

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

Name of the component	StoRM		
Release	1.8.2	RT Ticket	3455
Software Provider	EMI		
Release Contact	Name:	E-Mail	
	cristina.aiftimiei@pd.infn.it		
Validator	Name:	E-Mail	
	Mario David (david@lip.pt)		
V. Hours Worked	20		
Component status	ACCEPT	Date	23 February 2012
Verification start date	23 February 2012	Verification end date	29 February 2012

Criteria	Accepted (Y/N/NA)	Tested (TP/VLD)	Comments
<b>Generic QC</b>			
GENERIC_DOC_1 (Functional Description)	Y	VLD	<a href="http://storm.forge.cnaf.infn.it/_media/documentation/storm-service-description.pdf?id=documentation">http://storm.forge.cnaf.infn.it/_media/documentation/storm-service-description.pdf?id=documentation</a> incomplete, some server components are not yet described
GENERIC_DOC_2 (Release Notes)	Y	VLD	<a href="http://www.eu-emi.eu/emi-1-kebnekaise-updates/-/asset_publisher/lr6q/content/update-13-17-02-2012#StoRM_SE_v_1_8_2_task_25353">http://www.eu-emi.eu/emi-1-kebnekaise-updates/-/asset_publisher/lr6q/content/update-13-17-02-2012#StoRM_SE_v_1_8_2_task_25353</a>
GENERIC_DOC_5 (API Documentation)	Y	VLD	<a href="http://www.gridforum.org/documents/GFD.129.pdf">http://www.gridforum.org/documents/GFD.129.pdf</a>
GENERIC_DOC_6 (Administrator Documentation)	Y	VLD	<a href="http://storm.forge.cnaf.infn.it/_media/documentation/storm-sysadminguide.pdf?id=documentation">http://storm.forge.cnaf.infn.it/_media/documentation/storm-sysadminguide.pdf?id=documentation</a>
GENERIC_DOC_7 (Service Reference Card)	Y	VLD	<a href="https://twiki.cern.ch/twiki/bin/view/EMI/StoRMPTServiceReferenceCard">https://twiki.cern.ch/twiki/bin/view/EMI/StoRMPTServiceReferenceCard</a>
GENERIC_DOC_8 (Software License)	Y	VLD	Apache 2.0
GENERIC_DOC_9 (Release changes testing)			
GENERIC_DIST_1 (Source Code Availability)	Y	TP	
GENERIC_DIST_2 (Source Distribution)	Y	TP	
GENERIC_DIST_3 (Binary Distribution)	Y	VLD	
GENERIC_SERVICE_1 (Service control and status)			/etc/init.d/storm-* start stop status
GENERIC_SERVICE_2 (Log Files)	Y	VLD	/var/log/storm/*
GENERIC_SERVICE_3 (Service Reliability)			
GENERIC_SERVICE_4 (Service Robustness)			
GENERIC_SERVICE_4 (Automatic Configuration)	Y	VLD	yaim configuration
GENERIC_SEC_1 (World Writable Files)	Y	VLD	find / -perm -o=w -type f -print
GENERIC_SEC_2 (Directory Traversal Attacks testing)			
GENERIC_MISC_2 (Bug Tracking System)	Y	VLD	<a href="https://storm.cnaf.infn.it:8443/redmine/">https://storm.cnaf.infn.it:8443/redmine/</a>
<b>Security Capabilities QC</b>			
AUTHN_IFACE_1 (X.509 Certificate support)	Y	VLD	
AUTHN_IFACE_2 (SAML authentication)			
AUTHN_DELEG_1 (Delegation Interface)			
AUTHZ_PCYDEF_3 (Ban UserFQAN)			
AUTHZ_PCYDEF_4 (Allowed users definition)	Y	VLD	
AUTHZ_PEP_1 (Policy Enforcement)	NA	VLD	
AUTHZ_PEP_2 (User Mapping)	NA	VLD	
<b>Information Capabilities QC</b>			
INFOMODEL_SCHEMA_1 (GlueSchema Support)	Y	VLD	
INFODISC_IFACE_1 (Information Discovery Interface)	Y	VLD	
<b>Storage Capabilities QC</b>			
FILEACC_API_1 (POSIX Read file access)	Y	VLD	
FILEACC_API_2 (POSIX Write file access)			
FILETRANS_API_1 (GridFTP File Access)	Y	VLD	
FILETRANS_API_2 (HTTPS File Access)	Y	VLD	https service configuration and testing OK
FILETRANS_API_3 (WebDAV File Access)			
STORAGE_API_1 (SRM API Support)	Y	TP	
STORAGE_API_2 (LCG-UTILS test)	Y	VLD	
STORAGE_DEVICE_1 (Information retrieval)	Y	VLD	

