



Eliot Blueprint (Enterprise-edge Lightweight & IoT)

DRAFT 2

Nov 5, 2018

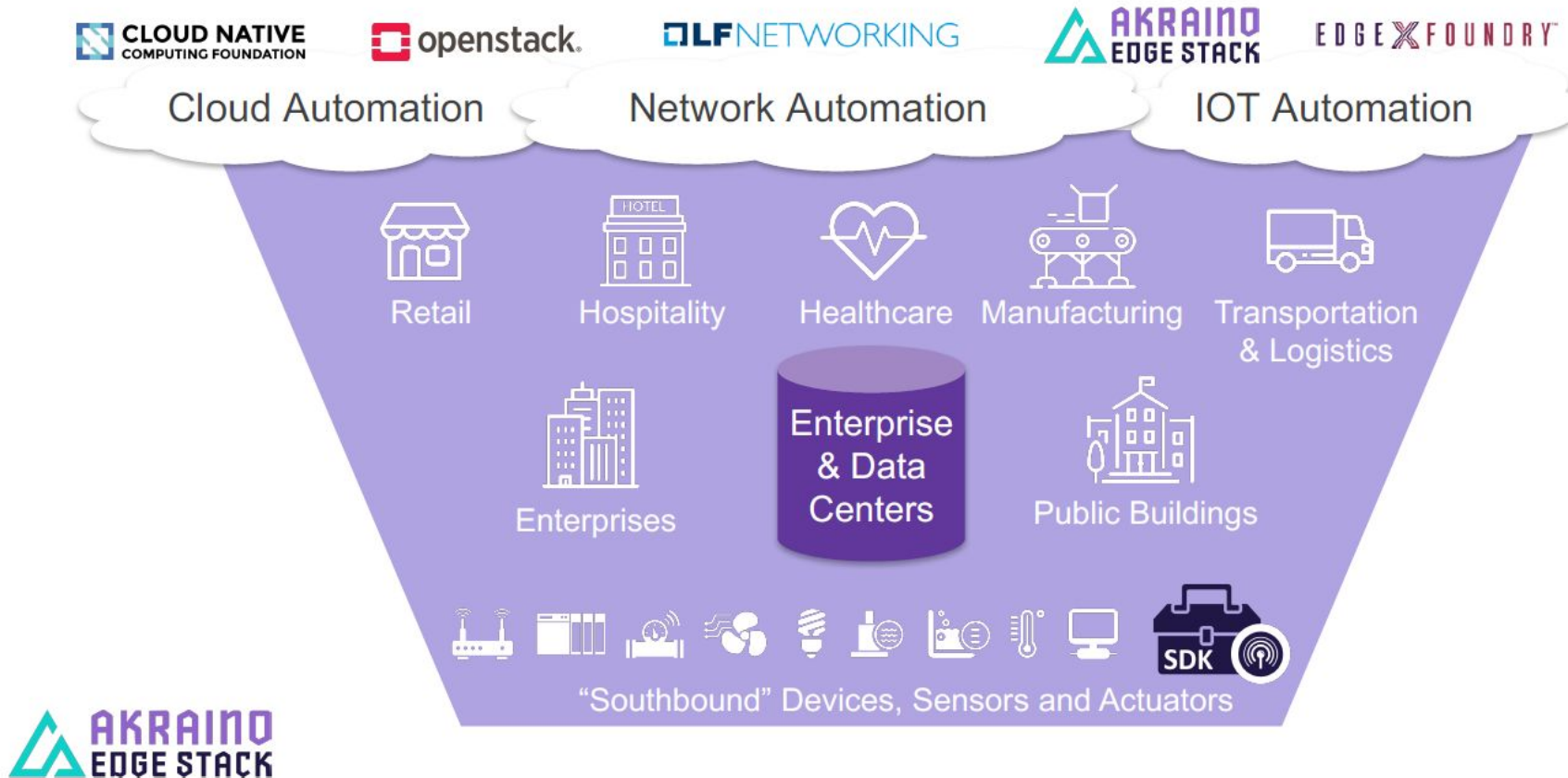
Wenjing Chu

BUILDING A BETTER CONNECTED WORLD

