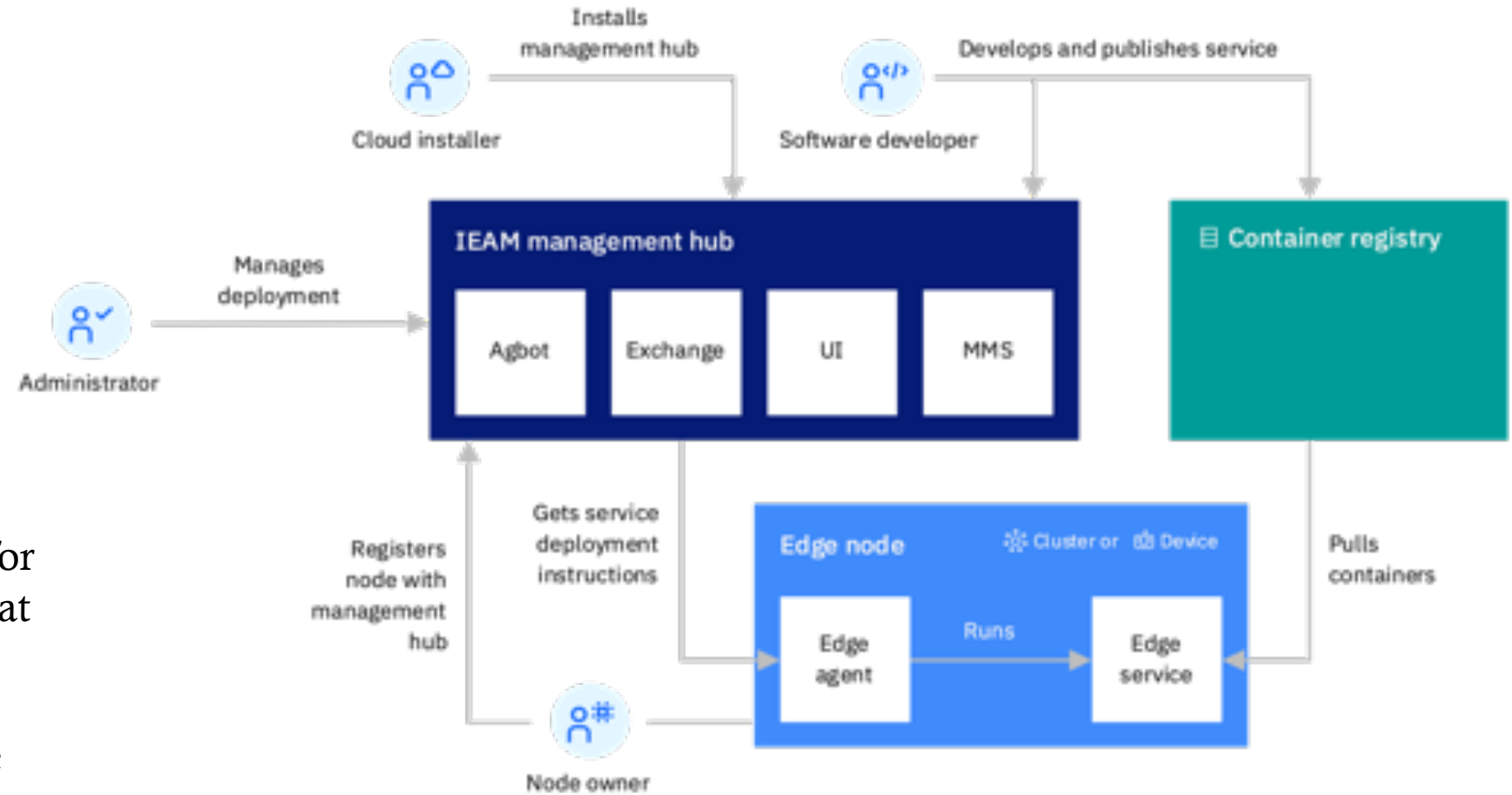

MEETING OPEN HORIZON



OVERVIEW



A “single pane of glass” for application management at extreme scale on both Kubernetes clusters and stand-alone Linux devices.

Edge Devices

X86/64
atom



arm32v
6
RPi ZW



arm64v8
nano



arm32v7
RPi 3/4



arm64v8
tx2



Edge Devices

Docker
1+ cores
0.5+GB RAM
ARM32/64, x86/64
huge machines too!

Management Hub



Management Hub

Server class machine(s)
Any public cloud, or
Private data center
Air-gapped okay too!

HIGHLIGHTS

- Edge Native – designed from the beginning for the edge
 - Security first, robust ([decentralized](#), small scopes of authority)
 - Truly “[zero touch](#)” installation in the field (wire it and leave)
 - Fully [autonomous](#) agents (driven by the policies you set)
 - Firewalled devices? No problem – devices always [pull](#) (no push)
 - Disconnected operation (local agent still [works when offline!](#))
 - Your software release buggy? No problem, fallback policies fix that!
 - [Extreme scale](#) (tens of thousands per Management Hub)
 - Manage Kubernetes clusters and/or [stand-alone Linux devices](#)
 - [Single pane of glass](#), easy to use, role-based interfaces
 - Like other LF-Edge projects, Open-Horizon welcomes contributions
-

RESOURCES

- LF Edge “Open Horizon” project page:

