



FLUIDOS

Flexible, scaLable, secUre, and decentrallseD Operating System

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Many silos



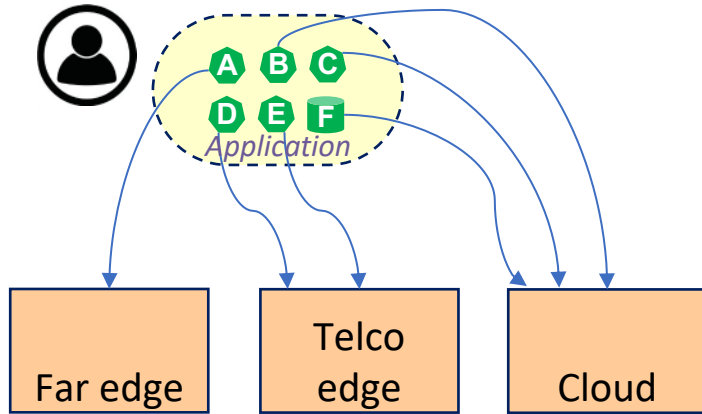
IoT/Edge



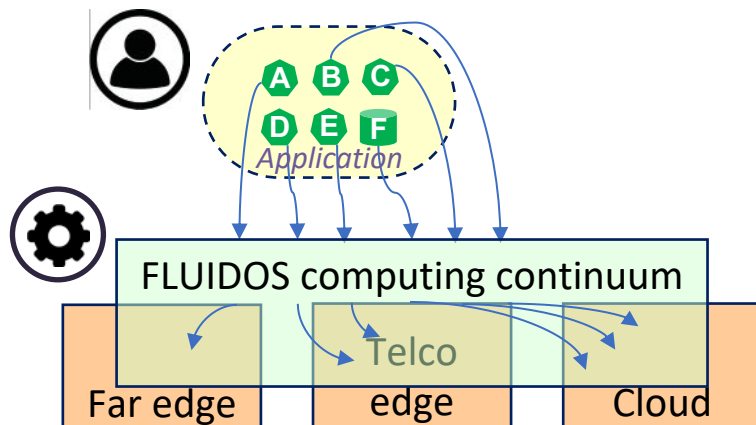
Cloud



FLUIDOS is all about transparency



a) Current silos-based computing continuum

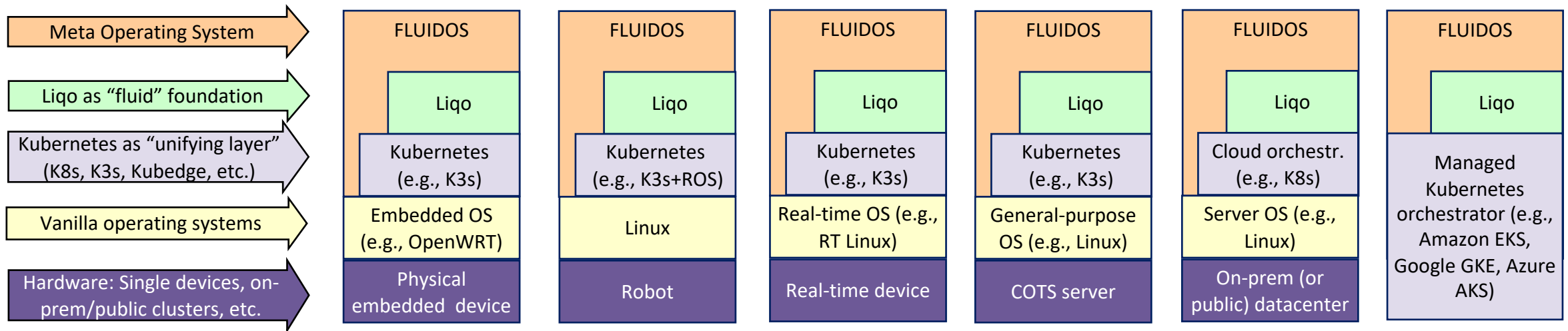