**Summary of Quality Criteria verification:**

	Generic Quality Criteria Total (Critical/Non critical)			
	Passed	Not passed	Not Applicable	Total
<b>TP</b>	2			2
<b>VLD</b>	11			11
	Specific Quality Criteria			
<b>TP</b>	1			1
<b>VLD</b>	15		2	17

**Summary:**

- yum update OK
- yaim configuration OK
- basic tests OK
- tested in particular the storm-gridftp server, because of the recent issues about the new globus packaging

**Validator comments:**

Test of storm-gridftp machine

Repos enabled  
 SL5  
 EPEL  
 UMD production  
 EGI-CA's

PLUS

```
[root@gftp03 yum.repos.d]# cat EMI.storm.sl5.x86_64.repo
```

```
# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) -
(3455,434,357)
```

The important thing is to have protect and priorities like the ones following

```
[root@gftp03 yum.repos.d]# cat repos-lip-umd-1.repo
```

```
[UMD-1-base]
```

```
name=UMD 1 base (SL5)
```

```
baseurl=http://linux.lip.pt/umd/1/sl5/$basearch/base
```

protect=1

enabled=1

# To use priorities you must have yum-priorities installed

priority=45

gpgcheck=1

gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/1/RPM-GPG-KEY-emi  
http://repo-rpm.ige-project.eu/RPM-GPG-KEY-IGE file:///etc/pki/rpm-gpg/RPM-GPG-  
KEY-emi file:///etc/pki/rpm-gpg/RPM-GPG-KEY-IGE

[UMD-1-updates]

name=UMD 1 updates (SL5)

baseurl=http://linux.lip.pt/umd/1/sl5/\$basearch/updates

protect=1

enabled=1

# To use priorities you must have yum-priorities installed

priority=40

gpgcheck=1

gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/1/RPM-GPG-KEY-emi  
http://repo-rpm.ige-project.eu/RPM-GPG-KEY-IGE file:///etc/pki/rpm-gpg/RPM-GPG-  
KEY-emi <file:///etc/pki/rpm-gpg/RPM-GPG-KEY-IGE>

[root@gftp03 yum.repos.d]# cat EMI.storm.sl5.x86\_64.repo

# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) -  
(3455,434,357)

[EMI.storm.sl5.x86\_64]

name=EMI.storm.sl5.x86\_64

baseurl=http://admin-repo.egi.eu/sw/unverified/emi.storm.sl5.x86\_64/1/8/2/

enabled=1

protect=1

priority=20

gpgcheck=1

gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/1/RPM-GPG-KEY-emi

Both the production and the “unverified” repos are “protected”, but the latest has higher priority (=20) then the formers (=40)

```
[root@gftp03 yum.repos.d]# yum update
```

Loaded plugins: kernel-module, priorities, protectbase

```
EMI.storm.sl5.x86_64  
| 1.9 kB  00:00
```

Excluding Packages in global exclude list

Finished

1918 packages excluded due to repository priority protections

807 packages excluded due to repository protections

Setting up Update Process

Resolving Dependencies

--> Running transaction check

----> Package emi-version.x86\_64 0:1.9.0-1.sl5 set to be updated

----> Package yaim-storm.noarch 0:4.1.8-1.sl5 set to be updated

--> Finished Dependency Resolution

Beginning Kernel Module Plugin

## Finished Kernel Module Plugin

### Dependencies Resolved

```
=====
=====
=====
```

Package Repository	Arch Size	Version
-----------------------	--------------	---------

```
=====
=====
=====
```

