

#### Meeting Details

- March 24, 2021 (@ 7:00am PDT)
- Meeting Info:
  - > Meeting URL: <a href="https://zoom.us/j/94796108342?pwd=VjlaMTBxcXFOO3pVcU85NTJvWkxaZz09">https://zoom.us/j/94796108342?pwd=VjlaMTBxcXFOO3pVcU85NTJvWkxaZz09</a>
  - > Calendar Subscription: <a href="https://lists.lfedge.org/g/TAC/calendar">https://lists.lfedge.org/g/TAC/calendar</a>





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### LF Edge TAC

Project/ Member	Representative	Named Alternate	Project/ Member	Representative	Named Alternate
Altran	Shamik Mishra	Nilanjan Samajdar	HP Inc.	Henry Lau	
Arm	Reed Hinkel	Tina Tsou	Huawei	JianGuo Zeng	Gabriel Yuyang
AT&T	Kaustubh Joshi (KJ)		IBM	Joseph Pearson	Ryan Anderson
Baidu	Leding Li		Intel	Jim St. Leger (TAC Chair)	Sharad Mishra
Charter	Jeffrey Saelens	Mohammad Zebetian	Nokia	Tapio Tallgren	
Dell	David Lake	Trevor Conn	NTT	Takeshi Kuwahara	
Dianomic	Mark Riddoch	Tom Arthur	OSIsoft	Daniel Lazaro	
Equinix	Justin Dustzadeh		Radisys	Adnan Saleem	Prakash Siva
Ericsson	Torbjörn Keisu	Andrew Wilkinson	Red Hat	Anil Vishnoi	Thomas Nadeau
Fujitsu	Toshimichi Fukuda	Hatsumi lino	Samsung	MyeongGi Jeong	Chi-Hyun Cho
Futurewei	Chaker Al-Hakim	Deepak Vij	Tencent	Yachen Wang	Wei Chen





### LF Edge TAC

Project/ Member	Representative	Named Alternate	Project/ Member	Representative	Named Alternate
Western Digital	Jorge Campello De Souza		Akraino	Tina Tsou	Oleg Berzin
Wipro	Subhas Mondal		EdgeX Foundry	Henry Lau	
ZEDEDA	Erik Nordmark	Roman Shaposhnik			



#### Topics

- 1. Digital Twin Consortium
- 2. Akraino Blueprints
  - a. Re-introduction to include BP requirements (e.g. all open source; commercial hardware components, etc?)
- 3. Shared Community Lab Wiki tour (Resource walk-through)
- 4. Upcoming Events / Next Meeting



# Digital Twin Consortium Jim White

#### Digital Twin Consortium

- Digital Twin Consortium coalesces industry, government and academia to drive consistency in vocabulary, architecture, security and interoperability of digital twin technology. It advances the use of digital twin technology from aerospace to natural resources.
- Website: <a href="https://www.digitaltwinconsortium.org/">https://www.digitaltwinconsortium.org/</a>
- As part of planned collaboration between EdgeX Foundry and Digital Twin, the Linux Foundation entered into a MOU
- DTC Press Release + EdgeX Blog to follow
- > EdgeX work will begin under their Application Services and Core Work Groups
  - Next step is a working meeting to present EdgeX to DTC members, to start identifying deliverables
  - > Those interested in participating in the discussion can join the EdgeX mailing lists for <u>Application Services</u> and/or <u>Core</u> WG



### Akraino Blueprints Tina Tsou Oleg Berzin

### What is an Akraino Blueprint?

Community Integrated, tested, deployable, end to end Edge Stack



Since launch in 2018, Akraino continues to gain community support for collaboration and validation with 30+ blueprints



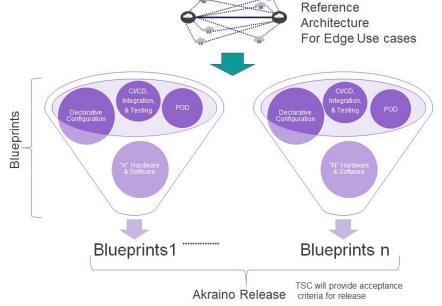


### Akraino Blueprints

- Propose a new Blueprint:
   <a href="https://wiki.akraino.org/display/AK/Blueprint+Proposals">https://wiki.akraino.org/display/AK/Blueprint+Proposals</a> (sample)
- > Blueprint Families concept vs. Individual Blueprints

Questions?

Akraino TSC mail list





# Shared Community Lab - Wiki tour (Resource walk-through) Lincoln Lavoie

#### Shared Community Lab - Wiki tour (Resource walk-through)

- https://wiki.lfedge.org/display/LE/Shared+Community+Lab
- Lab Resources
  - > Available Resources: <a href="https://wiki.lfedge.org/display/LE/Lab+Resources">https://wiki.lfedge.org/display/LE/Lab+Resources</a>
  - How to initiate a request for Lab Resources: <a href="https://wiki.lfedge.org/display/LE/Getting+Started">https://wiki.lfedge.org/display/LE/Getting+Started</a>
- > Have a request for resources not currently available in the LF Edge Community Lab?
  - > Bring for discussion at the next <u>Community Lab Subcommittee</u> meeting
    - > Can also initiate discussion over the Mail List, or reach out to Lincoln (Chair) directly
- Questions?



