

# NeoNephos

Foundation in formation



Finanziert von der Europäischen Union  
NextGenerationEU



Bundesministerium für Wirtschaft und Klimaschutz

Gefördert durch:

aufgrund eines Beschlusses des Deutschen Bundestages





# Building Europe's Platform Mesh

## Cloud-Native APIs for Multi-Provider Integration and Digital Sovereignty

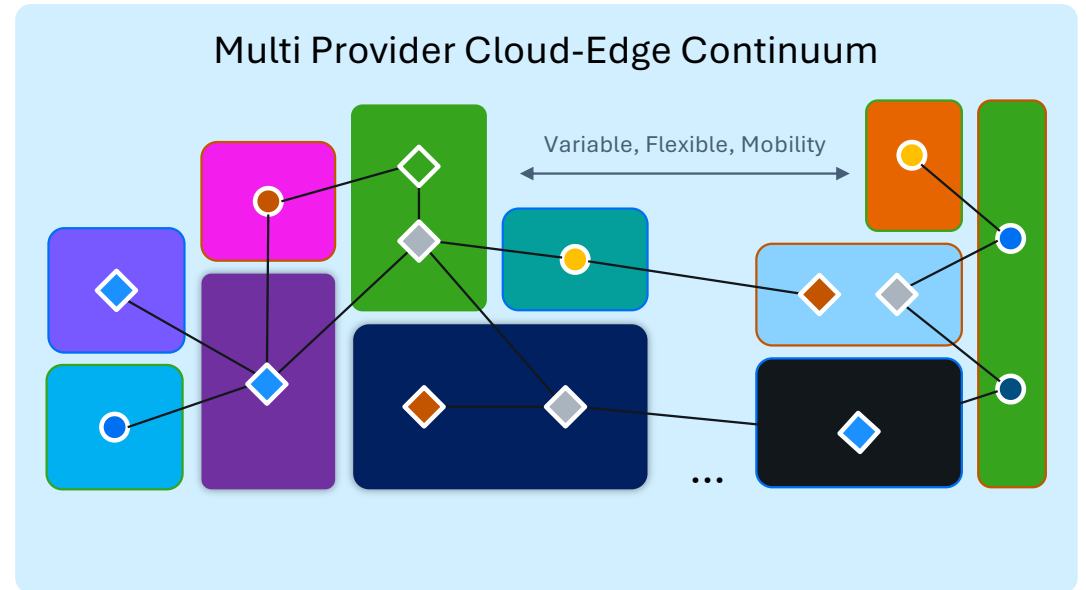
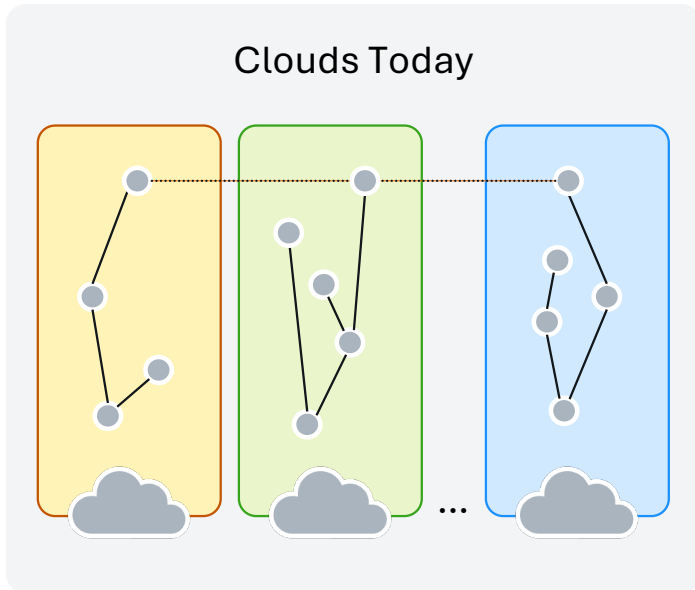
Mirza Kopic, SAP  
Marvin Beckers, Kubermatic

February 2025



How do we enable the required flexibility/interoperability?

