

Results of dCache srmcp transfers between SRM v1.1 and SRM v2.2 endpoints

Here I report the results of the tests executed using the dCache srmcp client tool while performing transfers between an SRM v1.1 and SRM v2.2 endpoint.

I installed the latest dCache srmcp client distributed with dCache 1.7 available on the dCache.org site. This is dCache client patch level 39.

```
[lxplus071] ~ > srmcp -version
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client
to be executed
WARNING:
SRM_PATH=/afs/cern.ch/project/gd/egee/glite/ui_PPS_testing/d-cache/srm
Storage Resource Manager (SRM) CP Client version 1.23.1
Copyright (c) 2002-2006 Fermi National Accelerator Laboratory
#
```

Then I performed a file transfer between a CASTOR endpoint running SRM v1.1 and a dCache endpoint running SRM v2.2 using a CMS voms proxy. Here are the results:

```
[lxplus071] ~ > srmcp file:///testing.dvi
srm://ralsrme.rl.ac.uk:8443/castor/ads.rl.ac.uk/test/cms/flavia1.dvi
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client
to be executed
WARNING:
SRM_PATH=/afs/cern.ch/project/gd/egee/glite/ui_PPS_testing/d-cache/srm
#
[lxplus071] ~ > srm-get-metadata
srm://ralsrme.rl.ac.uk:8443/castor/ads.rl.ac.uk/test/cms/flavia1.dvi
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client
to be executed
WARNING:
SRM_PATH=/afs/cern.ch/project/gd/egee/glite/ui_PPS_testing/d-cache/srm
FileMetaData(srm://ralsrme.rl.ac.uk:8443/castor/ads.rl.ac.uk/test/cms/flavia1.dvi)=
RequestFileStatus          SURL
:srm://ralsrme.rl.ac.uk:8443/castor/ads.rl.ac.uk/test/cms/flavia1.dvi
      size :75536
      owner :cms001
      group :cms
      permMode :33204
      checksumType :null
      checksumValue :null
      isPinned :true
      isPermanent :true
      isCached :true
      state :
      fileId :0
      TURL :
      estSecondsToStart :0
      sourceFilename :
      destFilename :
      queueOrder :0
[lxplus071] ~ > srmcp -srm_protocol_version=1 -pushmode=true
srm://ralsrme.rl.ac.uk:8443/castor/ads.rl.ac.uk/test/cms/flavia1.dvi
srm://gridka-dCache.fzk.de:8443/srm/managerv2\?SFN=/pnfs/gridka.de/cms/disk-only/flavia1.dvi
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client
to be executed
WARNING:
SRM_PATH=/afs/cern.ch/project/gd/egee/glite/ui_PPS_testing/d-cache/srm
SRMClientV1 : copy: try # 0 failed with error
SRMClientV1 : CastorSRMCopyInterface.c:472 CCI_startCopy() get/put failed:
SOAP fault No such operation 'put'
```

GGSDSRM1SRM2 < LCG < TWiki

```
(errno=22, serrno=0)
srm client error: CastorSRMCopyInterface.c:472 CCI_startCopy() get/put failed:
SOAP fault No such operation 'put'
(errno=22, serrno=0)
[lxplus071] ~ > srmcp -srm_protocol_version=2 -pushmode=false srm://ralsrme.rl.ac.uk:8443/castor/
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client to be executed
WARNING: SRM_PATH=/afs/cern.ch/project/gd/egge/glite/ui_PPS_testing/d-cache/srm
srm copy of at least one file failed or not completed
[lxplus071] ~ > srmls -l srm://gridka-dCache.fzk.de:8443/srm/managerv2?SFN=/pnfs/gridka.de/cms/d
WARNING: SRM_PATH=/afs/cern.ch/project/gd/egge/glite/ui_PPS_testing/d-cache/srm
[main] ERROR client.Call - Exception:
org.xml.sax.SAXException: Invalid element in org.dcache.srm.v2_2.TMetaDataPathDetail - path
    at org.apache.axis.encoding.ser.BeanDeserializer.onStartChild(BeanDeserializer.java:258)
    at org.apache.axis.encoding.DeserializationContext.startElement(DeserializationContext.java:
    at org.apache.axis.message.SAX2EventRecorder.replay(SAX2EventRecorder.java:165)
    at org.apache.axis.message.MessageElement.publishToHandler(MessageElement.java:1141)
    at org.apache.axis.message.RPCElement.deserialize(RPCElement.java:236)
    at org.apache.axis.message.RPCElement.getParams(RPCElement.java:384)
    at org.apache.axis.client.Call.invoke(Call.java:2467)
    at org.apache.axis.client.Call.invoke(Call.java:2366)
    at org.apache.axis.client.Call.invoke(Call.java:1812)
    at org.dcache.srm.v2_2.SrmSoapBindingStub.srmLs(SrmSoapBindingStub.java:2089)
    at org.dcache.srm.client.SRMClientV2.srmLs(SRMClientV2.java:570)
    at gov.fnal.srm.util.SRMLsClientV2.start(SRMLsClientV2.java:188)
    at gov.fnal.srm.util.SRMDispatcher.work(SRMDispatcher.java:500)
    at gov.fnal.srm.util.SRMDispatcher.main(SRMDispatcher.java:209)
SRMClientV2 : put: try # 0 failed with error
SRMClientV2 : ; nested exception is:
    org.xml.sax.SAXException: Invalid element in org.dcache.srm.v2_2.TMetaDataPathDetail - pa
[...]
```

