GAPS, VISION & SOLUTIONS

The entire continuum starting from IoT devices and going to all the way to core cloud systems is not here yet!

How can we…

exploit IoT processing capabilities?

enable intelligent collaborative deployments?

Target

An open, secure, and trusted IoT-to-edge-to-cloud compute continuum framework

with ubiquitous infrastructure and service layer programmability

that will unleash the true potentials of edge intelligence

Security & Trust

Under the hood… The INCODE solution

1. **Infrastructure management layer (IML) ->** performs resource allocation/release & process scheduling across the entire IoT-to-edge-to-cloud continuum including microservices like:
   - Infrastructure manager controllers (Cloud, network, mobile, o-RAN, IoT)
     - Infrastructure drivers (Cloud, networks, mobile, o-RAN, IoT)
   - Core components (resource manager, scheduler, file system)
   - Security & Trust (auth. through BC, attestation, data & app provenance through BC)

2. **Applications and Business Programmability stratum (ABPS) ->** allow apps to run on the underlying HW in a HW-agnostic way including microservices like:
   - UI portal
   - RBAC
   - Runtime Orchestration
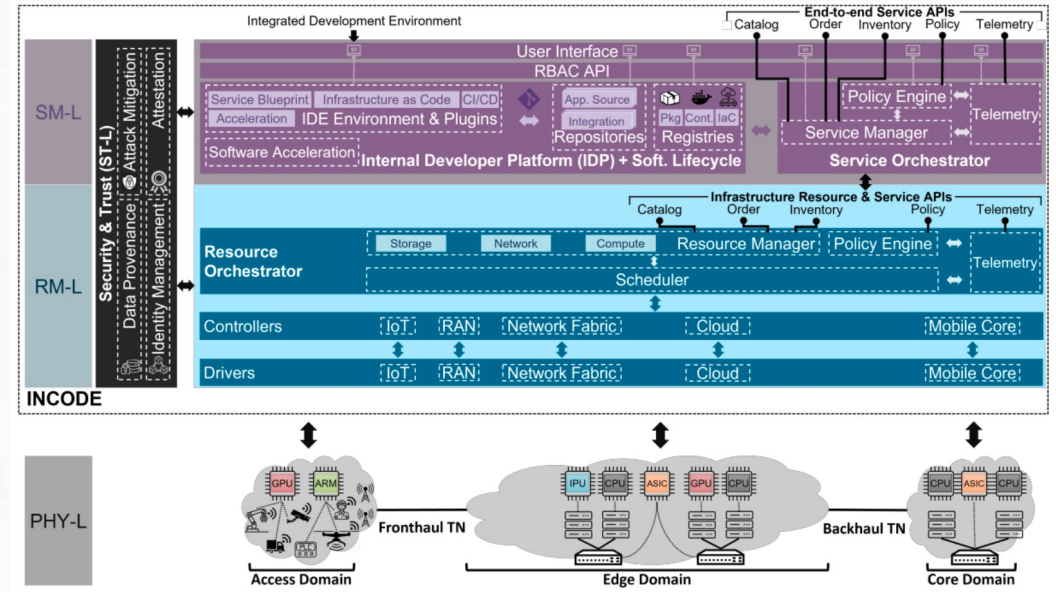   - Telemetry
   - Software Lifecycle

Scientific & Technology:

- Easy interconnection of multiple IoT platforms
- Creation of a common development framework for IoT drivers & controllers
- Enhanced trust & security
- New & custom applications for smart IoT-edge cross-industrial environments

Business & Social:

- New business opportunities for infrastructure providers & systems integrators
- Verticals benefited from new types of applications
  - Safety in working environment
  - Work quality & satisfaction increase
  - Goods quality through traceability
  - Advance community crisis management services

CREATE VALUE

INCODE use case Domains

Industry Worker safety

Utilities Surveillance inspection

Logistics Mobility

Agriculture

Smart Cities

e-Health

Other IoT domains

The team

uni.systems — Red Hat — NEC — FIWARE FOUNDATION — SIEMENS

ipto — MADE Competence Center I4.0 — UBITECH — Suite5 — iLINK

KEY — agentscape — axon logic — arῃs DEVELOPMENTS HELLAS — MARTEL innovate

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INCODE

THANK YOU FOR YOUR ATTENTION

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