### Upcoming Events

#### **Upcoming External Events**

Additional LF Edge events available at: https://www.lfedge.org/events/

- > Embedded IoT World: 28-29 April, 2021 Virtual
- <u>Kubernetes on Edge Day</u>: 4 May, 2021 Virtual
- > Open Source Summit Europe / Embedded Linux Conference: 28 Sept 1 Oct, 2021 Dublin, Ireland
  - <u>CFP</u> Deadline: 13 June, 2021
- > OSPOCon: 29 Sep 1 Oct, 2021 Dublin, Ireland
  - CFP Deadline: 13 June, 2021
- > <u>IoT Solutions World Congress</u>: 5-7 October, 2021 Barcelona, Spain
  - > <u>CFP</u> is now open
  - > <u>Call for Testbeds</u> is now open
- Open Networking & Edge Summit North America: 11-12 October, 2021 Los Angeles, CA

- > Discussions around upcoming events occur in the LF Edge Outreach Committee
- > Members may subscribe at: <a href="https://lists.lfedge.org/g/outreach-committee">https://lists.lfedge.org/g/outreach-committee</a>



#### LF Live: Mentorship Series + LFX Webinar Series

- > Generating Software Bill of Materials: 25 March, 2021
- > KUnit Testing Strategies: 31 March, 2021
- Kernel Validation With Kselftest: 14 April, 2021

- > Join the LF Live: Mentorship Series mailing list and be alerted when new sessions are added!
  - > Sign up available at the bottom of <a href="https://events.linuxfoundation.org/lf-live-mentorship-series/">https://events.linuxfoundation.org/lf-live-mentorship-series/</a>
- Full list of LF Webinars (upcoming/recorded) available at <a href="https://linuxfoundation.org/webinars/">https://linuxfoundation.org/webinars/</a>



### Next Meeting

#### Next Meeting

- > Next Meeting: Wednesday, April 7 @ 7am PT
  - Topics
    - > End User Solution Groups
    - > EdgeX Ready
    - > EdgeX Ireland Release
  - > Future Topics
    - > TBD



### Thank You

# Backup/Resources

### LF Edge Projects





Onboard

Stage 2: **Growth Projects** 

Open Horizon, State of the

Edge

Stage 3:

#### **Impact Projects**

Akraino,

EdgeX Foundry





Baetyl, Secure Device EVE, Fledge, Home Edge,

















**Distributed Devices and Systems** 

**Buildings / Factories / Smart Homes** 

MCU-based devices

**Applications** 

Infrastructure

Embedded compute

Smartphones, PCs, ruggedized IoT gateways and servers in accessible to semi-secure areas

Servers in secure on-prem data centers. MDCs

Constrained Device Edge

Smart Device Edge

On-Prem Data Center Edge



Access Networks

Last Mile Networks



Aggregation Hubs/COs



Regional Data Centers



Centralized Data Centers

Server-based compute at Regional Telco and Direct **Peering Sites** 

Servers in traditional cloud data centers

Access Edge

Server-based compute at Telco

Network and Edge Exchange Sites

Regional Edge

**User Edge** 

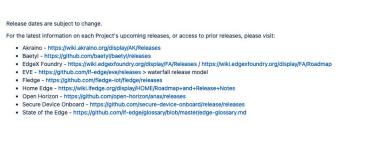
Service Provider Edge

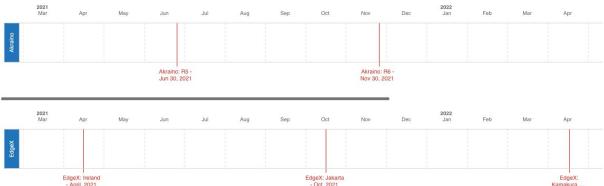
**Dedicated**, Operated

Shared, XaaS

#### Upcoming Release Calendar

- Reminder to Projects to please review and update as needed
- https://wiki.lfedge.org/display/LE/Upcoming+Release+Calendar









#### From earlier Linux Foundation (LF) Core Infrastructure Initiative (CII) presentation

#### CII Best Practices Badge

- Identifies a set of best practices for OSS projects, focusing on security
- > Provides a mechanism for projects to self-certify that they meet these criteria
  - > Automation helps & prevents some false answers
- > Full presentation here:
  - https://github.com/coreinfrastructure/best-practices-badge/blob/master/doc/cii-bp-badge-intro.pptx
- Website where projects can receive a badge here:
  - https://bestpractices.coreinfrastructure.org
- EdgeX Foundry, Home Edge and Open Horizon badging already in progress!
  - https://bestpractices.coreinfrastructure.org/en/projects/1226
  - https://bestpractices.coreinfrastructure.org/en/projects/4336
  - https://bestpractices.coreinfrastructure.org/en/projects/4300
- LF Edge Wiki tracks badge progress here: <a href="https://wiki.lfedge.org/">https://wiki.lfedge.org/</a>
- > Proposal: All LF Edge projects be encouraged to get a CII Best Practices badge



