

gLite Commands Cheat Sheet

last update: September 29, 2007

Tutorial agenda page: <http://indico.cern.ch/conferenceDisplay.py?confId=18939>
Tutorial User Interface: glite-tutor.ct.infn.it (*glite-tutor2.ct.infn.it backup*)
User name: budapest01-30 (case sensitive)
Password: GridBUD01-30 (case sensitive)
Certificate Password: BUDAPEST (case sensitive)

Command with Example	Use
Access to Grid	
voms-proxy-init --voms gilda	Create proxy with additional credentials as a member of the gilda VO
voms-proxy-destroy	Destroy proxy
voms-proxy-info --all	See proxy information
Information System	
lcg-infosites --vo gilda ce	List Ces
lcg-infosites --vo gilda se	List SEs
lcg-infosites --vo gilda closeSE	List CE's with "close SEs"
Data Management	
Catalogue access (LFC) and file management (lcg-utils) <pre> graph LR LFN1[Logical File Name 1] --> GUID[GUID] LFN2[Logical File Name n] --> GUID GUID --> PS1[Physical File SURL 1] GUID --> PSn[Physical File SURL n] PS1 --> TURL1[TURL 1] PSn --> TURLn[TURL n] </pre>	LFC=LCG File Catalogue You do need to specify the VO in the lcg-* commands lfn: logical file name GUID: global unique identifier SE: Storage element Catalogue namespace has form: /grid/<voname>/...
lfc-ls -l /grid/gilda/training/	List a directory in the LFC
lfc-mkdir /grid/gilda/training/budapest/budapest51	Create new directory in LFC
lfc-ln -s <already exists> <new name>	New lfn
export LFC_HOME =/grid/gilda/training/budapest/budapest51/	Set LFC home directory Avoids repeatedly typing /grid/...
lcg-cr -v --vo gilda file://\$PWD/text_file.txt -l \	Copy a file to a SE and

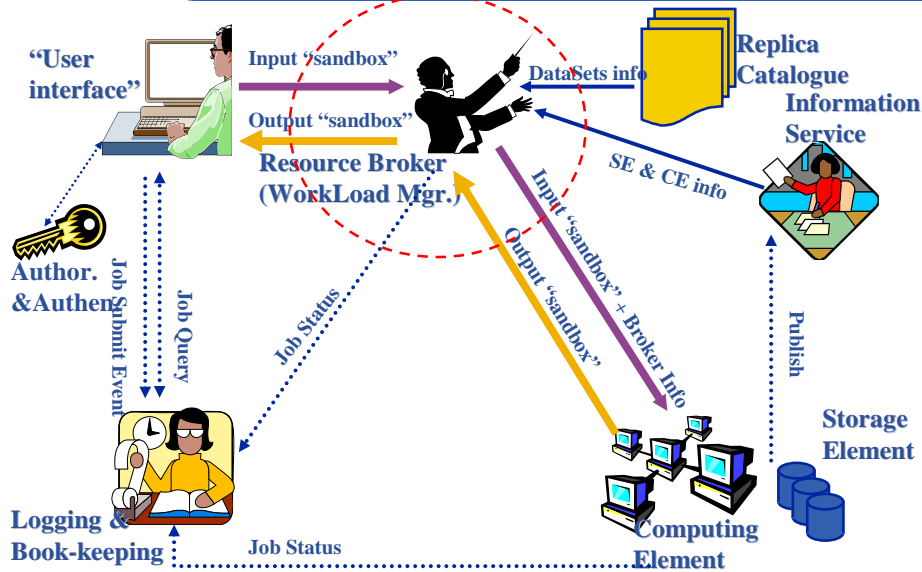
lfn:myfile.txt -d aliserv6.ct.infn.it lcg-cr -v -d grid-se.bio.dist.unige.it \ -l lfn: /grid/gilda/training/budapest/budapest51/data.txt \ --vo gilda file://\$PWD/mydata.txt	register it into the catalog Equivalent if \$LFC_HOME is set and I'm in the local directory that holds mydata.txt.
lcg-cp --vo gilda lfn:scripts.tar.gz \ file://^pwd`/kc_1.tar.gz	Copy a file from SE to your local directory - uses the LFC to locate the file. (uses \$LFC_HOME)
lcg-rep --vo gilda -d gildase.oact.inaf.it \ lfn:/grid/gilda/training/budapest/budapest51/ex3.tar	Create a replica on named SE for a specified lfn
lcg-lr --vo gilda lfn:data.txt	List replicas (by lfn or GUID)

