



Enabling Grids for E-science

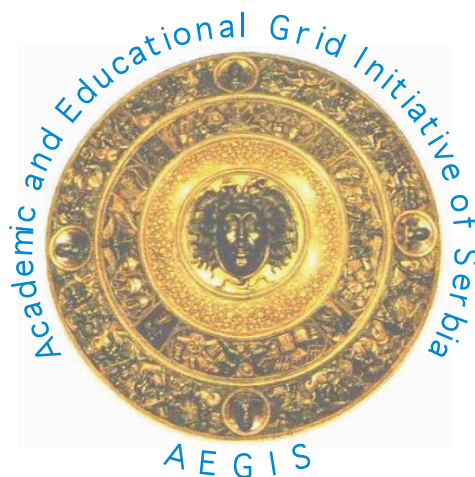
HOW TO USE GRID STORAGE RESOURCES

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SEE-GRID-SCI
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- **How to find available storage elements**
- **File transfer protocols**
- **LCG CLI Utils**
- **Logical File Catalog**

- **1st Generation – GDMP + edg-replica-manager**
C++ base, used Globus for Secure file transfer
- **2nd Generation – uses web services via XML**

- **GUID – Globally Unique Identifier**
- **LFN – Logical File Name**
- **SURL - SiteURL**

- **lcg-aa** - add an alias in the RMC or the LFC for a given GUID
- **lcg-cp** - copy a Grid file to a local destination
- **lcg-cr** - copy and register a file
- **lcg-del** - delete one file (either one replica or all replicas)
- **lcg-gt** - get the TURL for a given SURL and transfer protocol
- **lcg-la** - list the aliases for a given LFN, GUID or SURL
- **lcg-lg** - get the GUID for a given LFN or SURL
- **lcg-lr** - list the replicas for a given LFN, GUID or SURL
- **lcg-ra** - remove an alias in the RMC or the LFC for a given GUID
- **lcg-rep** - copy a file from
on
e
Storage Element to another Storage Element and registers it in the LRC or the LFC
- **lcg-r**
f - register in the LRC (and optionally in the RMC) or the LFC a file residing on an SE
- **lcg-sd** - set file status to "Done" for a given SURL in a specified request
- **lcg-ur** - unregister in the LRC or the LFC a file residing on an SE

- **lfc-chmod** - change access mode of a LFC directory/file in the name server
- **lfc-chown** - change owner and group of a LFC directory/file in the name server
- **lfc-delcomment** - delete the comment associated with a file/directory
- **lfc-entergrpmap** - define a new group entry in Virtual Id table
- **lfc-enterusrmap** - define a new user entry in Virtual Id table
- **lfc-getacl** - get LFC directory/file access control lists
- **lfc-ln** - make a symbolic link to a file or a directory in the LFC Name Server
- **lfc-ls** - list LFC name server directory/file entries
- **lfc-mkdir** - make LFC directory in the name server
- **lfc-modifygrpmap** - modify group entry corresponding to a given virtual gid
- **lfc-modifyusrmap** - modify user entry corresponding to a given virtual uid
- **lfc-rename** - rename a LFC file or directory in the name server
- **lfc-rm** - remove LFC files or directories in the name server
- **lfc-rmgrpmap** - suppress group entry corresponding to a given virtual gid or group name

- **lfc-rmusrmap** - suppress user entry corresponding to a given virtual uid or user name
- **lfc-setacl** - set LFC directory/file access control lists
- **lfc-setcomment** - add/replace a comment associated with a file/directory

- http://grid-deployment.web.cern.ch/grid-deployment/documentation/LFC_DPM/lcg_util/html/
- <https://twiki.cern.ch/twiki/bin/view/LCG/LfcApi>