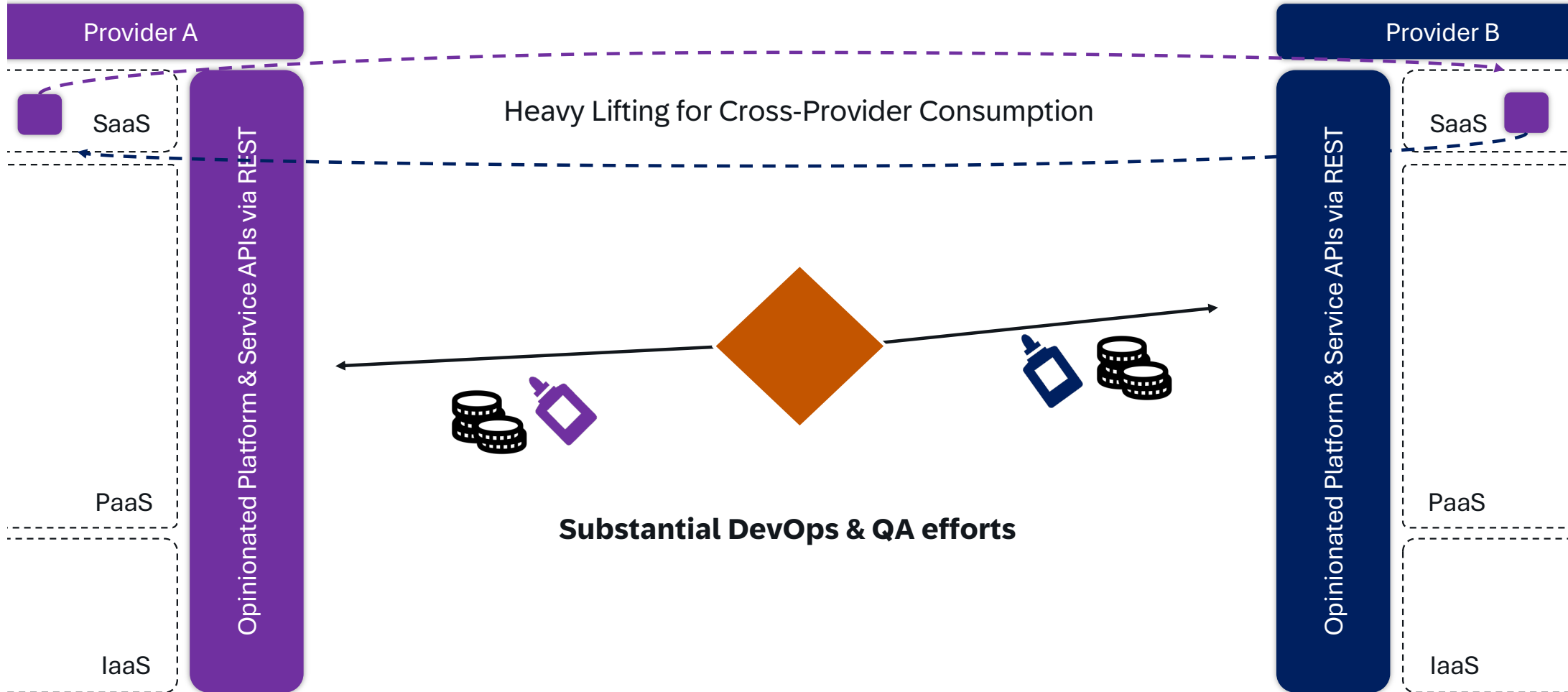
# Target Vision



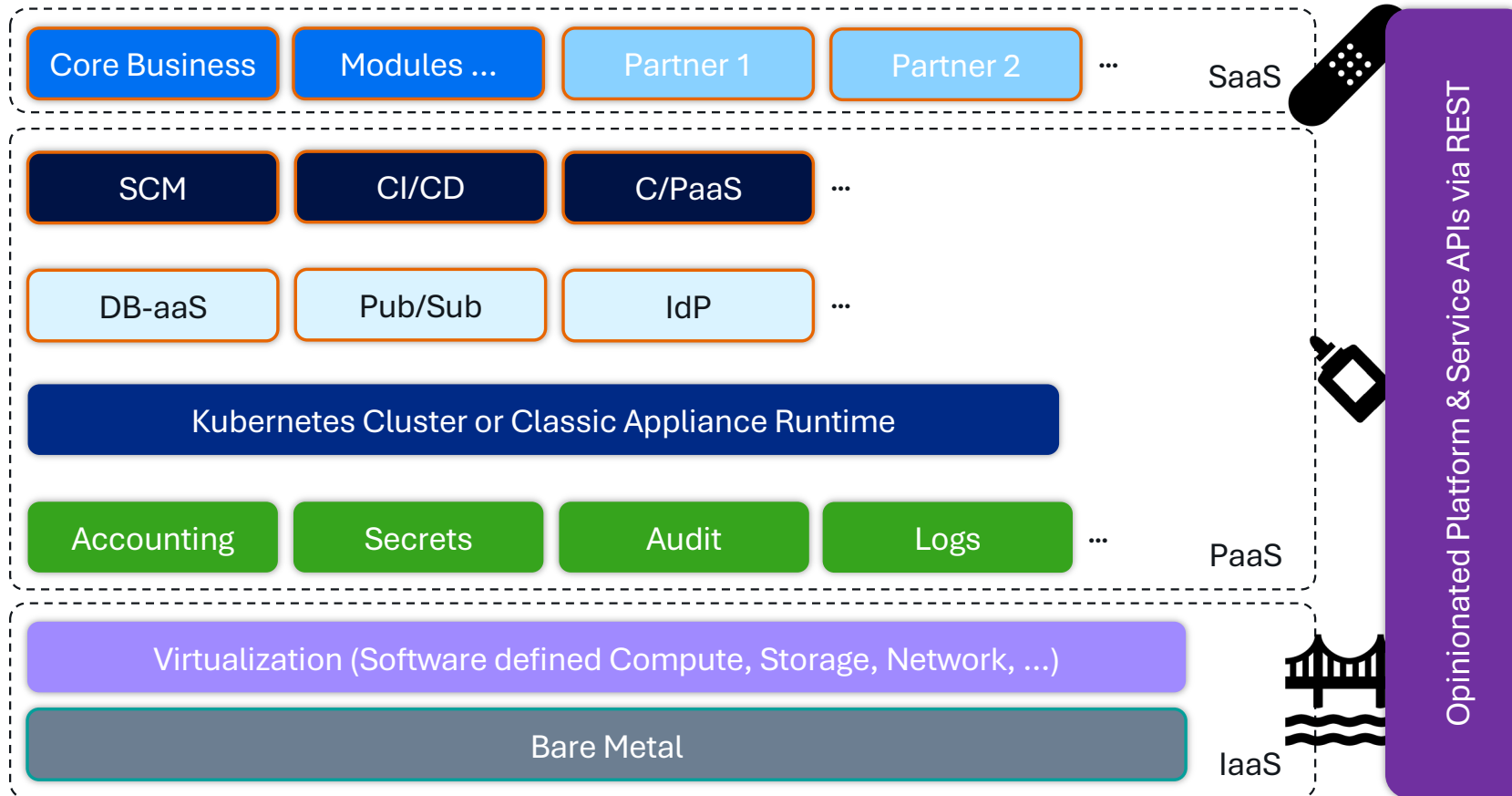
< Flexible, open, sustainable, secure, and resilient cloud-edge continuum from heterogeneous resources >



