

# **AEGEE Online Membership System (OMS)**

## ***Introduction***

AEGEE is an organisation of around 15.000 members, having local branches in around 225 university cities. On European level there is a board of directors and several commissions, working groups and project teams that all need certain information from the local branches. AEGEE also has an active alumni network called *Les Anciens*.

Till summer 2009 the core IT system was based on Lotus Notes. This provided accounts (called 'aegee.org accounts') as well as a lot of databases, including document store, event calendar, address book and summer university (a yearly project organising around 90 events Europe-wide) project management, application and evaluation system. Next to that, several stand-alone applications were in use, like a forum, Agora/EBM (statutory events) applications and a photo page. All stand-alone applications were linked to the core system using LDAP, MySQL and XML.

In summer 2009 the whole IT system was turned of by the Comité Directeur 2008/2009, and replaced for an externally developed system called 'Intranet'. While some new functionality was added, a lot of relevant functionality was also lost. Not only is the too strict design far from useful for AEGEE, also the implementation by the contracted company Troxo was done in an inconsistent way that puts too strong limits on corrections and future enhancements. Next to that, hardly any transition was taken care of, resulting in the loss of a lot of valuable information from the past.

To provide AEGEE again with a working IT environment, ITWG will re-initiate the Online Membership System (OMS) project dating back to 2006. Together with the network we want to build a new system that suits the needs of the network, while also keeping in mind that it has to be maintained by a group of frequently changing students.

## ***General constraints & requirements***

As AEGEE is a quickly changing organisation, the new system needs to be flexible enough to adjust to the changing organisation. As there is a high turnover of members (also the ones maintaining the IT facilities) the system needs to be easy to understand, and proper documentation needs to be available, both for the users of the system as well as for the administrators (like there was ABC for the AB) and developers (ITWG).

To keep the system maintainable, and also make it possible for new people to get involved, the system needs to be modular. In this way one only has to understand a small piece of the whole system to be able to start development. Between the different modules a fixed interface should be defined, one that is preferably technology independent (preferably XML instead of a certain database language).

Many local members will be using the system, as it contains their membership data. As not everybody is as fluent in English, the system should support multi-lingual user-interface. Translation is out of the scope of ITWG work, but a framework should be provided that makes it possible to present the whole user-interface in different languages, at least for the modules that are used by people that don't need English for their work in AEGEE (this means that member administration needs to be in different languages, while Agora/EBM/event applications don't need that, as you can hardly participate if you don't speak English).

As the system will contain a lot of data fitting within privacy laws, it needs to be secure. For login and accessing this data, encryption should be used (SSL/TLS). Access rights should be properly defined, and fitting with the requirements and needs of everybody using the system, but always keeping in mind that as little as possible information should be available to others.

## Structure of the AEGEE IT system

The system will be modular. The different modules should be loosely linked, meaning that they should not depend on the language a module is written in, or the underlying database structure. Interfaces should exist that are fixed or at least backwards compatible, and every module should be aware of the other modules that access its data, this to be aware of which modules will be influenced by changes in the interfaces.

The core of the system will be the accounts and membership module. This module is responsible for storing the accounts (formerly known as 'aegee.org accounts') and the membership relations a person has with different bodies (both locals and European level bodies).

Around this core module, tools like the calendar of events, event applications, Summer University (SU) tools (list of SUs, applications, selection, evaluation etc.), Forum, Document stores (both per body as well as general ones), Photo page, Agora/EBM applications, Address Book, Network Management tools and voting/polling tool will have to be build. Through interfaces the different modules can exchange data with each other. Each module is free to choose its own implementation language and database, but for consistency certain programming languages, libraries, frameworks and databases should be encouraged by AEGEE, to keep the system maintainable also after a certain person leaves.

Figure 1 shows the design of the whole system. This document will further focus on the OMS-basic part. Other tools can either be taken from existing applications, extracted from intranet or written from scratch, depending on what is available already.

