

# PTC HUB Lightning Talk

Multi-Domain Edge Connectivity Services for Equinix Metal, Network Edge, Fabric, Multi-Cloud and more ...

TUESDAY, 23 JANUARY 2024 @ 13:30 hours

# Data Centers Moving to Digital Services

7.5%

DATACENTER GROWTH  
'22 - '32

10% →  
40%

IaaS GROWTH %  
'21 - '25 (Gartner)

20% →  
70%

INFRA AUTOMATION %  
'21 - '25 (Gartner)

# The Data Center is Indeed Moving to IaaS\*

## Compute

Equinix Metal  
AWS Outposts  
Zenlayer  
HPE GreenLake

## Storage

Pure Storage  
Dell APEX  
Seagate Lyve  
NTAP

## K8s

Red Hat OSP  
Platform9  
EKS Anywhere  
Google Anthos

## Networking

Equinix NE  
Equinix Fabric  
Megaport  
Cisco

\*Infrastructure-as-a-Service

# Multi-Vendor IaaS Deployment is Difficult

- **Deploying Multi-Vendor IaaS Topologies is a manual multi-week process**
- **Connecting Topologies to Public Clouds is also manual**

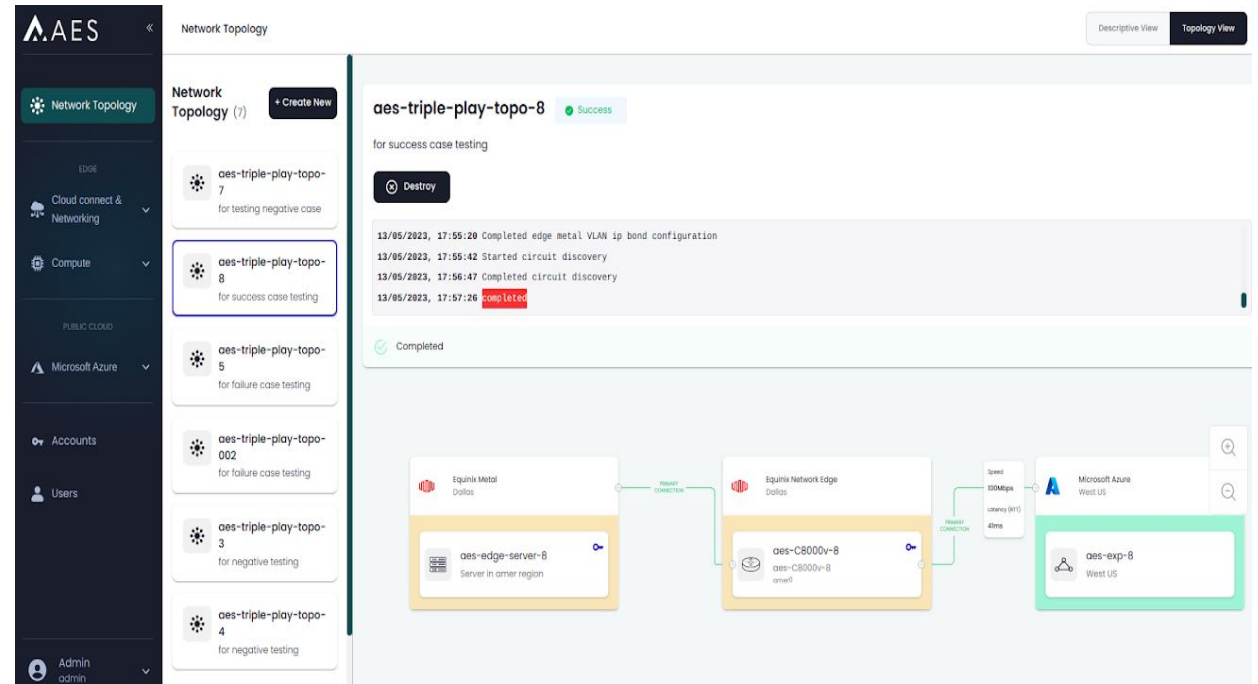
# Solution: Linux Foundation Edge Akraino PCIe