### Updating:

emi-version EMI.storm.sl5.x86_64	x86_64 2.0 k	1.9.0-1.sl5
yaim-storm EMI.storm.sl5.x86_64	noarch 37 k	4.1.8-1.sl5

### Transaction Summary

```
=====
=====
=====
```

Install 0 Package(s)

Upgrade 2 Package(s)

Total download size: 39 k

Is this ok [y/N]: y

Downloading Packages:

(1/2): emi-version-1.9.0-1.sl5.x86\_64.rpm  
| 2.0 kB 00:00

(2/2): yaim-storm-4.1.8-1.sl5.noarch.rpm  
| 37 kB 00:00

---

---

Total  
74 kB/s | 39 kB 00:00

Running rpm\_check\_debug

Running Transaction Test

Finished Transaction Test

Transaction Test Succeeded

Running Transaction

Updating : yaim-storm  
1/4

Updating : emi-version  
2/4

Cleanup : yaim-storm  
3/4

Cleanup : emi-version  
4/4

Updated:

emi-version.x86\_64 0:1.9.0-1.sl5  
storm.noarch 0:4.1.8-1.sl5

yaim-

Complete!

So, although the EPEL has the newer globus versions, they have not been updated.

```
[root@gftp03 ~]# /opt/glite/yaim/bin/yaim -c -s /opt/lip/yaim-site-cfg/siteinfo/site-  
info.def -n se_storm_gridftp
```

INFO: Using site configuration file: /opt/lip/yaim-site-cfg/siteinfo/site-info.def

INFO: Sourcing node specific configuration file: /opt/lip/yaim-site-cfg/siteinfo/nodes/gftp03.lip.pt

INFO:

#####

```
.      /'.-' )
.  yA,-"-(,m,:/) .oo.  oo  o  ooo o.  .oo
.  /  .-Y a a Y-.  8. .8'  8'8.  8  8b  d'8
.  /      ~~/      8'  .8oo88.  8  8  8'  8
.  (/_      '===='      8  .8'  8.  8  8  Y  8
.  Y,-"-,Yy,-,./      o8o o8o  o88o o8o o8o  o8o
.  I))_)I))_)
```

current working directory: /root

site-info.def date: Jul 29 2011 /opt/lip/yaim-site-cfg/siteinfo/site-info.def

yaim command: -c -s /opt/lip/yaim-site-cfg/siteinfo/site-info.def -n  
se\_storm\_gridftp

log file: /opt/glite/yaim/bin/./log/yaimlog

Thu Feb 23 11:33:00 WET 2012 : /opt/glite/yaim/bin/yaim

Installed YAIM versions:

glite-yaim-core 5.0.2-1

yaim-storm 4.1.8-1.sl5

#####

INFO: The default location of the grid-env.(c)sh files will be: /usr/libexec

INFO: Sourcing the utilities in /opt/glite/yaim/functions/utlis

INFO: Detecting environment

INFO: Executing function: config\_add\_pool\_env\_check

INFO: Executing function: config\_host\_certs\_check

INFO: Executing function: config\_edgusers\_check

INFO: Executing function: config\_users\_check

INFO: Executing function: config\_mkgridmap\_check

INFO: Executing function: config\_vomkdir\_check

INFO: Executing function: config\_vomsmmap\_check

INFO: Executing function: config\_lcas\_lcmmaps\_gt4\_check

INFO: Executing function: config\_storm\_globus\_gridftp\_check

INFO: Using locally defined function  
/opt/glite/yaim/functions/local/config\_storm\_globus\_gridftp

INFO: Executing function: config\_add\_pool\_env\_setenv

INFO: Executing function: config\_add\_pool\_env

INFO: Executing function: config\_ldconf

INFO: config\_ldconf: function not needed anymore, left empty waiting to be removed

INFO: Executing function: config\_sysconfig\_edg

INFO: Executing function: config\_crl

INFO: Now updating the CRLs - this may take a few minutes...