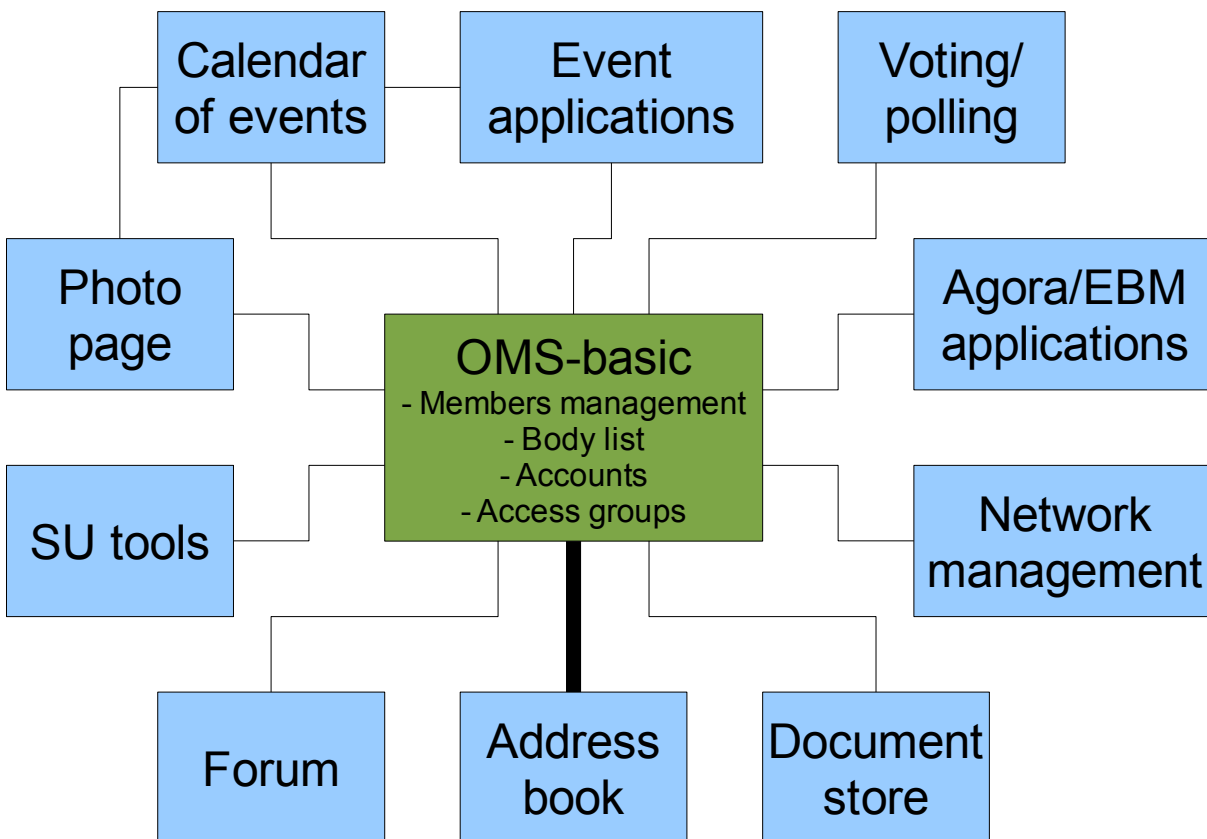


Figure 1: Overview of proposed IT system

For access control OMS-basic will provide basic information, like group memberships. The detailed ACLs will be implemented by the different modules themselves.

## OMS-basic

The following section will describe the OMS-basic system in more detail.

### ***Functionality***

OMS-basic basically needs to replace the aegee.org accounts that we had till summer 2009, the list of bodies including all data that was present of bodies in the old Address Book, provide a members management tool for locals and access groups.

