



EO Applications Security Use Cases

DataGrid WP9

Final DataGrid Conference

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Groups within VOs

- The EO VO has different groups of investigators working on different parts of the same application (GOME use case)
 1. **Data production** (e.g. KNMI, ESA produce different datasets to be validated)
 2. **Data validation** (e.g. IPSL accesses the datasets and produces validation results)
 3. **End-users** (e.g. Scientists request validation results - may trigger Grid production "on demand")
- Expect many, many more in future (Tens of EO VOs, hundreds of groups / Users)



The main issues (1)

- Creation / management of groups in VOs
 - creating the groups
 - defining / controlling data access among the groups
 - adding members
 - requires VO database administration tools
- Controlled, secure access to datasets shared among different groups in the VO
 - User may belong to more than one group and/or VO
 - At grid login : user selects VO; then selects group within the VO
 - Data access control only as far as group level



The main issues (2)

- Flexibility to make changes
 - add / remove VOs
 - add / remove groups in the VOs
 - add / remove members in the groups
 - modify members' group (add / remove / change)
 - modify groups' data access rights
 - speed of propagation to sites resources
- Roles are basically instances of groups
 - Solve the group issues first
 - Roles functionality can then be implemented in terms of group control



Test case scenario

- Create an EO VO with 3 Groups
 - Data production (e.g. KNMI, ESA produce different datasets to be validated)
 - dataset: Level1, Level2, Level2b
 - Data validation (e.g. IPSL accesses the datasets and produces validation results)
 - dataset: Validation
 - End-User / Portal (e.g. Scientist, demonstration)
 - browse all datasets

| Datasets | Level1 | NNO | OPERA | Validation |
|--------------------------|---------------|------------|--------------|-------------------|
| IPSL | - | R | R | RW |
| KNMI | R | - | RW | RW |
| ESA | RW | RW | - | R |
| End-User / Portal | R | R | R | R |

EO Application Security Use Cases TN

https://edms.cern.ch/file/398262/1/DataGrid-wp9-TN_security_usecases_v0_0_2.doc