Then I executed the same test but using as a source a dCache 1.7 endpoint:

```
[lxplus071] ~ > srmcp file:///testing.dvi srm://cmsdcache.pi.infn.it:8443/pnfs/pi.infn.it/data/cm
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client to be executed
WARNING: SRM_PATH=/afs/cern.ch/project/gd/egge/glite/ui_PPS_testing/d-cache/srm
[lxplus071] ~ > srm-get-metadata srm://cmsdcache.pi.infn.it:8443/pnfs/pi.infn.it/data/cms/flavia1
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client to be executed
WARNING: SRM_PATH=/afs/cern.ch/project/gd/egge/glite/ui_PPS_testing/d-cache/srm
FileMetaData(srm://cmsdcache.pi.infn.it:8443/pnfs/pi.infn.it/data/cms/flavia1.dvi)=
RequestFileStatus      SURL :srm://cmsdcache.pi.infn.it:8443/pnfs/pi.infn.it/data/cms/flavia1.
                        size :75536
                        owner :10200
                        group :1023
                        permMode :420
                        checksumType :adler32
                        checksumValue :35f67d02
                        isPinned :false
                        isPermanent :true
                        isCached :true
                        state :
                        fileId :0
                        TURL :
                        estSecondsToStart :0
                        sourceFilename :
                        destFilename :
                        queueOrder :0
```

```
[lxplus071] ~ > srmcp -srm_protocol_version=1 -pushmode=true srm://cmsdcache.pi.infn.it:8443/pnfs
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client to be executed
WARNING: SRM_PATH=/afs/cern.ch/project/gd/egge/glite/ui_PPS_testing/d-cache/srm
Wed Dec 12 22:49:01 CET 2007: java.io.IOException: Request with requestId =-2146751438 rs.state =
RequestFileStatus#-2146751437 failed with error: [ ]
```

```
srm copy of at least one file failed or not completed
[lxplus071] ~ > srmcp -srm_protocol_version=2 -pushmode=false srm://cmsdcache.pi.infn.it:8443/pnf
```

WARNING: SRM_PATH is defined, which might cause a wrong version of srm client to be executed
 WARNING: SRM_PATH=/afs/cern.ch/project/gd/egee/glite/ui_PPS_testing/d-cache/srm
 srm copy of at least one file failed or not completed

Then I made the same test using instead a dCache v1.8 srmcp client:

```
[flavia@lxb0728 ~]$ srmcp -srm_protocol_version=1 -pushmode=true
srm://ralsrme.rl.ac.uk:8443/castor/ads.rl.ac.uk/test/cms/flavia1.dvi
srm://gridka-dCache.fzk.de:8443/srm/managerv2\?SFN=/pnfs/gridka.de/cms/disk-only/flavia2.dvi
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client
to be executed
WARNING: SRM_PATH=/opt/d-cache/srm
SRMClientV1 : copy: try # 0 failed with error
SRMClientV1 : CastorSRMCopyInterface.c:472 CCI_startCopy() get/put failed:
SOAP fault No such operation 'put'
  (errno=22, serrno=0)
srm client error: CastorSRMCopyInterface.c:472 CCI_startCopy() get/put failed:
SOAP fault No such operation 'put'
  (errno=22, serrno=0)
java.lang.RuntimeException: CastorSRMCopyInterface.c:472 CCI_startCopy()
get/put failed: SOAP fault No such operation 'put'
  (errno=22, serrno=0)
    at org.dcache.srm.client.SRMClientV1.copy(SRMClientV1.java:780)
    at gov.fnal.srm.util.SRMCopyClientV1.start(SRMCopyClientV1.java:144)
    at gov.fnal.srm.util.SRMDispatcher.work(SRMDispatcher.java:779)
    at gov.fnal.srm.util.SRMDispatcher.main(SRMDispatcher.java:372)
[flavia@lxb0728 ~]$ srmcp -srm_protocol_version=2 -pushmode=false srm://ralsrme.rl.ac.uk:8443/cas
WARNING: SRM_PATH is defined, which might cause a wrong version of srm client to be executed
WARNING: SRM_PATH=/opt/d-cache/srm
[flavia@lxb0728 ~]$ srmls -l srm://gridka-dCache.fzk.de:8443/srm/managerv2\?SFN=/pnfs/gridka.de/c
WARNING: SRM_PATH=/opt/d-cache/srm
  75536 /pnfs/gridka.de/cms/disk-only/flavia2.dvi
  storage type:PERMANENT
  retention policy:REPLICA
  access latency:ONLINE
  locality:ONLINE
locality: null
  UserPermission: uid=14001 PermissionsRW
  GroupPermission: gid=5600 PermissionsR
  WorldPermission: R
  created at:2007/12/12 22:36:50
  modified at:2007/12/12 22:36:50
    - Assigned lifetime (in seconds): -1
    - Lifetime left (in seconds): -1
    - Original SURL: /pnfs/gridka.de/cms/disk-only/flavia2.dvi
  - Status: null
  - Type: FILE
```

Conclusions

It is possible with a dCache v1.8 srmcp client to transfer files between SRM v1.1 and SRM v2.2 endpoints.
 The same operation is not possible using a v1.7 srmcp client.

-- Flavia Donno - 12 Dec 2007

This topic: LCG > GGSDSRM1SRM2

Topic revision: r1 - 2007-12-12 - FlaviaDonno



Copyright &© 2008-2020 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

Ideas, requests, problems regarding TWiki? Send feedback