The bodies are maintained by the CD together with a body comparable to ABC. Next to the possibility for CD and ABC to modify and create bodies, also board members of the bodies will have the possibility to edit the data of the body.

Every member will get only one single account that is valid for all his/her memberships. All memberships are linked to the account. As long as there is memberships connected to an account, the person is considered AEGEE member, with the related access.

New members can be added to the system by board members of their local, or people can apply themselves for membership, after which board approval is required. The members data is solely accessible by the local to which the membership applies. It is up to the local to decide if only the board has access, or if all members have access to (part of) the data. For Eurolevel bodies, only statistical data is provided if their work requires this. No access is available to the data of the members, except when required by CIA.

Board can define access groups, and if only the board can edit them, or also people in the access group. Certain access groups will be compulsory, like the 'board' or 'SU-outgoing', others can be freely created.

### ***Database structure***

The database for storing data will be LDAP. The baseDN will be o=AEGEE,c=EU. Access rights and setup will be stored in MySQL. The following structure will be build in LDAP for the storage of data:

```
o=AEGEE,c=EU
  ou=bodies
    bodycode=ATH
    bodycode=ENS
    bodycode=IUG
  ou=groups
    cn=board-ATH
    cn=SU-outgoing-ATH
    cn=board-ENS
    cn=board-IUG
    cn=Zeus administrators-IUG
  ou=people
    uid=Joost Rovers
      bodycode=NIJ
    uid=Wim van Ravesteijn
      bodycode=ENS
      bodycode=IUG
    uid=Wim van Ravesteijn2
      bodycode=ATH
```

The following information will be stored in the entries:

bodycode=XXX,ou=bodies,o=AEGEE,c=EU

- bodyName
- bodyNameAscii
- bodyStatus
- bodyCategory
- bodyCategoryOrder
- netcomCode
- url
- email
- latitude
- longitude
- careOf
- street
- zip
- city
- countryCode
- phone
- fax
- sip
- officeLocation
- officeHours
- socialMeetingLocation
- socialMeetingHours
- lastBoardElection[Day|Month|Year]
- founded[Day|Month|Year]
- remarks
- changelog

cn=board-XXX,ou=groups,o=AEGEE,c=EU

- memberUid
- changelog

uid=XXX,ou=people,o=AEGEE,c=EU

- email
- userPassword
- gender
- birth[Day|Month|Year]
- csn
- preferredLanguage
- fieldOfStudies
- changelog

bodycode=XXX,uid=XXX,ou=people,o=AEGEE,c=EU

- givenName
- surName
- function
- careOf
- street
- zip
- city

- phone
- mobile
- fax
- countryCode
- homeCareOf
- homeStreet
- homeZip
- homeCity
- homeCountryCode
- homePhone
- homeFax
- sip
- email
- memberSince[Day|Month|Year]
- memberUntil[Day|Month|Year]
- memberType (member, ancien, deleted)
- photo
- iban
- bic
- bankaccount
- msnMessenger
- icqMessenger
- yahooMessenger
- skypeMessenger
- website
- changelog

## **Fields in membership entry**

The fields in the membership entry are predefined. There are no custom fields available. In order to insert custom fields into the member management forms, the local boards will need to request those from the OMS admins, which will check if the field does not already exist, possible under a different name. If the field is unique, it will be added to the scheme, and code is written so it can be used.

Locals can choose themselves which fields they use. Newly added fields will by default be disabled. Possible settings for fields are 'required', 'optional' and 'disabled'. This information is stored in MySQL.

Locals can also define per field if it is freely editable or requires board approval before a change is made.

## **User names**

The user names used in the OMS will be compatible with aegee.org user names. This means that by default we use the full name as user name. Duplicate entries are solved by adding a number to the user name, which is automatically incrementing by 1, starting with 2.

## ***Transition***

*To be decided during implementation.*

## ***Final words***

This is just a basic outline to make the reader understand the proposed structure and its effects on the entire system.

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