- **Open Source Blueprint**
- **Goal**
  - **Orchestrate & manage cloud edge (datacenter) infra along with dedicated public cloud connectivity**
  - **Orchestrate & manage applications such as IoT, 5G etc. on that infrastructure**
- **Award winning open source blueprint**
  - **Akraino Blueprint of the Year 2023**
  - **ETSI MEC Hackathon Winner 2022**



# Aarna Edge Services (AES): Commercialized PCEI

A SaaS platform for deployment & orchestration of infra, apps, network services at the cloud edge (aka new middle mile or datacenter)



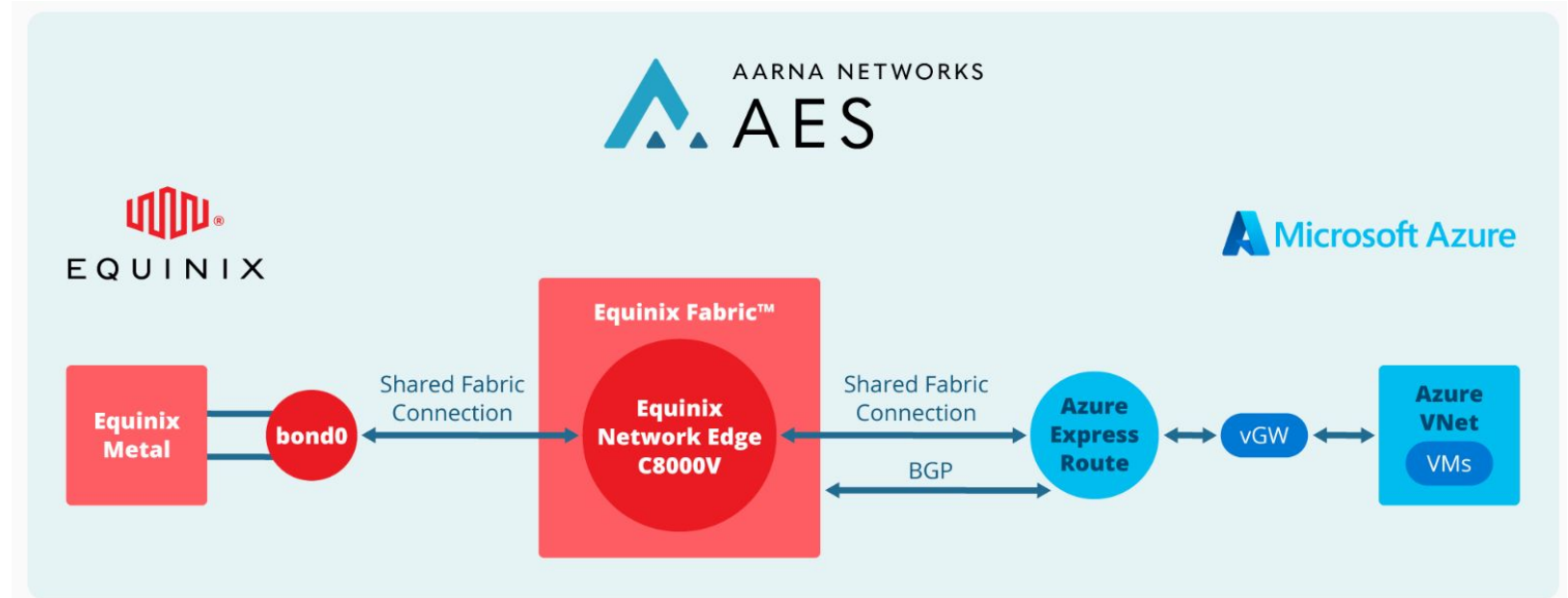
# Aarna Edge Services Use Cases

01	Edge to Multi-Cloud Networking	<ul style="list-style-type: none"><li>• Create IaaS environments in the data center</li><li>• Connect IaaS environments OR cages to Public cloud via dedicated connectivity</li></ul>
