

Cloud Skin

Adaptive virtualization for Al-enabled Cloud-edge Continuum

PROJECT OBJECTIVES

- Deploying, lifecycle management and optimization of large-scale, real-life applications on the Cloud-edge continuum
- Breaking down execution silos from the edge to the cloud core
- Developing a high-performance infrastructure tailored to the short-lived, also bursty, execution of Cloud-edge tasks

I HOW DO WE DO IT?

- Developing an AI-enabled Learning plane for the smart and holistic orchestration of the continuum resources
- Building safe Cloud-edge cells: a universal container-like execution abstraction based on WebAssembly and TEEs

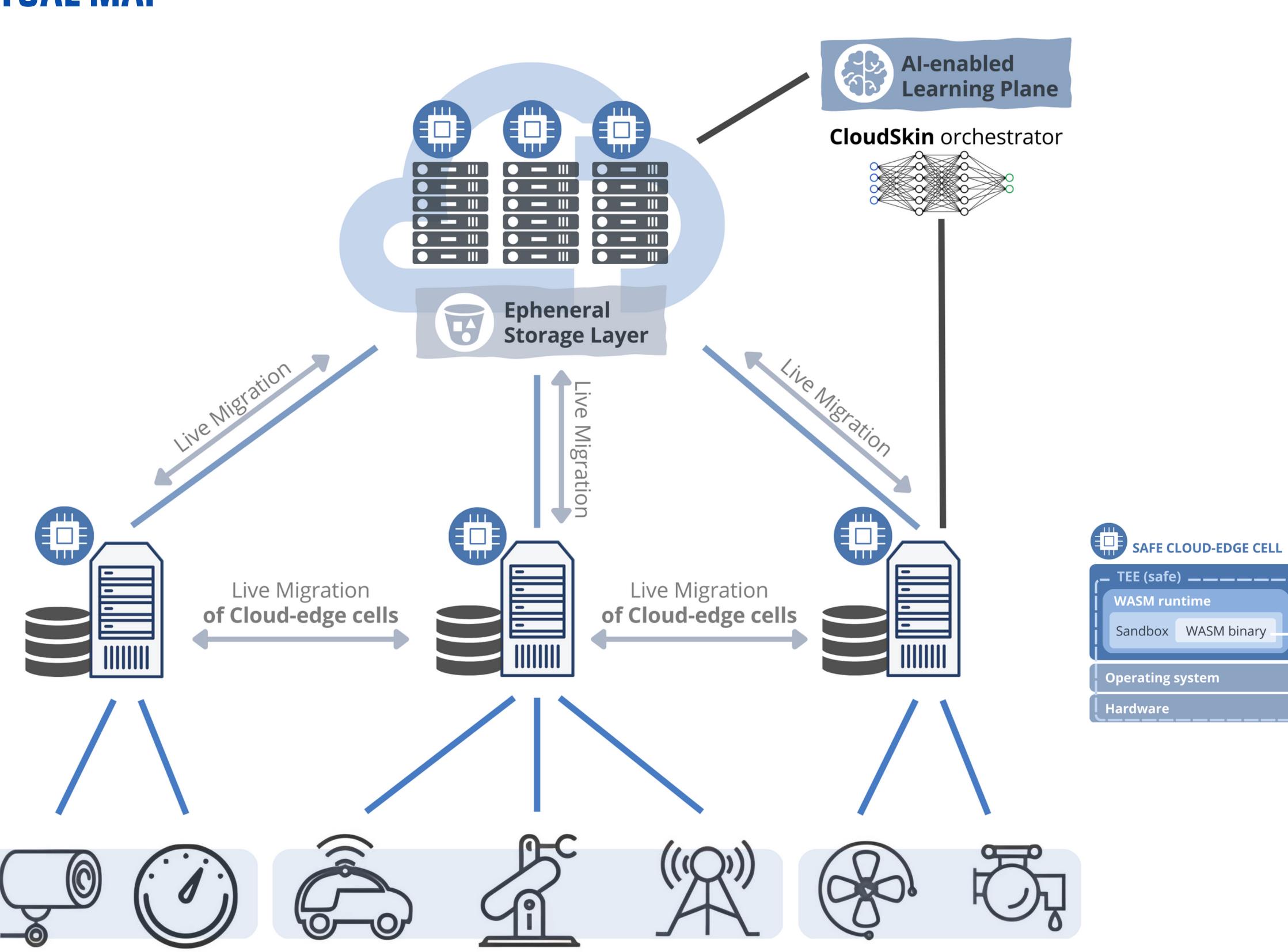
CloudSkin

WASM system

interface (WASI)

Developing new multi-tiered, elastic
ephemeral storage services

I CONCEPTUAL MAP





Edge orchestration and video analytics

Orchestration of edge apps with matching cloud performance and the creation of AI video-analytics



Metabolomics

Edge/on-premise batch analytics and reduction of cloud offloading for the METASPACE metabolite annotation platform



Surgery

Real-time edge video analytics with dynamic resource allocation and Private Deep & Federated Learning at the edge



Agriculture IoT

Dynamic cloud offloading to match detail level and creation of an IoT-based agriculture data space

I PARTNERS





















