

08/19-20/2019 Akraino Mini Summit



The Linux Foundation Akraino Edge Stack community is conducting a mini-summit on August 19-20th in San Diego. The mini-summit will be hosted at Qualcomm headquarters and will occur the two days before the Linux Foundation Open Source Summit North America.

The event will cover demos of Akraino Release 1 blueprints, planning for Akraino Release 2 and discussions on edge APIs and other edge computing related technical topics. Led by experienced architects, designers and implementers, the mini-summit will provide a unique opportunity to learn best practices and acquire needed skills in edge computing space. There is no cost to attend the event and we encourage everyone interested in edge computing infrastructure to attend.

Akraino Edge Stack, a Linux Foundation project initiated by AT&T and Intel focused on developing a fully integrated edge infrastructure solution. The project is completely focused towards Edge Computing. The open source software stack provides critical infrastructure to enable high performance, reduce latency, improve availability, lower operational overhead, provide scalability, address security needs, and improve fault management. The Akraino community addresses multiple edge use cases and industries, not just the Telco Industry. Akraino community develops solutions and supports carrier, provider, and IoT networks.

Thus, the mini-summit will provide the access to most comprehensive coverage of topics in edge computing space and provide a unique opportunity for peer networking to connect with fellow professionals and expert practitioners from industry-leading companies such as AT&T, Intel, Ericsson, Nokia, Qualcomm, ARM, Juniper, RedHat, Wind River and others.

Meeting Agenda Lead: Tina Tsou, Akraino TSC Co-Chair

Please submit any questions about this event to tsc@lists.akraino.org.

Please RSVP below

Hosted by Qualcomm.

Etherpad: <https://etherpad.akraino.org/p/tV5VgzfX3g>

Agenda: (Contact: [Kandan Kathirvel \(TSC-Chair\)](#) for edits/changes /addition to the agenda))

Day 1, Monday, 19 Aug 2019

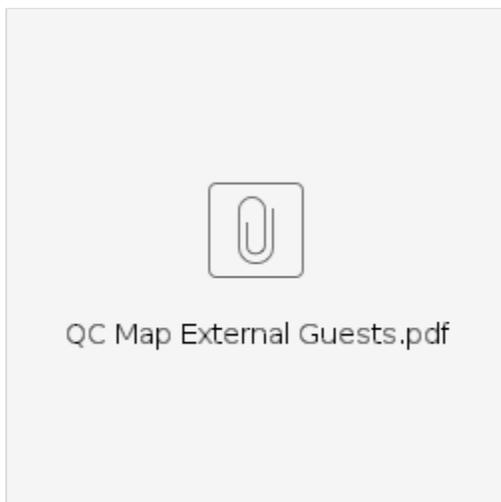
Room: AZ Auditorium + 3 Multipurpose rooms

| Time (Local time, PT) | Topics, Zoom Recording , Akraino PPT Template |
|-----------------------|---|
| 8:30 am - 9:00 AM | Breakfast |

Dates and Locations:

19 Aug 2019 to 20 Aug 2019

- Qualcomm AZ Auditorium at 10155 Pacific Heights Blvd, San Diego, CA 92121 (corner of Pacific Center Blvd/Pacific Heights Blvd).



Day 1:

19 Aug 2019 The meeting will be held in Qualcomm AZ Auditorium and up to 3 multipurpose rooms.

Note: The Zoom meeting sessions will be recorded and posted to this event page.

- Qualcomm Hosted Breakfast
- Meeting Start - 9am
- Qualcomm Hosted Lunch - 12:00 to 1:00 pm
- Qualcomm Hosted Coffee Breaks – 10:30am to 10:45am, 3:30am to 3:45pm
- Meeting End - 5pm
- Qualcomm Hosted Happy Hour on building AZ rooftop

Please provide an RSVP (in person, via Zoom, or not attending) [here](#) for Day 1 of the event. This is very important for logistics and planning purposes.