b) FLUIDOS computing continuum

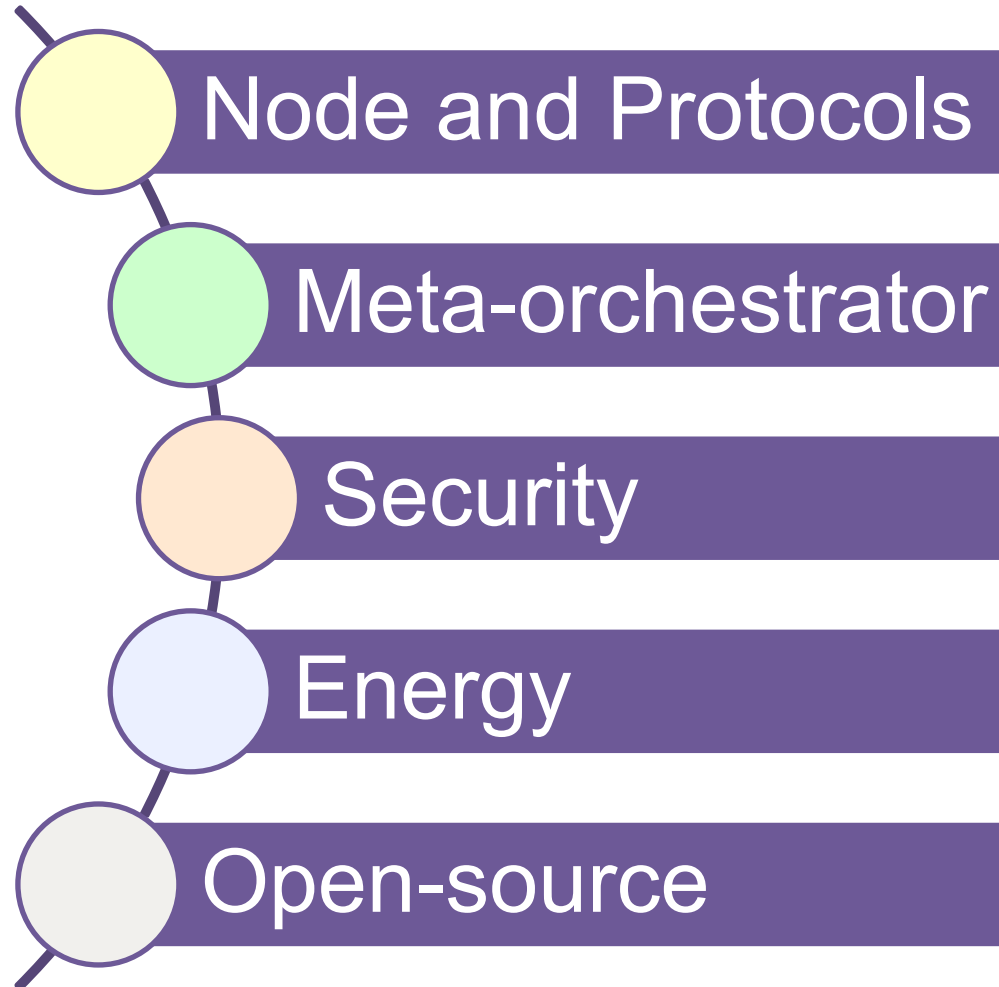
The **FLUIDOS** computing continuum defines *multiple, dynamic, secure virtual spaces*, spanning across multiple *technological* domains and *administrative* boundaries, with *deployment transparency*, *communication transparency*, and *resource transparency*.



