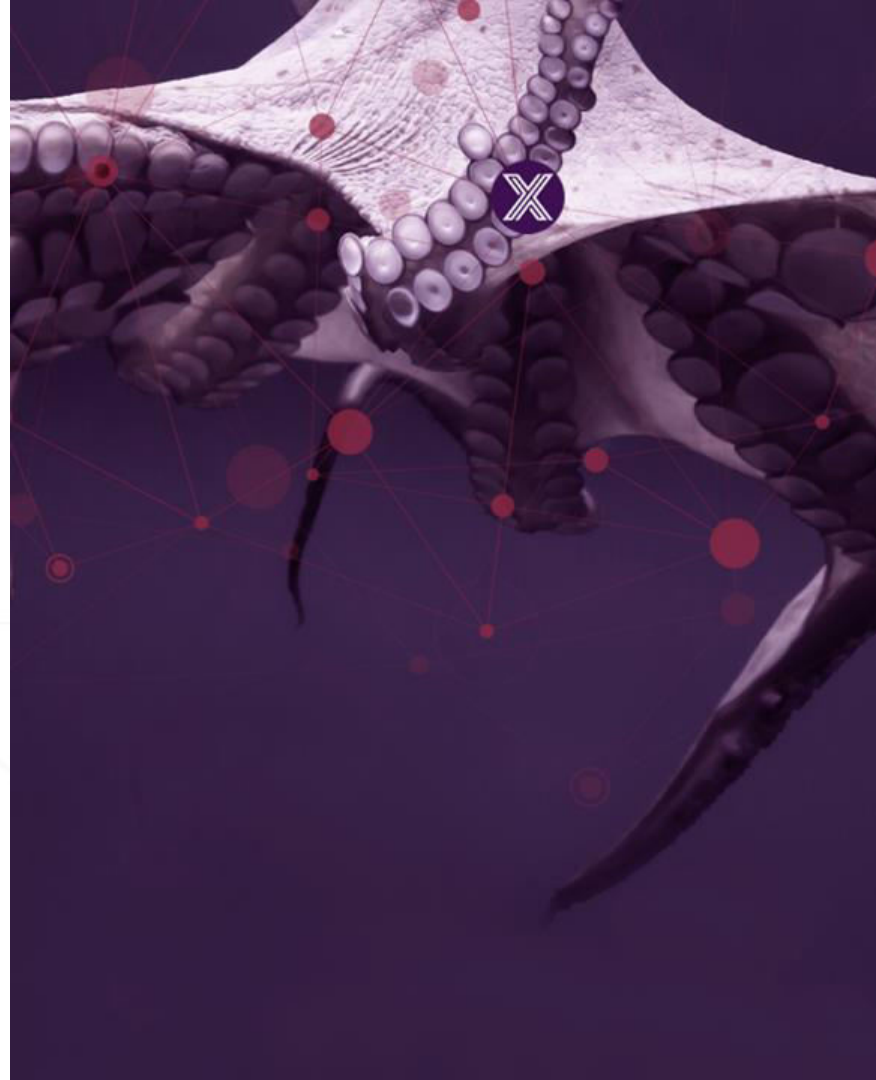




China Project Meeting

<https://wiki.edgexfoundry.org/display/FA/China+Project>

Aug 7, 2020



LF Antitrust Policy Notice

EdgeX Foundry meetings involve participation by industry competitors, and it is the intention of the Linux Foundation to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable US state, federal or foreign antitrust and competition laws.

Examples of types of actions that are prohibited at EdgeX Foundry meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at <http://www.linuxfoundation.org/antitrust-policy>. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrave of the firm of Gesmer Updegrave LLP, which provides legal counsel to the Linux Foundation.