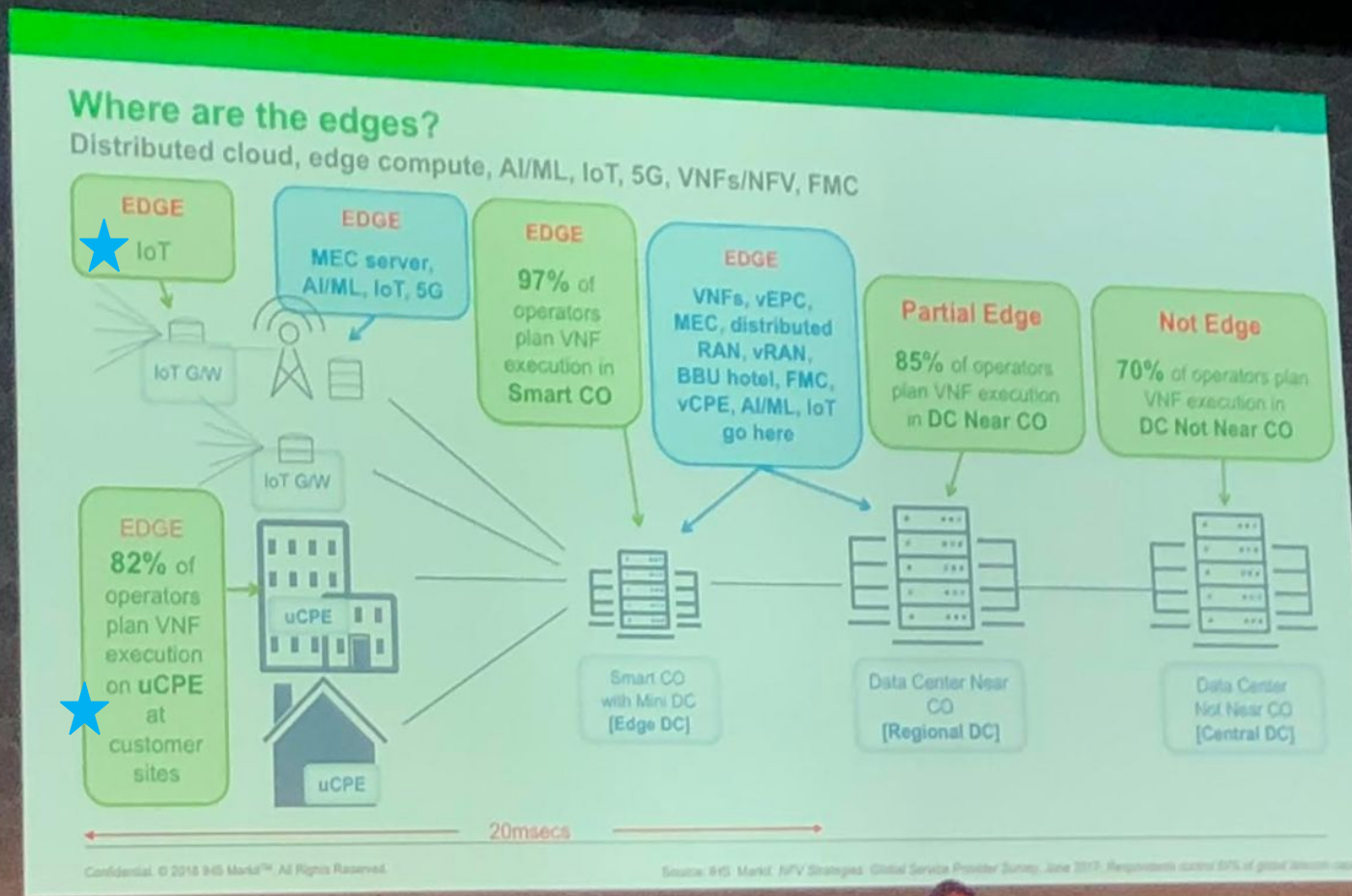


Focus on Akraino community's "Use Case 2"

Use Case 2: IOT Driving the New Edge for Enterprise Retail, Transportation, Healthcare...



