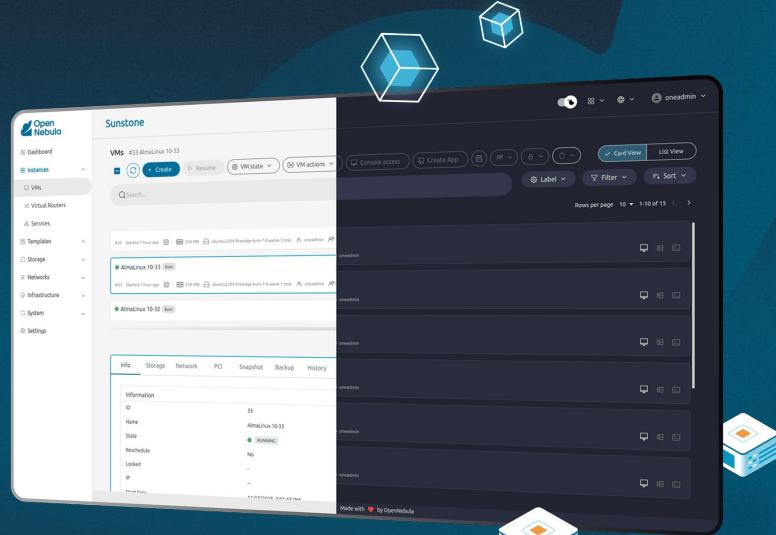




Europe's Open Source Cloud & Edge Computing Platform



OpenNebula.io

What is OpenNebula?



Your Sovereign Cloud & Edge Computing Platform

Workload Orchestration – App Management

- Streamlines application operations
- Container and VMs execution
- Isolation & multi-tenancy
- App portability & scaling



Kubernetes Clusters



Virtual Machines

System Containers (LXC)

Cloud and Virtualization – Infra Management

- Unified on-demand provisioning
- Automates K8s lifecycle
- Delivers hybrid & multi-tenant clouds
- Optimizes infrastructure usage

Virtual Infrastructure Management, Cloud Management Provisioning & Cloud Federation



Data center



Public cloud



Edge

Expanding to the Hybrid Cloud



Building a private cloud overlay using Public Cloud Resources

Any Application

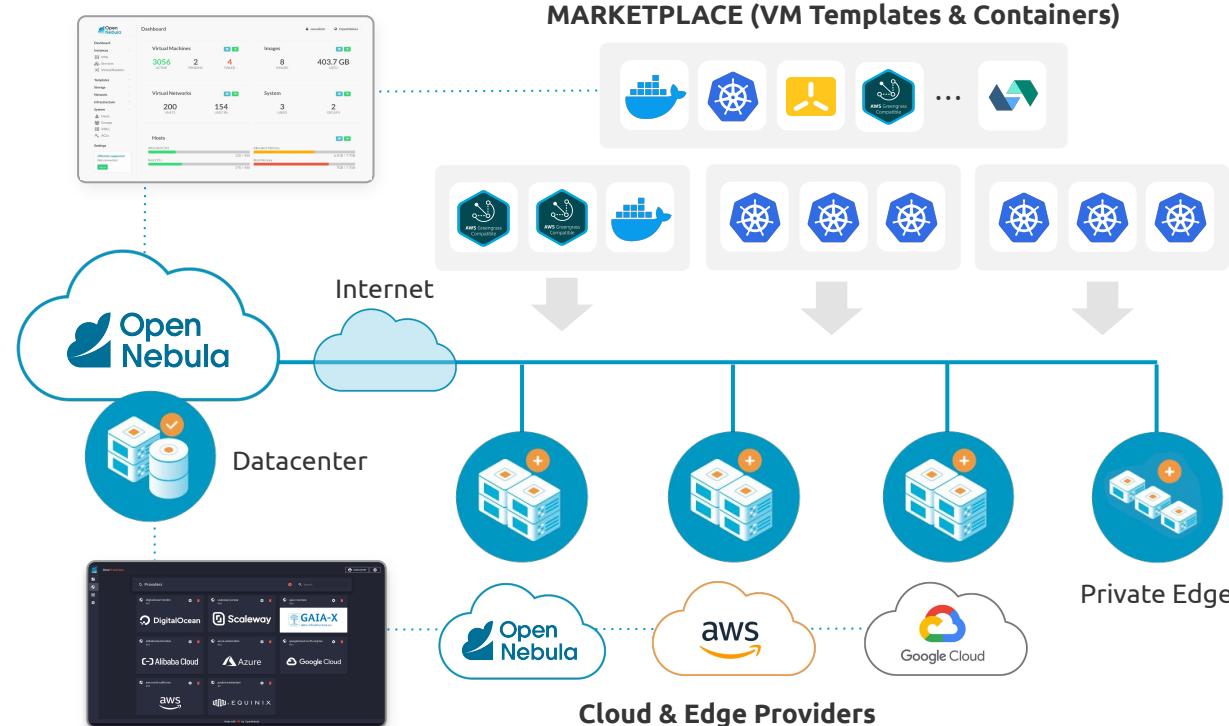
VMs, multi-VM services, containers, and K8s clusters on a shared environment.

Uniform Management

Homogeneous layer for user and workload management and operation.

Any Infrastructure

Automatic provision of resources from cloud providers.