02	Cloud Adjacent Storage	<ul style="list-style-type: none"><li>• Compute in public clouds</li><li>• Storage at the cloud edge for cost (no egress costs!), performance, and proximity to users</li></ul>
03	Cloud Adjacent GenAI	<ul style="list-style-type: none"><li>• Private GenAI model for inferencing</li><li>• Dedicated connectivity to corporate data</li><li>• Training via dedicated public cloud connectivity</li></ul>

# Edge ⇒ Multi-Cloud Deployment

## Weeks to <1 Hour

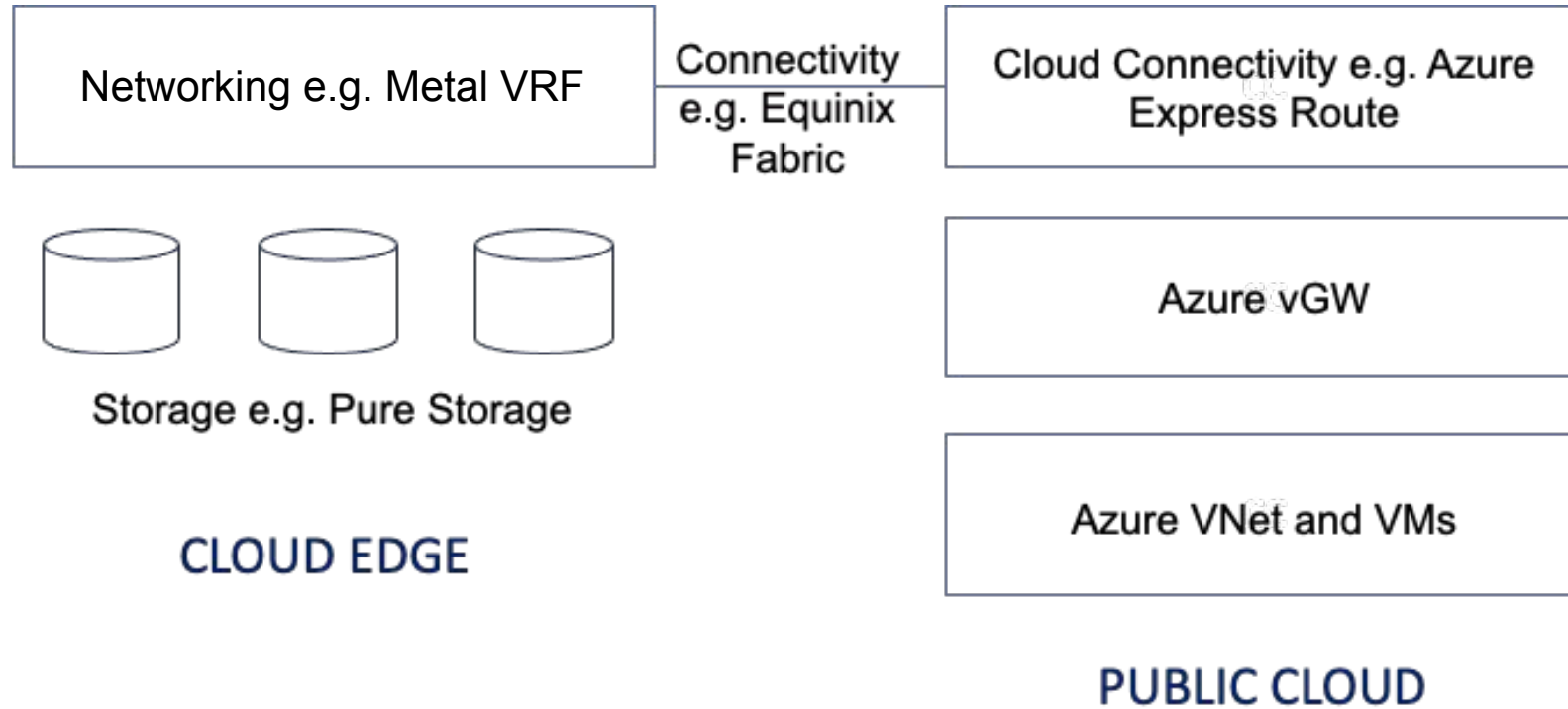
- Equinix Metal, Network Edge, Fabric OR Port, Metal VRF, Fabric
- Azure Express Route
- AWS DirectConnect
- Select ML, 5G, IoT applications
- Ongoing monitoring, optimization, mgmt.