(** for those unable to RSVP via the link above ([Groups.io](#)) you may RSVP at <https://forms.gle/6Hi65VGH8Zpu5fmu7>. The primary RSVP tool, and where any updates will be sent to, is the RSVP link above (<https://lists.akraino.org/g/tsc/viewevent?eventid=497644&calstart=2019-08-19>))

Day 2:

20 Aug 2019 The meeting will be held in Qualcomm AZ Auditorium.

Note: The Zoom meeting sessions will be recorded and posted to this event page.

- Qualcomm Hosted Breakfast
- Meeting Start - 9am
- Qualcomm Hosted Coffee Break – 10:30am to 10:45am
- Meeting End - 12pm
- Qualcomm Hosted Lunch

Please provide an RSVP (in person, via Zoom, or not attending) [here](#) for Day 2 of the event. This is very important for logistics and planning purposes.

(** for those unable to RSVP via the link above ([Groups.io](#)) you may RSVP at <https://forms.gle/6Hi65VGH8Zpu5fmu7>. The primary RSVP tool, and where any updates will be sent to, is the RSVP link above (<https://lists.akraino.org/g/tsc/viewevent?eventid=497645&calstart=2019-08-20>))

9:00-9:20 AM

Welcome note - Kandan Kathirvel (TSC-Chair)



9:20-9:30 AM

Summit logistics- Tina Tsou (TSC Co-Chair)

9:30 am - 11:00 am

R1 blueprints to demo and present their BP

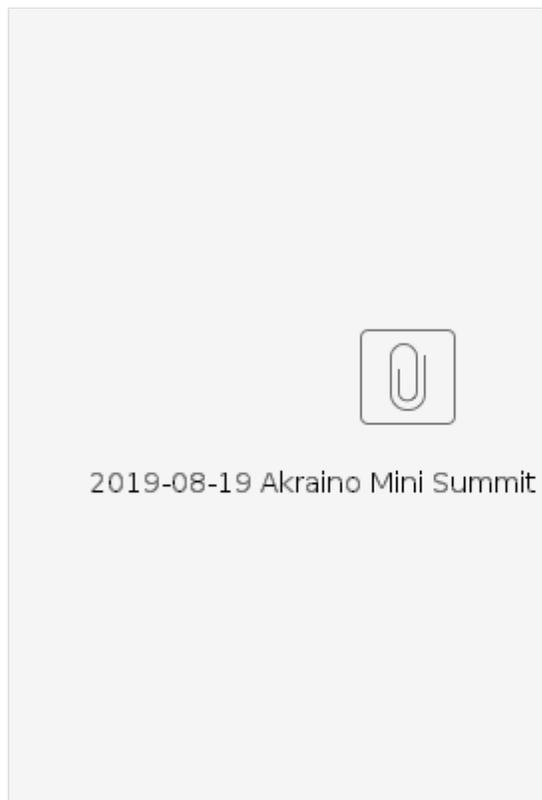
<https://www.lfedge.org/projects/akraino/release-1/>

9:30 am - 9:50 am [David Plunkett](#)

Network Cloud Blueprint - Rover and Unicycle (R1 and R2 upc

<https://www.lfedge.org/projects/akraino/release-1/network-clou>

<https://www.lfedge.org/projects/akraino/release-1/network-clou>



9:50 am - 10:10 am [Andrew Wilkinson](#)

Visa Letter Request Process: <https://events.linuxfoundation.org/visa-request/>

Recommended Airport: San Diego International Airport (SAN)

Distance from Airport: ~17 miles; 30 min drive.

Recommended Area Hotel(s): if wanting to stay near Qualcomm; ask for Qualcomm rate when booking stay

- [Hyatt House San Diego/Sorrento Mesa](#)
- [Country Inn & Suites by Radisson - San Diego North](#)
- [Holiday Inn Express & Suites San Diego/Sorrento Valley](#)
- [Extended Stay America - San Diego/Sorrento Mesa](#)
- [Residence Inn by Marriott San Diego/Sorrento Mesa/Sorrento Valley](#)
- [Courtyard by Marriott San Diego/Sorrento Valley](#)

Transportation Options: Self driving, Taxi, Uber, or Lyft

Guest Parking Available:

- Qualcomm parking structure (entrance on Pacific Center Blvd)
- or street parking

Corporate Security Access: Not applicable. Conference center is open. Will have attendee name badges on stickers.