<https://www.lfedge.org/projects/openhorizon/>

- Open-Horizon documentation:

<https://open-horizon.github.io>

- Open-Horizon GitHub (source code):

<https://github.com/open-horizon>

- Example programs for Open-Horizon:

<https://github.com/open-horizon/examples>

- Open-Horizon on the LF-Edge Slack:

<https://lfedge.slack.com/archives/C011XLC1V2Q>



+



HISTORY

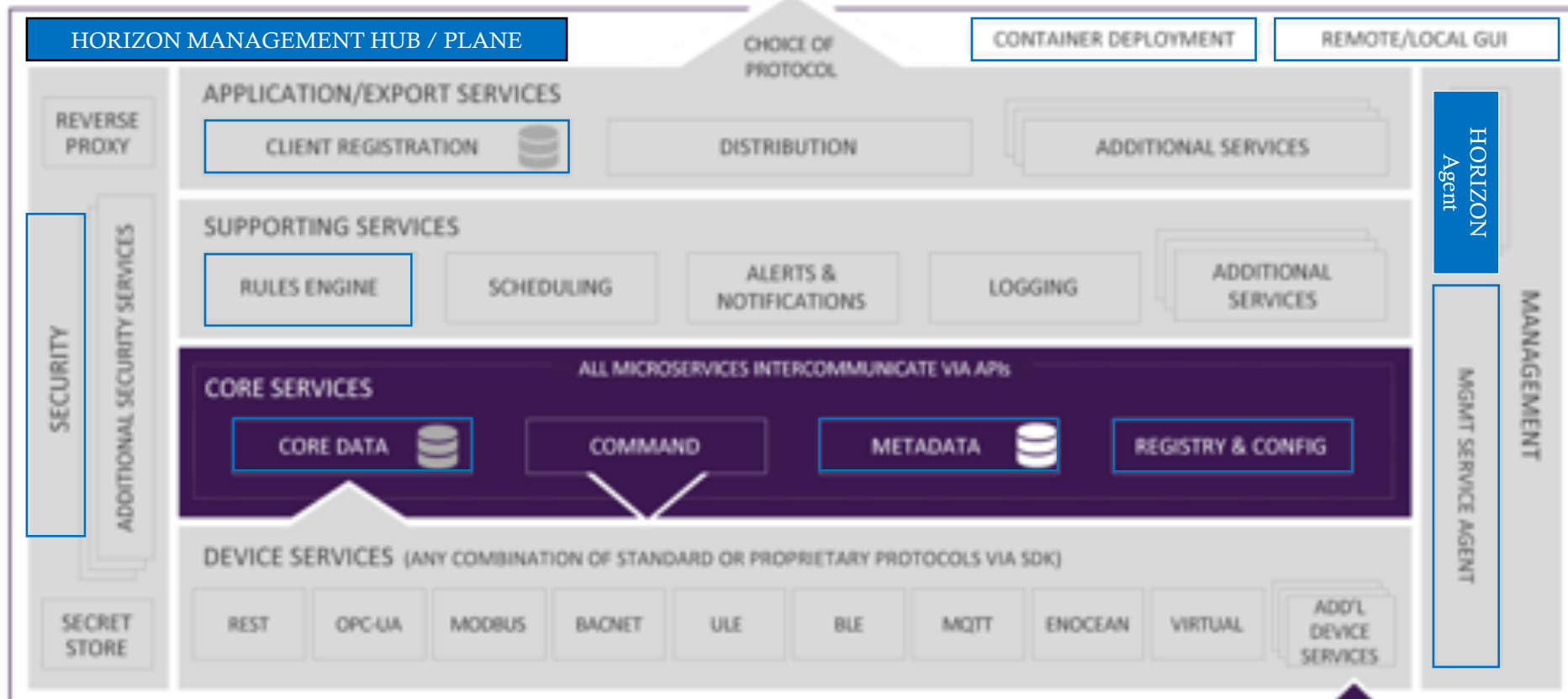
- Summer 2019: Open Horizon first presented to the EdgeX Foundry project.
 - May 2019: Joe Pearson elected to the EdgeX Foundry TSC as an At-large member.
 - October 2019: Joe Pearson attended the [EdgeX Open Hackathon](#).
 - November 2019: EdgeX TSC voted to incubate the Open Horizon project.
 - February 2020: [Open Horizon/EdgeX Foundry integration sub-group](#) initiated and [repo](#) created.
 - March 2020: Joe Pearson participated as a judge in the [EdgeX IoT Innovation Challenge](#).
 - May 2020: Open Horizon graduate/exited incubation with EdgeX and became standalone project in LF Edge.
 - Fall 2020: Joe Pearson became one of the [TAC Sponsors of EdgeX](#) Foundry project at their Annual Review.
 - September 2020: Open Horizon participating in EdgeX [Kubernetes Support sub-group](#).
-

POC INTEGRATION

EDGE X FOUNDRY
Platform Architecture


"NORTHBOUND" INFRASTRUCTURE AND APPLICATIONS

- INTEGRATION WORK NEEDED
- IBM CONTRIBUTED CODE
- REQUIRED INTEROPERABILITY FOUNDATION
- REPLACEABLE REFERENCE SERVICES




"SOUTHBOUND" DEVICES, SENSORS AND ACTUATORS