CO_2 Data Storage Consortium

Sharing reference datasets from CO_2 storage projects

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Summary

CO_2 DataShare aims to be an international platform for sharing CO_2 storage datasets. Its goal is to promote R&D of new technology based on experience gained from demonstration and industrial projects, thereby accelerating the deployment of CCS. Objectives are:

- Lowering the threshold for data owners to share with the CCS community
- Make it easy to find, access and use well-documented datasets online
- Curate and prepare a limited number of high-quality reference datasets
- Stimulate sharing of results and promote networking

The initiative is currently a collaboration between US and Norwegian stakeholders, but aims to be an open international network that includes private and public actors. The first version of the digial portal is expected to be ready by mid-2019.

Intended benefits

Benefits to data providers:

- Insights and feedback from having others use the data
- Visibility or promotional opportunities, including academic citations
- Reduced cost of data preparation and sharing

Benefits to data users:

- Ability to easily discover, access and cite well-documented datasets
- Documentation to make data easy to understand and use
- Clear terms of use

Benefits to society:

- Support reproducible research
- Boost research and development into CO_2 storage.

The Digital Platform

A permanent online data repository will be set up to facilitate publication, discovery and access to the shared datasets. It will allow users to search for specific types of data or projects, filter on data formats, or look up associated publications. Each dataset has an assigned web page (landing page) to provide an overview and detailed description of the dataset contents.

As a general rule, datasets can be directly downloaded from the portal, in part or in full, under an open license. In some cases, the data owner may have additional restrictions on data access, or an embargo period may be defined after which data becomes freely accessible.

The digital portal is built upon the well-established open-source CKAN software solution (`https://ckan.org`), adapted to the specific needs of the project.
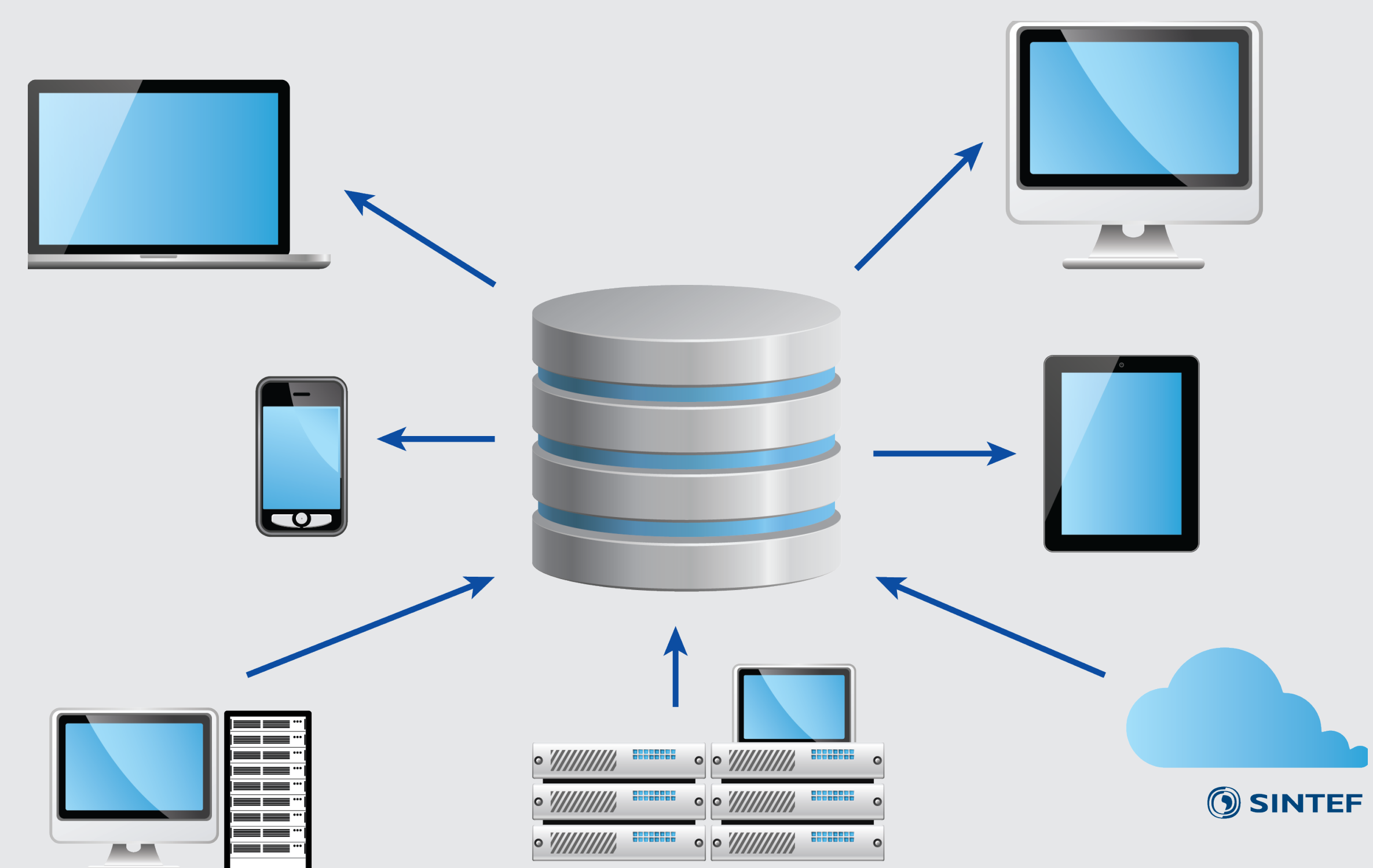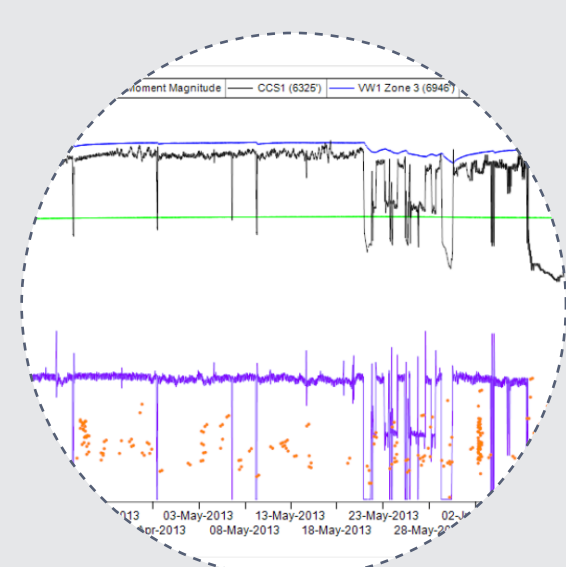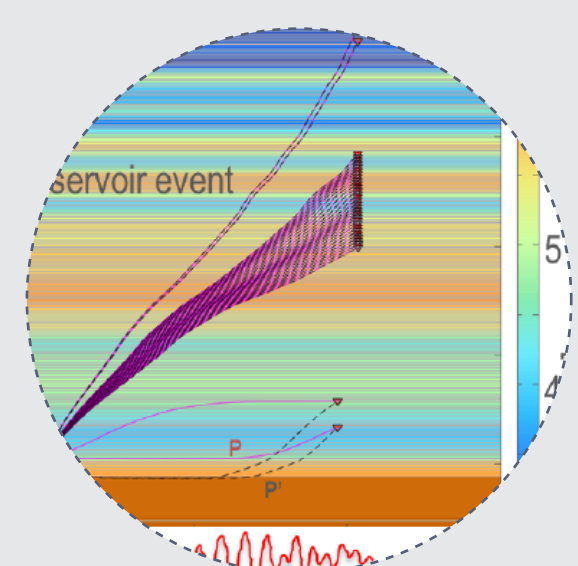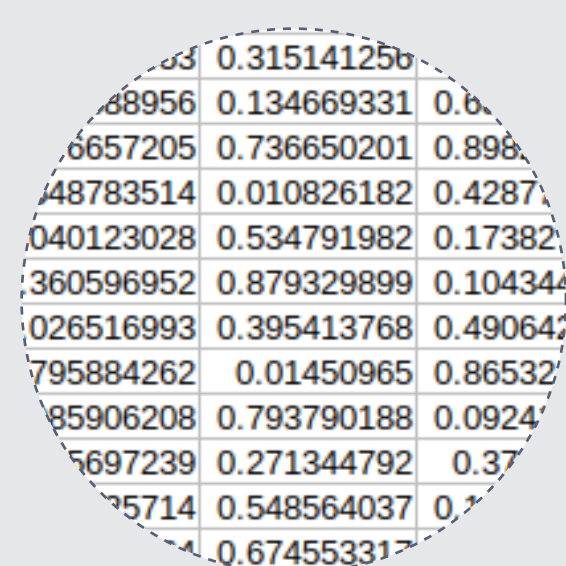