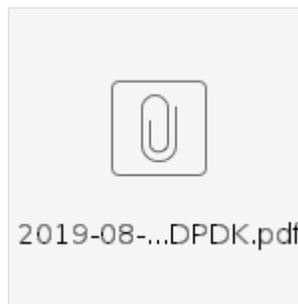
Guest Wifi: Will be provided on site.

Special Note regarding events following the Akraino Mini Summit in San Diego:

- LF Edge will be hosting a mini-Summit prior to [Open Source Summit North America](#), starting at 2pm PDT on August 20
 - For more information, see [State of the \(LF\) Edge Co-Located Event](#)
- [Open Source Summit North America](#) will be held August 21 - 23 at the Hilton San Diego Bayfront
 - LF Edge members can receive a 20% discount off Attendee Registration. Email info@lfedge.org for the discount code.

Network Cloud Blueprint - OVS-DPDK (R1 and R2 updates)

<https://www.lfedge.org/projects/akraino/release-1/network-clou>



10:10 am - 10:30 am [Trevor Tao](#)

IEC blueprint type 1 (R1 and R2 updates)

<https://www.lfedge.org/projects/akraino/release-1/integrated-ec>



11:00
am - 11:
15 am

Coffee Break

11:15
am - 12:
35 pm

11:15 am - 11:35 am [Trevor Tao](#)

IEC blueprint type 2 (R1 and R2 updates)

<https://www.lfedge.org/projects/akraino/release-1/integrated-edge/>



Akraino-- IEC v0.2.pdf

11: 35 am - 11:55 am [Paul Carver](#)

Radio Edge Cloud Blueprint (R1 and R2 updates)

Slides in [Powerpoint](#) and [PDF](#)

<https://www.lfedge.org/projects/akraino/release-1/telco-applian>

11:55 am - 12:15 PM [khemendra kumar](#)

Eliot R1 and R2 updates -



Akraino_ELIOT_R...e_features.pptx

<https://www.lfedge.org/projects/akraino/release-1/edge-lightwe>

<https://www.lfedge.org/projects/akraino/release-1/edge-lightwe>

12:15 PM - 12:35 pm [Glenn Seiler](#)

Starlingx R1 and R2 updates

<https://www.lfedge.org/projects/akraino/release-1/starlingx-far->



Slides in pdf

12:35 pm - 1:15 pm

Lunch break

1:15 pm - 4:30 pm

1:15 pm - 1:35 pm [Yolanda Robla Mota, Sukhdev Kapur](#)

KNI PAE R1 and R2 updates

<https://www.lfedge.org/projects/akraino/release-1/kubernetes-access-edge/>

[Akraino KNI-Edge Blueprint.pdf](#)

(better seen with Chrome browser)

External Speaker Presentations (Academi

1:35 pm - 2:00 pm **Xin Liu, University of California Davis**

<https://web.cs.ucdavis.edu/~liu/>

Machine Learning Meets Cellular Networks

Machine learning has drawn much recent attention in its ability control network performance and user experience, based on n user performance data. In this talk, we discuss our recent work resource management, using the example of collaborative-lear parameter configuration. We will also discuss the challenges a machine learning techniques in networks.



EdgeComputing20...19Liu (003).pdf

2:00 pm - 2:20 pm **Aurojit Panda NYU and ICSI**

https://cims.nyu.edu/people/profiles/PANDA_Aurojit.html

Programming the Edge

In the last few years there has been increased interest in deploying computation at the network edge to improve application performance and reduce latency. However, the introduction of computation at the network edge makes it more difficult to achieve correctness and efficiency, requiring developers to manage state between the edge and backend servers running at a cloud provider. I will present some early results from our attempts to build an edge computing framework that ensures correctness while providing abstractions that facilitate performance improvements, and also briefly discuss application-level challenges at the edge.