#### TAC - Focus Areas for 2020 (what to emphasize / de-emphasize in 2021?)

Target areas identified for the TAC to direct focus, beyond PLD/Project Review

- 1. Architecture (Tech > LF Edge) Output: TBD (White paper?)
- 2. APIs Document, Align and Publish
- 3. SDO/Consortiums expansion
- 4. Forcing function Use Case or Deployment > Demo across all projects
- 5. Technical overlap/unification
- 6. Cross Project Collaboration
- 7. IT Efficiencies

Out of Scope for the TAC (for now)

- 1. Vertical Solutions (End User / SIG Program)
  - a. At Board/SPC level



#### LF Edge TAC - Focus Areas for 2021: Continued Discussion

- One idea raised was for deeper (technical) solution briefs around Use Cases and Deployments
  - > Would require commitment (volunteers) from the TAC, Projects, as well as the SPC
- (from prior discussion) White Papers
  - > LF Edge level or Project level?
  - General (2020 introduced taxonomy/Projects) or Specific? (e.g. Security, Telemetry)
  - > Who would be the audience?
  - Post publishing, vehicle for feedback? Success metrics?
- Other initiatives?
  - > Open Edge Services Catalog creation and cross-project support
  - > Common way to document APIs for all the projects



#### LF Edge Webinar Series - 2020 Recordings

- Akraino Edge Stack
  - Held Thursday, April 2 Your Path to Edge Computing with Akraino Edge Stack
  - On-demand recording available at: https://zoom.us/webinar/register/WN Zido4-5fTOSigH7pL8iHrO
- > EdgeX Foundry
  - Held Thursday, April 23 EdgeX Foundry 101: Intro, Roadmap and Use Cases
  - > On-demand recording available at: https://zoom.us/webinar/register/4515850788014/WN\_xCd6YPjEOrCwLiFhBWPKug
- Project EVE
  - Held Friday, May 29 <u>Building the "Android of the IoT Edge"</u>
  - On-demand recording available at: <a href="https://zoom.us/webinar/register/6415888722675/WN-35oZI3hrOE69snMailUTPg">https://zoom.us/webinar/register/6415888722675/WN-35oZI3hrOE69snMailUTPg</a>
- White Paper
  - Held Thursday, July 9 Demystifying the Edge with the new LF Edge Taxonomy and Framework
  - >> On-demand recording available at: https://zoom.us/webinar/register/WN icv5h6wFTcuw9O0xvMpgLw
- Fledge
  - Held Thursday, August 13 How Google, OSIsoft, FLIR and Dianomic use Fledge to implement Industrial 4.0
  - Recording available at: <a href="https://www.youtube.com/watch?v=6|XNv3A|Wog">https://www.youtube.com/watch?v=6|XNv3A|Wog</a>
- State of the Edge
  - > Held Thursday, September 17 State of the Edge: Exploring the Intersection of IoT, Al, 5G and Edge Computing
  - On-demand recording available at: https://zoom.us/webinar/register/8115959695936/WN\_4rt-MmP1Rl6Vkzn3ULpiAA
- Home Edge
  - Held Thursday, October 15 Home Edge: How Your Home Devices Get Deployed in An Edge Computing Services Ecosystem
  - On-demand recording available at: https://zoom.us/webinar/register/WN\_uSlgb-R5O4etkDhxoSXISO
- Open Horizon
  - > Held Thursday, November 19 Secure Application Management for Machine Learning & Constrained Devices
  - On-demand recording available at: <a href="https://zoom.us/webinar/register/WN">https://zoom.us/webinar/register/WN</a> tYli1IZ1RWq1pml8FuPRPw
- More to follow...





#### Linux Foundation edX and Training Courses

- Business Considerations for Edge Computing:
   <a href="https://www.edx.org/course/business-considerations-for-edge-computing">https://www.edx.org/course/business-considerations-for-edge-computing</a>
- Getting Started with EdgeX Foundry (LFD213):
   <a href="https://training.linuxfoundation.org/training/getting-started-with-edgex-foundry-lfd213/">https://training.linuxfoundation.org/training/getting-started-with-edgex-foundry-lfd213/</a>
- > Full list of courses available at <a href="https://training.linuxfoundation.org/">https://training.linuxfoundation.org/</a>



### **Upcoming Project Events**

> TBA

Projects can add their events to this list by sending the Wiki page listing the information to info@lfedge.org



### Pushed to Next Meeting