Meeting Logistics

Time: 3pm – 4pm (China Standard Time) CST first Friday monthly

Dial-In Info: Join Zoom Meeting: <https://zoom.us/j/392518710>

Dial by your location:

+86 10 87833177 China

+86 10 53876330 China

400 669 9381 China Toll-free

400 182 3168 China Toll-free

400 616 8835 China Toll-free

Meeting ID: 392 518 710

Find your local number: <https://zoom.us/u/abscayLpz>

*China Project calls are recorded and added to Wiki post-call

+1 669 900 6833 US (San Jose)

+1 646 558 8656 US (New York)

877 369 0926 US Toll-free

855 880 1246 US Toll-free

China Project – Core Team Members/Representatives Present Today

Company	Name	Email
VMware	Gavin Lu	gguanglu@vmware.com
Intel	Melvin Sun	melvin.sun@intel.com
Thundersoft	Shuo Zhang	gavin.zhang@thundersoft.com
WayClouds	Qiang Fu	fuqiang@wayclouds.com
EMQ	Rocky Jin	rocky@emqx.io
IoTech	Hans Chen	hans@iotechsyst.com
Jiangxing AI	Xiaoyi Fan	xiaoyifan@jiangxing.ai

Note: Quorum for China Project 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. Decisions by vote at a meeting require a majority vote of those in attendance, provided quorum is met. Current quorum = 5 members

Today's Agenda

- Core team updates
- Industry sub-teams updates
- Upcoming Events





Core team update

Maintainers

Maintainer Update (Gavin)

- China Project wiki
 - <https://wiki.edgexfoundry.org/display/FA/China+Project>
- Official Wechat
 - ID: EdgeXFoundryCN, Chinese: “EdgeXFoundry社区”
- Hanoi release
 - Target in Oct
- EdgeX Challenge Shanghai 2020
 - Ongoing

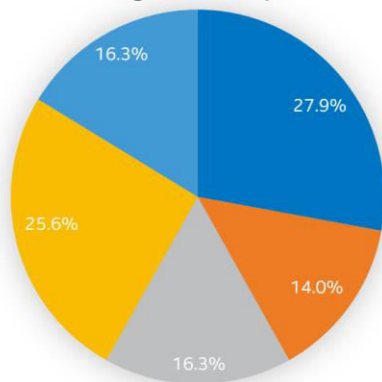


Maintainer Update (Melvin)

EdgeX China Project has just made an in-depth survey & interview to collect EdgeX deployment information.

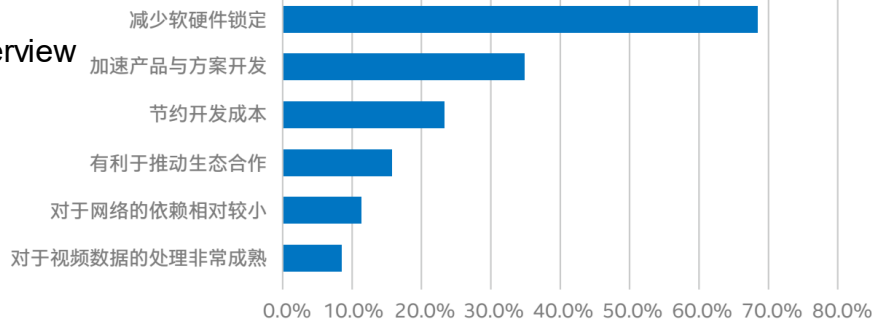
- Total survey & interview: 32
- Top 3 industries: industrial-18, retail-6, banking-4
- Size of organization: large-7, medium-13, small-12
- Interviewees: engineer-15, PM-6, CIO-4, others-8

Stage of adoption

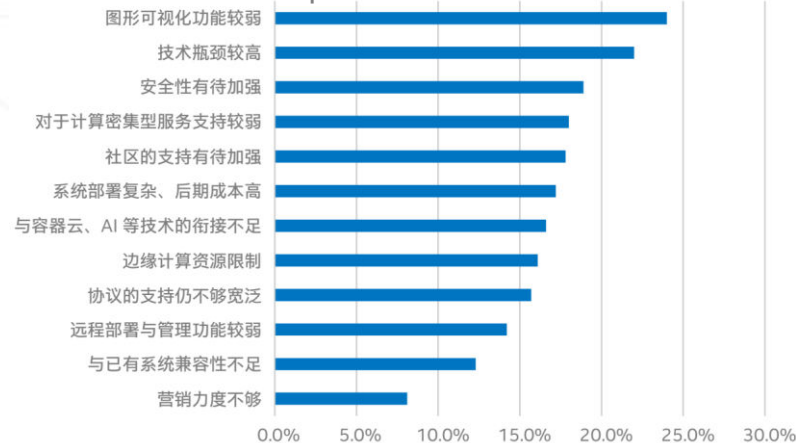


■ 已有项目落地 ■ 处于验证阶段 ■ 处于理论探索阶段 ■ 个人感兴趣 ■ 其它

Added value



Improvements needed



Main use-cases (Melvin)