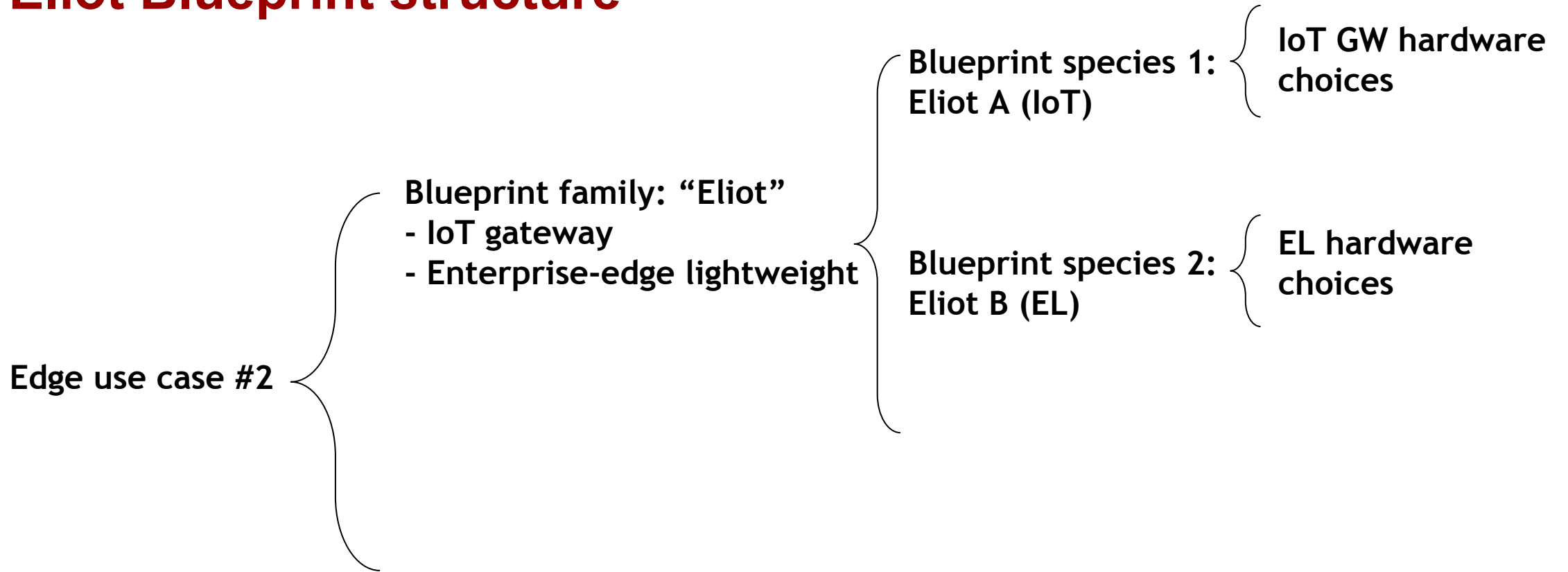
Where on the edge?