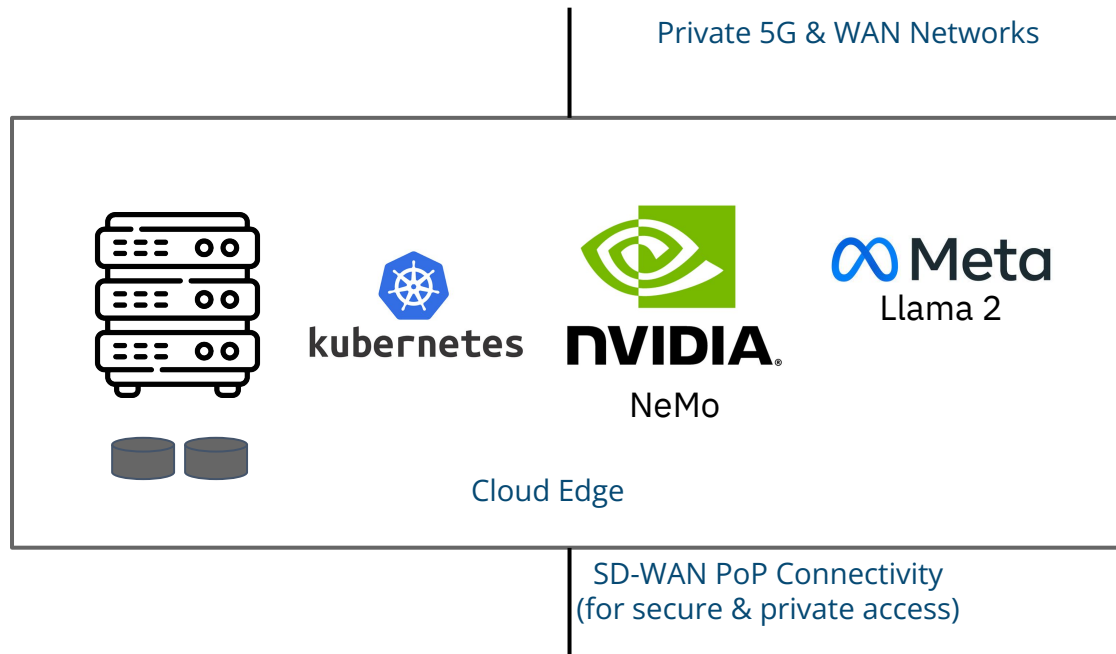
# Cloud Adjacent Storage

## Orchestrated & Optimized in Minutes



# Cloud Adjacent GenAI

## Months to <1 Hour



1. Use existing compute or orchestrate IaaS compute
2. Orchestrate IaaS storage
3. Orchestrate IaaS connectivity
4. Orchestrate & configure Kubernetes
5. Choose the right GenAI model
6. Orchestrate & configure GenAI model, vector database, and associated components
7. Monitor, manage, optimize environment over time

# Questions?

<https://www.aarnanetworks.com/products/aes>

subramanian.s@aarnanetworks.com

cwadke@aarnanetworks.com