# Business/End User Experience: Fragmentation, Lock-in, Snowflakes



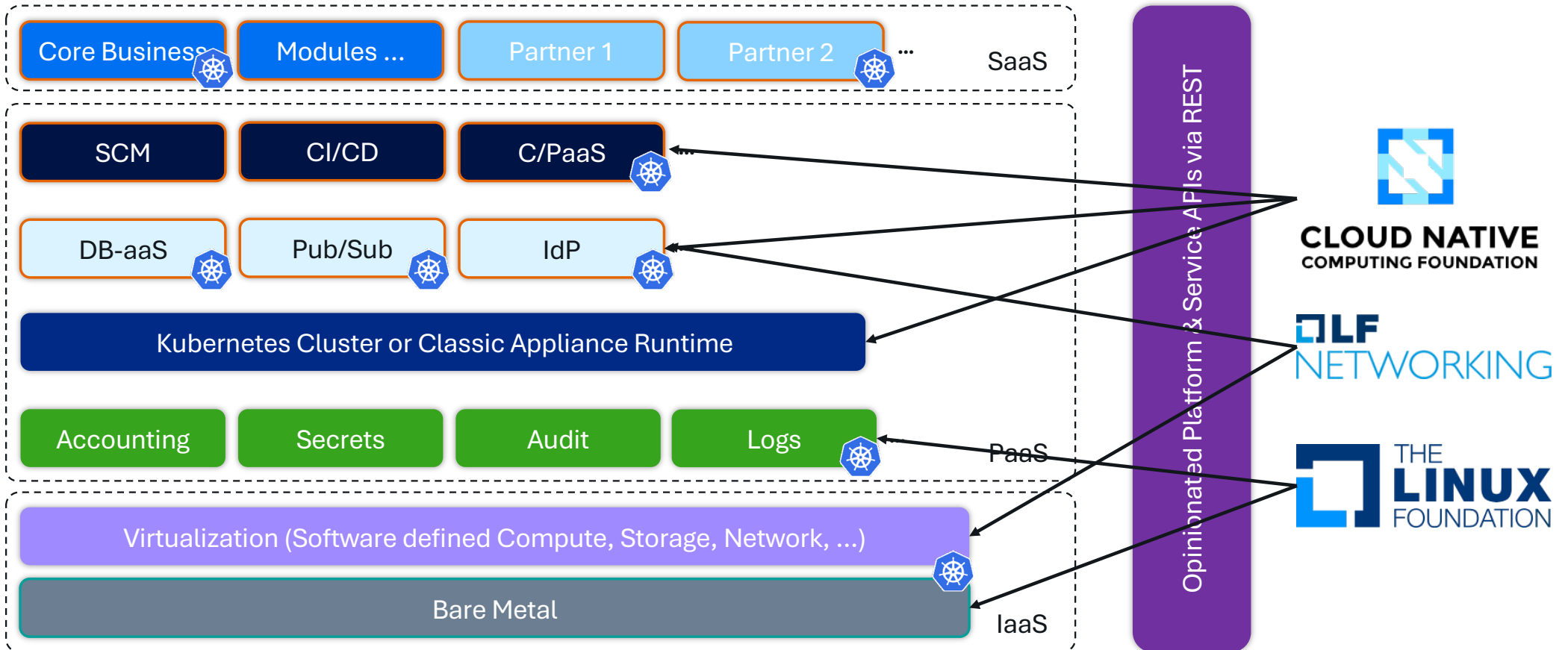
# Commercial Platform: Bridging APIs to achieve vertical integration



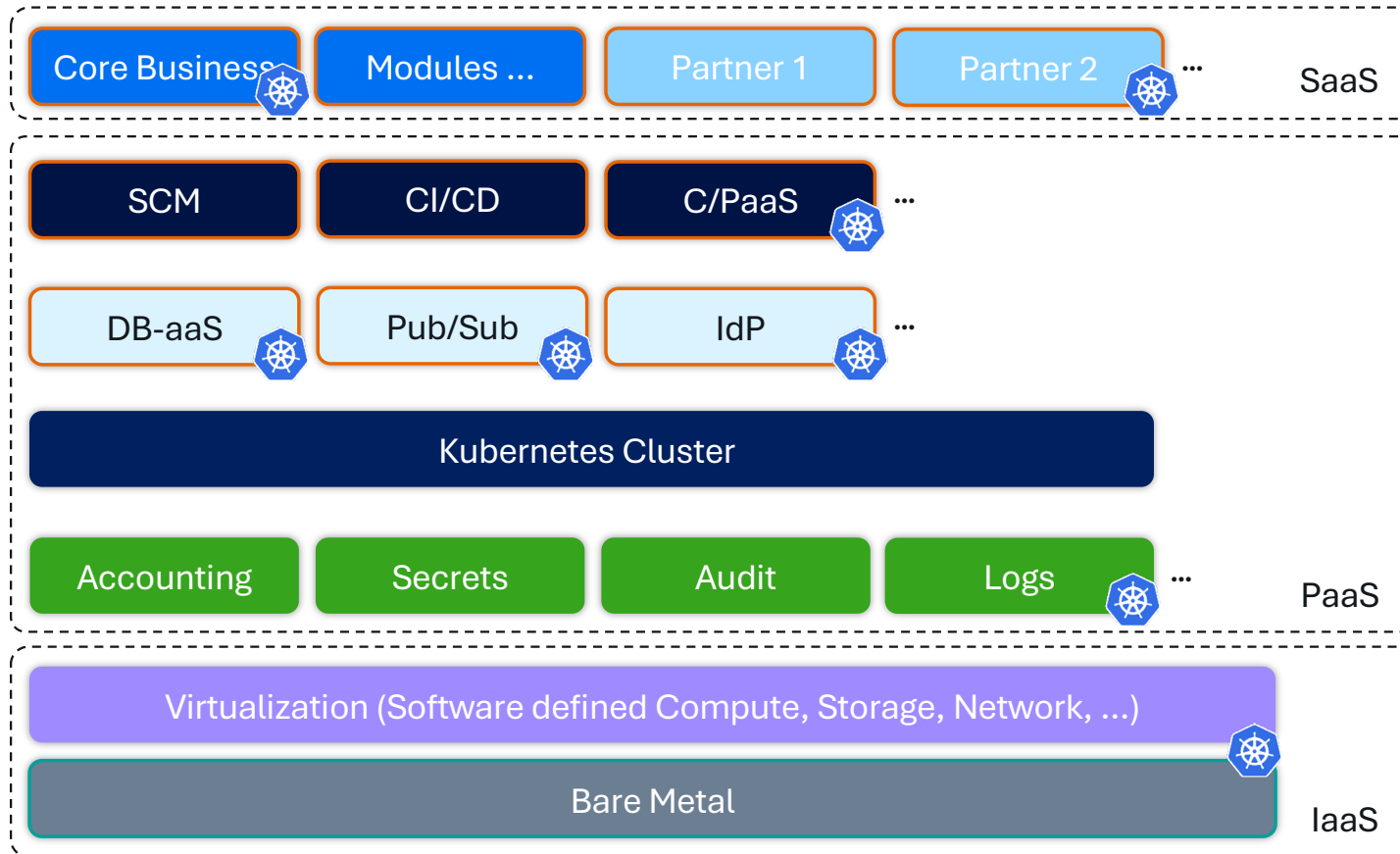
# Evolution or Revolution: Innovation?

