

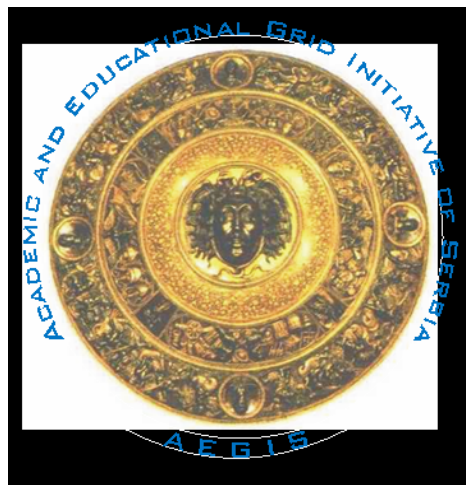


Enabling Grids for E-science

Obtaining and using grid certificate

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SEE-GRID-SCI
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Information Society



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www.eu-egee.org

- Certificates
- User Interface
- Obtaining a certificate
- Converting Certificates
- Proxies
- Proxy renewal

- Grid passport
- X.509
- Public key infrastructure (public and private key)
- Subject Name (SN)

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- Certification Authority (CA) – AEGIS CA
- Certificate Revocation List – CRL
- Virtual Organisation (VO)

- Access point to Grid
- User must have a local account on machine
- Basic grid operations:
 - list resources suitable for job
 - submit jobs
 - cancel jobs
 - retrieve job output
 - show job status
 - file operations

- .globus
\$ grid-cert-request
userkey.pem usercert_request.pem usercert.pem.globus
- Right permissions:
 - 444 usercert.pem
 - 400 userkey.pem
- Checking a certificate
\$ grid-cert-info [-subject | -enddate | -issuer)

- Creating p12 certificate

```
$ openssl pkcs12 -export -in ~/.globus/usercert.pem -
inkey ~/.globus/userkey.pem -name "My Certificate" -
out mycertificate.p12
```
- Importing certificate in to mail client and web browser
- VO membership request (web interface)

- Standard proxies
 - \$ grid-proxy-init
 - \$ grid-proxy-info
 - \$ grid-proxy-destroy
- VOMS proxies
 - Group
 - Role
 - \$ voms-proxy-init -voms <vo>
 - \$ voms-proxy-init -voms <alias>:<group name>
:[Role=<role name>]
 - \$ voms-proxy-info (-all)

- MyProxy server

```
$ echo $MYPROXY_SERVER
```

```
$myproxy-init -s <myproxy_server> -d -n
```

```
$myproxy-info -s <myproxy_server> -d
```

```
$ myproxy-destroy -s <myproxy_server> -d
```


- <http://ca.aegis.rs>
- <https://edms.cern.ch/file/722398//gLite-3-UserGuide.pdf>
- http://wiki.egee-see.org/index.php/Quick_User_Guide_for_Submitting_Jobs