Policy context: supporting cloud-to-edge infrastructure and services in Europe

Cloud computing is identified as a central piece of Europe's digital future, providing European businesses and public organisations the data processing capability required to support their digital transformation.

Trusted Cloud and Edge services across different domains, boosting their uptake in Europe with a strong customer-oriented focus.

Delivering on the objectives of its digital strategy, through the EU programmes such as the Digital Europe Programme and the Connecting Europe Facility (CEF), the European Commission is proposing actions for building essential capacities that will be achieved by co-investing with Member States in new high-end digital infrastructures and services, and by upgrading and consolidating available capacities at the EU and national level.

In this context, the European Commission has stepped up its effort supporting the deployment of the cloud-to-edge infrastructure and services to:
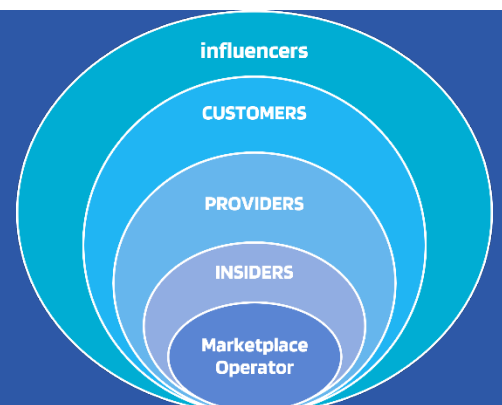
1. Improve the **availability of highly trustworthy, curated cloud and edge services** that serve the interests of crucial sectors dealing with sensitive data, such as the public sector.

2. Increase the **uptake cloud-to-edge services among public and private entities alike** and in vertical sectors that lag in cloud adoption, such as the European health sector.

3. Reinforce the **EU's open strategic autonomy**, ensuring that the digital transformation of the economy is undertaken based on secure, fair, inclusive, and resource-efficient infrastructures and services.

A Digital Europe Programme (DEP) project

DIGITAL-2021-CLOUD-AI-01

Keywords

- Digital Services & Platforms
- Cloud computing
- Cloud Services
- EU Cloud Marketplace
- Cloud federation

DOME - Distributed Open Marketplace for Cloud and Edge Services in Europe

Partners

DOME is coordinated by ENGINEERING INGEGNERIA INFORMATICA in collaboration with the FIWARE FOUNDATION as technical coordinator, and the partnership involves ACTIVE AGEING ASSOCIATION; AKADEMIA GORNICZO-HUTNICZA; BEIA CONSULT INTERNATIONAL; CLOUDFERRO; CONSORCIO RED ALASTRIA; CONSORZIO SISTEMA INFORMATIVO; DAWEX; DEKRA TESTING AND CERTIFICATION; DEMETRIX; DIGITANIMAL; E-GROUP ICT SOFTWARE; ELLIOT CLOUD; ETNA HITECH; EUROCRIME; EUROPEAN DYNAMICS; EXPERT.AI S.P.A.; FUNDINGBOX RESEARCH; FUTURE INTERNET CONSULTING; GOLEM; HASHNET; IDOM CONSULTING; IN 2 INGENIERIA DE LA INFORMACION; INNO-FOCUS; IONOS; LIBELIUM COMUNICACIONES; NICOS AKTIENGESELLSCHAFT; ORANGE; OUTSCALE ; PONS IP SA; PORTEL LOGISTIC; STICHTING ISHARE FOUNDATION; TEAMDEV; TECNALIA FUNDACION RESEARCH & INNOVATION; TIME.LEX; TORINO E PIEMONTE EXCHANGE; UBIWHERE.

With this aim, the first call of the Digital Europe Programme (DIGITAL-2021-CLOUD-AI-01) pressed for actions to deploy and operate a Marketplace for federated cloud-to-edge based services. The project DOME was selected and started in January 2023 with the following objectives, to be addressed by December 2025:

1. Deploy the **technical infrastructure of the marketplace platform**, with strong customer focus, user-friendliness, and inclusion and equality principles.
2. **Operate the platform** according to security, energy and resource efficiency, data protection, ethical standards and portability requirements.
3. Ensure the **integration of state-of-the-art identity and access management services** on the marketplace platform to support its operation.
4. Design a **curation/vetting process for services offered on the marketplace**, notably for sector-specific services in regulated sectors (e.g., health, energy, finance...).
5. Implement **interconnections with similar marketplaces and service catalogues** that already exist in some Member States.
6. Enable access, through a single EU portal, to an **online catalogue of existing cloud-to-edge based service offerings** that are **compliant with a pre-defined set of EU rules and requirements** available in the forthcoming **EU Cloud Rulebook.**
7. Implement a **service brokerage functionality** to enable transactions between providers and users to take place on the Marketplace.
8. Ensure a **vendor-neutral technical architecture** and reference framework.

Key assets: Sovereignty, trust and reputation

Satisfying the EU market requirements, the DOME service catalogue quality will ensure its reputation towards building a brand for trusted information, through governance mechanisms and trust-enhanced transactions, aligned with Gaia-X specifications.

DOME ensures unbiased competition and strict vendor neutrality in the positioning of services on the marketplace, offering same business opportunities to all players in a win-win model, being fair and open to all who comply with the rules and requirements in place.

This will empower European technology suppliers to develop new digital services and provide state of the art AI enhanced solutions to increase and optimise the productivity of public and private sectors.