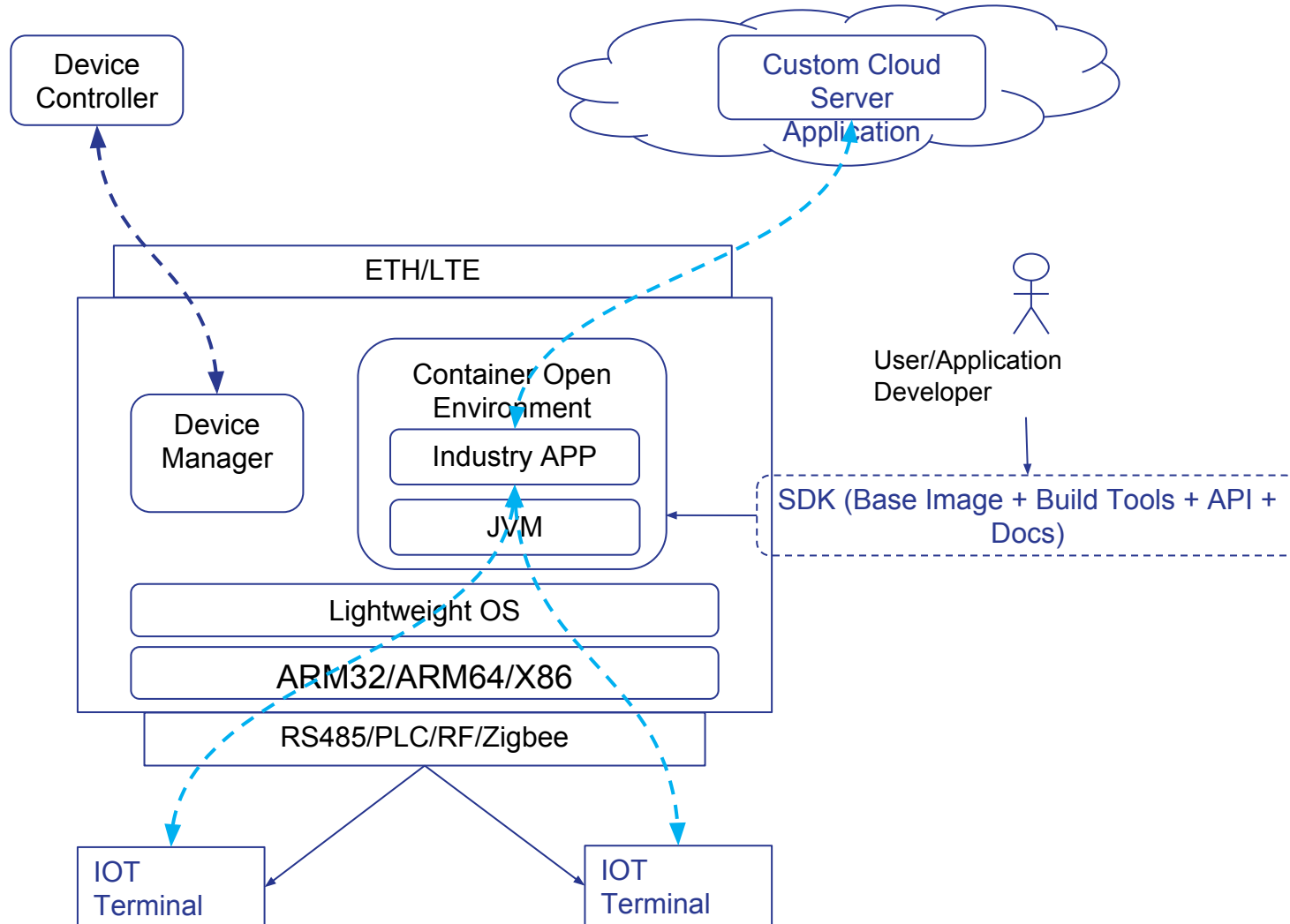
- › Two main use cases
 - » Enterprise edge lightweight, e.g. uCPEs
 - » IoT gateways
- › The control/management entity can be anywhere in the cloud, including edge of the network or cloud.

Photo thanks to Michael Howard of IHS.