The cloud native ecosystem has already “infiltrated” your stack!

Thought leadership and paradigm shift is substantially influenced by Open Source Foundations



# Evolution or Revolution: Innovation!



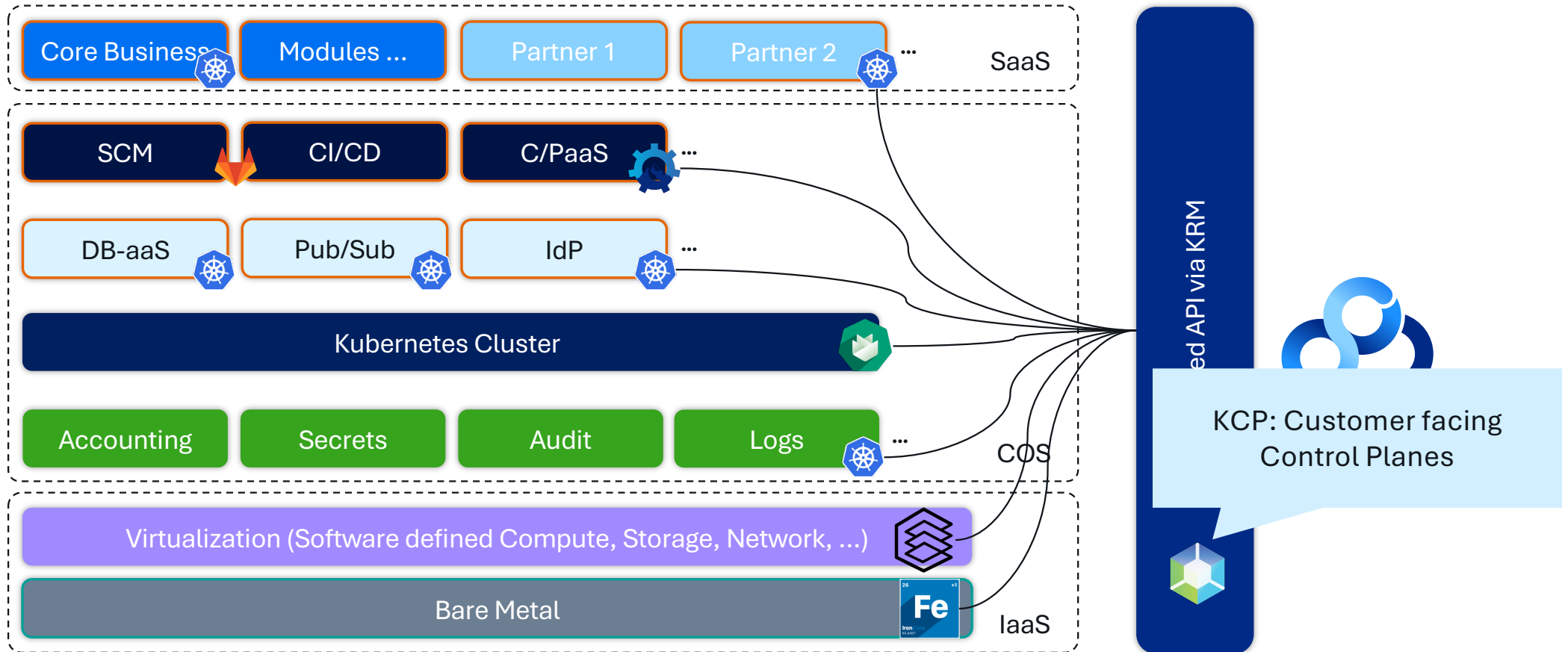
Kubernetes API Machinery  
“API for all of the Ecosystem”

