



# **SRM-Tester**

## **For SRM v2.2**

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# SRM-Tester



- **Independent implementation of SRM specification for the purpose of testing**
  - Tests conformity of the SRM server interface according to the SRM spec v2.2
  - Tests compatibility and interoperability of the SRM servers according to the SRM spec



## SRM-Tester (2)



- **SRM-Tester tests file transfer protocols**
  - **Supported protocols**
    - gsiftp, ftp, http and https
- **SRM-Tester can publish the testing results to a designated web site**



# SRM-Tester (3)



- **SRM-Tester implementation in progress**
  - In the same timeline with SRM implementations
  - Implementation and the tests are done in few ways
    - Basic compatibility test: minimal request information to make successful and completed requests
    - Advanced compatibility test: combination of different options to try to create “failed” requests and see the behavior on the server
    - Basic interoperability test: minimal request information to make a successful and completed “copy” requests
    - Advanced interoperability test: combination of different options to try to create “failed” requests and see the behavior on the server

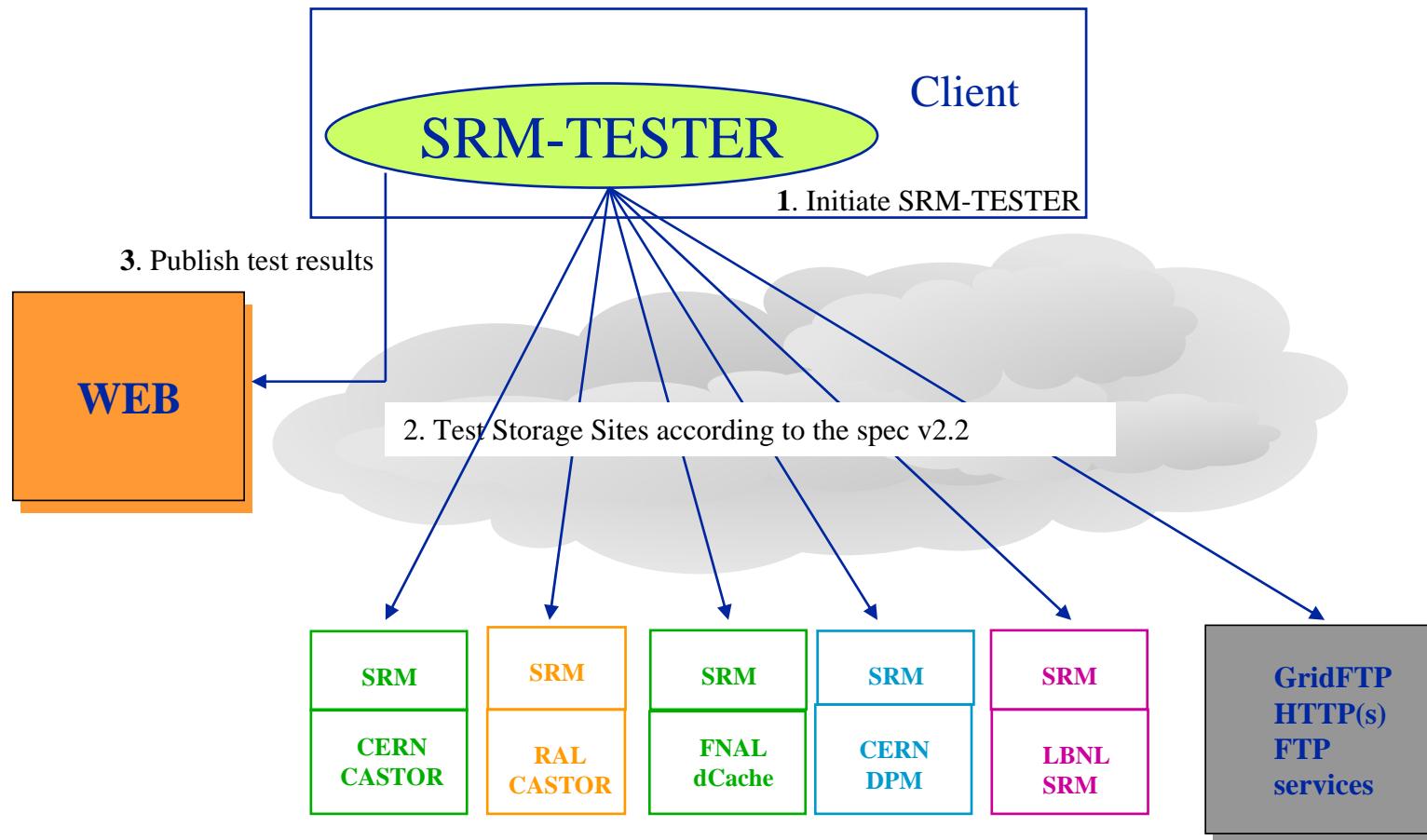


## SRM-Tester (4)



- All test results are published on the web
  - Updated daily, specially on the failed or N.A. tests
  - <http://sdm.lbl.gov/srm-tester>