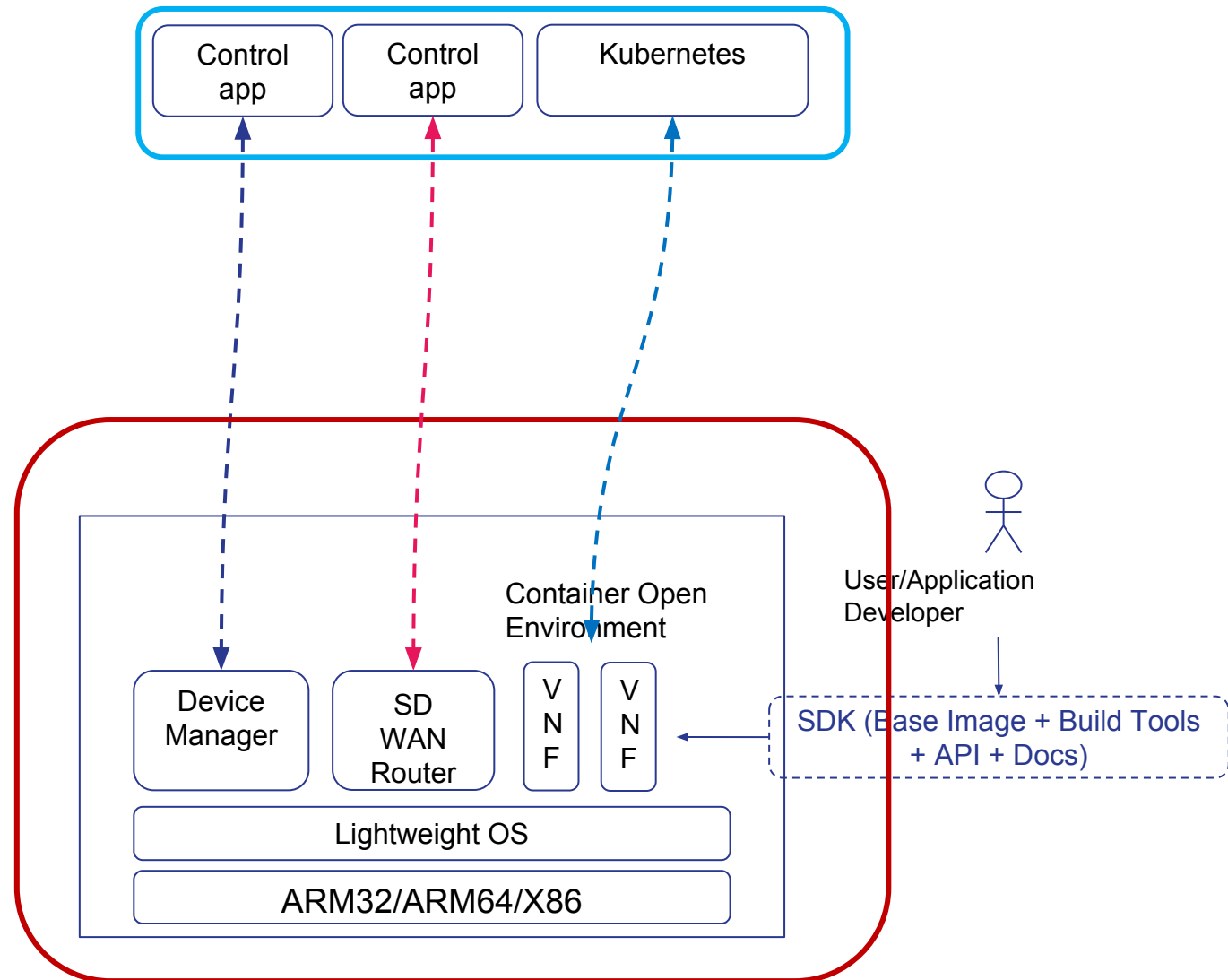
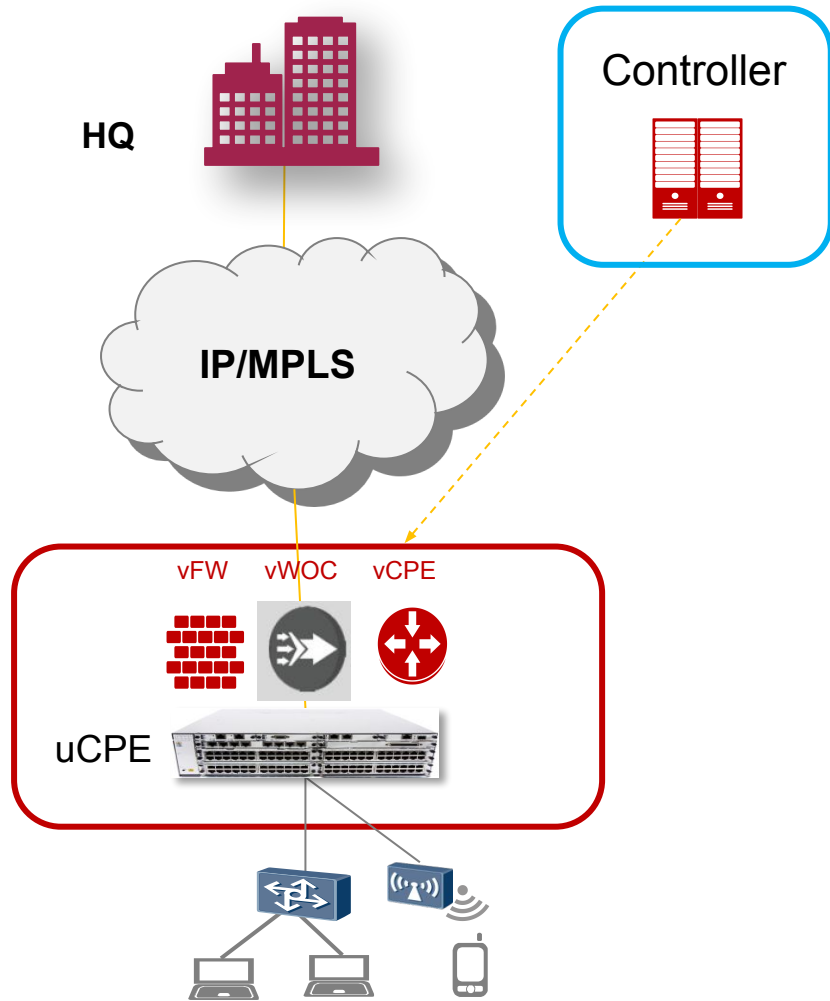
Eliot Blueprint structure