The FLUIDOS stack



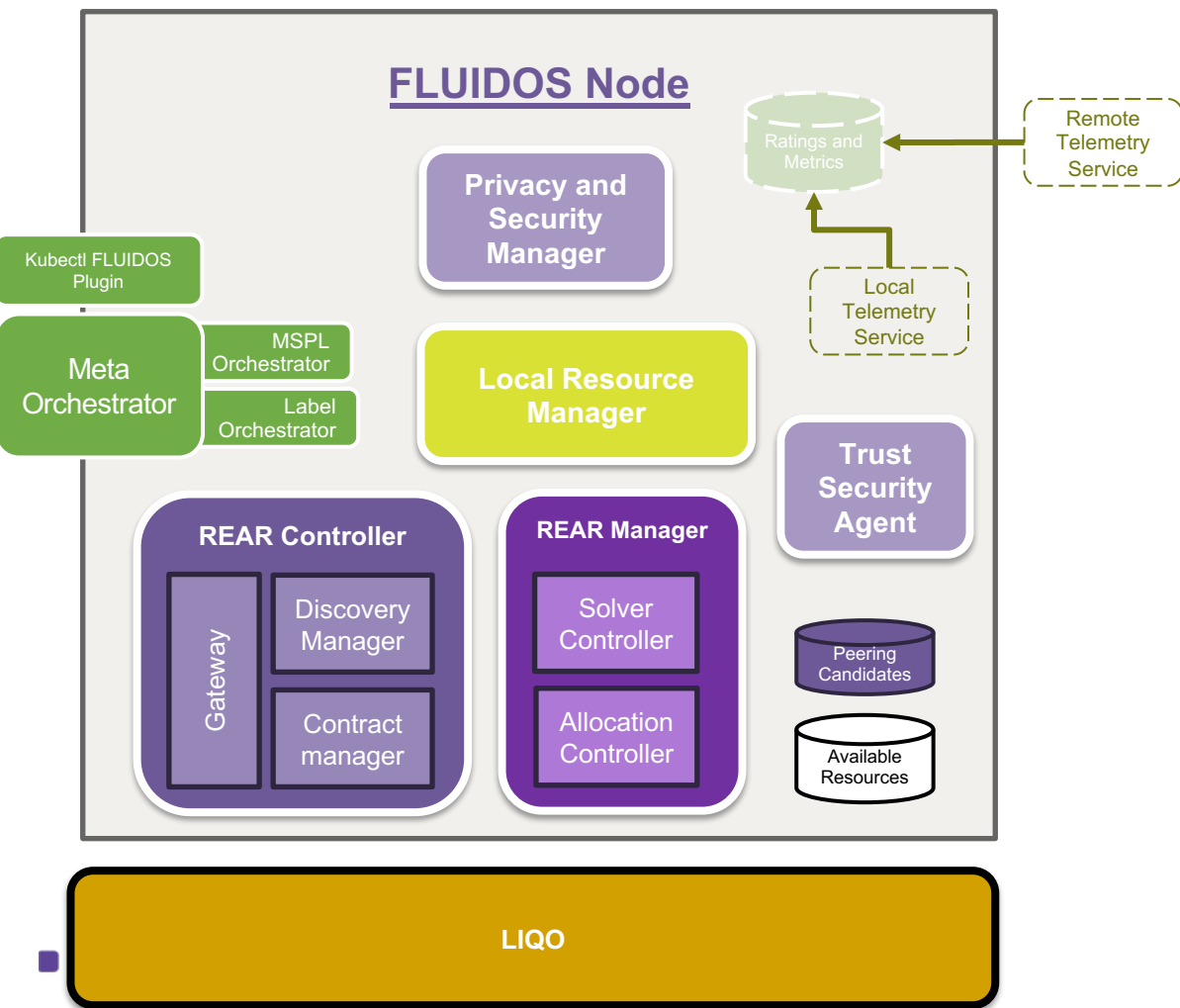
FLUIDOS technological pillars



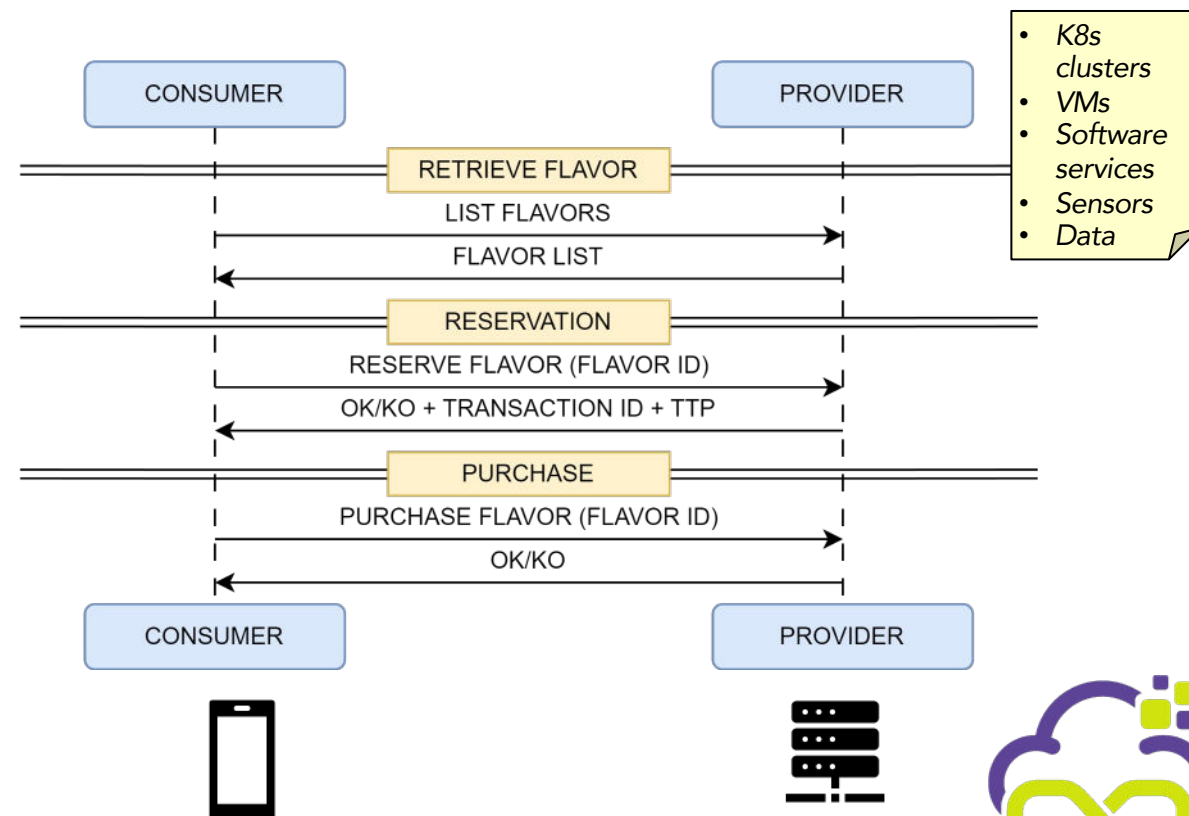
