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check_storage.sh

```
#!/bin/bash

PROTOCOL=dcap
#PROTOCOL=rfio
#PROTOCOL=xroot

# LHCb software
source /exports/work/ppe/lhcb/lhcb-soft/scripts/local-setup.sh

# SetupProject
unset CMTPROJECTPATH
source /exports/work/physics_ifp_ppe/lhcb/lhcb-soft/scripts/SetupProject.sh DaVinci v19r14

# Grid UI
export ECDF_UI=/exports/work/ppe/lhcb/lhcb-soft/lcg/external/Grid
#export PATH=$PATH:$ECDF_UI/glite/bin:$ECDF_UI/lcg/bin:$ECDF_UI/lcg/bin/dpm:$ECDF_UI/globus/bin
#export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ECDF_UI/glite/lib:$ECDF_UI/lcg/lib:$ECDF_UI/globus/lib:

# dCache
export DCACHE_CLIENT_ACTIVE=1
export DCACHE_REPLY="eddie`hostname|cut -d\"e\" -f2`.ecdf.ed.ac.uk"
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/exports/work/physics_ifp_ppe/lhcb/lhcb-soft/lcg/external

# DPM
# This picks up libshift.so (for the ROOT libRFIO.so lib). In fact, libshift.so is a copy of libd
export DPM_HOST=srm.glite.ecdf.ed.ac.uk
export DPNS_HOST=srm.glite.ecdf.ed.ac.uk
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/exports/work/ppe/sw/builds

# Run check
python ~/test/check_storage.py ${PROTOCOL}
```

check_storage.py

```
#!/usr/bin/env python
# $Id: $

__author__ = 'Greig A Cowan'
__date__ = 'July 2008'
__version__ = 0.1

'''
Do "SetupProject Davinci" before running this script.

For rfio, make sure that DPM_HOST and DPNS_HOST are set appropriately. You will
need to have a valid grid proxy (for the GSI) and your LD_LIBRARY_PATH set so
that libRFIO can pick up the GSI libs.

For dcap, make sure that DCACHE_CLIENT_ACTIVE=1 is you are having firewall
troubles.

For xroot, you probably do not need anything special.
'''

import sys
from optparse import OptionParser

def main():
    parser = OptionParser(
        usage = 'usage: %prog [options] protocol')
    parser.add_option('-v', '--verbose', dest='verbose', action='store_true',
        help='Use verbose flag only for testing')

    (options, args) = parser.parse_args()

    try:
        protocol = args[0]
    except:
        parser.print_help()

    if len( args) != 1:
        parser.print_help()

    if protocol == 'dcap':
        dst = 'dcap://pool1.epcc.ed.ac.uk:22125/pnfs/epcc.ed.ac.uk/data/lhcb/production/DC06/L0-v1-lumi2/00001959/DST/0000/'
    elif protocol == 'rfio':
        dst = 'rfio:///dpm/ecdf.ed.ac.uk/home/lhcb/production/DC06/L0-v1-lumi2/00001959/DST/0000/'
    elif protocol == 'xroot':
        dst = 'root://srm.glite.ecdf.ed.ac.uk//dpm/ecdf.ed.ac.uk/home/lhcb/production/DC06/L0-v1-lumi2/00001959/DST/0000/'

    exit = False

    try:
        import ROOT
        f = ROOT.TFile.Open( dst)
        if f:
            print 'Successfully opened the RAW file: %s' % dst
        else:
            print '[ERROR]=3 Failed to open the RAW file: %s' % dst
            exit = True
    except Exception,x:
        print '[ERROR]=4 Exception while opening the RAW file: %s' % dst
        print str(x)
        exit = True

    if exit == True:
        sys.exit()
```

```
fileSize = f.GetSize()
bufferSize = 35*1024

buffer = ''
for i in range( bufferSize):
    buffer += ' '

bytes = 0
event = 0

while( bytes < ( fileSize - bufferSize)):
    bytes += bufferSize
    event += 1
    try:
        res = f.ReadBuffer( buffer, bufferSize)
    except Exception,x:
        print '[ERROR]=7 Failed to read event %s.' % event
        res = 'ERROR'

f.Close()
print '[SUCCESS]'
```

```
if __name__ == '__main__':
    main()
```

-- GreigCowan - 18 Jul 2008

This topic: [Main > LHCbEdinburghGroupAccessToGridStorage](#)

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