Enabling periodic fetch-crl: [ OK ]

INFO: Executing function: config\_host\_certs

INFO: Executing function: config\_edgusers

INFO: Executing function: config\_users

INFO: Executing function: config\_mkgridmap\_setenv



INFO: Executing function: config\_mkgridmap

INFO: The grid-map file will also contain special users for VO ATLAS since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in groups.conf

INFO: The grid-map file will also contain special users for VO AUGER since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in groups.conf

INFO: The grid-map file will also contain special users for VO CMS since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in groups.conf

INFO: The grid-map file will also contain special users for VO DTEAM since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in groups.conf

INFO: The grid-map file will also contain special users for VO OPS since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in groups.conf

INFO: The grid-map file will also contain special users for VO IBER.VO.IBERGRID.EU since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in groups.conf

INFO: The grid-map file will also contain special users for VO OPS.VO.IBERGRID.EU since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in groups.conf

INFO: The grid-map file will also contain special users for VO TUT.VO.IBERGRID.EU since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in groups.conf

INFO: The grid-map file will also contain special users for VO  
PHYS.VO.IBERGRID.EU since UNPRIVILEGED\_MKGRIDMAP=no for the VO.

INFO: Adding ordinary users in the gridmap file since the VO is defined in  
groups.conf

INFO: Now creating the grid-mapfile - this may take a few minutes...

/opt/glite/yaim/functions/utils/split\_quoted\_variable: eval: line 10: unexpected EOF  
while looking for matching `"

/opt/glite/yaim/functions/utils/split\_quoted\_variable: eval: line 11: syntax error:  
unexpected end of file

INFO: Executing function: config\_vomsdir\_setenv

INFO: Executing function: config\_vomsdir

INFO: Executing function: config\_vomsmap\_setenv

INFO: Executing function: config\_vomsmap

INFO: Creating grid-map directory in /etc/grid-security/gridmapdir

INFO: Creating voms grid-map file in /etc/grid-security/voms-grid-mapfile

INFO: Creating voms groupmap file in /etc/grid-security/groupmapfile

INFO: Executing function: config\_lcas\_lcmaps\_gt4\_setenv

INFO: Executing function: config\_lcas\_lcmaps\_gt4

INFO: Creating LCAS\_DB\_FILE in /etc/lcas/lcas.db

INFO: Creating LCMAPS\_DB\_FILE in /etc/lcmaps/lcmaps.db

INFO: Executing function: config\_storm\_globus\_gridftp\_setenv

INFO: Using locally defined function  
/opt/glite/yaim/functions/local/config\_storm\_globus\_gridftp

INFO: Executing function: config\_storm\_globus\_gridftp

INFO: Using locally defined function  
/opt/glite/yaim/functions/local/config\_storm\_globus\_gridftp

INFO: Starting gridftp service :

Stopping globus-gridftp-server: [ OK ]

Starting globus-gridftp-server: [ OK ]

INFO: Configuration Complete.

[ OK ]

INFO: YAIM terminated succesfully.

```
root 24825 0.0 0.0 145248 3560 ? Ssl 11:34 0:00 /usr/sbin/globus-gridftp-server
-p 2811 -d error,warn,info -l /var/log/storm/storm-gridftp-session.log -Z
/var/log/storm/storm-globus-gridftp.log -dsi StoRM -allowed-mod
```

```
[root@gftp03 ~]# /etc/init.d/storm-globus-gridftp status
```

globus-gridftp-server (pid 24825) is running...

Test of frontend and backend

```
[root@srm02 ~]# /opt/glite/yaim/bin/yaim -c -s /opt/lip/yaim-site-cfg/siteinfo/site-
info.def -n se_storm_backend -n se_storm_frontend
```

I got the following

INFO: Executing function: config\_bdii\_5.2\_check

ERROR: BDII\_DELETE\_DELAY is not set

ERROR: Error during the execution of function: config\_bdii\_5.2\_check

ERROR: Error during running check functions.

