

A Secure B2SHARE

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Sensitive data is defined as any information that is protected against unwarranted disclosure.

Protection of data may be required for legal or ethical reasons, for issues pertaining to personal privacy, or for proprietary considerations.

- **Human data: e.g. health, genetic and personal information, data that may identify a person**
- **Ecological data: e.g. location of endangered species or other conservation effort**
- **Confidential data: e.g. trade secrets**
- **Data that is otherwise deemed sensitive**



SecureB2SHARE is a framework actively been developed, evaluated and started during EOSC-Hub by;

- **Sigma2 / University of Oslo in Norway**
- **CSC – IT Center for Science in Finland**
- **Based on EUDAT B2SHARE service**
 - **With the addition of sensitive data specific changes and functionality**
 - **Allows storing, describing and sharing sensitive datasets**
 - **Controlling access to the datasets without jeopardizing privacy or security**

What is SecureB2SHARE

Challenge: provide the sensitive data resources without violating privacy, yet maintaining FAIR principles in a user-friendly way.

Metadata stored in B2SHARE.

Sensitive data stored in access restricted secure storage.

Data access either inside secure environment or through file API.
(implementation specific policy decision)

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Pilot instance at UiO, Norway.

Work-in-progress instance at CSC, Finland.



ICT Solutions for
Brilliant Minds

UNINETT

figma2



UiO : **University of Oslo**



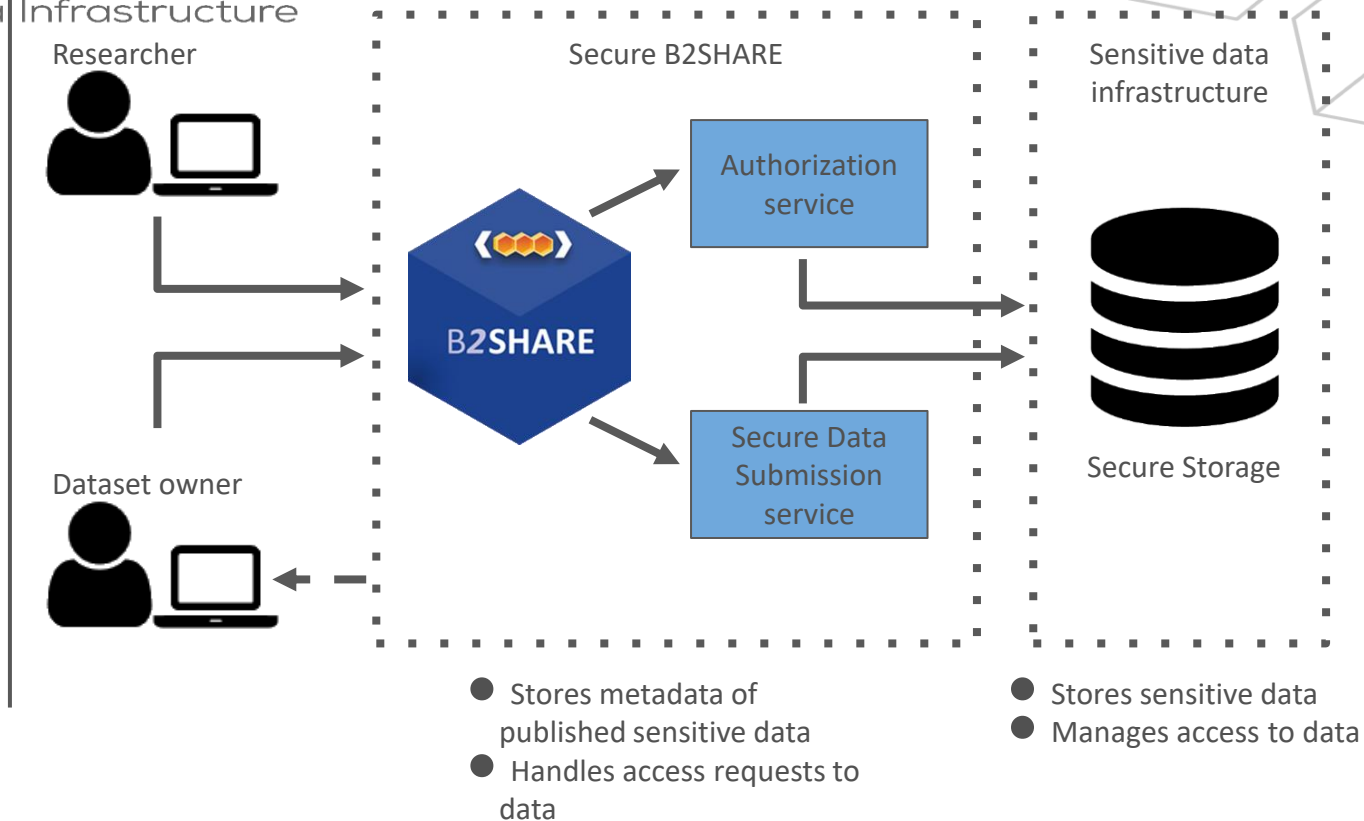
Development effort is maintaining a shallow fork of EUDAT B2SHARE where;