2:20PM - 2:40 PM **Professor Ken Birman, Cornell University**

<http://www.cs.cornell.edu/ken/>

Enabling Cloud-Hosted Intelligence for Real-time IoT Applications

Deploying machine learning into IoT cloud settings will require new infrastructure. Cornell's open-source Derecho system represents progress in solving the resulting problems, but I'll also point to open technical challenges to be solved as we progress further in this direction.



R2 blueprints (in dev) to show case what is coming next

2:40 pm - 3:00 pm **Bruce** Tencent

[ELIOT AIoT in Smart Office Blueprint](#)



AIoT in Smart Office.v4.pdf

3:00 pm - 3:20 pm [Wenhui Zhang](#)

[IEC Type 4: AR/VR oriented Edge Stack for Integrated Edge C](#)



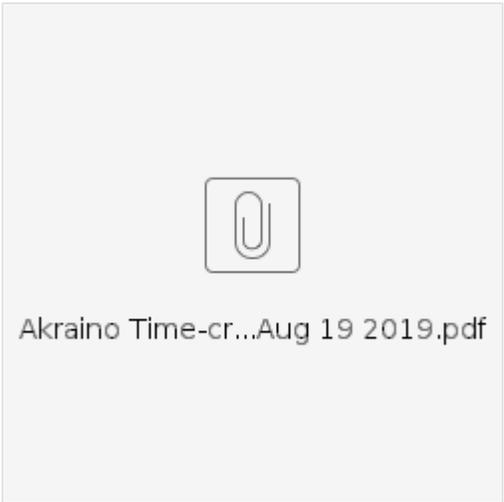
ARVR.pdf.pdf

3:20 pm - 3:40 pm [Sukhdev Kapur](#)

[Network Cloud and TF Integration Project](#)

3:40 pm - 4:00 pm [Shane Dewing](#)

[Time-Critical Edge Compute](#)



4:00 pm - 4:20 pm [Srinivasa Addepalli](#)
[Integrated Cloud Native NFV/App stack family \(Short term: ICT](#)
Presentation link: <https://wiki.akraino.org/download/attachmerNative-Edge-Stack-external-v3.pptx?api=v2>

4:20 pm
- 4:35
pm

Coffee break

4:30 pm
- 5:30
pm

4:50 pm - 5:10 pm [Vikram Siwach Rolf Muralt](#)
[AI/ML and AR/VR applications at Edge](#)



Quick Q&A on R2 release especially for APAC participants
[Release 2 Planning](#)

END of
Day 1

5:45 pm
- 6:45
pm

Happy Hour

Day 2, Tuesday, 20 Aug 2019

Room: AZ Auditorium only

| Time | Topics, Zoom Recording, Akraino PPT Template |
|---------------------|---|
| 8:30 am | Breakfast |
| 9:00 am - 9:10 am | Recap of day 1 and Open discussion on BP collaborations - Coordinator: Kandan |
| 9:10 am - 9:30 am | Connected Vehicle Blueprint xin qiu |
| 9:30 am - 9:50 am | IEC Type 5: AI on the edge for Integrated Edge Cloud (IEC) Blueprint Family @Wei TaoHechun Zhang |
| | Open discussion about R2. Address any questions - Coordinator: TSC |
| 9:50-10:10 | Upcoming events/Summit - Update by Balaji |
| 10:10-10:30 | Akraino Community lab update and open discussion - Coordinator: Lincoln |
| 10:30-10:50 | Edge APIs Open discussion - Coordinator: Vikram <ol style="list-style-type: none">1. What level of APIs required by different use cases?2. Summary of the discussion from previous mini-summit |
| 10:50 am - 11:00 am | LF Edge project collaborations with Akraino |
| 11:00 am - 11:15 am | Coffee Break |
| 11:15 - 11:35 am | Akraino TSC member election - process update - TSC Open discussion |
| 11:35-12:00 | Sub- committee topics - Open discussion with Sub-committee chair |
| 12:00 pm - 1:00 pm | Lunch |