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

The new virt8ra infrastructure, run by European open source technology, is the first tangible result of industrial collaboration sponsored by €3B IPCEI Cloud.

MADRID, SPAIN, January 20, 2025 /EINPresswire.com/ -- A group of eight European tech organisations (Arsys, BIT, Gdańsk University of Technology, Infobip, IONOS, Kontron, MONDRAGON Corporation, and Oktawave)—coordinated by

virt8ra, the IPCEI-CIS software stack for virtualization

OpenNebula Systems—has launched virt8ra, the first sovereign edge cloud in Europe. This innovative infrastructure, aimed at providing portability and interoperability across multiple cloud providers, offers computing and storage resources in six EU member states (Croatia, Germany, the Netherlands, Poland, Slovenia, and Spain).

> I'm proud to see the EU industry finally taking the lead in developing strategic open source technologies and delivering tangible solutions for creating sovereign digital infrastructure across Europe."
>
> *Dr. Alberto P. Martí, Chair of the IPCEI-CIS Industry Facilitation Group*

This unique collaboration has taken place in the context of the Important Project of Common European Interest on Next Generation Cloud Infrastructure and Services (IPCEI-CIS), approved by the European Commission in December 2023 and supported by 12 EU Member States. As part of the virt8ra integration cluster, more than 30 European companies are defining an open source software stack for virtualization able to offer a "made in Europe" vendor-neutral solution for managing the cloud-edge continuum. The IPCEI Cloud, funded with more than €3B, represents the largest open source project in the history of the EU.

The virt8ra infrastructure is the first step towards building a European alternative for the deployment of next-generation use cases demanding ultra-low-latency (e.g. smart trains, remote surgery, connected vehicles, smart factories, and wildfire management) on top of a computing continuum ranging

from 5G cell towers to cloud providers and data centers. The open source technologies behind virt8ra will help EU businesses and public organizations strengthen their digital sovereignty and reduce their current dependence on hyperscalers and Big Tech vendors.

The current version of the virt8ra infrastructure already supports a number of unique features, including interoperability—managing physical resources, virtual machines, and Kubernetes clusters through a single control plane—and portability—allowing applications to be easily deployed, executed, and migrated across different locations and cloud providers. This infrastructure will incorporate more locations and new advanced features in order to meet the evolving needs of the cloud market, including the deployment of distributed AI applications at the edge.

In order to ensure a competitive market in the EU, customers of data processing and AI services should be able to switch seamlessly from one cloud or edge provider to another. However, nowadays customers still face significant barriers imposed by dominant players, including high data egress fees, complex migration procedures, and a lack of interoperability between cloud providers. In line with the EU Data Act, which will become applicable in September 2025, the virt8ra initiative will provide the open source technological stack that enables the smooth switching between data processing services.

What virt8ra Partners Say

"The virt8ra testbed represents a turning point in the way in which EU tech champions are coming together to fix the cloud market. We are finally building a sovereign cloud-edge continuum based on vendor neutrality and European open source. Through the ONEnextgen project, we are turning OpenNebula into the most powerful virtualization platform in the market," said Ignacio M. Llorente, CEO of OpenNebula Systems and Chair of the Cloud-Edge WG of the EU Cloud Alliance.

"The virt8ra testbed is our first step at Arsys towards the development of the meta-orchestration software that will enable a multi-vendor solution from technology providers across Europe. It is also the kick-off for future cloud-edge continuum solutions that will boost the European data economy, digital sovereignty, and competitiveness," said Miguel Martínez Vélez, Chief Product Officer at Arsys.

"BIT is providing resources to the virt8ra infrastructure while also being a partner in ECOFED, an IPCEI-CIS project aimed at creating a federated European cloud. BIT hopes to use the testbed in the future to test ECOFED solutions and collaborate further with other IPCEI-CIS projects," said Cristiaan Brans, Project Leader at BIT.

"The cooperation with European partners is being undertaken by the Gdańsk University of Technology under project CAISE (Cloud Artificial Intelligence Service Engineering), which will provide high quality, efficient and portable cloud services for researchers and SMEs to develop

innovatiive AI services," said Piotr Orzechowski, Deputy Director for Development at the TASK Informatics Center.

"Through its IONORA project, IONOS is contributing to the virt8ra testbed by providing bare-metal servers located in our German Data Centers. We will deepen our collaboration by incorporating advanced features enabling the automatic provisioning and shifting of VMs. This aligns with IONORA's goal of extending IONOS Cloud's scalability, agility, and automation to meet growing industry demands," said Alina Rubina, Senior Project Manager at IONOS.

"Kontron is excited to be the first Slovenian partner providing cloud resources to the virt8ra infrastructure. Through this collaboration, we are contributing to strengthening Europe's digital sovereignty and driving innovation across the continent. This distributed environment will enable further research and development on a cloud continuum made of heterogeneous, country-oriented clouds," said Jože Orehar, Head of the Cloud Platform Department at Kontron.

"Through its R&D center IKERLAN, the MONDRAGON Corporation is actively contributing to the virt8ra testbed by providing infrastructure resources in the Basque Country. This collaboration under our AASDS-IND project addresses the challenges in the cloud and edge computing domain for enabling advanced distributed and standardized data spaces in the manufacturing and automotive sector," said Michel Iñigo Ulloa, Senior Innovation & Technology Manager at MONDRAGON.

"Oktawave's contribution to virt8ra is based on the development of components highly connected to data security, including Confidential Computing and data access management. We are also proud to be engaged in providing computing power and data space for intra IPCEI-CIS development of virt8ra components, which will work across the whole EU," said Paweł Masłowski, Chief Innovation Officer at Oktawave.

About OpenNebula Systems

OpenNebula Systems develops the open source cloud and edge computing platform OpenNebula, supports its Community, and provides SLA-based support, enterprise tools, consulting, and managed cloud services. OpenNebula Systems has a global presence, with offices in Spain, Belgium, Czech Republic, and the US.

The virt8ra initiative is supported by the Spanish Ministry for Digital Transformation and Civil Service through OpenNebula Systems' ONEnextgen project (UNICO IPCEI-2023-003), and co-funded by the European Union's NextGenerationEU through the RRF.

Check virt8ra.eu for more information.

Anastasiia Rachkova
OpenNebula Systems

press@opennebula.io

This press release can be viewed online at: https://www.einpresswire.com/article/777832788