

Task Force Storage

Terms of Reference

1. A Task Force is established under the auspices of the TERENA Technical Programme to coordinate the development of open and interoperable data storage and data management infrastructures and services among National Research and Education Networks and academic and research institutions.

The Task Force will be known as TF-Storage.

2. The aims of this Task Force are:

- a. to provide a forum for exchanging and promoting ideas, experience and knowledge.
- b. to identify, and promote the use of, common standards, techniques, (new) technology and procedures in the field of data storage that are relevant to the educational and research community.
- c. to be a focal point for (the gathering of) storage expertise within the European educational and research environment.
- d. to identify and coordinate and where possible collaborate on the development of storage services.
- e. work together with the NREN AAI federations (TF-EMC2/JRA5) to find possible solutions for AAI and non-web storage services.
- f. to liaise with other communities such as the grid environment, HPC, Internet2, APAN on storage activities.

The Task Force will focus its activities on the TERENA constituency and, as it recognizes there are many activities already underway in this constituency related to grids, which have a storage component, the Task Force will work with these activities to prevent unnecessary duplication of effort.

3. The Task Force will be open to any individual who can offer appropriate expertise, manpower, equipment or services. Participation will be on a voluntary basis.

4. The Chair of the Task Force will be Jan Meijer (UNINETT) who will be responsible for preparing the agenda of each meeting, and for co-ordinating the work of the Task Force. He will also be responsible for ensuring that the agreed deliverables are produced. Sub groups may be formed as deemed appropriate.

5. The secretary of the Task Force will be appointed by TERENA. He/she will be responsible for taking the minutes at each meeting, and for making logistical arrangements as necessary.

6. The Task Force will operate with a 2-year mandate, starting on the 25th of February 2008. A report on the progress of the Task Force and the results achieved will be made at the TERENA Networking Conference 2009. The mandate of the Task Force may be renewed by the TERENA Technical Committee (TTC). If the mandate is not renewed, the Task Force will be dissolved. The Task Force may also be dissolved if the TTC considers that it is making insufficient progress or that its activities are no longer useful or relevant, or if the Task Force chair resigns and no replacement can be found.

7. The Task Force will meet at approximately four-monthly intervals. Physical meetings will be held at various locations, taking care to reduce overall costs to participants by co locating with other events. Videoconferencing facilities will be available whenever possible for these meetings. Video or audio conferencing facilities can be used for regular or intermediate meetings.

8. Reports and other results of the Task Force will be placed in the public domain, with the exception of information that is subject to a Non-Disclosure Agreement.

9. The Task Force will have a mailing list (storage@terena.org) for communication between the participants. The mailing list archive will be publicly available.

List of Work Items and Deliverables

The following work items are considered relevant to the Task Force:

The following NRENs and research organisations have expressed their willingness to contribute to the work items and deliverables:

CSC, DFN, GRNET, HEANet, IBBT, NDGF, NIIF, PSNC, Red.ES, STFC - Rutherford Laboratory, SURFnet, SWITCH, UNINETT

Code	Description	Deadline	Leader / Interested parties
A	Knowledge dissemination: <ul style="list-style-type: none"> Organize interesting talks with speakers both from within and outside the TF-Storage participants. Work together to disseminate storage knowledge and expertise to local institutions. 	Feb 2010	UNINETT
B	Overview of (national) activities and deployments: <ul style="list-style-type: none"> Gather information on relevant projects, activities and deployments. Publish on the TF-Storage wiki on an ongoing basis. Provide a technology watch function. 	Feb 2010	UNINETT
C	Poste Restante service: <ul style="list-style-type: none"> Coordinate the deployment of the Poste Restante service in various NRENs. Ensure the use of a single code base. Coordinate the further (co)development of the code base. Integrate this service with EduGain. 	Feb 2009	CSC GRNET SWITCH HEANet SURFnet UNINETT
D	Collection of best practices and service requirements including: <ul style="list-style-type: none"> National laws and policies. Long-time storage (archiving). Security requirements (audit compliant storage, tamperproof storage). 	Feb 2010	PSNC UNINETT

E	Taxonomy of storage (virtualization) middleware: <ul style="list-style-type: none"> • Create a taxonomy of the various storage (virtualization) middleware packages available. • Provide a collection point for evaluations, experiences and usable contacts to our community useable in the decision process on storage technologies. 	Sep 2008	NGDF STFC
F	Taxonomy of storage technologies: <ul style="list-style-type: none"> • Create a taxonomy of storage technologies. • Provide a collection point for evaluations, experiences and usable contacts to our community useable in the decision process on storage technologies. 	Sep 2008	STFC
G	Measuring storage performance: <ul style="list-style-type: none"> • Provide a cookbook for doing solid measurements on storage performance. 	May 2009	
H	Backup and/or disaster recovery services: Several NRENs are investigating to offer (offsite) backup and/or disaster recovery services to their community. This activity provides for collaboration on establishing the requirements for such a service (e.g. creating a requirements survey). <ul style="list-style-type: none"> • Investigate the various possible business models. • Investigate the various technical options needed to create such a service. 	Sep 2008	UNINETT
I	Storage and AAI: <ul style="list-style-type: none"> • Describe the problem space of using the NREN AAI federations with storage services. • Liaise with the TF-EMC2/JRA5 to find a path to solve the problems and/or suggest suitable workarounds. <p>Note that TF-Storage does not consider it within its realm to solve the problem, but does want to provide the push to the AAI groups needed to ensure an appropriate level of attention is given by the AAI world to these issues to get them solved.</p>	May 2009	RedIRIS SURFnet
J	Energy consumption considerations: <ul style="list-style-type: none"> • Describe how the storage field can contribute to reducing power 	Dec 2008	SURFnet UNINETT

	consumption in the data centre, taking into account possibly counter intuitive directions as e.g. increasing the power consumption of the storage part of the infrastructure to gain a significant reduction elsewhere.		
K	Liaise with other communities: <ul style="list-style-type: none"> • TERENA task forces. • The grid community. • HPC community. • Internet2. • APAN. 	Feb 2010	All

New work items or deliverables may be added as the Task Force sees fit.