Harmonized API via KRM



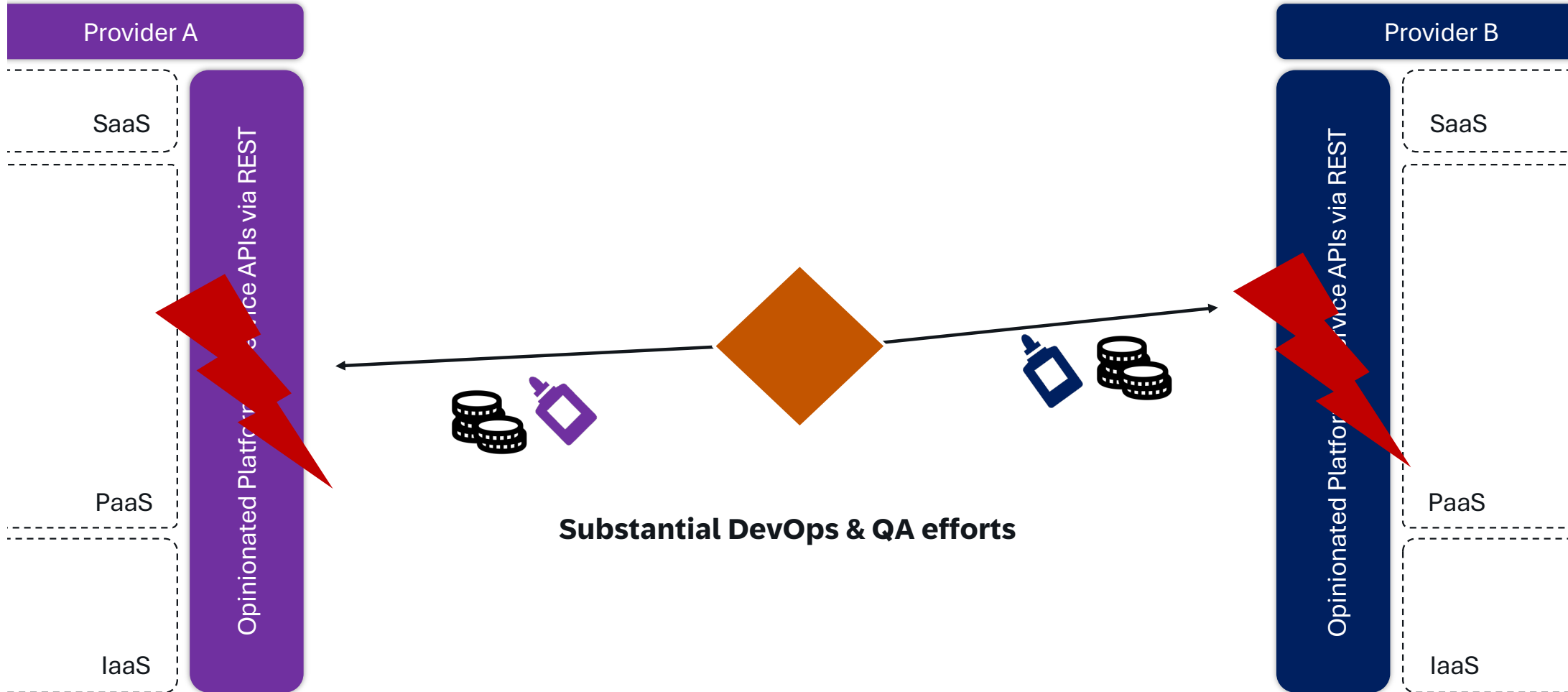
**No connection with Kubernetes as Container Orchestrator!**