- **B2SHARE is acting as user-friendly metadata browser**
- **File upload functionality is removed**
- **Records are pointing towards an access request interface**

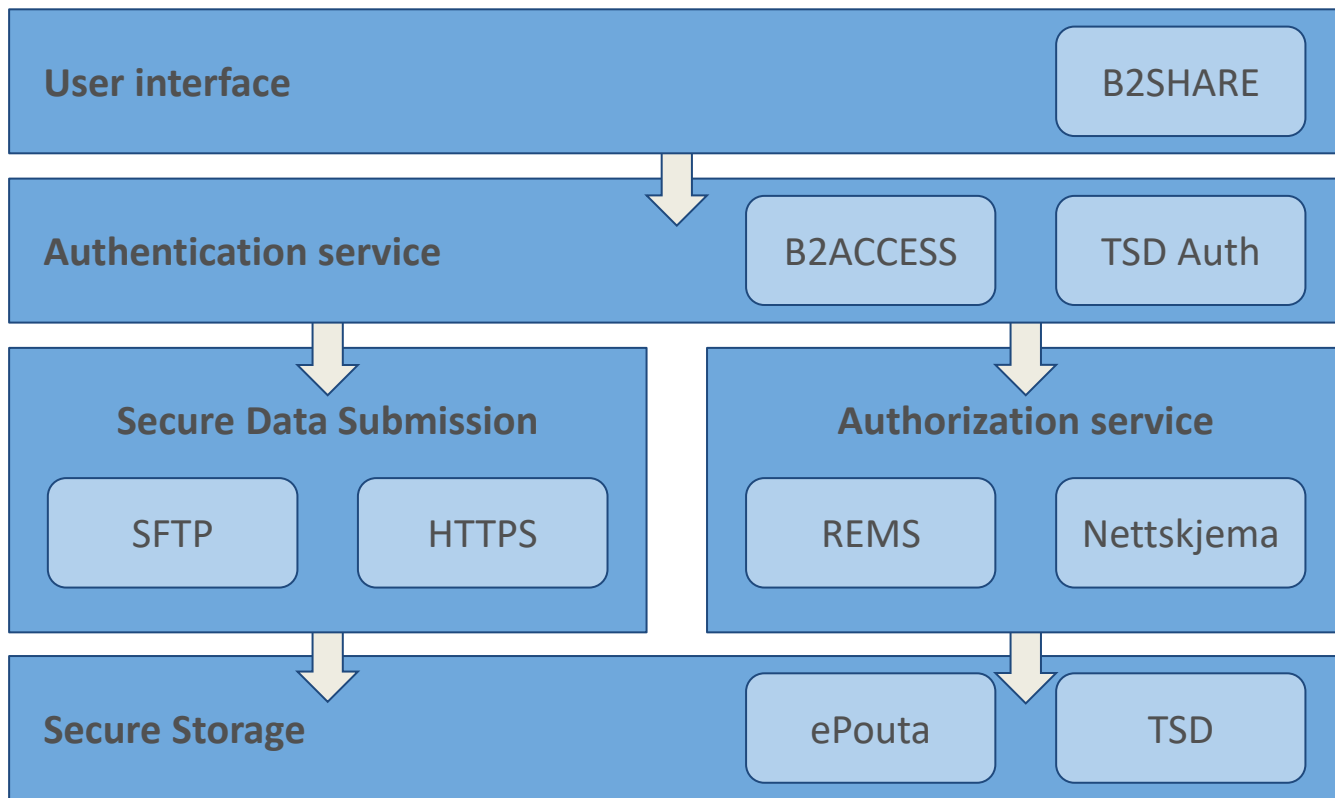