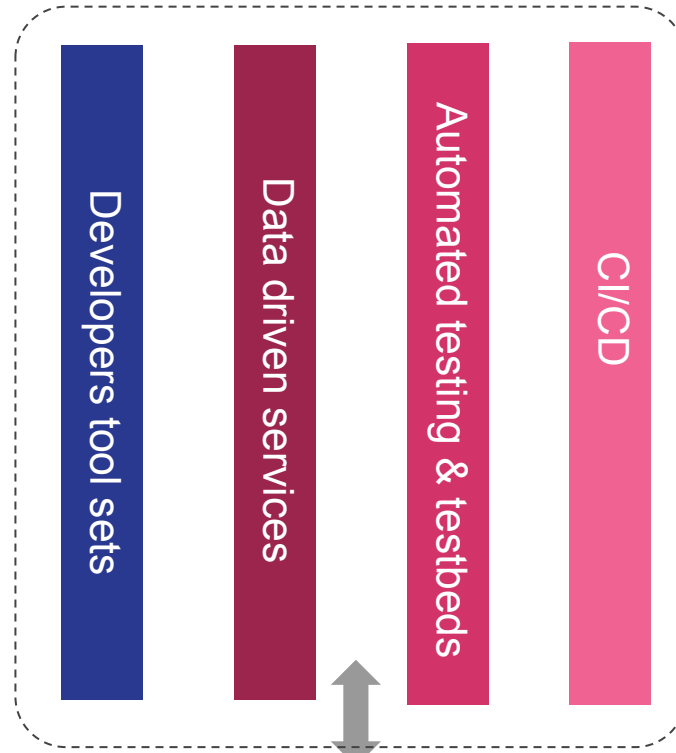
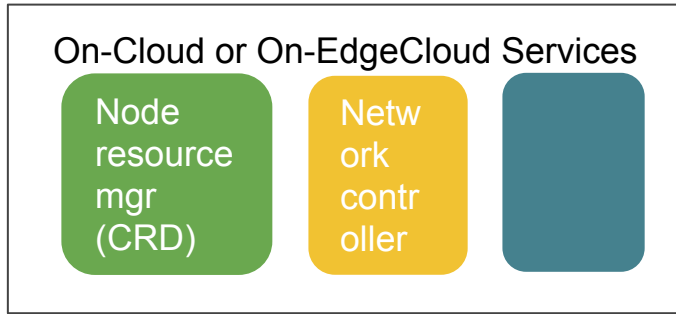
Use Case A: IOT Gateway



Use Case B: SD WAN (uCPE)

