

## SCALUS: SCALing by means of Ubiquitous Storage

### Description

Storage research increasingly gains importance based on the tremendous need for storage capacity and I/O performance. Over the past years, several trends have considerably changed the design of storage systems, starting from new storage media over the widespread use of storage area networks, up to grid and cloud storage concepts. Furthermore, to achieve cost efficiency, storage systems are increasingly assembled from commodity components. Thus, we are in the middle of an evolution towards a new storage architecture made of many decentralized commodity components with increased processing and communication capabilities, which requires the introduction of new concepts to benefit from the resulting architectural opportunities.

The consortium of this Marie Curie Initial Training Network (MCITN) “SCALing by means of Ubiquitous Storage (SCALUS)” aims at elevating education, research, and development inside this exciting area with a focus on cluster, grid, and cloud storage. SCALUS consortium involves 12 full partners (10 from academia and 2 industry partners) and 5 associated partners.

The vision of this MCITN is to deliver the foundation for ubiquitous storage systems, which can be scaled in arbitrary directions (capacity, performance, distance, security).

Providing ubiquitous storage will become a major demand for future IT systems and leadership in this area can have significant impact on European competitiveness in IT technology. To get this leadership, it is necessary to invest into storage education and research and to bridge the current gap between local storage, cluster storage, grid storage, and cloud storage. The consortium will proceed into the direction by building the first interdisciplinary teaching and research network on storage issues. It consists of top European institutes and companies in storage and cluster technology, building a demanding but rewarding interdisciplinary environment for young researchers.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

---

**Source URL (retrieved on 4 mai 2025 - 20:29):** <https://www.bsc.es/ca/research-and-development/projects/scalus-scaling-means-ubiquitous-storage>