From an idea to the implementation of a local data storage solution at Stockholm University

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Focus on Open Science 2021-06-18

Stockholms universitet

Our ambitions

"…Stockholm University should be a driving force in national and regional collaboration on infrastructure issues and offer a suitable, high-quality infrastructure. In addition, **the University should be a driving force in the transition to Open Science, both open access to publications and open research data***."* Strategies for Stockholm University 2019-2022

**Our ambition
is to make
research data from
Stockholm University
available according to
the FAIR principles**

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Background

- New demands regarding Research Data Management
  not only for the researchers, but also for the Universities

- Upskill the University to new levels of commitment,
  responsibility and support

- Preparedness for a local infrastructure at the University
  to meet and support today´s level of RDM demands

  Storage of data a big challenge and a scattered landscape

- Difference between researcher needs and University needs

- Descentralised University – different, individual solutions
  for storing and sharing data, not all of them good ones

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From an idea to a service

- The University library - a leading role in promoting, developing and coordinating the central services for RDM in collaboration with other stakeholders within and outside of the University

- No lengthy investigations before project begun, but discussions and involvement from relevant stakeholders with different perspectives

- Stockholm University, Sunet (Swedish University Computer Network) and SND (Swedish National Data Service) started a small storage/repository pilot in 2019

- In December 2020 Stockholm University could as one of the first pilot universities onboard Sunets national federated storage solution

- Still under development and improvement

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Strategies for storage

- Build an infrastructure for RDM management in line with the overall ambitions for the FAIR principles

- Deliver IT-services that are in demand and used based on the users' needs

- Better dialogue and involvement from researcher representatives in new IT management organization and structure

- Match and align the IT infrastructure, IT security and legal requirements

- Involve IT architects at an early stage to ensure more harmonization

- Develop comprehensive IT-strategies

- Optimize infrastructure with storage solutions that will enable scalability, reliability, performance, availability, affordability and manageability

- Offer the right storage for the right storage need

- "Follow your data as a researcher and own your data as an institution"

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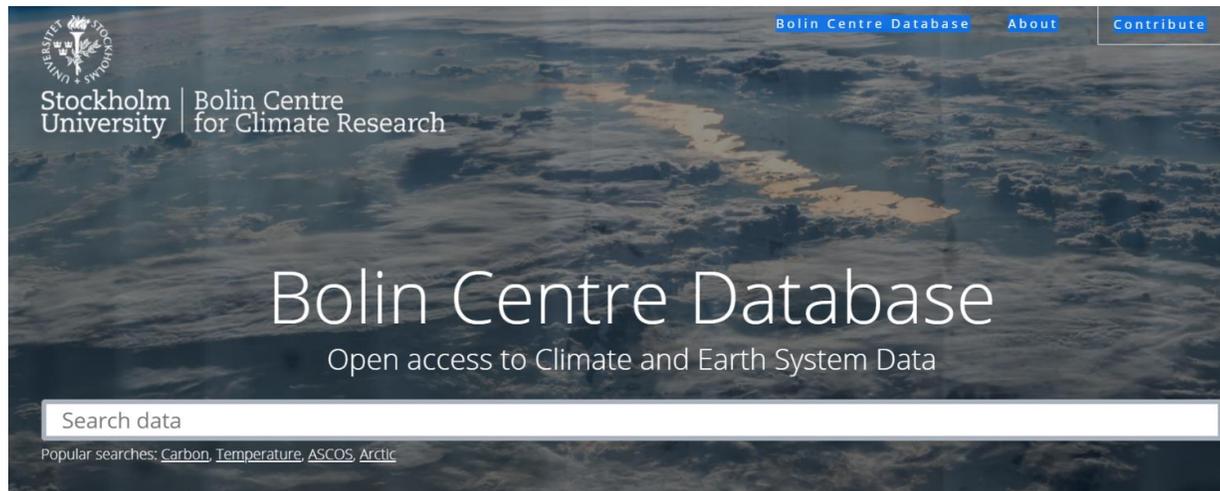
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Sunet Drive at Stockholm University

- Sunet drive - a federated private cloud storage solution hosted by Sunet, interface by Nextcloud

- Storage solution is financed by the University Library

- A storage node with 2 petabytes was placed at SU in December 2020

- Researchers (spring 2021) automatically allocated a free storage space of 200 Gigabyte, extra storage can be ordered

- Local administration managed by the University Library in collaboration with IT-department and Sunet

- The solution offers the opportunity to both share and control access to data within and outside the University

- One of various storage solutions at SU

- Work in progress at Sunet to develop Sunet Drive and scalable solutions

Gino Crescoli Pixabay
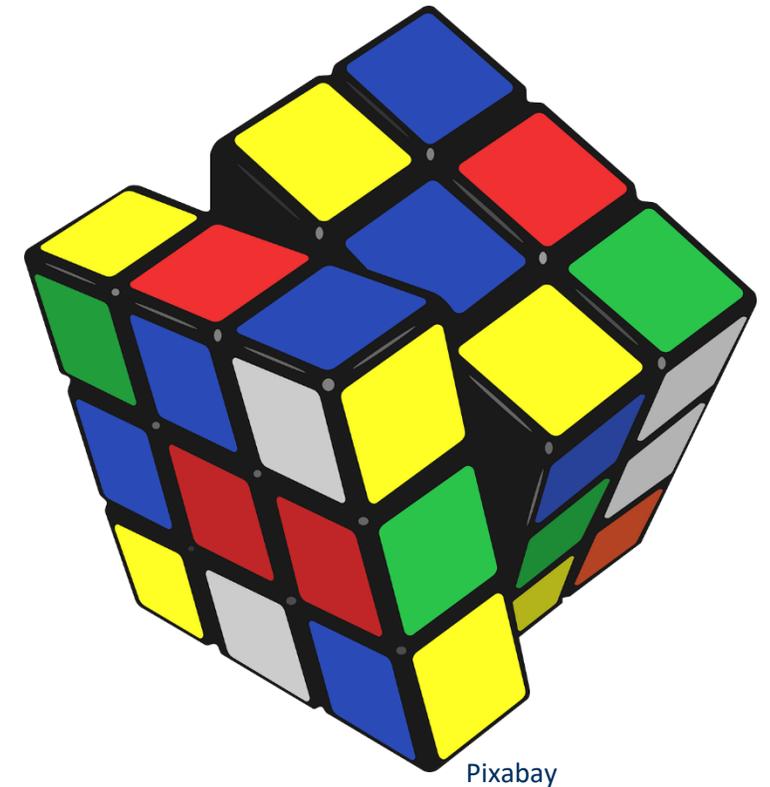
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Bolin center for Climate Research

- Bolincentret is Sweden's largest climate research environment
  A repository for research data produced by the center's researchers since 2008

- Migration of data from external storage location to SU storage solution June 2021

- Direct collaboration with SU's central research data team, IT support and in the future also the e-archive

- Facilitate continued development in collaboration with SU's central RDM organization

- Ensure that research data from climate research at SU is stored securely and made available for a long time to come

Work in progress

- Work in progress! First steps taken, more work to come

- Improve work processes and University`s instructions for managing research data

- Waiting for successful integration of metadata - SND repository and Sunet Drive

- Develop integration SU Sunet Drive with the upcoming e-archive

- Continue to develop support for automated workflows for data management

- Evaluate user experiences of storage needs

- Connect storage areas with digital systems for DMP and ELN

- Develop an infrastructure that can join the EOSC ecosystem

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