Use cases



(1) FLUIDOS node and Protocols



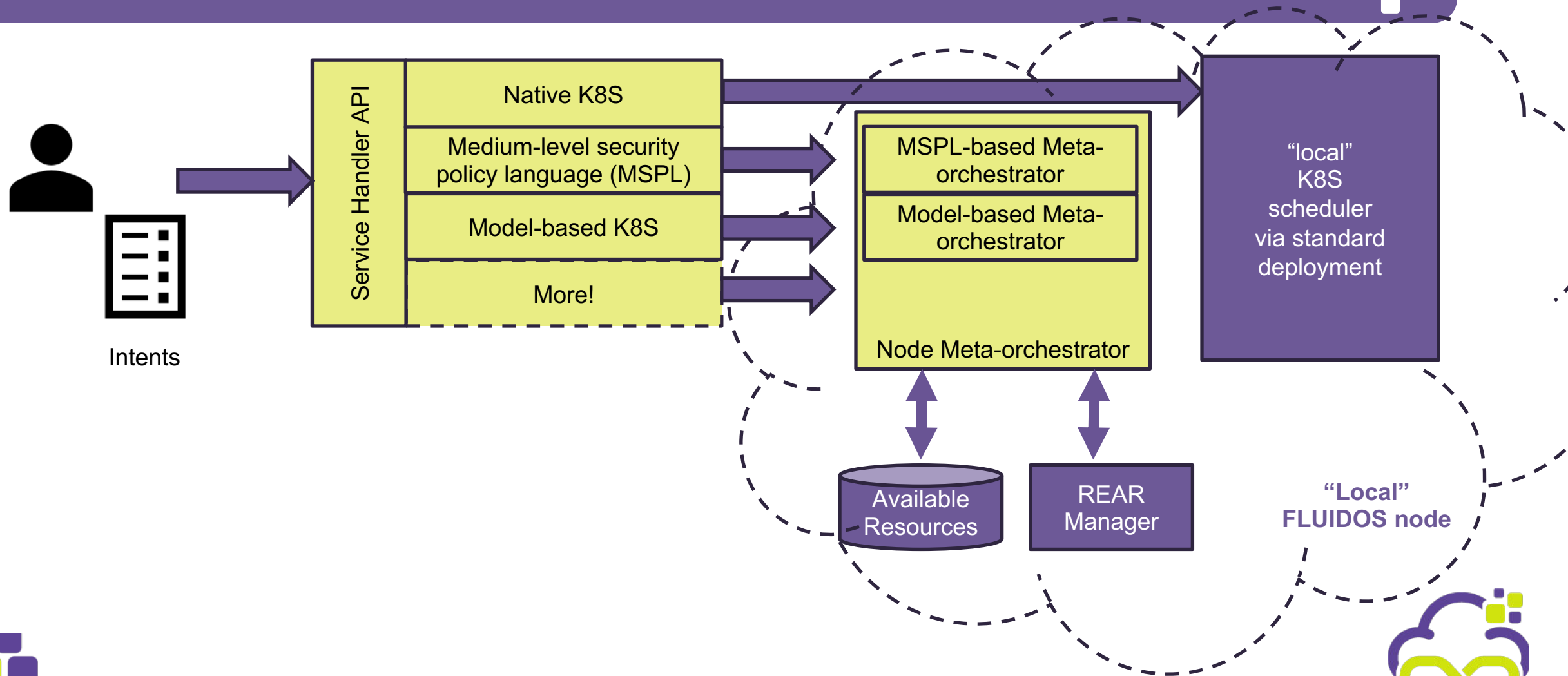
REsource Advertisement and Reservation protocol (REAR)