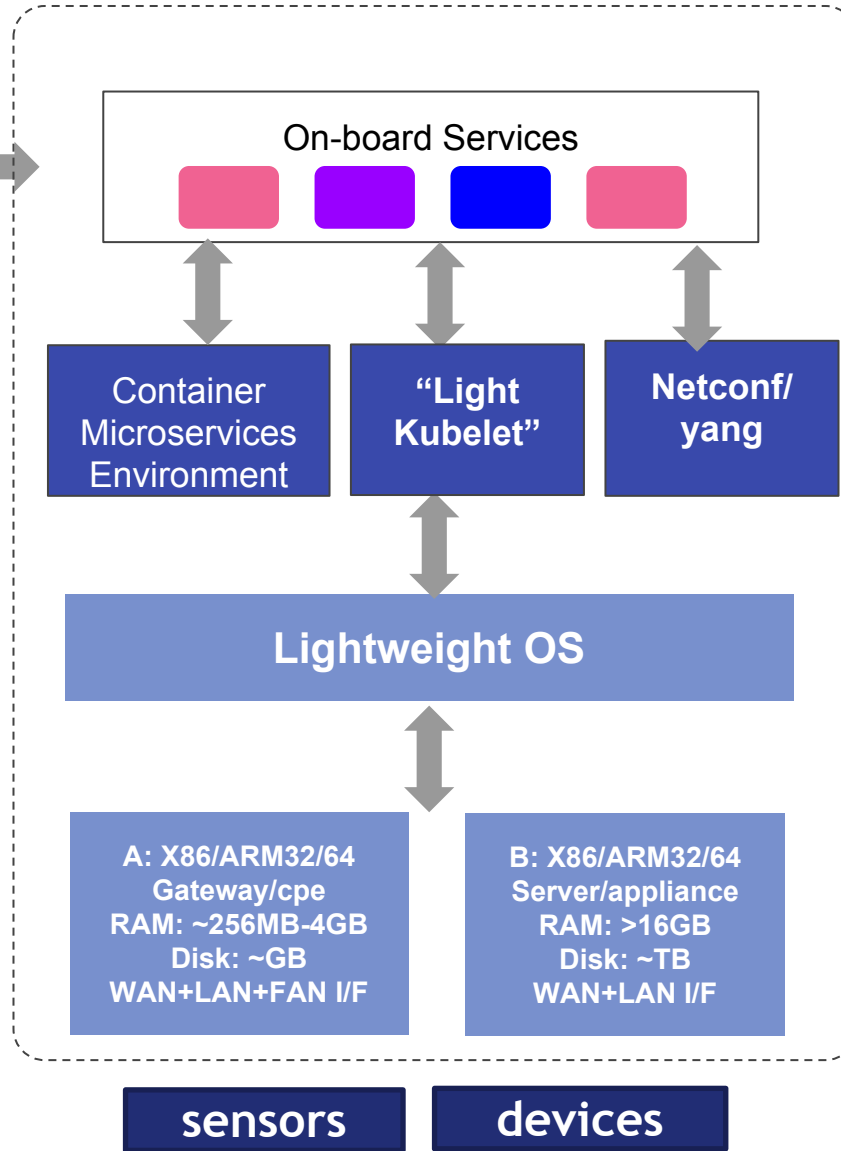


Cloud services

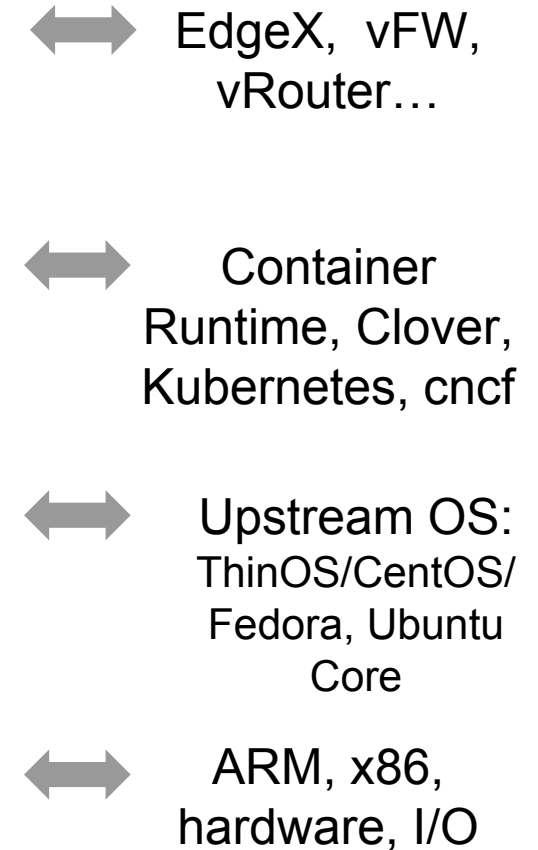


Reuse Clover/OPNFV, K8S, CNCF etc.

Gateway node



Related upstream projects

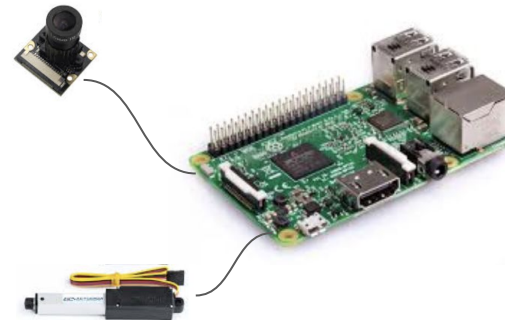


Akraino lightweight blueprint – Eliot - for Enterprise edge, lightweight and IoT

Hardware selections

- **Any hardware that meet the minimum requirements**
 - For developers and user community: virtual machines
 - For developers and user community: widely available enthusiast's favorites: RPi
 - For deployable choices
 - ARM family based
 - x86 family based
 - GPU, and other accelerators
- **The management software requires cloud services (private or public), e.g. Akraino network edge blueprints**

