

DPM Migration campaign status

Renato Santana / Alessandro Paolini EGI Foundation

16-02-2023

OMB meeting





DPM Decommission and migration campaign

Introduction

- In <u>Sept 2022 tickets</u> were opened to sites providing DPM endpoints
- since the process will take time
 - sites and on the needs of the supported Vos
 - Currently available in UMD: dCache, Storm, EOS, XrootD.
- DPM team provided a script and a guide for the migration to dCache:
 - https://twiki.cern.ch/twiki/bin/view/DPM/DpmDCache
- Collecting migration plans
- Migration to dCache should be completed by June 2023.

Sites have been encouraged to start the migration to a different storage element

• Choosing the new storage solution depends on the expertise/experience of the

Following-up the tickets along with DPM team to provide support in case of issues





DPM Decommission and migration campaign

Status (link to <u>summary overview</u>)

Number of tickets		
In progress	27	
On hold	16	
Not replied	3	
Solved	9	
Total	55	

Planned completion date		
By 2022	1	
Beginning of 2023	5	
By Feb 2023	5	
By Q1 2023	8	
By Q2 2023	12	
undefined	11	

Chosen technology		
Migration to dCache	28	
Migration to EOS	6	
Migration to xroot/ceph	3	
Migration to XrootD	1	
Migration to Xcache	1	
Migration to Dynafed	2	
Not yet decided/no clear plan	11	
Decommissioning SE or site	3	





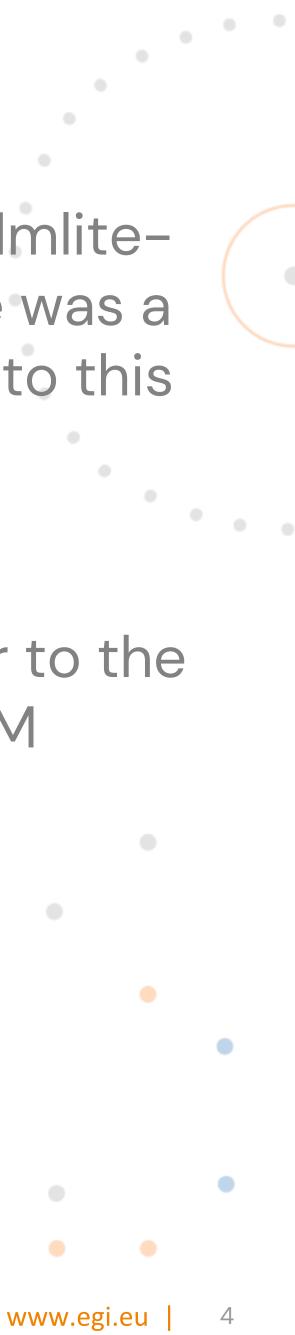
Issues encountered (I)

Found stuck replica – <u>GGUS 158796</u> (GRIF – NGI_FR)

- state or also if disk-node suddenly died you would see also these kind of inconsistent state.
- "dirty/inconsistent transfers").

1. "found stuck replica" means that file transfer did not finish correctly (in the dmliteshell -e 'info /path/to/file' you would see status kBeingPopulated) - e.g. there was a race-condition in the DPM gsiftp implementation in the past that could lead to this

2. Anyway, it is safe to remove "found stuck replica" files, because their transfer to the DPM did not finish correctly and they were not accessible for reading via DPM protocols. (In the migration documentation there are commands to clean all





Issues encountered (II)

GGUS 158832 (UKI-SCOTGRID-ECDF)

- fix for reading the ssh configs which I need to work out where to contribute)
 - rare)
- space allocation by hand in a .csv file)
 - release uncertain)
- this until now, but I'm going to need to investigate this. https://ggus.eu/index.php?mode=ticket_info&ticket_id=160308
 - replica on disknode => this makes already lost files more visible)

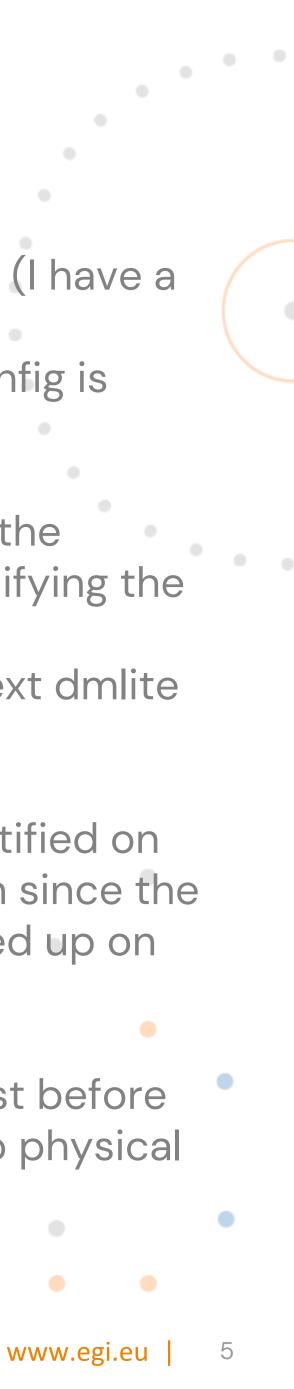
1. The migration tools had to be adjusted to work in an environment where we have to use custom ssh ports. (I have a nonstandard ssh ports - that script should at least log some reasonable exception (the used SSH config is

2. The initial migration failed due to one of the quota tokens in DPM containing more data than was in one of the spaces which caused problems at the db import. (This was fixed by starting again on the import after modifying the

added warning in case spacetoken size is smaller than sum of file size from given spacetoken (but next dmlite

3. ATLAS is now picking up files not found. Unfortunately a) they didn't exist in the site DPM, b) were not identified on disk as damaged or dark-data detected in the migration from DPM and c) appear not to have been written since the dCache was brought up. The suspicion is that these were lost files in the DPM era and ATLAS has not picked up on

if you checked that namespace import log file doesn't contain any warning than files were already lost before migration (e.g. consistency checks - migration first step - remove from DPM namespace files with no physical





Issues encountered (III)

<u>GGUS 158811</u>

- IR-IPM-HEP (ROC_Asia/Pacific)

 - 2. they asked to postpone the deadline to June/23.

1. internet interruptions on irregular basis due to political reasons in Iran.





Thank you

Questions?

www.egi.eu



This work is partially funded by the EU research and innovation programme

in