SecureB2SHARE interaction model

- Discover datasets
- View dataset metadata
- Request access to dataset

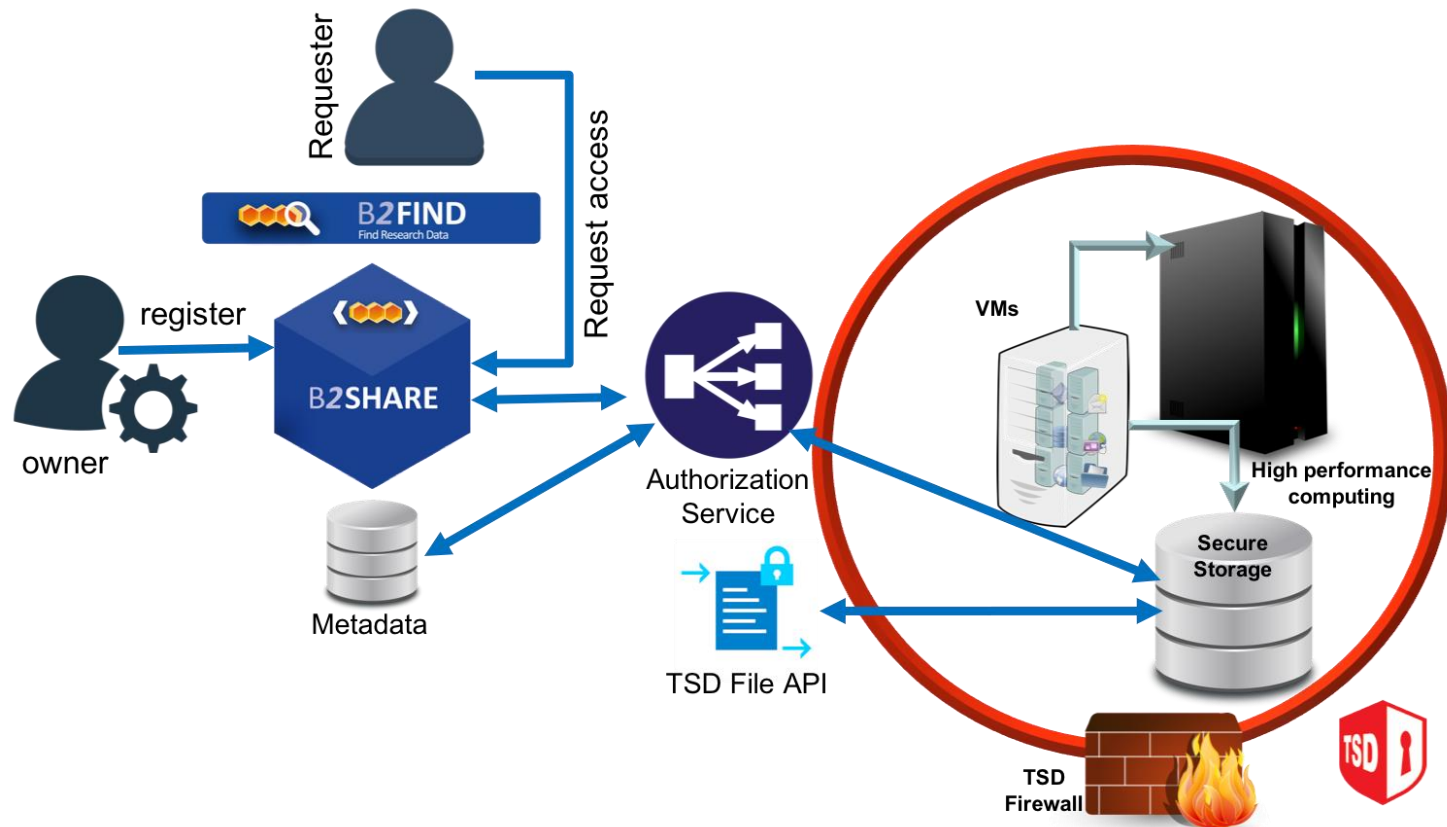
- Submit datasets
- Describe dataset metadata
- Authorize access to datasets