# Platform Mesh: Standardize APIs using KRM/Digital Twins

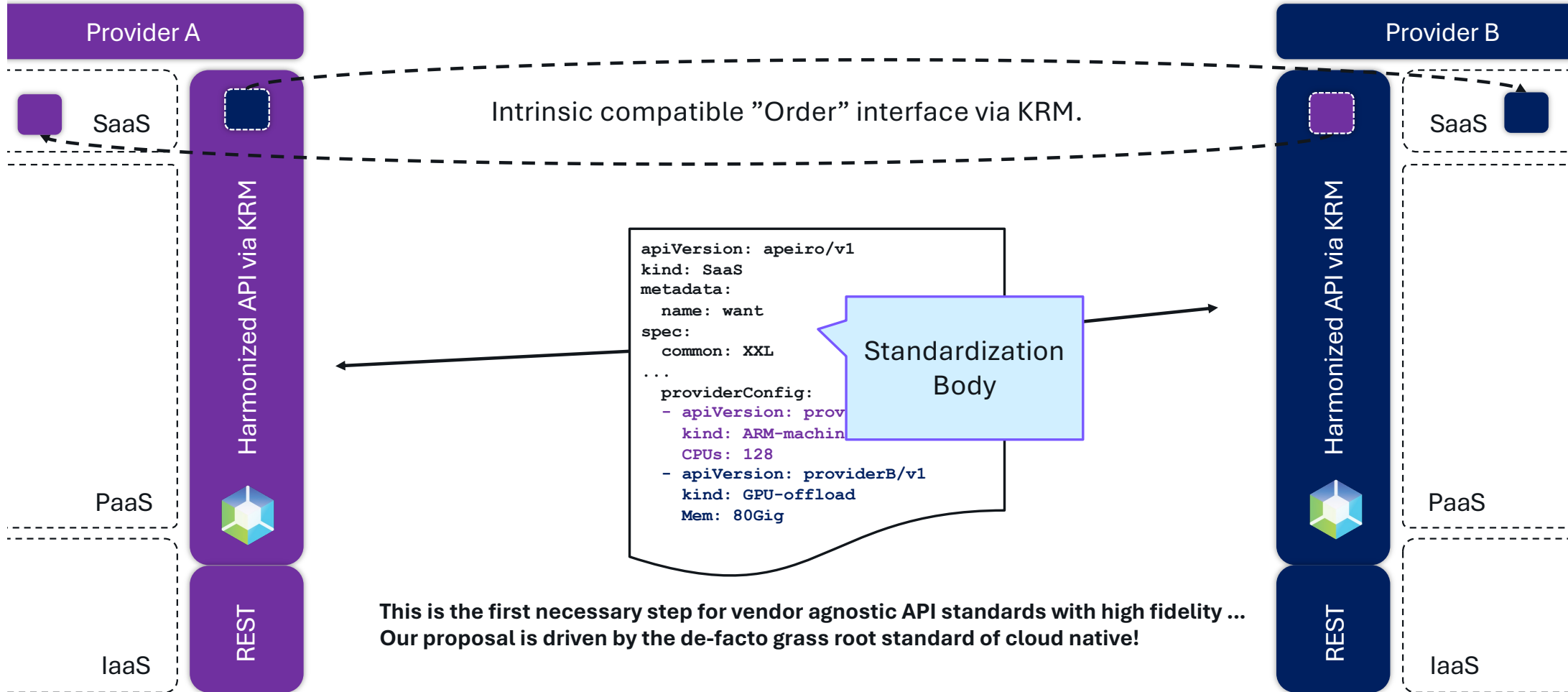




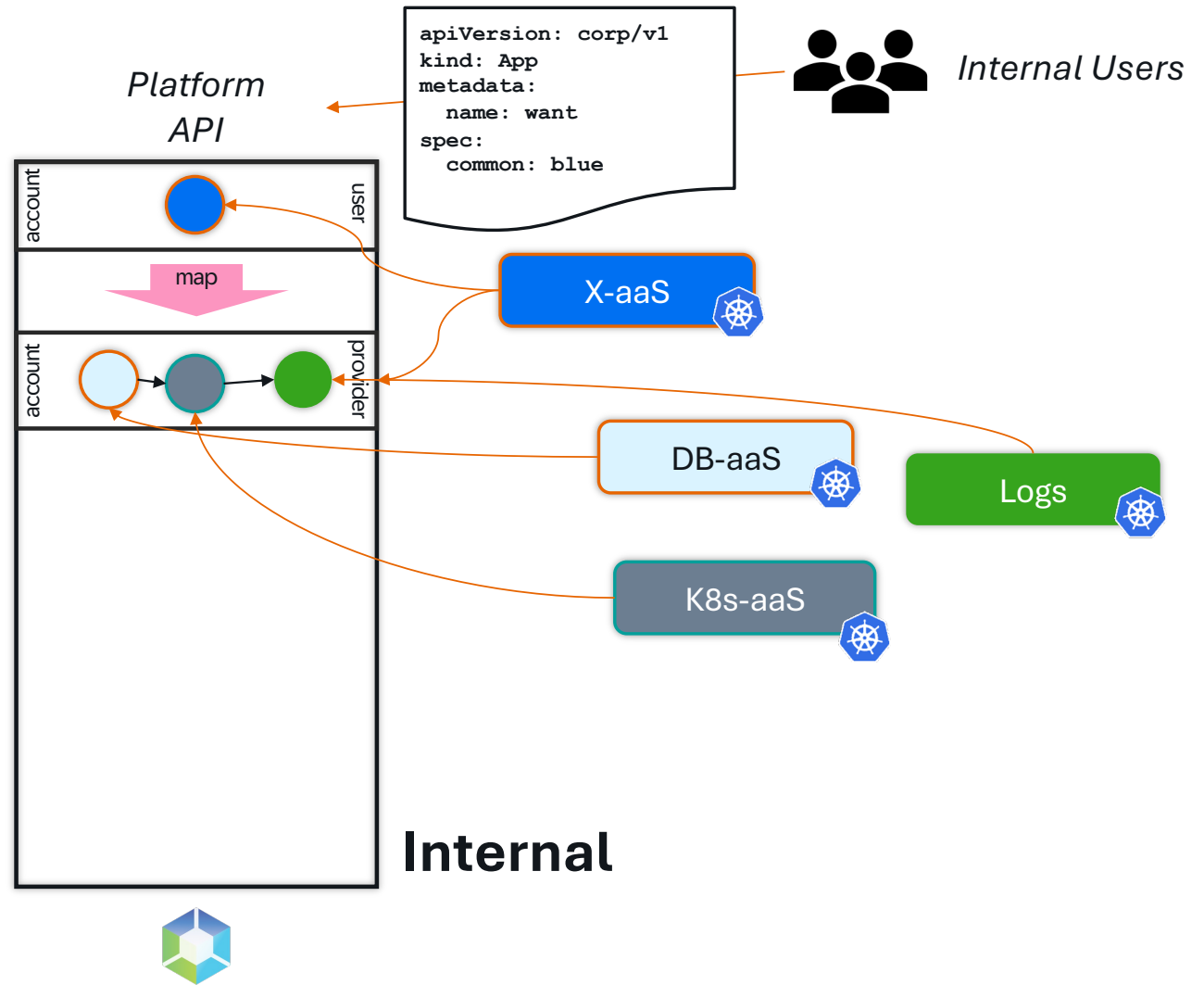
# Business/End User Experience: Fragmentation, Lock-in, Snowflakes



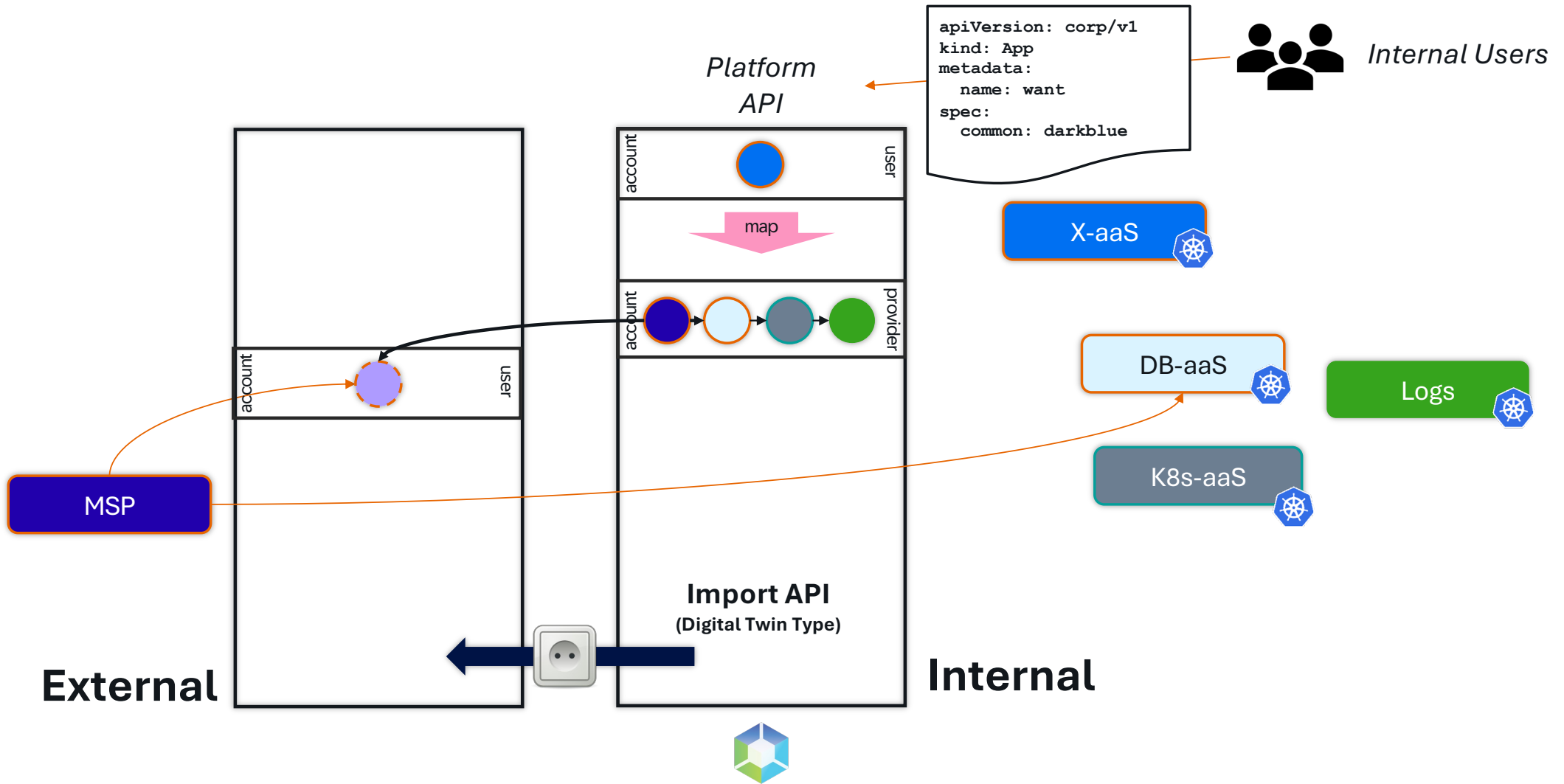
# Apeiro Platform Mesh Offering: Attach to Cloud Native Standard



