device SDK DONE
 - App Services TBD
- Implement Generate/Inject passwords into Vault •
 - go-mod-bootstrap DONE 0
 - all services/sdks TBD (DependaBot) 0
 - C SDK/Service TBD 0

Done (4, +1)

- Quotes in TOML files inconsistent
- Commit go.sum & remote tidy script
- Upgrade Base Images to alpine3.14
- New PR template

Backlog (1)

- CORS for all (secure and non-secure)
- Icebox (0)

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Applications WG Update (10/13/2021)

Completed

• None

WIP

- Handle Tags with generic type for AddTags function (**PRs open**)
- Handle new Object type Reading in PushToCore
- Enhance Batch to have option to unmarshal list of object when using Events
 - Currently JOSON is BASE64 encoded

eKuiper

• No update

Next

• Possible Encryption pipeline function rework for stronger encryption.

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



Core WG Snapshot (13 Oct 2021)

- Jakarta:
 - TAF all passing
 - Functional test: 542
 - Integration test: 36
 - Performance test:10
 - WIP / Review
 - <u>#3691</u> Add total count to multiple object search API PR ready
 - <u>#3716</u> Core Command Crash recheck needed

Core Project Board Status

- 3 New Issues (-2)
- 8 Release Backlog (-4)
- 0 Bug Backlog (+0)
- 3 In Progress/QA (+2)
- 65 Done (+3)
- 4 Jakarta Stretch (+0)
- 14 Icebox (+5)

QA/Test Project Board Status

- 0 New Issues (+0)
- 3 Release Backlog (-2)
- 0 In Progress/QA (-5)
- 13 Done (+0)
- 1 Icebox (-8)

Next meeting Thursday October 14th @ 8am Pacific Time

Device Services WG Update (13-Oct-21)

New

- device-camera release
- Support for Object type for Readings

Pending

- CoAP device service to be made read-write
- UART device service review for adoption

Not for Jakarta

• Record and replay

At risk

- BACnet device service
- Secure MessageBus / Consul for C

Next meeting: October 25th

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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):

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• UART in Go

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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 (10-13-2021)

Pipeline Related

- [Hold] Go 1.17 released <u>Release Notes</u> On hold until Kamakura
- [In Progress] Implement pipeline changes for LTS
- [Complete] Implement changes to Go repositories for LTS
- [Resolved] Many pipeline failures due to timeout issues. Hosting provider moved us to new hardware.
- [Resolved] Build Executors stacking up: <u>https://jira.linuxfoundation.org/plugins/servlet/theme/portal/2/IT-23027</u>

Other

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

Next DevOps WG Meeting Thursday, October 21, 2021 @ 9AM PDT



Security WG Update (10/12/21)

Next Meeting: Today

- Last week:
 - Moved CORS issue into go-mod-bootstrap
 - :-) De-scoped tech debt and Consul phase 3 hardening
 - :-(Replaced them with new issues
- Today's topics
 - Obsolete/broken crypto in app-functions-sdk-go while enabling gosec
 - Discuss switch in- and out- of insecure Consul mode in snaps if time permits

Security Project Board Status

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

Secure Consul Project Board Status

- 1 In-review (+1)
- 2 In-progress (+1)
- 2 Phase 1 To-do (0)
- 1 Phase 2 To-do (0)
- 4 Phase 3 To-do (-3) [all de-scoped for Jakarta]

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Updates on EdgeX in Chinese speaking regions

Winners of EdgeX challenge 2021 have been pre-announced on Oct 12th, English version case introduction will be shared with global community.



Outreach WG (10/13/21)

Certification

• Working on EdgeX Ready social media blitz

Vertical Solutions

• Looking for next Adopter Series presenter(s)

Developer Badge Program

- Finalizing process and certification
- Draft Wiki page created feedback welcome
- <u>https://wiki.edgexfoundry.org/display/FA/EdgeX+De</u> veloper+Badges

EdgeX Challenge - Smart *

- Wiki page created Feedback welcome
- Sponsors needed

<u>ORRA</u>

 LF Member Summit (Nov 2-4): 30 minutes speaking slot

<u>Misc</u>

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

Next meeting Monday (18th) at 9am PDT

ADR review

ADR name and PR number	Status	owner	Work Group
Metrics / #268	Updated - ready for review Monthly Arch Meeting	Jim White	Core
ADR on dynamic service list / #377	Updated - ready for review Monthly Arch Meeting	Jim White	Core
ADR on unit of measure / #386	Needs review	Jim White	Core
ADR for delay start service secret store token	Ready for a vote	Bryon Nevis	Security
Device profile changes / #605	NEW	Jim White	DS

* - indicates some work this week



Monthly Architect's Meeting

- Monday at 1pm EDT, 10am PDT
- Topics:
 - Service List ADR per last meeting, resolve this meeting
 - Please (Re)Review:
 - Registry ADR (approved)
 - Service List ADR (pending but with several approvals)
 - Security ADR for creation of secret store tokens for delayed start services
 - Metrics ADR
 - Please (Re) Review the ADR ٠
 - Updated and additional info on go-metrics and other libs provided
 - Time permitting
 - UoM ADR
 - Declarative Kong •
 - Best place to record project decisions

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Miscellaneous

- I will be out on vacation Oct 20th. TSC meeting cancelled next week.
- "Done" column on Github project boards problem fixed by Github
 - Thanks LF and Eric Ball!
- 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)
- Planning Meeting architect's pre-wire
 - Proposed date options
 - A: Oct 28, 8am-11am PDT (take place over Core, Dev Ops and ORRA meeting)
 - B: Oct 27, 8am-11am PDT (take place over TSC and Security WG)
 - C: Oct 29, 8am-11am PDT

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Thank You

