

Task Force EMC2

Terms of Reference

1. A Task Force is established under the auspices of the TERENA Technical Programme to promote the development and deployment of open and interoperable middleware infrastructures among National Research and Education Networks and academic and research institutions.

The Task Force will be known as TF-EMC2 (Task Force European Middleware Coordination and Collaboration).

2. The aims of this Task Force will be:

- a. to provide a forum for exchanging experiences and knowledge;
- b. to promote the development and testing of innovative middleware technologies;
- c. to promote the use of common standards and procedures in the middleware infrastructures;
- d. to establish pilot services for the European academic community and, specifically, to run and extend the current TACAR pilot;
- e. to liaise with other middleware activities at international level, such as GGF (Global Grid Forum) and Internet2;
- f. to promote the actual use of middleware infrastructures at the campuses;
- g. to co-ordinate and provide support to other joint initiatives and projects and, specifically, to provide a forum for Joint Research Activity 5 "Ubiquity (Mobility) and Roaming Access to Services" of the GN2 project to receive feedback on its work from a wider community

The Task Force will focus its activities on Europe and neighbouring countries and on middleware infrastructures and initiatives operated by research and education networks. The Task Force will collaborate closely with Joint Research Activity "Ubiquity (Mobility) and Roaming Access to Services" (JRA5) in the GN2 project, liaise with TF-Mobility and provide middleware assessment to any other TERENA Task Force or JRA within the GN2 project. It will collaborate with organisations outside the geographical area or with a different scope whenever such collaboration will assist in achieving the aims of the Task Force.

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 Diego Lopez (RedIRIS) 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. If necessary, work items can have activity leaders who will be responsible for ensuring that any agreed deliverables are produced, and preparing the agendas of any sub-group meetings.

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 1 September 2004. A report on the progress of the Task Force and the results achieved will be made at the TERENA Networking Conference 2005. 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 (although this may be via telephone or videoconference). Physical meetings will be held at various locations, taking care to reduce overall costs to participants. Videoconferencing facilities will be available whenever possible for these meetings. Videoconferencing shall be the preferred method for any other, intermediate meetings, when necessary.

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 commercial Non-Disclosure Agreement.

9. The Task Force will have a mailing list (emc2@terena.nl) 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:

1) TACAR

The success of the initial TACAR pilot (currently available through <http://www.terena.nl/tech/task-forces/tf-aace/tacar/index.html>), among both the NREN and Grid communities, makes it one of the most important focus of the direct Task Force activities for the coming years. The work will concentrate on:

- further development of the pilot to turn it into a service, available at its new home at <https://www.tacar.org/>,
- promoting the service through the projects it can contribute to, such as EGEE, GN2, and the international trust management initiatives currently under discussion.
- providing advices on the continuation and maintenance of the service

It is envisaged that the TACAR activities will be able to deliver the following results:

- Availability of the TACAR site at <https://www.tacar.org/>
- TACAR policy updated according to the new site procedures
- Report about the usage of TACAR and awareness among TACAR user communities

2) AA-RR

The Authentication and Authorisation Requester-Responder is the result closest to a reference implementation that TF-AACE was able to achieve, taking into account the different technologies and national initiatives in the AA arena. TF-AACE produced a design of the system and a proof-of-concept implementation that has to be transformed into production-level software. The results of this activity will be of capital importance for

the development of JRA5 in GN2, and its application in (inter)national interoperability of AAls and in the inclusion of AA technologies in other areas is also envisaged.

It is envisaged that the AA-RR activities will be able to deliver the following results during the first year of the Task Force:

- + A first version of the AA-RR software, supporting at least SAML-based interactions
- + Dissemination materials about the AA-RR

3) Campus Middleware Issues

Actual use of middleware technologies in campuses is one of the main challenges for these infrastructures to succeed. Reaching the necessary capillarity in campuses will be one of the main strategic goals of the Task Force. With respect to this, work will concentrate on:

- a. Producing a set of good-practice documents on the following issues:
 - (i) Establishing and maintaining directories (technical and legal aspects)
 - (ii) SSO systems and their integration with AAls
 - (iii) Integrating available AuthN/AuthZ tools with existing services
- b. Organising events to train, and provide hands-on experience to, IT practitioners in the European academic institutions (inspired on Internet2 CAMP). The first of these events is intended to take place during the first six months of the Task Force mandate, and it is envisaged to repeat them with a frequency to be decided according to the outcome of the first event.

The Task Force will also support NRENs (or some other national players in organising local CAMP events) in organising local CAMP events, to discuss more specific and local needs.

4) Directory Schema

One of the issues that will be tackled by the Task Force is the directory schema co-ordination and harmonisation.

In this context, schema co-ordination does not mean global-level co-ordination, as it has proven to be a hard task to achieve agreements at that level at the present moment. The Task Force will, therefore, concentrate on defining and using a list of schemas that are relevant for information to be exchanged between collaborating universities. After the first year such a list will be ready. New elements can be added if considered of importance.

An attempt to harmonise schemas, to achieve interoperable middleware infrastructures, reducing schema duplication was provided by Peter Gietz's project Directory Schema Registry (<http://www.schemareg.net/>).

Part of the work during the first year of the Task Force will be focused on testing the Directory Schema Registry software, comparing it with other similar tools and producing a report on the sustainability of the Schema Registry, including support from a significant number of NRENs and other parties.

If the registry becomes a service (agreements with Internet2 are on their way) a group inside the Task Force will act as a review panel for technical and policy aspects of the service. More details in relation to the Schema Registry development will be defined later.

Collaboration with other interested parties, such as Internet2, other NRENs and NREN associations in other parts of the world, and the Grid international community will also be pursued in the area of coordination of attribute syntaxes and semantics as well as relevant EU standardisation activities.

Important to the European academic community is the initiative called "International Person Schema" (<http://middleware.internet2.edu/intl-schema/>), currently carried out under Internet 2 umbrella, with which the Task Force will collaborate.

5) Liaison with GGF and virtual organisations

It is important to assure that the Task Force will not duplicate work of others and that the results produced are compliant with the standards followed by the scientific community. Over the last years there has been a gap between the Grid community and the NREN community. The Task Force aims at filling the gap by bringing together the two worlds. Periodic reports about the AA results in the Grid community will be presented during the Task Force meetings. It is envisaged that people active in Grid middleware initiatives will attend the Task Force meetings.

6) Liaison with JRA5

The results of JRA5 will be presented and discussed during Task Force meetings. JRA5 will closely follow the Task Force work items and check for applicability (new ideas and concepts, additional input to proposed solutions etc.). JRA5 will use the dissemination channels of the Task Force.

Once per year a joint meeting of JRA5, TF-EMC2 and TF-Mobility will be organised to exchange information and disseminate results. Guests from other environments can be invited depending on the items to discuss.

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