ERROR: Please define your missing variables ! Exiting.

ERROR: One of the functions returned with error without specifying its nature !

Now it seems it's needed in the site-info.def file

BDII\_DELETE\_DELAY=0

After this , the yaim configuration finished correctly

```
[root@srm02 backend-server]# /etc/init.d/storm-backend-server status
```

storm-backend-server (pid 29306) is RUNNING [ OK ]

```
[root@srm02 backend-server]# /etc/init.d/storm-frontend-server status
```

storm-frontend-server (pid 29512) is running...

```
[root@srm02 backend-server]# /etc/init.d/bdii status
```

BDII Running

[ OK ]

Both the GLUE2 and Glue1.3 resource values published all seem to be correct and make sense

Some SRM tests

```
[david@ui03 scripts]$ clientSRM Ping -e httpg://srm02.lip.pt:8443
```

=====

Sending Ping request to: httpg://srm02.lip.pt:8443

Before execute:

execute Request with:Ping

started calling ns1\_\_srmPing:

finished calling ns1\_\_srmPing:

Afer execute:

Request Status Code 0

Poll Flag 0

=====

Request status:

statusCode="SRM\_SUCCESS"(0)

explanation="SRM server successfully contacted"

=====

SRM Response:

versionInfo="v2.2"

otherInfo (size=3)

[0] key="backend\_type"

[0] value="StoRM"

[1] key="backend\_version"

[1] value="<FE:1.7.3-1><BE:1.8.2-2>"

[2] key="backend\_os\_distribution"

[2] value="Scientific Linux SL release 5.7 (Boron)"

=====

[david@ui03 srmtests]\$ ./srmls.sh

=====

Sending Ls request to: httpg://srm02.lip.pt:8443

Before execute:

Afer execute:

Request Status Code 0

Poll Flag 0

=====

Request status:

statusCode="SRM\_SUCCESS"(0)

explanation="All requests successfully completed"

=====

SRM Response:

details (size=1)

[0] path="/dteam/MD1-480MB"

[0] size=5

[0] lastModificationTime="2011-12-16T10:52:22"

[0] fileStorageType=2

[0] retentionPolicyInfo=(0,0)

[0] fileLocality=0

[0] type=File

[0] lifetimeAssigned=-1

[0] lifetimeLeft=-1

[0] ownerPermission (userID="3059",mode=RW-)

[0] groupPermission (groupID="3059",mode=RW-)

[0] otherPermission=RW-

[0] status: statusCode="SRM\_SUCCESS"(0)

explanation="Successful request completion"

=====

I have run the following script

```
#!/bin/sh
```

```
#Modify these variables
```

```
SE1="srm02.lip.pt"
```

```
PORT1="8443"
```

```
PATH1="dteam"
```

```
FILE1="FILEtrampaMD"
```

```
LocalDIR=`pwd`
```

```
TMPFILEptp=tmpPTP
```

```
TMPFILEstat=tmpPTPstat
```

```
LOGGlobus=gsiftp.log
```

```
ENDP1="httpg://${SE1}:${PORT1}"
```

```
SRM1="srm://${SE1}"
```



## Results

```
[david@ui03 srmtests]$ ./srmPTP-local-srm.sh
```

```
>>>>>>>> Start PTP <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```

```
>>>>>>>> Status PTP <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```

```
>>>>>>>> Start copy <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```

```
debug: starting to put gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD
```

```
debug: connecting to gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD
```

```
debug: response from gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:
```

```
220 gftp03.lip.pt GridFTP Server 3.33 (gcc64pthr, 1305148829-80) [Globus Toolkit 5.0.3]  
ready.
```

```
debug: authenticating with  
gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD
```

```
debug: response from gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:
```

```
230 User dteam051 logged in.
```

```
debug: sending command to  
gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:
```