Virtualization and Orchestration Layer

To manage distributed, multi-provider 6G testbeds



Sylva Project

Open source standard infrastructure for telco cloud to enable interoperability



5G Neutral Host

Enabling multiple wireless service providers to operate within the same 5G cell tower infrastructure



Distributed NFV

Deployment of Virtual Network Functions across a distributed cloud-edge infrastructure



Virtualized RAN

Cloud-based approach to deploying radio network functions (RNFs)



AI/RAN

Accelerated 5G vRAN and AI inference infrastructure with multitenancy for each customer



Prepare for 6G

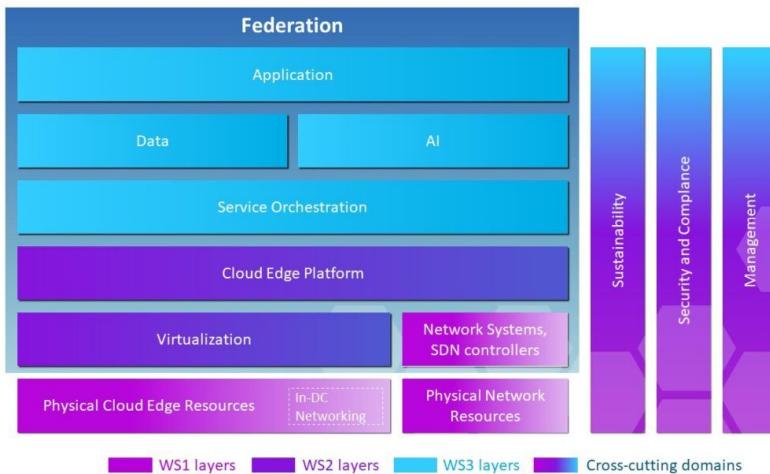
Experiment with future 6G networks and innovative applications

The €3B IPCEI Cloud

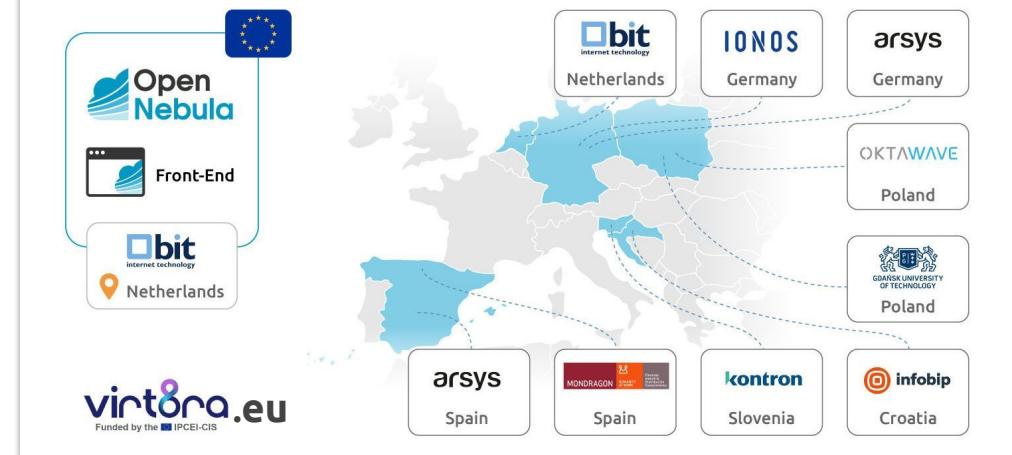
OpenNebula is at the core of Europe's main initiative to regain cloud sovereignty



IPCEI-CIS Reference Architecture



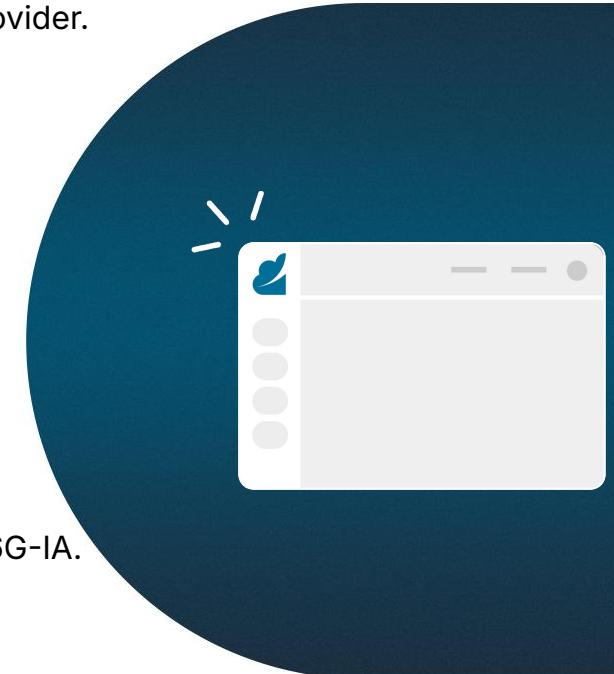
The EU Tech Industry Joins Forces to Launch the First **Sovereign Edge Cloud for Europe**



OpenNebula Systems

Sovereign Cloud-Edge Orchestration & Federated AI Infrastructure

- **Type of organisation:** Private company (SME) > EU open source tech provider.
- **Country:** Spain > Madrid
- **Keywords:** Cloud & Edge Computing; AI-enabled Orchestration.
- **Main value:** Alignment with the IPCEI Cloud through the integration with OpenNebula.
- **Relevant calls:** STREAM-C-01 SNS experimental infrastructure; STREAM-B-01 Collection, Generation and Validation of Datasets suitable for training AI Models for 6G Networks and for AlaaS
- **Relevant experience:** Core developers of the OpenNebula software; Unique combination of top R&D skills; Long experience in EU projects (Call 1 STREAM-C 6G-SANDBOX); Coordinators of HE Project COGNIT.
- **Key Roles:** Chair of the IPCEI-CIS; Chair the Cloud/Edge Working Group (EU Cloud Alliance); Sylva Validation Platform; Members of ETSI OSM & 6G-IA.
- **Email:** innovation@opennebula.io
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Thank You!

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