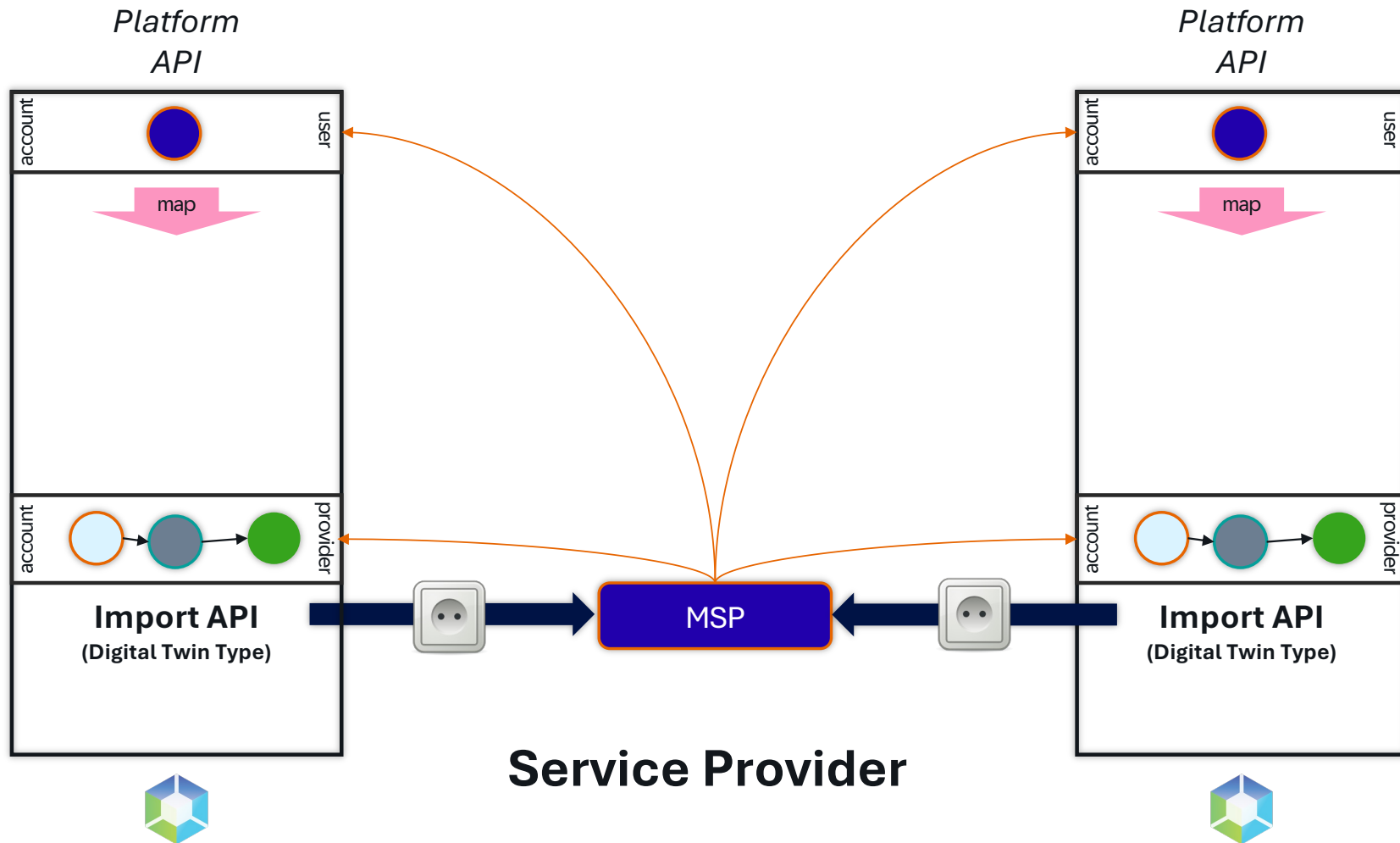
# Exploit Interior Motivation: e.g. Internal Developer Platform