Use Cases/Verticals

Industrial GW, Retail store edge, Banking GW



Flexibilities to consolidate sensors & devices

Time sensitive CV (for people, behavior, place, object) in retail, industrial, banking, hospitality, etc



CV Inference at the Edge to reduce latency

Factory, home, banking, etc.



Concerns on IoT local storage and data privacy

Edge Native APPs (POS LP, retail data correlation, robotics, predictive maintenance, etc.)



Data consolidation on Edge

Contributor Update – Rules Engine (EMQ)

- 0.9.0 was released
 - [State management function is supported](#). This feature enables Kuiper to implement stream with state;
 - Device model support for [KubeEdge data model](#) is provided;
 - [TDengine plug-in](#) is added, which can support saving analysis results to TDengine time series database;
 - All Chinese documents are translated and synchronized;

Contributor Update – UI & K8S (VMware)

- UI
 - Hanoi release
 - App service & rule engine demo at working group meeting
 - Kuiper integration (updating)
- K8S
 - Helm Chart support OSS at <https://github.com/DaveZLB/edgex-helm>
 - K8S Operators support OSS at <https://github.com/DaveZLB/edgex-operator>
 - Engaged with Jim to contribute upstream

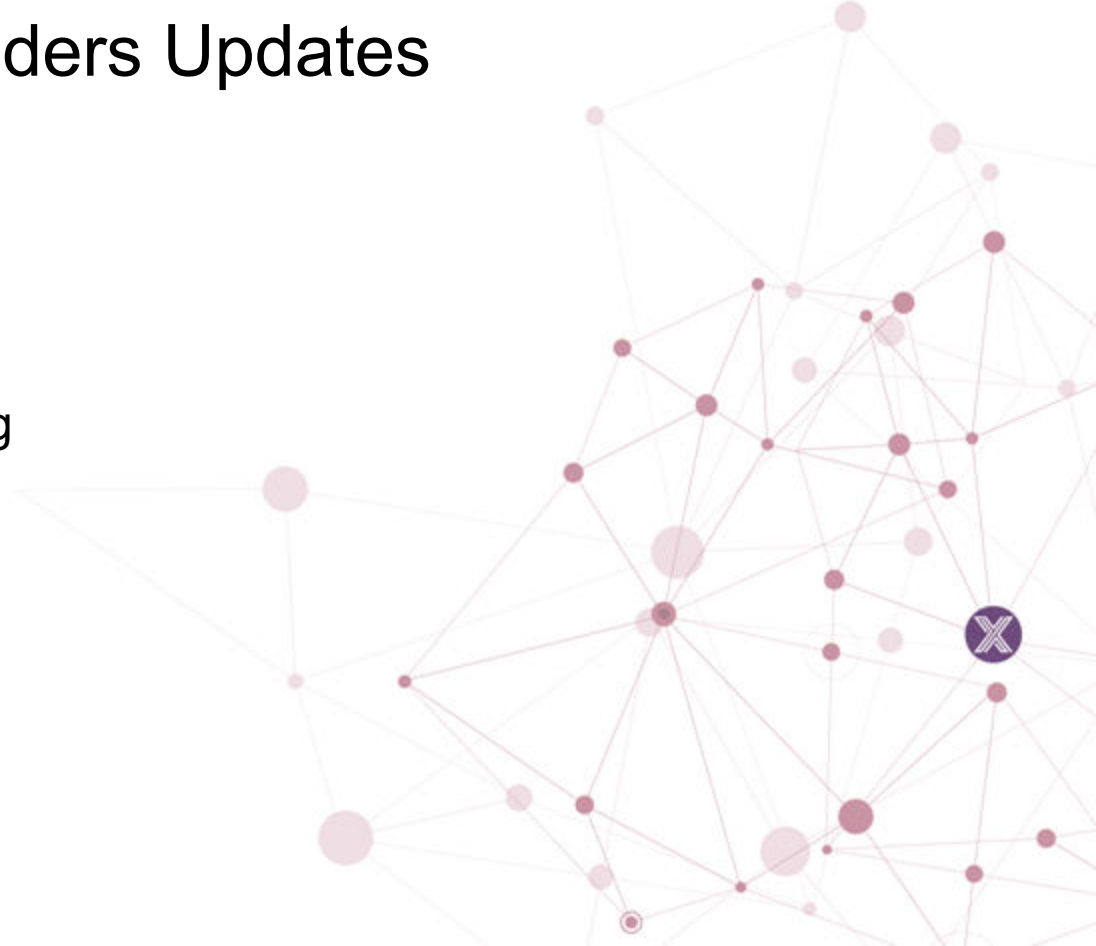


Industry Sub-team Updates

Team Leaders

Industry Sub-team Leaders Updates

- Retails
 - Intel: Melvin Sun
- Manufacturing
 - Thundersoft: Shuo Zhang
- Energy
 - WayClouds: Qiang Fu
- Cities/Campus
 - Intel: Melvin Sun
- Transportation



EdgeX- Camera Device Service enhanced (Thundersoft – Shuo Zhang)

EdgeX original Camera Device Service :

<https://github.com/edgexfoundry/device-camera-go>

Based on 3rd Lib:

<https://github.com/faceterteam/onvif4go>

Need Help : How to contribute into EdgeX ?

EdgeX connect with ROS

Plan

- Add ROS1 support.
- Update EdgeX version to Geneva.
- Add Robotics Management Reference Design

拓展内容

- go语言onvif库, onvif4go库对于云台控制(PTZ)调用支持不太友好, 未实现设备发现(Discovery)

