



# Security Group

TODO

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## 1. CAS/VOMS strategy

- ◆ `grid-proxy-init --vo Alice -role admin`  
client application, PAM module?!
- ◆ Membership administration - admin interface
- ◆ VOMS: WP1/WP2/CAS implementation
- ◆ Encoding of the information: XML vs. ASN.1  
basically it is an attribute certificate
- ◆ Format of attributes: `group/role/VO`  
`/O=Grid/O=Alice/Role=RM-admin`
- ◆ Where to put the extra info: inside or beside the proxy cert?
- ◆ Libraries for the services (C/Java/?)



## 2. ACL syntax and semantics

- ◆ AND?: yes (multi-VO requirement from WP10) but have only allow xor deny
- ◆ XML, C, Java and database representation of ACLs
- ◆ ACL manipulation library API -> Andrew's GACL for C is the current nominee, but we probably need it in Java and Perl as well.
- ◆ Transport format: probably XML (write grammar!)



## 3. SE/RM interaction

The interaction is as described earlier.

- ◆ Transport of ACL and metadata: needs common format
- ◆ Delegation: file transfers between SE nodes - they must act on behalf of the initiator of the transfer
- ◆ (Checksum on files - signatures?)



## 4. SE/MSS interaction

Mixed access to files (local and grid)

- ◆ SE authz to replace and/or emulate existing authorization
- ◆ Conflict of ownership
- ◆ Semantical differences in access rights



## 5. WP10 confidentiality issues

Protecting the owner's identity

- ◆ In access control lists (protected storage and evaluation)
- ◆ Log/audit records (different name for audit)
- ◆ Key to read data (encrypted for the session)

See slides from the earlier meeting.

- ◆ Requirements along contracts - „implement“ them as policies!



## 6. Accounting user/group/VO level?

Granularity of accounting and/or quotas

- ◆ User level: OK, based on the identity  
„accounted user“ field in file metadata
- ◆ VO level: OK, in a replica manager  
files are mixed in an SE - „accounted VO“ field?
- ◆ Group level: ?  
Group may change over time - „accounted group“ field?

Extra fields

- ◆ Do we allow modifications?
- ◆ Who can modify them (ACL)?



## 7. Mutual authorization - client

Service can also obtain authorization information from a VOMS.

User may configure, which „group of service“ is acceptable.

- ◆ Do we need this?
- ◆ Semantics of client applications





## 8. CE/LCAS interaction with VOMS

VOMS provides group/role info

- ◆ Mapping identity to local credentials - OK
- ◆ Mapping group information to local groups?
- ◆ Enforcement of group level access rights in a CE?



## 9. Multiple vs. single VO

- ◆ See WP10 requirements -> multiple VOs



## 10. VO LDAP servers

VOMS vs. VO-LDAP servers

- ◆ VO membership information (VOMS, LDAP)
- ◆ User information (LDAP)
  
- ◆ Which is the primary data source?
- ◆ Updating of user information - site authorities
- ◆ Tracking of incidents -> plan



## 11. Auditing

Tracking changes for incidents and debugging

- ◆ Pool of assigned user accounts  
(who was using N userid at T time?)
- ◆ Membership information  
(was X member of group Y at T time?)
- ◆ Software versions  
(what version of software W was running at T time?)
- ◆ Authorization decisions  
(why user X was allowed to access R resource at T time?)



## 12. GGF presentation

- ◆ What shall be in the presentation?