# Exploit Interior Motivation: e.g. Buy vs Build



# Exploit Service Provider Motivation: e.g. **Sell to Many w/o Cost/Toil**



# Ecosystem

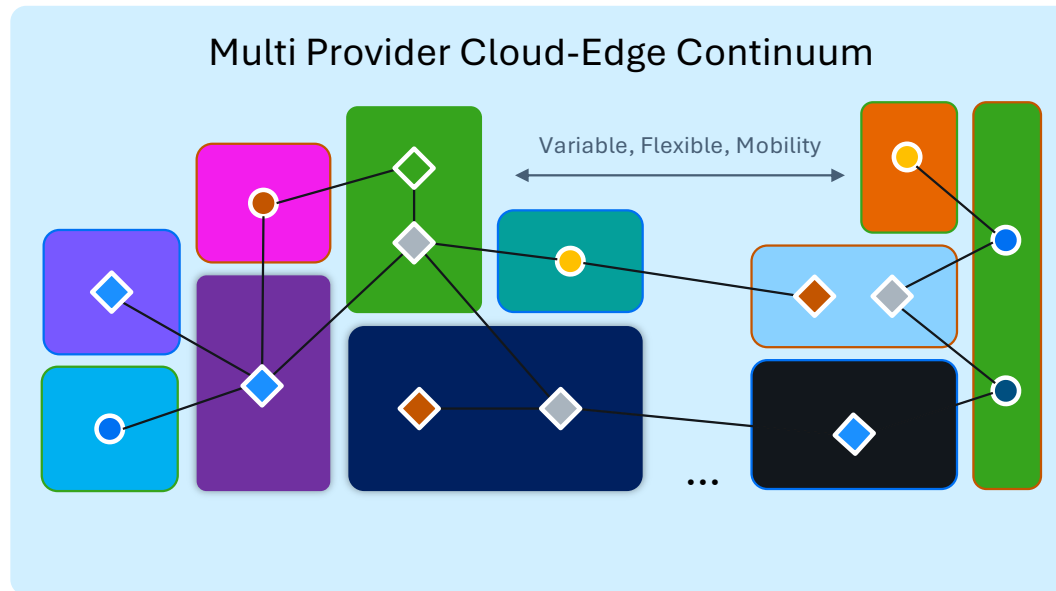
## PROJECTS AND PRODUCTS

The image displays a comprehensive grid of logos for various cloud native projects and products, organized into functional categories. The categories include:

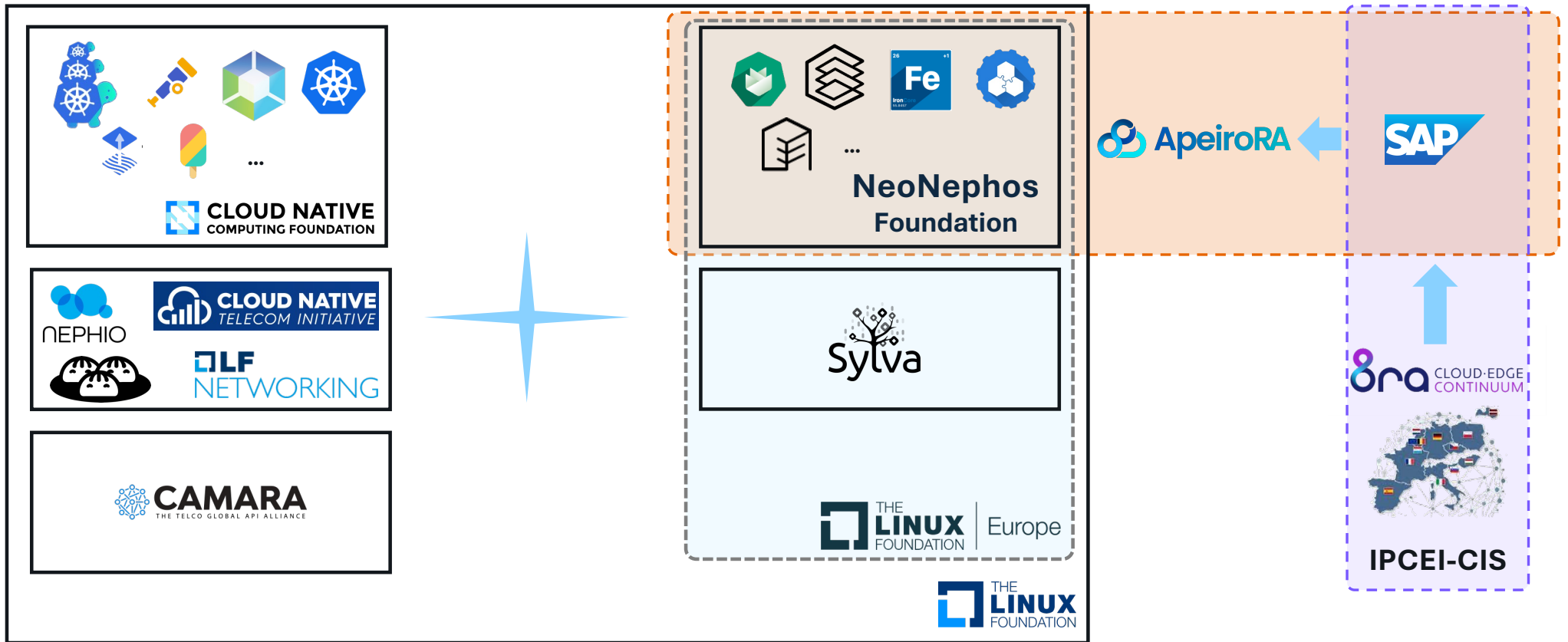
- Application Definition & Image Build:** HELM, Backstage, Buildpacks.io, dapr, KubeVela, KubeVirt, OPERATOR FRAMEWORK, CHEF, CAPVEL.
- Database:** KV, Vitess, CockroachDB, Yugabyte, TiDB, Redis, Aerospike, etc.
- Continuous Integration & Delivery:** argo, flux, keptn, OpenVela, etc.
- Streaming & Messaging:** cloudevents, NATS, STRIMZI, etc.
- Scheduling & Orchestration:** KEDA, kubernetes, Argo CD, etc.
- Service Mesh:** Istio, LINKERD, etc.
- Remote Procedure Call:** gRPC, etc.
- Observability and Analytics:** fluentd, Prometheus, Grafana, Thanos, etc.
- Continuous Optimization:** bmc, etc.
- Chaos Engineering:** Chaos Mesh, Litmus, etc.
- Feature Flagging:** Open Feature, etc.

A large red banner in the center of the grid contains the text: **Immediately unlock the cloud native ecosystem**

## Multi Provider Cloud-Edge Continuum



# Open Source Ecosystems, IPCEI-CIS, 8RA: NeoNephos in Formation





# Thank you.