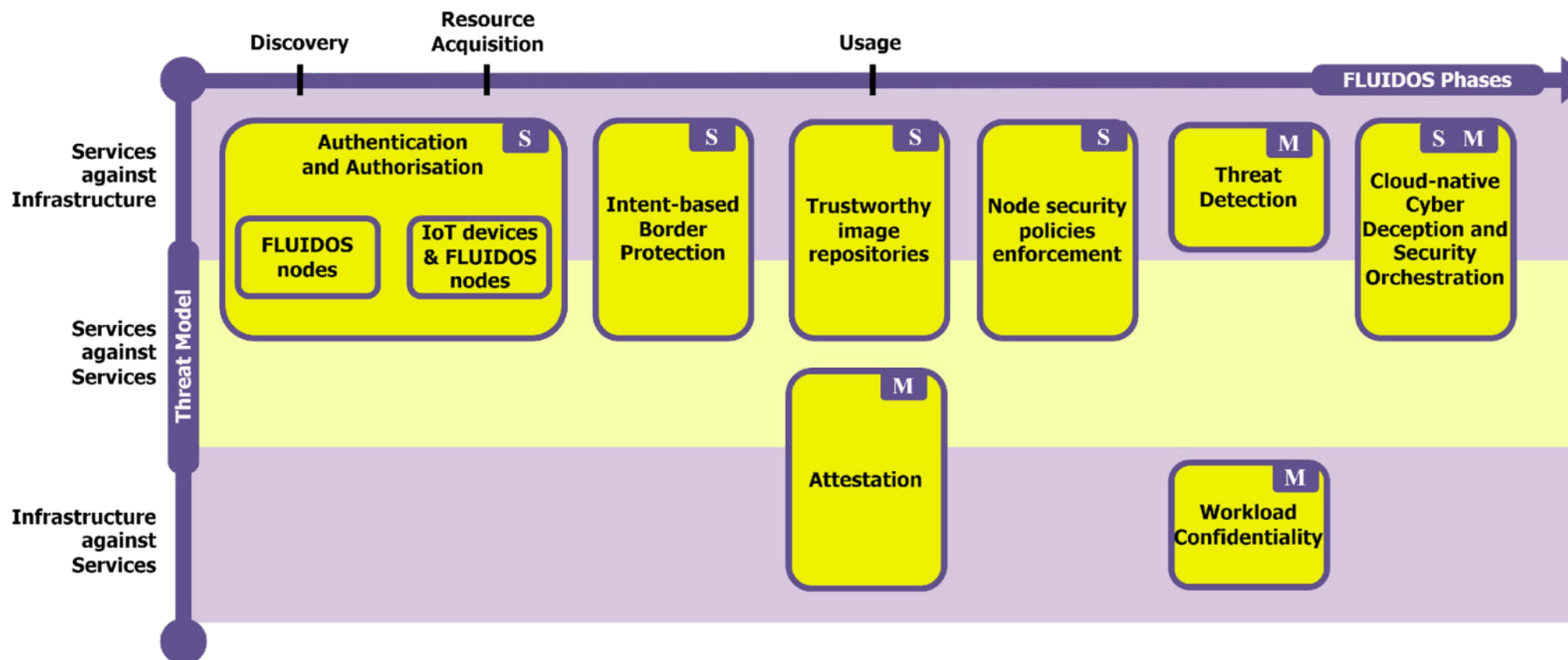
- K8s clusters
- VMs
- Software services
- Sensors
- Data



