

**Quality Criteria Verification  
Executive Summary  
For QCV, Stage Rollout, DMSU and EGI internal**

Name of the component	dCache		
Release	2.2.4	RT Ticket	
Software Provider	dCache.org (EMI)		
Release Contact	Name:	E-Mail	
Validator	Name: Antonio Delgado Peris, Javier Rodríguez Calonge	E-Mail: lcg.support@ciemat.es	
V. Hours Worked	8		
Component status	<b>OK</b>	Date	24-10-2012
Verification start date	22-10-2012	Verification end date	24-10-2012

**Summary:**

The component is ready for production (we have been using it in production for a few weeks). It just presents a few minor problems, as indicated in the tickets below.

**GGUS Tickets:**

Please notice that these are dCache RT tickets, not GGUS ones.

Issue already solved in dCache 2.2.4:

- 7334: xrootd door presents two principals for the same DN (different encoding)

Issues not solved in 2.2.4 but understood and fixed by a future release:

- 7333: When using vorolemap and authzdb plugins with gPlazma2, if several FQANs are presented in VOMS proxy, only the first one is considered. It is a serious issue but can be worked around by using gPlazma1.
- 7450: Problem with the production of billing plots.
- 7451: Problem with ACL function that makes new files and subdirectories inherit ACEs in the wrong order.

Issue not yet understood:

- 7396: Pools exhausting all space and disabling themselves. A restart is needed to recover them. The problem is not yet understood. It happens rarely but, when it does, it is a serious problem.

**Summary of Quality Criteria verification:**

	Generic Quality Criteria Total (Critical/Non critical)			
	Passed	Not passed	Not Applicable	Total
<b>TP</b>				
<b>VLD</b>	18	0	3	21
	Specific Quality Criteria			
<b>TP</b>				
<b>VLD</b>	9	0	6	15