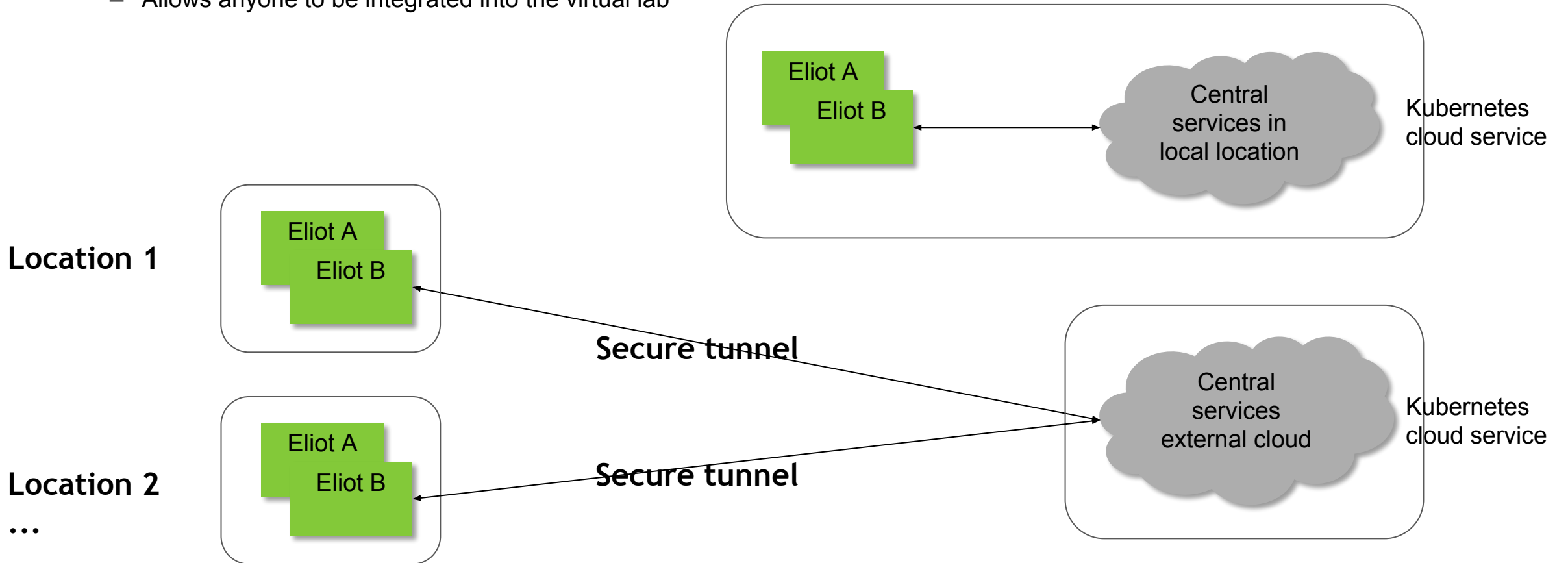
for example:



Labs

› 2 types of labs may be enabled for Eliot

- » Centralized lab location: all physical gateways reside in a shared lab
- » Distributed lab locations: physical gateways can reside in different admin domains as long as secure tunnel is enabled
 - Allows anyone to be integrated into the virtual lab



Eliot Blueprint creation documentation in progress

- › [Template 1 - Use case template](#)
- › [Template 2 - Blueprint family template](#)
- › [Template 3 - Blueprint species template](#)
- › [**Blueprint Draft Doc**](#)

Eliot project planning

› **Community and Project Planning dates**

- › November 5-6, online Zoom workshop, initial proposal
- › December 6-7: F2F meeting, location Santa Clara, CA, Eliot project workshop, demo
- › December 10-13: KubeCon Seattle

› **First release: depends on Akraino community planning, but we suggest e.g. end of Q1 2019.**

- › end of March, 2019

› **Welcoming contributors**

- › arm based systems, x86 based systems, sensors/devices
- › operating systems, containers, run times
- › middleware, SDN controllers, VNFs, e.g. EdgeX, Tungsten Fabric, smart video
- › sample applications
- › CI/CD
- › testing, validation, labs, ...

Thank you

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