Workload Management: glite-wms-	
glite-wms-job-list-match -a <jdlfile> glite-wms-job-list-match -a -o fileForId.txt hostname.jdl	List CEs that can run the job specified in the JDL file
glite-wms-job-submit -a -o <fileForId> <jdlfile> glite-wms-job-submit -a -o fileForId.txt hostname.jdl	Submit a job, save its id in a file
glite-wms--job-status <job id> glite-wms--job-status -i fileForId.txt	Check status
glite-wms--job-output <job id> glite-wms--job-output --dir <outputdir in your UI> \ -i <file> glite-wms-job-output --dir outdir -i fileForId.txt	Retrieve output Create new subdirectory to hold the output
glite-wms--job-cancel <job id>	Cancel a job
glite-wms--job-get-logging-info <jobid> glite-wms--job-get-logging-info -v 3 -i fileForId.txt	See the log for a job -v 3 option: most verbose

Workload Management: edg-	
edg-job-list-match <jdlfile> edg-job-list-match -o fileForId.txt hostname.jdl	List CEs that can run the job specified in the JDL file
edg--job-status <job id> edg--job-status -i fileForId.txt	Check status
edg--job-get-output <job id> edg--job-get-output --dir <outputdir in your UI> \ -i <file> edg-job-get-output --help	Retrieve output
edg--job-cancel <job id>	Cancel a job
edg--job-get-logging-info <jobid>	See the log for a job

EGEE Workload Management System

Enabling Grids for E-science



EGEE Possible job states

Enabling Grids for E-science

Flag	Meaning
SUBMITTED	submission logged in the LB
WAIT	job match making for resources
READY	job being sent to executing CE
SCHEDULED	job scheduled in the CE queue manager
RUNNING	job executing on a WN of the selected CE queue
DONE	job terminated without grid errors
CLEARED	job output retrieved
ABORT	job aborted by middleware, check <i>reason</i>

Acronyms

Components:

UI	User Interface
RB	Resource Broker
CE	Computing Element
WN	Worker Node
SE	Storage Element
LFC	LCG File Catalogue
VOMS	Virtual Organization Management Service
WMS	Workload Management System

Information System (IS):

BDII	Berkeley DataBase Information Index
GIIS	Grid Index Information Server
GRIS	Grid Resource Information Server
MDS	Monitoring and Discovery Service
LDAP	Light Weight Directory Access Protocol
DN	Distinguished Name
GLUE	Grid Laboratory for a Uniform Environment: schema used by the information system

Grid Security:

CA	Certification Authority
VOMS	Virtual Organization Management System

Data Management:

DPM	Disk Pool Manager (Storage Element)
SRM	Storage Resource Manager
LFC	LCG File Catalog
GFAL	Grid File Access Layer (POSIX file access API)
LFN	Logical File Name
GUID	Global Unique Identifier
SURL	Storage URL
TURL	Transport URL

Reference Links:

EGEE: <http://www.eu-egee.org>

gLite: <http://www.glite.org>

gLite User Guide <https://edms.cern.ch/file/722398/1.1/gLite-3-UserGuide.html>

gLite Documentation: <http://glite.web.cern.ch/glite/documentation/default.asp>

GILDA Wiki: <https://grid.ct.infn.it/twiki/bin/view/GILDA/WebHome>

EGEE Digital Library: <http://egee.lib.ed.ac.uk/>