## Quality Criteria verification cheatsheet:

Criteria	Accepted (Y/N/NA)	Tested (TP/VLD)	Comments
<b>DOCUMENTATION QC</b>			
GENERIC_DOC_1 (Functional Description)	Y	VLD	<a href="http://www.dcache.org/manuals/dcache-whitepaper-light.pdf">http://www.dcache.org/manuals/dcache-whitepaper-light.pdf</a> <a href="http://www.dcache.org/manuals/Book-2.2/index-fhs.shtml">http://www.dcache.org/manuals/Book-2.2/index-fhs.shtml</a>
GENERIC_DOC_2 (Release Notes)	Y	VLD	<a href="http://www.dcache.org/downloads/1.9/release-notes-2.2.shtml">http://www.dcache.org/downloads/1.9/release-notes-2.2.shtml</a>
GENERIC_DOC_3 (User Documentation)	Y	VLD	dCache is a service. Users should rather refer to user guides of client tools such as lcg_utils (or generic EMI user guides). However, dCache does describe its own client tools (dccc): <a href="http://www.dcache.org/manuals/dccp.shtml">http://www.dcache.org/manuals/dccp.shtml</a>
GENERIC_DOC_4 (Online help (man pages))	Y	VLD	For dccc, there is no manpage but '--help' option exists.
GENERIC_DOC_5 (API Documentation)	Y	VLD	<a href="http://www.dcache.org/manuals/libdcap.shtml">http://www.dcache.org/manuals/libdcap.shtml</a>
GENERIC_DOC_6 (Administrator Documentation)	Y	VLD	<a href="http://www.dcache.org/manuals/Book-2.2/index-fhs.shtml">http://www.dcache.org/manuals/Book-2.2/index-fhs.shtml</a>
GENERIC_DOC_7 (Service Reference Card)	Y	VLD	<a href="https://twiki.cern.ch/twiki/bin/view/EMI/DCacheServerServiceReferenceCard">https://twiki.cern.ch/twiki/bin/view/EMI/DCacheServerServiceReferenceCard</a>
GENERIC_DOC_8 (Software License)	Y	VLD	
GENERIC_DOC_9 (Release changes testing)	Y	VLD	Each change is documented and links to the patches are provided, so one understand the change has been tested. However, I cannot see links to the tests themselves.
<b>SOFTWARE DISTRIBUTION QC</b>			
GENERIC_DIST_1 (Source Code Availability)	Y	VLD	dCache team offers access to "some parts of the dCache code". This seems quite comprehensive, though they do not explain which parts are not accessible: <a href="http://www.dcache.org/downloads/source-code.shtml">http://www.dcache.org/downloads/source-code.shtml</a>
GENERIC_DIST_3 (Binary Distribution)	Y	VLD	<a href="http://www.dcache.org/downloads/1.9/index.shtml#server-2.2">http://www.dcache.org/downloads/1.9/index.shtml#server-2.2</a>
<b>SOFTWARE FEATURES QC</b>			
GENERIC_SOFT_1 (Backwards Compatibility)	Y	VLD	
GENERIC_SOFT_2 (New features testing)	Y	VLD	
<b>SERVICE CRITERIA QC</b>			
GENERIC_SERVICE_1 (Service control and status)	Y	VLD	All actions are OK. Only caveat is that stopping an already stopped service does not show any output messages as requested by the test.
GENERIC_SERVICE_2 (Log Files)	Y	VLD	
GENERIC_SERVICE_3 (Service Reliability)	Y	VLD	Service has been in production for weeks, working quite OK.
GENERIC_SERVICE_4 (Service Robustness)	Optional		NOT TESTED
GENERIC_SERVICE_6 (Default Password Configuration)	N		The SSH admin interface has a default password ("dickereich"). This is also documented in the dCache book: <a href="http://www.dcache.org/manuals/Book-2.2/start/intouch-admin-fhs.shtml">http://www.dcache.org/manuals/Book-2.2/start/intouch-admin-fhs.shtml</a>
<b>SECURITY QC</b>			
GENERIC_SEC_1 (World Writable Files)	Y	VLD	
GENERIC_SEC_2 (Directory Traversal Attacks testing)			DON'T KNOW HOW TO TEST
GENERIC_SEC_3 (Passwords in world readable files)	Y	VLD	There are no passwords in world readable files.
<b>MISCELLANEOUS QC</b>			
GENERIC_MISC_2 (Bug Tracking System)			CAN'T TEST THIS
<b>AUTHENTICATION QC</b>			
AUTHN_IFACE_1 (X.509 Certificate support)	Y	VLD	
AUTHN_DELEG_1 (Delegation Interface)			DON'T KNOW HOW TO TEST
<b>FILE ACCESS QC</b>			
FILEACC_API_1 (POSIX Read file access)	Optional		NOT TESTED: we are not using NFS access to files, though it is in theory supported
FILEACC_API_2 (POSIX Write file access)	Optional		NOT TESTED: we are not using NFS access to files, though it is in theory supported
<b>FILE TRANSFER QC</b>			
FILETRANS_API_1 (GridFTP File Access)	Y	VLD	
FILETRANS_API_2 (HTTPS File Access)			NOT TESTED: we are not using HTTPS access to files, though it is in theory supported
FILETRANS_API_3 (WebDAV File Access)	Optional		NOT TESTED: we are not using WebDAV access to files, though it is in theory supported
<b>STORAGE MANAGEMENT QC</b>			
STORAGE_API_1 (SRM API Support)	Y	VLD	Common operations work. We didn't test the complete API specification.
STORAGE_API_2 (LCG-UTILS test)	Y	VLD	
STORAGE_DEVICE_1 (Information retrieval)	Y	VLD	
STORAGE_DEVICE_2 (Fine grained authorization)	Y	VLD	It works although there is a bug in gPlazma2 (see tickets section, ticket #7333)
STORAGE_DEVICE_3 (Space reservations)	Optional		NOT TESTED: Our supported VOs do not use space tokens. In theory it is supported.
STORAGE_DEVICE_4 (Checksum)	Y	VLD	
<b>MONITORING PROBES QC</b>			
MON_PROBE_GENERIC_1 (Certificate Lifetime Probe)	Y	VLD	
MON_PROBE_GENERIC_2 (Service Probe)	NA		We only know about standard SRM probes
MON_PROBE_STORAGE_1 (SRM Probes)	Y	VLD	Standard SRM probes (not specific for dCache)

**Validator comments:**

**Not applicable Quality Criteria:**

**Specific Functional Tests to be repeated in SR:**

Test number	Description	Motivation

**Specific Non-functional tests (Scalability, etc...) to be repeated in SR:**

Test number	Description	Motivation

**Comments for UMD QC definition (TSA2.2):**

**Comments for SR (TSA1.3):**

**Comments for DMSU (TSA2.5):**

**Comments for TP:**