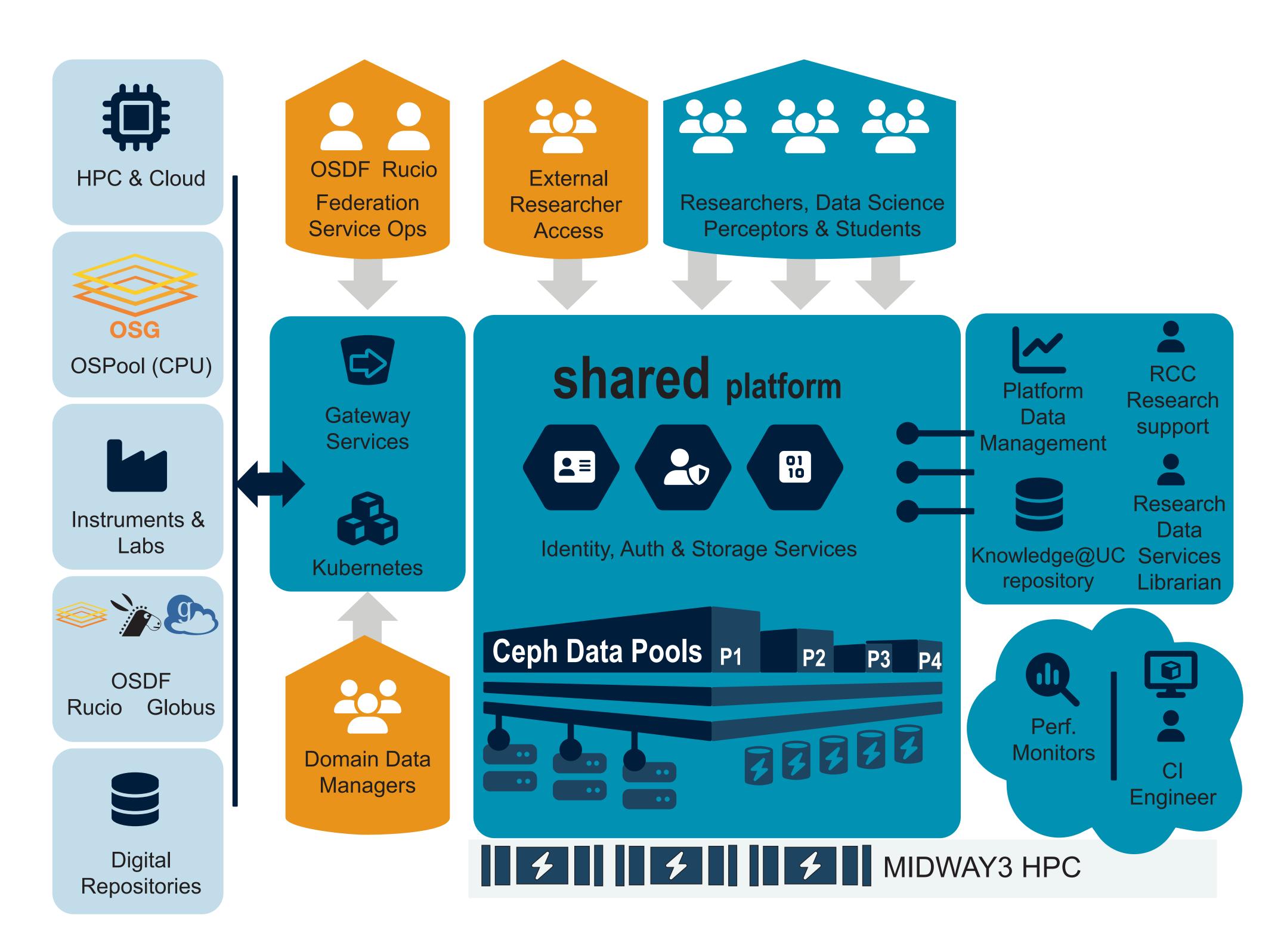


SHARED: Secure Hub for Access, Reliability, and Exchange of Data

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Federation Sources SHARED OSDF Rucio System Components **UChicago Science DMZ Kubernetes Layer for Gateway Services Deployment Local Access** Midway3 HPC Environment Interconnect **Shared Volumes** Knowledge@UChicago Ceph Storage Cluster

A partnership between the Library, Physical Sciences Division and the Research Computing Center to address research data storage needs and connect data storage to the repository.

Challenges

- Researchers creating their own solutions data storage solutions that may not be secure and don't enable preservation
- Lack of interoperability hinders interdisciplinary research
- Lack of workflows for from shared data storage to repository

Deliverables

- Procure, install and deploy 4.6 PB of storage.
- Integrate with UChicago's institutional repository in a FAIR way.
- Contribute 20% of storage to the Partnership to Advance Throughput Computing (PATh).
- Enable data science education through partnerships around curated datasets for minority-serving and K-12 institutions.

Impact

- SHARED supports data-intensive research across a range of disciplines, including cosmology, particle physics, linguistics, and psychology. It preserves neural and linguistic data, to enhance our understanding of cognitive processes and language diversity.
- SHARED provides robust infrastructure for data preservation and sharing for data-intensive research and helps maintain scientific records
- SHARED contributes to preparing the next generation of researchers with data science skills.

https://shared.rcc.uchicago.edu/