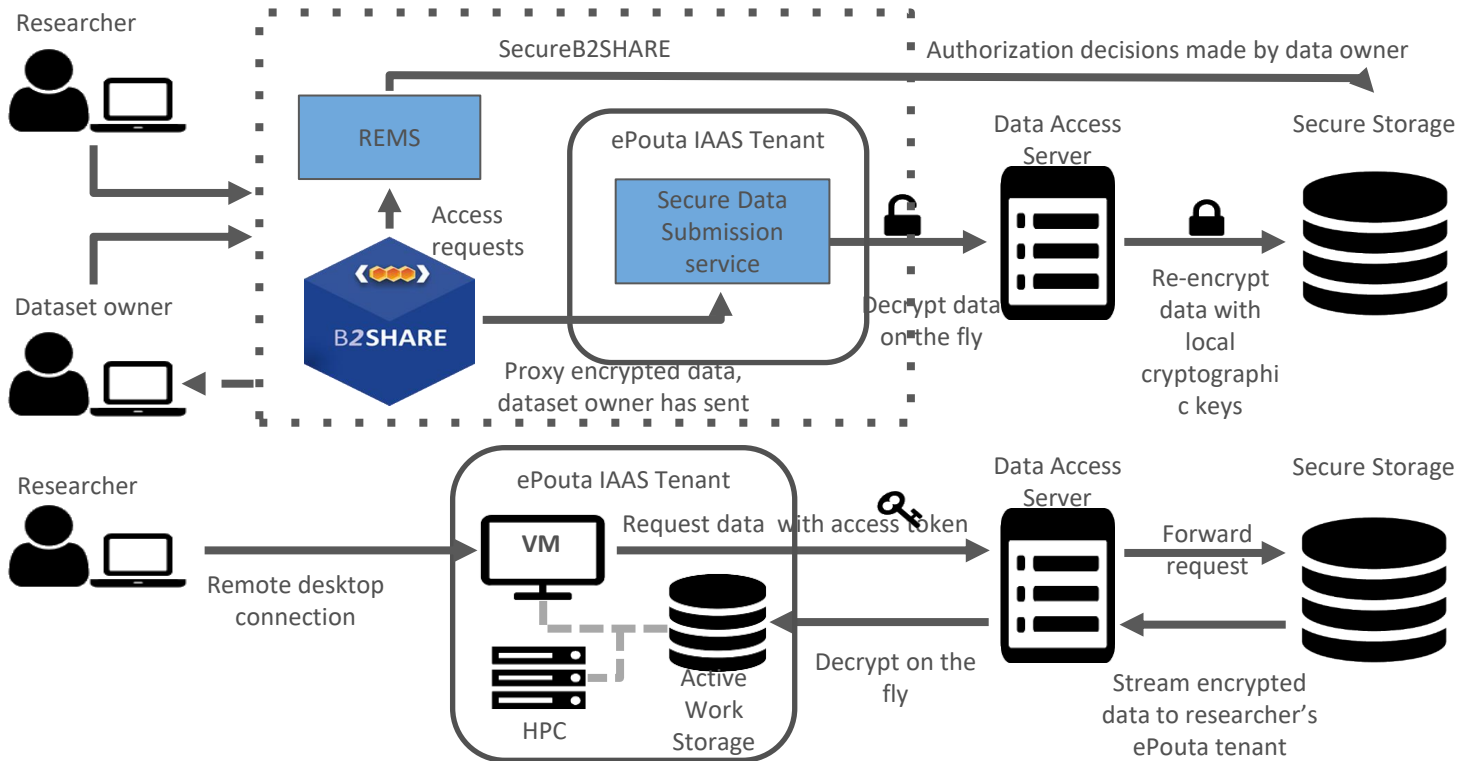
SecureB2SHARE layered architecture diagram



Data registration / access model of SecureB2SHARE in TSD



SecureB2SHARE implementation on CSC's sensitive data infrastructure



Conclusions



- Secure B2SHARE is a framework still under active development. In it's current state, it should be considered to be a concept.
- Concrete implementations requires customization and possible (re-)implementation of SDS and AS components.
- CSC and TSD are developing and evaluating how Secure B2SHARE can be implemented on sensitive data infrastructure that have differences regarding to security policies and implementation technology. (Proof-of-concept)
- Future: Proof-of-value for Secure B2SHARE, Feasibility of generic implementation, Interoperability of multiple Secure B2SHARE deployments

Thank you

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