(2) Meta orchestrator



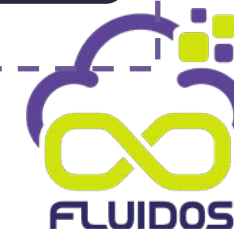
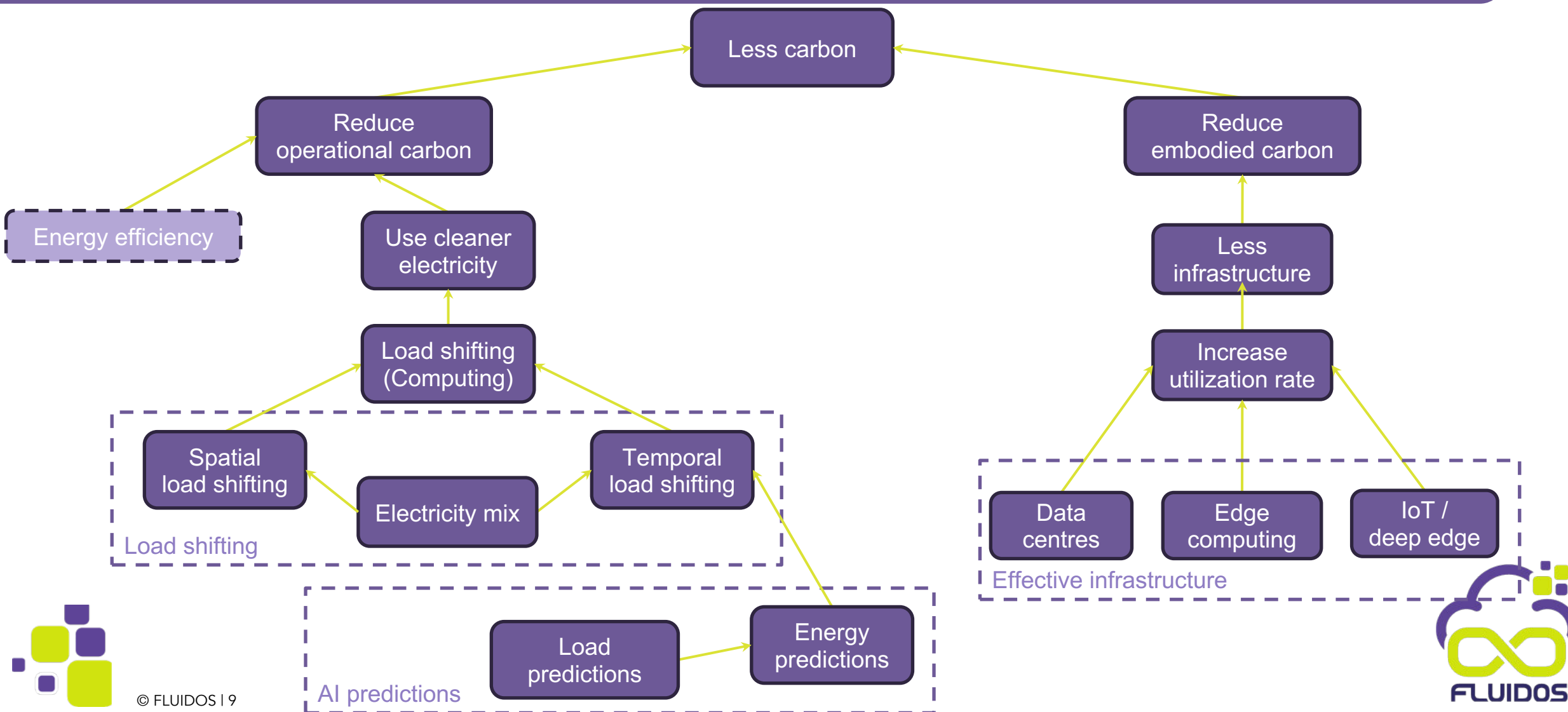
(3) Security



- S Software tool
- M Method (Algorithm, Protocol, Policy, etc.)



