

SC4 SERVICES - Planning

Legenda		Feature available with the next deployed release of LCG		
References on:		https://uimon.cern.ch/twiki/bin/view/LCG/SummaryOpenIssuesTF		
ID			References	Notes Comments
GLITE RUNTIME ENVIRONMENT				
	ALL	Run-time environment compatible with experiments and application	8.a	On going effort with Dirk and Andrea. Please check: http://cern.ch/sciaba/Dependencies.xls
		Software configuration compatible with experiments and application	8.a	
AUTHORIZATION AND AUTHENTICATION				
	VOMS API and server: v1.6.16; admin: 1.2.15; Oracle: 2.0.6	Groups and roles implemented by services	1.b	LFC Yes; DPM Yes; WMS yes;
		User Metadata	1.c	User Alias retrievable from VOMS server with provided script. Not available in user proxy.
		Mirroring available	1.a	High availability but not mirroring off site.
INFORMATION SYSTEM				
	BDII v3.5.4 GLUE 1.2.2	Mechanism to identify SE type (disk, tape)	9.d	Available
DATA MANAGEMENT				
	FTS v1.5.0 (agents 2.2.0; api 3.1.0; server 3.2.0; url-copy 1.5.0)	Automatic retry (keep trying till the service is told to stop)	4.1b,4.1.c	Both FTS 1.4.1 and 1.5 allow the number of retries and the retry policy to be set per VO (you can set infinite retries if necessary). FTS 1.5 provides a smarter default retry policy that handles some common error conditions better - it also allows the default retry policy to be overridden more easily with VO specific ones.
		Real-time monitoring of errors	4.1b,4.1.c	FTS 1.4.1 and FTS 1.5 provide users several job status queries providing all transfer information and errors, using a polling model. Explicit error notification (i.e. messaging) to users is not provided. FTS 1.5 provides basic tools to enable the service admin to monitor the status of the service; however, more work is required in this area.
		Full VOMS integration	1.b	FTS >= 1.4.1: The FTS web-service can authorise using VOMS roles; DN; groups; subgroups. The FTS does not currently use the VOMS credentials when contacting the SRMs (it uses the plain credential retrieved from plain MyProxy).
		Priority and reshuffling support	4.1b,4.1.h	FTS >= 1.4.1: Reshuffling, cancellations possibles. VO managers can change order of jobs.

		Support for experiments plug-ins	4.1b,4.1.i	FTS 1.5.0: Plugin retry policy is available. Catalog plugin mechanism is available and is being validated (currently by Atlas) to check that it meets their requirements. The deployment model for these VO-specific plugins is not clear yet.
		Error and event handling (signal conditions such as source file missing, etc.)	4.1b,4.1c	FTS 1.4.1 and FTS 1.5.0: full errors are available to users and experiment frameworks using a polling pattern. Notification (i.e. messaging) to users or to experiment frameworks is not available.
	LFC v1.5.4	VOMS enabled. LFC supports dirs and files permissions based on VOMS roles, groups, subgroups and user DN. No automatic proxy renewal is available (not needed). No VOMS metadata associated to user DN is available.	1.b, 1.c, 1.d	LFC version >= 1.4.3
		Replica attributes	4.3.b	LFC version >=1.4.x: Custodial flag requested by CMS available as ftype (file type). No replica attributes since they are available from SE via getFileMetadata (SRM v1) or srmLs (SRM v2). DLI interface available in LFC v1.4.5. Possibility to set this flag is not
		Interface to POOL	4.3.c	POOL >= 2.1.0 available plugins.
		Improved read performance for experiment access patterns	4.3.d	LFC version >= 1.4.3: It is possible to use DNS switch to balance servers load. Not possible to serve 100Hz requests per server if security is on. The performance measured is 150Hz requests served on a normal 2GHz PC. SSL sessions are not currently implemented. Bulk operations not available, but there is support for sessions (no failure prone) and transactions (failure prone).
	GFAL v1.7.7	Posix file access via LFN	4.4.b	GFAL>= 1.7.3: Posix file access via LFN available
		Best replica selections	4.4.b	GFAL>=1.7.3: Best replica selection based on site location only.
		Accessing multiple instances of LFC. LHCb request of multiple R/O repli	4.4.c	GFAL >=1.7.3: If LFC replicated via DNS switch, this feature OK.
WORKLOAD MANAGEMENT				
	RB gLite v3.0 (server: 1.5.5; client: 1.5.9)	Interactive access to running jobs information	5.i	Available. Peek possible (retrieve output sandbox while job is running). Top and ls not available.
		Capability to handle 10**5 jobs/day, 1 Hz submission rate	5.b	Available. The restriction comes really from Condor. ClassAds to be recompiled with optimization on. DAG helps.
		Improved ranking and match-making capability	5.c	Available.
JOB SUBMISSION				
	CE gLite 3.0	CE interface publicly available	-----	CE gLite 3.0 probably deployed together with Classic LCG 2.7.0 CE at sites that have available resources to do so.
POLICY MANAGEMENT				

MONITORING				
	RGMA v5.0.n	VO specific information	6.c	Available. R-GMA has Authentication based on VOMS proxies. Available in 2006: coarse-grained, local site configured, control of operations and find grained VO control of data access.
		Logging and bookeeping information available	6.d	Available. R-GMA Monitoring of transfer traffic and L&B info is currentlyprovided on LCG.
		Availability of local batch events	6.d	Available. Job wrappers are publishing the state of the process running a job every 5 minutes for each running job on a WN.
	GridICE v1.5.0	VO specific information	6.c	Available. VO-specific information for global operations: wide set of measures (both raw and aggregate one); to enable the VO to check several aspects related to the operations (e.g., what are the accessible CE/SE, their status and load). VO-specific information for jobs: all Grid jobs are monitored in terms of both status and resources usage; the exit status refers to the one returned by the LRMS Available in June 2006: sensor for passive monitoring of WMS; filtering of information based on a given BDII; integration of GOC DB downtimes; integration of the L&B job status.
ACCOUNTING				
	DGAS v1.1.n	Support for granular accounting (users, site, groups)	7.a	dgas >= v1.1.14 offers granularity at site and VOMS user, role, group, subgroup.
		Possibility for aggregation based on VO specific tags	7.b	dgas >= v1.1.14 offers aggregation per Vos
	APEL v.1.0.0	Support for granular accounting (users, site, groups)	7.a	Accounting for site, EGEE region, dn and local Unix Group. No connection with VOMS.
		Possibility for aggregation based on VO specific tags	7.b	Offers aggregation per Vos but not VO tags.
APPLICATIONS				
	POOL v2.3.0	Provide software configuration matching with the middleware	8.a	POOL >= 2.3.0 compatible with available middleware
		Interface to POOL	4.3.c	POOL >= 2.1.0 available plugins.
		ATLAS/CMS-specific features: PFN metadata	8.b	POOL >= 2.3.0 LFC features exposed. PFN metadata available.
	ROOT	Interface with GFAL	-----	Available
EXPERIMENT AGENTS				
	VOBOX v1.0.1-3	No special software requirements. Only requirements concerning deployment. Check site plans.	9.f, 9.g	Available
STORAGE MANAGEMENT (SRM2)				
	CASTOR2	SRM V2.1.1 interface implemented	3.a	Available
	DPM v1.5.4	SRM V2.1.1 interface implemented	3.a	Available without srm-copy nor global space reservation