Reference Datasets

simulation models
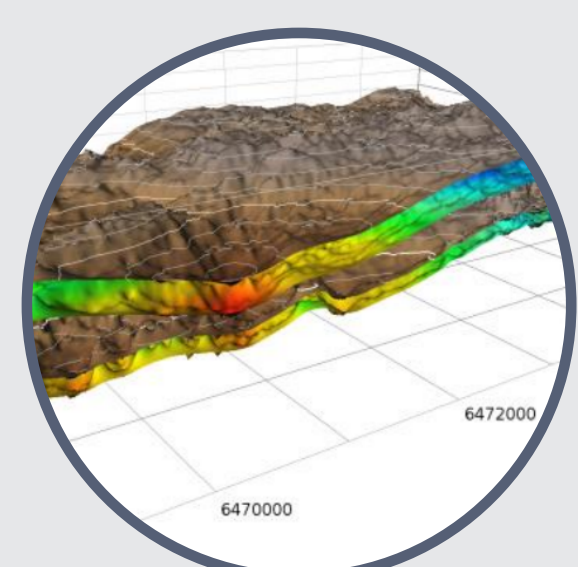
well data

seismic measurements

and other data

CO_2 DataShare seeks to collect and disseminate high quality datsets related to CO_2 storage, meaning that the data has been generated at some stage (from planning to execution) in the process of a commercial or research-oriented CO_2 storage activity. As such the scope is fairly broad, and datasets may include operational data, monitoring data, modeling data, simulated data and so on.

The focus of CO_2 DataShare is to provide a limited number of hand-picked, well-documented and high quality *reference datasets*, individually selected, prepared and uploaded to the online portal in cooperation with the dataset owner.

A reference dataset is a dataset that has been acknowledged by the consortium to be of high quality and relevance for a larger community of researchers. It should be well documented to avoid misuse, and with identified and explained terms of use.