- 实现go语言的PTZ接口定义

```
1 GetNodes
2 GetNode
3 GetConfiguration
4 GetConfigurations
5 SetConfiguration
6 GetConfigurationOptions
7 SendAuxiliaryCommand
8 GetPresets
9 SetPreset
10 RemovePreset
11 GotoPreset
12 GotoHomePosition
13 SetHomePosition
14 ContinuousMove
15 RelativeMove
16 GetStatus
17 AbsoluteMove
18 Stop
```

- 实现Onvif discovery接口, 返回发现的设备列表

```
1 func StartDiscovery(duration time.Duration) ([]Device, error){}
2 func GetDeviceAddrList(devices []Device) []DeviceAddr {}
```

- Camera Device Service

- 控制摄像头云台转动
- 控制摄像头调焦
- 停止云台转动、调焦动作
- Camera设备自发现: 支持onvif协议的Camera自动发现、认证、添加到EdgeX
- 已在海康威视 DS-2DC4223IW-D 通过测试

Better support for EdgeX on Raspberry Pi, and other development/reference devices

Actuality :

- EdgeX iterations are fast and have progressed to the Geneva version, but the Wiki documentation on running EdgeX on Raspberry Pi is only updated to the Delhi version, 3 releases behind.
- The wiki documentation doesn't cover a simple of how to connect an IoT sensor on EdgeX.
- There is currently no dedicated channel on EdgeX Slack for communicating with questions about running EdgeX on Raspberry Pi and other development/reference devices.

Target :

- Let developer more easy to get EdgeX up and running on development/reference devices.
- More developers are interested in EdgeX.
- EdgeX can be of value on many more projects.

<https://github.com/edgexfoundry-holding/edge-device-support>



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Upcoming Events

GIAC 2020 Shenzhen, Aug 14-15

- GLOBAL INTERNET ARCHITECTURE CONFERENCE
 - Hosted by MSUP
 - IoT & Edge Computing track hosted by Feng Li, EMQ
 - <http://giac.msup.com.cn/Giac/schedule/subject?id=1512>
 - Breakout session: “Edge Computing and Intelligence with EdgeX Foundry” by Gavin Lu
 - <http://giac.msup.com.cn/Giac2020/schedule/course?id=14586>



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Thank You!