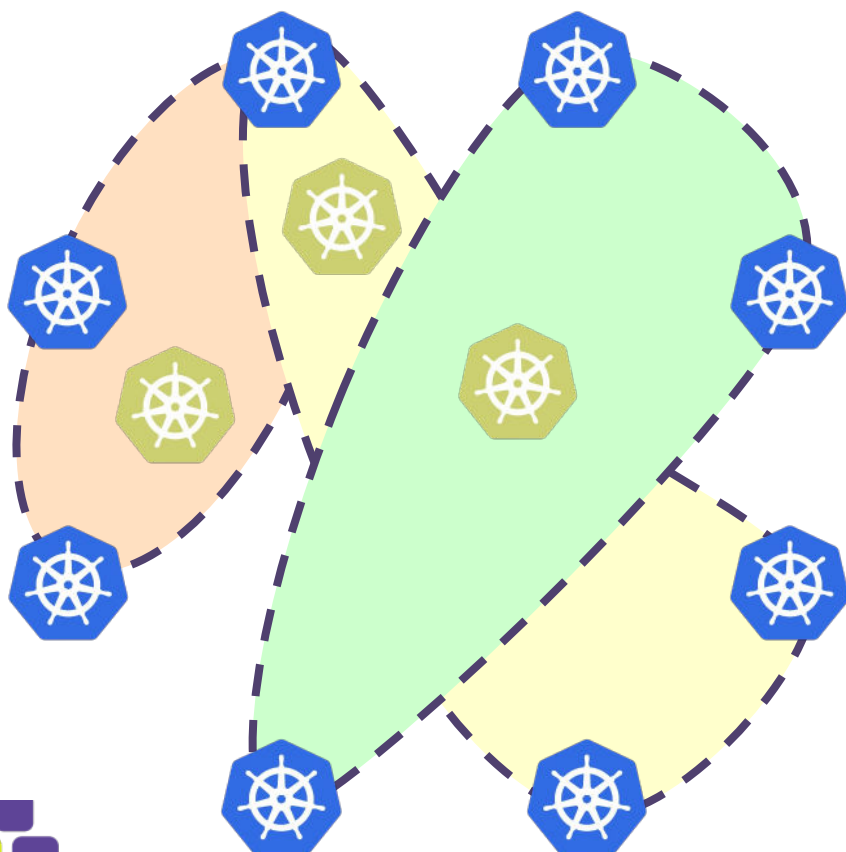
(4) Energy



(5) Open-source



Kubernetes (K8s, K3s, etc), Liqo, KubeEdge



<https://github.com/fluidos-project>

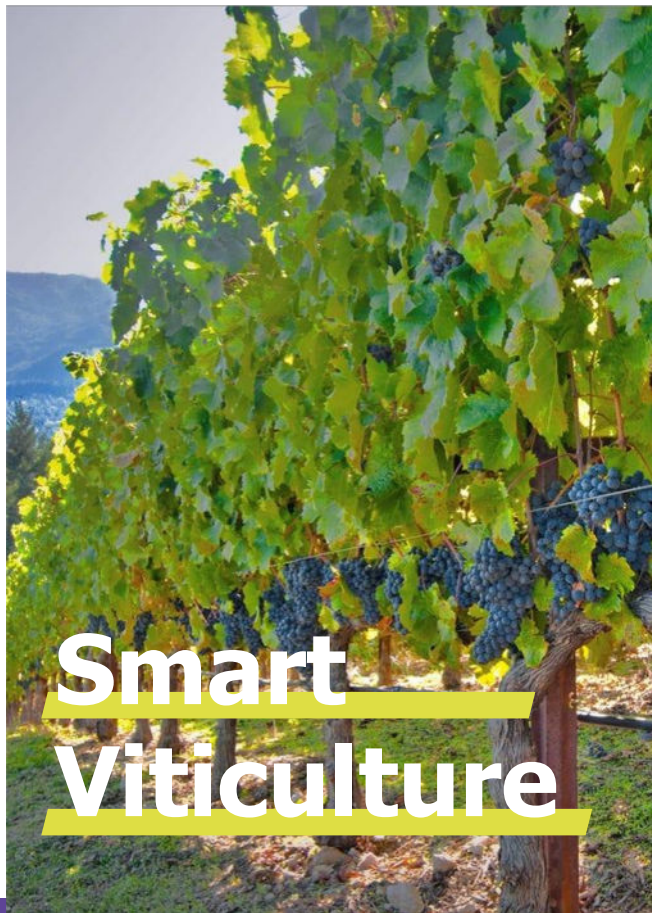
Repositories

Find a repository... Type Language Sort New

- node** Public
FLUIDOS Node and its essential components
Go 3 Apache-2.0 4 0 0 0 Updated last week
- REAR-data-models** Public
Shell 0 0 0 0 Updated last week
- quick-start-guide** Public
Quick start guide
3 BSD-3-Clause 4 0 0 1 Updated last week
- fluidos-edge** Public
Basic setup for managing Edge nodes and devices, and is designed to meet Fluidos project requirements
C 0 Apache-2.0 0 0 0 0 Updated 2 weeks ago
- fluidos-modelbased-metaorchestrator** Public
FLUIDOS meta-orchestrator for a geo-distributed continuum
Python 3 Apache-2.0 0 7 0 0 Updated 2 weeks ago
- idm-fluidos-aries-framework-go** Public