```
SITE HELP
```

```
debug: response from gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:
```

```
214-The following commands are recognized:
```

```
ALLO  APPE  REST  CWD  CDUP  DCAU  EPSV  FEAT
```

```
ERET  MDTM  STAT  ESTO  HELP  LIST  MODE  NLST
```

```
MLSD  PASV  RNFR  MLST  NOOP  OPTS  STOR  PASS
```

```
PBSZ  PORT  PROT  SITE  EPRT  RETR  SPOR  SCKS
```



TREV PWD QUIT SBUF SIZE SPAS STRU SYST

RNTO TYPE USER LANG MKD RMD DELE CKSM

DCSC

214 End

debug: sending command to  
gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

FEAT

debug: response from gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

211-Extensions supported

DCSC P,D

AUTHZ\_ASSERT

UTF8

LANG EN

DCAU

PARALLEL

SIZE

MLST

Type\*;Size\*;Modify\*;Perm\*;Charset;UNIX.mode\*;UNIX.owner\*;UNIX.group\*;Unique\*;  
UNIX.slink\*;

ERET

ESTO

SPAS

SPOR

REST STREAM

MDTM

PASV AllowDelayed;

211 End.

debug: sending command to  
gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

SITE CLIENTINFO scheme=gsiftp;appname="globus-url-copy";appver="5.14  
(gcc64pthr, 1305182462-80) [unknown]";

debug: response from gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

250 OK.

debug: sending command to  
gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

TYPE I

debug: response from gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

200 Type set to I.

debug: sending command to  
gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

PBSZ 1048576

debug: response from gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

200 PBSZ=1048576

debug: sending command to  
gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:

PASV

debug: response from gsiftp://gftp03.lip.pt:2811//lustre/data1/dteam//FILEtrampaMD:



Before execute:

Afer execute:

Request Status Code 0

Poll Flag 0

=====

Request status:

statusCode="SRM\_SUCCESS"(0)

explanation="All requests successfully completed"

=====

SRM Response:

details (size=1)

[0] path="/dteam/FILEtrampaMD"

[0] size=98894

[0] lastModificationTime="2012-02-28T12:04:30"

[0] fileStorageType=2

[0] retentionPolicyInfo=(0,0)

[0] fileLocality=0

[0] type=File

[0] lifetimeAssigned=-1

[0] lifetimeLeft=-1

[0] ownerPermission (userID="3059",mode=RW-)

[0] groupPermission (groupID="3059",mode=RW-)

[0] otherPermission=RW-

[0] checksumType="ADLER32"

[0] checksumValue="f114bf56"

[0] status: statusCode="SRM\_FILE\_BUSY"(30)

explanation="Successful request completion"

=====

>>>>>>>>> PutDone <<<<<<<<<<<<<<<<<<<<<

=====

Sending PutDone request to: httpg://srm02.lip.pt:8443

Before execute:

Afer execute:

Request Status Code 0

Poll Flag 0

=====

Request status:

statusCode="SRM\_SUCCESS"(0)

explanation="All file requests are successfully completed"

=====

SRM Response:

arrayOfFileStatuses (size=1)

[0] SURL="srm://srm02.lip.pt/dteam/FILEtrampaMD"

[0] status: statusCode="SRM\_SUCCESS"(0)

explanation=""

=====

>>>>>>>>> Remove file <<<<<<<<<<<<<<<<<<<<<

=====

Sending Rm request to: httpg://srm02.lip.pt:8443

Before execute:

Afer execute:

Request Status Code 0

Poll Flag 0

=====

Request status:

statusCode="SRM\_SUCCESS"(0)

explanation="All files removed"

=====

SRM Response:

arrayOfFileStatuses (size=1)

[0] SURL="srm://srm02.lip.pt/dteam/FILEtrampaMD"

[0] status: statusCode="SRM\_SUCCESS"(0)

explanation="File removed"

=====

**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):**

- Review criteria xxxx
- Add criteria xxxx

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

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

**Comments for TP:**