B2SAFE

B2SAFE is a robust, safe and highly available service which allows community and departmental repositories to implement data management policies on their research data across different geographical and administrative domains in a trustworthy manner.

B2SAFE is a way to distribute and store large volumes of data for a long-term to those sites which are providing powerful data processing, analysis and data access facilities. The service operates on the domain of registered data: data objects are made referencable via globally unique persistent identifiers which are managed by the corresponding administrative domains.

The characteristics of the B2SAFE service are defined by auditable policies which are specified for each data project (data collections to be managed in behalf of a project responsible). Each data project defines a B2SAFE instance which comprises at least one data ingest node (EUDAT node/site) and multiple data nodes for the replicas. The policies control the data flow, i.e. select the data source node and the target nodes, the mechanism for data integrity verification and they can specify the required level of service to be provided by the selected data nodes.

The data can be transferred from external resources to B2SAFE storage resources with different methods and via different channels. Currently iRODS is used at the EUDAT sites for the federation of the data nodes and the node-wise policy enforcement. Each data project can have own requirements depending on the data volume and granularity, the required network bandwidth, the reliability and the security of the network connections. Project-specific requirements on data transfer rates and data-access latencies determine the choice of the proper storage, compute service and network resources

Thursday 25th September 2014

B2SAFE SESSION
B2SAFE - introduction on the current status and recent advancements **Johannes Reetz, Garching Computing Centre of the Max Planck Society (RZG)** Johannes Reetz, Garching Computing Centre of the Max Planck Society (RZG), is Operations Manager of EUDAT and product manager of the B2SAFE service. He received a PhD in natural sciences from the University of Munich in 1999. His scientific background is observational and theoretical astrophysics in the domain of cool stellar atmospheres and the chemical evolution of the Galaxy. After a working stay at the ESO Data Management Division in 1999, he joined the XDV team at the Max Planck Institute for Plasma Physics developing data acquisition software for the W7-X nuclear fusion experiment. Since 2004 he has been actively involved in national and European HPC and data infrastructure projects.

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B2SAFE SESSION

The Data Policy Manager for B2SAFE

Willem Elbers, The Language Archive, a unit of the Max Planck Institute for Psycholinguistics

Willem Elbers has been working as a software developer at The Language Archive, a unit of the Max Planck Institute for Psycholinguistics, since 2009. Prior to this position he studied computer science with a master in artificial intelligence at the Radboud University in Nijmegen. His specific areas of interest include data grid middleware, single sign on solutions, authentication and authorization infrastructures and the management and access of digital collections of linguistic data.

Maria Francesca Iozzi, the University Center of Information Technology, University of Oslo

Maria Francesca Iozzi is presently employed as senior software engineer at the University Center of Information Technology, University of Oslo. She majored (with honors) at the University of Pisa in theoretical chemistry and obtained the PhD Degree in Physical Chemistry at the University of Napoli, Italy, specializing in molecular modeling and theoretical methods applied to material science. After many year of academic research she entered the HPC world as support for end users dealing with chemistry and material science software. She has been part of PRACE (Partnership for Advanced Computing in Europe) where she acted as coordinator of the effort of different European groups to enable common software to petascale computing. More recently she joined the EUDAT (European Data Infrastructure) as leader of the task force developing the Data Policy Manager Service.

Proteomics repositories integration using EUDAT resources
Rafael C Jimenez, ELIXIR Chief Technical Officer

Rafael joined ELIXIR as Chief Technical Officer in January 2014 following 13 of experience in the field of bioinformatics. He had the opportunity to work for the "European Bioinformatics Institute" (EBI-EMBL), the "Centro de Investigacion Principe Felipe" (CIPF), the "National Bioinformatics Network" of South Africa, the "British Society for Proteome Research" (BSPR), the "Institute for Molecular Bioscience" (IMB), the "Salamanca" University and NewBioTechnic (NBT). He holds a Master degree in Molecular Biology, a Master degree in Computer Science, a bioinformatics specialist certificate and a postgraduate certificate in education. He has experience in the technical co-ordination and development of services in international projects related to data integration, visualisation and analysing of biological data. He has contributed and had an active role in the development of communities and projects like BioJS, IMEx, IntAct, PSI (Proteomics Standards Initiative) and DAS (Distributed Annotation System).

IPSL Climate Data Management backed by B2SAFE
Franck Corsini, Institut Pierre Simon Laplace

Franck Corsini is an IT engineer who works at IPSL (Institut Pierre Simon Laplace) since 1997.
He has a master degree in computer science. He's responsible of an IT facility aim to provide services as high performance calculation, storage, virtualization hosting to the eight laboratories grouping the IPSL. He's also tightly involved in the CNRS GDS-Ecoinfo team. A group of engineer whose goal is to assist Educationnal & Research structure towards sustainable IT. His recent research interests include IPSL scientific data curation particularly backing and archiving. This work leads him in collaboration projects wi th EUDAT and RDA (Research Data Alliance).

B2SAFE at ODC and future EIDA/EPOS-S plans within EUDAT2020
Luca Trani, KNMI and Orfeus Data Centre

Luca Trani is an IT Architect with several years of experience working on large infrastructure projects. He holds a Master degree in Telecommunication Engineering and a II Level Master degree in Software Technologies. Since 2007 he has joined the R&D Information and Infrastructure department of the KNMI and the Orfeus Data Centre where he is responsible for the IT developments related to EU projects. His expertise and interests span across data management, distributed systems, workflow engines, data and metadata standards, interoperability, data intensive computing and big data. He is member of the EIDA Technical Committee and co-chair of the EPOS-PP WG7. In the last years he has been actively involved in a number of EU projects working on innovative solutions supporting science and research: NERIES, NERA, VERCE, EPOS-PP, ENVRI, COOPEUS, ADMIRE.

Questions

Attachment	Size
WillemElbers.pdf	1.07 MB
RafaelJimenez.pdf	2.12 MB
LucaTrani.pdf	7.41 MB

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Attachment	Size
JohannesReetz_0.pdf	1.16 MB
FranckCorsini.pdf	426.44 KB

Read more

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