# SRM inter-op testing





# SRM interop test result for v2.2 (8/25/2006)



Methods	CERN Castor	CERN DPM	FNAL dCache	RAL Castor	LBNL SRM
srmPing	<u>Ok</u>	<u>Ok</u>	<u>Exception</u>	<u>Ok</u>	<u>Ok</u>
srmPrepareToPut, srmStatusToPut, srmPutDone	N.A.	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>
srmPrepareToGet, srmStatusToGet	<u>Exception</u>	<u>Ok</u>	<u>Ok</u>	Failed	<u>Ok</u>
SrmRelease	N.A.	<u>Ok</u>	<u>Ok</u>	N.A.	<u>Ok</u>
Mkdir	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>
Rmdir	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>
SrmMv	N.A.	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>
SrmRm	N.A.	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>	<u>Ok</u>
SrmLs	<u>Exception</u>	<u>Exception</u>	<u>Ok</u>	<u>Exception</u>	<u>Ok</u>
SrmReserveSpace	Failed	<u>Ok</u>	<u>Ok</u>	Failed	<u>Ok</u>
SrmReleaseSpace	N.A.	<u>Ok</u>	<u>Ok</u>	N.A.	<u>Ok</u>
SrmBringOnline, srmStatusOfBringOnlingRequest	N.A.	<u>Ok</u>	N.A.	N.A.	N.A.



# SRM interop test result for v2.2

## (8/25/2006)



Methods	CERN Castor	CERN DPM	FNAL dCache	RAL Castor	LBNL SRM
SrmPrepareToPut, srmStatusOfPutRequest, srmPutDone (with space-token)	N.A.	Ok	Ok	N.A.	Ok
SrmPrepareToGet, srmStatusOfGetRequest (with space-token)	N.A.	Ok	N.A.	N.A.	Ok
SrmBringOnline, srmStatusOfBringOnlineRequest (with space-token)	N.A.	Ok	N.A.	N.A.	N.A.

Methods	CERN Castor	CERN DPM	FNAL dCache	RAL Castor	LBNL SRM
<i>COPY from Gridftp Source to SRM</i>	Failed (work in progress)	N.A.	Ok	Failed (work in progress)	Ok

<http://sdm.lbl.gov/srm-tester>



# SRM interop test result for v2.2

## (8/25/2006)



Copy/PULL Target SRM Source SRM	CERN Castor	CERN DPM	FNAL dCache	RAL Castor	LBNL SRM
CERN Castor		N.A.	Failed	N.A.	Failed
CERN DPM	N.A.		Ok	N.A.	Ok
FNAL dCache	N.A.	N.A.		N.A.	Ok
RAL Castor	N.A.	N.A.	Failed		Failed
LBNL SRM	N.A.	N.A.	Failed	N.A.	

Copy/PUSH Target SRM Source SRM	CERN Castor	CERN DPM	FNAL dCache	RAL Castor	LBNL SRM
CERN Castor		N.A.	N.A.	N.A.	N.A.
CERN DPM	N.A.		N.A.	N.A.	N.A.
FNAL dCache	Failed	Ok		Ok	Failed
RAL Castor	N.A.	N.A.	N.A.		N.A.
LBNL SRM	Failed	Ok	Ok	Ok	



# SRM interop test result for v2.2

## (8/25/2006)



3 <sup>rd</sup> Party Copy	CERN Castor	CERN DPM	FNAL dCache	RAL Castor	LBNL SRM
Target SRM					
Source SRM					
<i>CERN Castor</i>		N.A.	<i>Failed</i>	N.A.	N.A.
<i>CERN DPM</i>	N.A.		<i>Ok</i>	<i>Ok</i>	<i>Ok</i>
<i>FNAL dCache</i>	N.A.	<i>Ok</i>		<i>Ok</i>	<i>Ok</i>
<i>RAL Castor</i>	N.A.	N.A.	<i>Failed</i>		N.A.
<i>LBNL SRM</i>	N.A.	<i>Ok</i>	<i>Ok</i>	<i>Ok</i>	



# Summary



- **SRM-Tester for SRM v2.2 will be distributed in Oct. through VDT and web**
  - Earlier access is possible
- **As part of GIN efforts, SRM interop testing will be continuously conducted.**
  - Report will be provided in GGF-18



# SRM interop test result for v1.1 (8/21/2006)



	ping	get	put	advisory delete
ARC (UIO.NO)	pass	pass	fail	fail
LCG/EGEE (CERN)	pass	pass	pass	pass
FNAL	pass	pass	pass	pass
STAR (LBL.GOV)	pass	pass	pass	pass
OSG (SDSC.EDU)	pass	pass	pass	pass
EGEE (IC.UK)	pass	pass	pass	pass

COPY/PULL case Target SRM →	ARC (UIO.NO)	LCG/EGEE (CERN.CH)	FNAL	STAR (LBL.GOV)	OSG (SDSC.EDU)	EGEE (IC.UK)
Source SRM ↓						
ARC		N.A.	fail	fail	N.A.	fail
LCG/EGEE (CERN.CH)	fail		pass	pass	N.A.	pass
FNAL	fail	N.A.		pass	N.A.	pass
STAR (LBL.GOV)	fail	N.A.	pass		N.A.	pass
OSG (SDSC.EDU)	fail	N.A.	pass	pass		pass
EGEE (IC.UK)	fail	N.A.	pass	pass	N.A.	

<http://sdm.lbl.gov/srm-tester>