Store data with B2SAFE

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B2SAFE   what is it?

A service that allows community repositories the implementation of data management policies across multiple administrative domains

Features

- A single namespace across heterogeneous storages

- Allows the replication between data centers

- Support of persistent identifiers (PIDs)

- Allows for data archiving

- Support for large scale storage resources

- Supports integration with different kind of storage systems
  e.g. tape based HSM, POSIX filesystems, Object Storage

- Allows access via different protocols
  e.g. iRODS-clients, GridFTP, Webdav and other protocols (ssh, sftp, …)

B2SAFE   why to use it?

- Allows repositories to implement data management policies.

- Offers an abstraction layer of large scale, heterogeneous data storages

- Guards agains data loss in long-term archiving

- Allows the optimize access for users

- Based in opensource software iRODS with a steady growing users community

- Allows customised data management rules

- Service free until the end of the DICE project and data centers are committed to maintain the service

- Publication through B2SHARE

B2SAFE   how to request

go to EOSC Marketplace

https://marketplace.eosc-portal.eu/services/b2safe?q=B2SAFE

B2SAFE

Keep research data safe via data management policies

Organisation: **EUDAT**
Provided by: **Barcelona Supercomputing Center - Centro Nacional de Supercomputación, Jülich Supercomputing Centre, CSC – IT CENTER FOR SCIENCE, National Infrastructures for Research and Technology, SURF, Karlsruhe Institute of Technology, Cineca Consorzio Interuniversitario, The Cyprus Institute, IT4Innovations / VSB-TUO**

★★★★★ (0.0 /5) 0 reviews ☐ Add to comparison ☐ Add to favourites

→ Webpage   → Helpdesk   → Helpdesk e-mail   → Manual
→ Training information

ABOUT	DETAILS	REVIEWS (0)

B2SAFE is a robust and highly available service which allows community and departmental repositories to implement data management policies on their research data across multiple administrative domains in a trustworthy manner. It offers an abstraction layer of large scale, heterogeneous data storages, guards against data loss in long-term archiving, allows to optimize access for users (e.g. from different regions), brings data closer to facilities for compute-intensive analysis.

Features

- Support for data management policies (e.g. registration of PIDs, cross-site replication, data integrity checks)
- Support for policies customised to community and organisational needs
- Support for less frequently used archival data, but can also support active data
- Support for large scale storage resources (e.g up to PB-scale)
- A single namespace across hetrogeneous storages
- Supports integration with different kind of storage systems (e.g. Tape based HSM, POSIX filesystems, Object storage)
- Access via GridFTP, Webdav, iRODS commands
- Service offered by a network of EUDAT service providers

Resource offers

For Archival data
⏻ ORDER REQUIRED

B2SAFE can provide an higher level of abstraction to different underlying Data Archival mechanisms, in order to maintain Data Objects metadata (including also PIDs) and integrating with external...

For Active data
⏻ ORDER REQUIRED

As a standard default mechanism B2SAFE can allow users to simply store data directly in the iRODS File System (iRODS FS), rather than the Object Storage or the Data Archival (as previously...

B2SAFE   how to request

go to EOSC Marketplace

https://marketplace.eosc-portal.eu/services/b2safe?q=B2SAFE

🔹 Choose the offer that suits your needs

🔹 Initial storage capacity

🔹 Expected increase per year

🔹 Replication

🔹 Minimum and Maxi file size

🔹 Expected number of files

🔹 Data access protocol

🔹 Data management policies

🔹 Prefered provider

B2SAFE

| Offer selection | Access instructions | Configuration |

Offers

To gain the access to the resource, please select an offer that suits your needs best.

⬇ ORDER REQUIRED

For Archival data

B2SAFE can provide an higher level of abstraction to different underlying Data Archival mechanisms, in order to maintain Data Objects metadata (including also PIDs) and integrating with external...

Show more

⚙ TECHNICAL PARAMETERS

Requested initial storage capacity	10TB - higher than 500TB
Expected increase per year	10TB - higher than 100TB
Type of storage	Online - Offline
Replication	None - More than 1 site

Show more

Select an offer

⬇ ORDER REQUIRED

For Active data

As a standard default mechanism B2SAFE can allow users to simply store data directly in the iRODS File System (iRODS FS), rather than the Object Storage or the Data Archival (as previously...

Show more

⚙ TECHNICAL PARAMETERS

Requested initial storage capacity	1TB - higher than 100TB
Expected increase per year	1TB - higher than 20TB
Replication	None - More than 1 site
Backup	yes - no

Show more

Select an offer

B2SAFE options at MPCDF

- Type of storage   nearline
- Initial storage capacity   >= 500 TB
- Expected increase per year
- Replication   double copies at one site, (multiple sites)
- Minimum and Maxi file size   > 100 MB
- Expected number of files
- Data access protocol   GridFTP, iRODS, sftp, ssh, (Globus online)
- Data management policies   PIDs, HSM, (Replication)
- Prefered provider   MPCDF

B2SAFE at MPCDF

Standard services

Customised services

iRODS commands / GridFTP

ssh / sftp / scp / gridftp

register at
https://dicereg.mpcdf.mpg.de
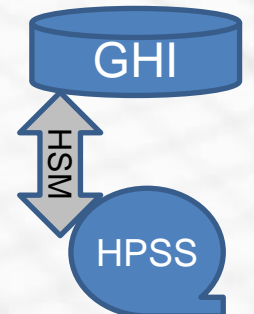
DICE order management
@ MPCDF

Mapping EUDAT ID MPCDF UNIX ID
Generate ssh-keys

diceb2safe.mpcdf.mpg.de

dicedat.mpcdf.mpg.de

B2HANDLE
Register your Research Data

B2SAFE

HPSS

B2SAFE

GHI

HSM

HPSS

Service Provision MPCDF and Sustainability

	Service	Access
During DICE	Providing B2SAFE • Typical Project size: >500 TB • Mid/long Term • HSM / iRODS	Granted until the end of the DICE Project (mid 2023) GripFtp iRods commands ssh / sftp / scp …
After DICE	• Retention 6 months after announcement • Pay per use storage • Best effort support	Data retrieval within limits Grid Ftp IROS Commands ssh / sftp /..

Thank you!

B2SAFE Guidelines for users
https://eudat.eu/services/userdoc/using-b2safe
B2SAFE service details
https://marketplace.eosc-portal.eu/services/b2safe/details
B2SAFE in GitHub
https://github.com/EUDAT-B2SAFE

Contact for integration in B2SAFE
DICE
https://www.dice-eosc.eu/contact
EUDAT RT
https://eudat.eu/contact-support-request

For further information at MPCDF:
dice-service@mpcdf.mpg.de

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