

Registering with a Virtual Organisation

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Registering with a Virtual Organisation

What a Virtual Organisation is, how to find which one is appropriate for the user's application area, and how to apply for membership.

Virtual Organisations

A *Virtual Organisation (VO)* is an entity which typically corresponds to a real organisation or group of people in the real world. Membership of a VO grants specific privileges to a user. For example, a user belonging to the `atlas` VO will be able to read ATLAS files and to use resources reserved for the ATLAS collaboration.

To avoid problems with conflicting names, at the present, VO are registered in the style of DNS names, e.g. `newvo.vo.eu-egee.org`, where `newvo` is a customizable name and `vo.eu-egee.org` is an existent DNS domain. However, the VOs registered before that this rule was introduced have an old- style name as short string like `cms` or `biomed`.

Becoming a member of a VO usually requires membership of the corresponding collaboration; in any case, a user must comply with the rules of the VO to gain membership. A user may be expelled from a VO for failure to comply with these rules.

It is possible to belong to more than one VO, although this is unusual.

The Registration Service

Before a user can use the EGEE infrastructure, registration of some personal data and acceptance of some usage rules are necessary and the first step is getting a valid certificate. The user must also choose a VO. The VO must ensure that all of its members have provided the necessary information, which is stored in a database maintained by the VO, and that all have accepted the usage rules. The procedure to do this vary. A [list of registered VOs](#) is available on the grid operations web site.

Note that some VOs are local and are not registered with EGEE as a whole; in this case users should consult local documentation for information on the registration procedures.

As an example of a registration service, the [LCG Registrar](#) serves the VOs of the LHC experiments.

The registration procedure normally requires the use of a web browser with the user certificate loaded, to enable the request to be properly authenticated. Browsers normally use the `PKCS12` certificate format: if the certificate was issued to a user in the `PEM` format it has to be converted to `PKCS12`. The following command can be used to perform that conversion:

```
openssl pkcs12 -export -inkey userkey.pem -in usercert.pem \  
-out my_cert.p12 -name "My certificate"
```

where:

<code>userkey.pem</code>	is the path to the private key file;
<code>usercert.pem</code>	is the path to the <code>PEM</code> certificate file;
<code>my_cert.p12</code>	is the path for the output <code>PKCS12</code> - formatfile to be created;
"My certificate"	is an optional name which can be used to select this certificate in the browser after the user has uploaded it if the user has more than one certificate available.

Once in PKCS12 format, the certificate can be loaded into the browser. [Instructions](#) for some popular browsers are available.