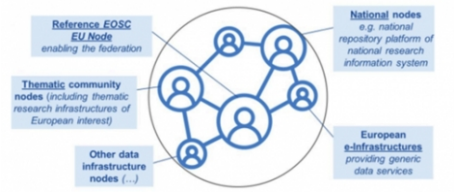
Concept Paper "EOSC Federation: Architecture and Federating Capabilities"

The **European Open Science Cloud (EOSC)** at its core was a catalogue of ?research products?, such as datasets relating to various disciplines, and ?services?, such as EGI Check-in and EGI DataHub, used in EUreka3D to operate its suite of services and tools dedicated to cultural heritage institutions who need to store, safely access, manage and share collections of 3D cultural heritage.



The EOSC landscape has changed dramatically in the last year, due to a process of redesign initiated by the European Commission. The EOSC Portal, which is where researchers could find services onboarded to EOSC, is no longer available, and has been replaced by the EOSC Federation of Nodes. The EOSC Federation is re-developed in the form of multiple EOSC Nodes that are interconnected and can collaborate to share and manage scientific data, knowledge, and resources within and across thematic and geographical research communities.

Project **EOSC Beyond,** with which a collaboration has been established for the integration of EUreka3D services and tools, published a concept paper which describes fundamental concepts to enable the Federation of EOSC Nodes, especially technical aspects, and defines key terms. It presents the EOSC Federation Architecture and introduces the concepts of EOSC Federating Capabilities describing how the Nodes of the Federation should interact to deliver them jointly. It also details how to develop a network of Nodes that can deliver services and resources to European researchers collaboratively.

ACCESS PAPER ON ZENODO>>> EOSC Federation: Architecture and Federating Capabilities], authored by Diego Scardaci (EGI Foundation), Mark Dietrich (EGI Foundation), and Paolo Manghi (OpenAIRE) on behalf of the EOSC Beyond Technical Coordination Board

Community feedback: To enhance and fine-tune the paper, we are also launching a survey to gather community feedback. The survey is available until 29 November 2024, and an updated version of the document will be presented by Q2 2025. Researchers, service providers, and stakeholders are invited to participate and contribute to shaping the future of EOSC.