FLUIDOS idm, Aries agent modified for use dp-abc cryptography combined with Hyperledger Fabric as VDR to provide a very powerful interface when working with DID's, issuing VCredentials or using smart contracts
Go 1 Apache-2.0 0 0 0 0 Updated 3 weeks ago
- intelligent-power-grid-use-case** Public
0 Apache-2.0 0 0 0 0 Updated 3 weeks ago



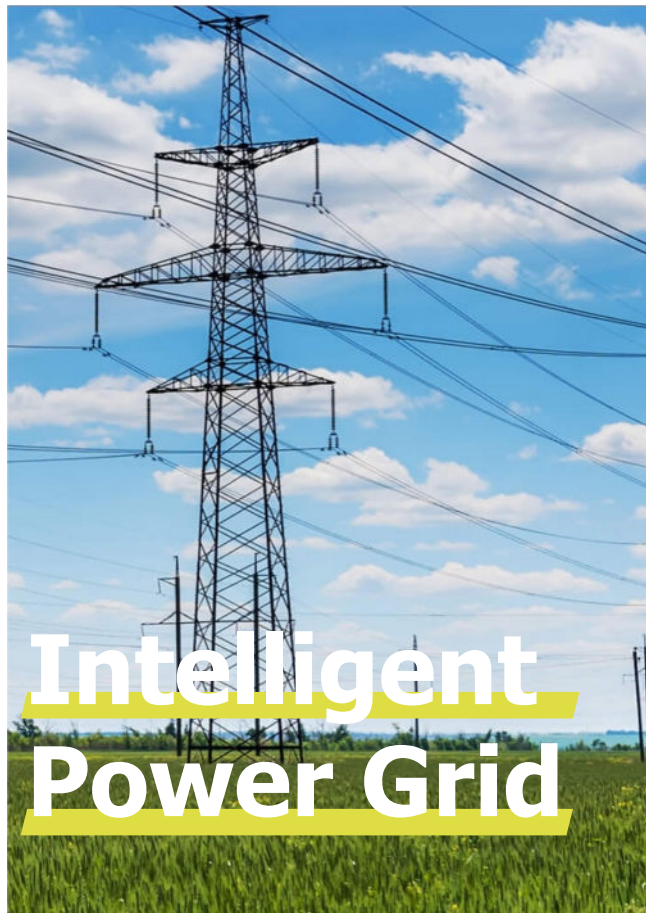
Use cases



Smart Viticulture

Seamless deployment of services
at device/edge/cloud level, with
reduced devops overhead

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Intelligent Power Grid

Increased resiliency and
survivability properties of critical
ICT services for smart grids



Robotics Logistic

Improved battery usage and
decreased hardware cost through
processing offloading





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