

Quality Criteria Verification Report

Product	<i>epel.gfal2.sl5.sl6.x86_64-2.5.5</i>	Release	2.5.5
Software Provider	<i>EPEL</i>	RT Ticket	<i>#7263 and #7264</i>
Provider contact	<i>Cristina Aiftimiei <crisrina.aiftimiei@pd.infn.it></i>		
Verifier	<i>Esteban Freire (esfreire@cesga.es)</i>		
Hours worked	<i>8h</i>	Date	<i>18/07/14</i>
Status	Accepted		

Summary

For **epel.gfal2.sl6.x86_64-2.5.5**, there are already newer **gfal2** versions on the EPEL production repository than in the **epel.gfal2.sl6.x86_64-2.5.5** repository. See for example the following link: http://mirror.switch.ch/ftp/mirror/epel/6/x86_64/. Therefore, I just have tested the *epel.gfal2* version installed from EPEL production repository:

gfal2-core-2.5.5-3.el6.x86_64

Related tickets

None

Documentation Criteria

Document	
Release notes	https://svnweb.cern.ch/trac/lcgdm/attachment/wiki/Dpm/dpm_rpmlist_17032014.txt
User Documentation	https://svnweb.cern.ch/trac/lcgutil/wiki/gfal2-userguide
API Documentation	https://svnweb.cern.ch/trac/lcgutil/wiki/gfal2-pytho
Admin Documentation	http://grid-deployment.web.cern.ch/grid-deployment/dms/lcgutil/gfal2/
Software License	http://dmc.web.cern.ch/projects/gfal-2/documentation

Generic Criteria

Criteria	Status ¹	Additional Comments
Binary Distribution	OK	
Upgrade	OK	
X.509 Certificate support	OK	
SHA-2 Certificates Support	OK	

¹**OK**, **WARN**, **FAIL**, NA (Not Applicable) or NT (Not Tested)

RFC Proxy support	OK	
ARGUS Integration	NA	
World Writable Files	NT	Minor release
Passwords in world readable files	NT	Minor release
GlueSchema 1.3 Support	OK	
GlueSchema 2.0 Support	OK	
Middleware Version Information	NT	Minor release
Service Probes	OK	
Accounting Records	NA	
Bug Tracking System	OK	

Specific QC

Basic Functionality Test

- Interesting links:

* <https://svnweb.cern.ch/trac/lcgutil/wiki/gfal2-userguide>

* <https://svnweb.cern.ch/trac/lcgutil/wiki/gfal2-faq>

* <https://svnweb.cern.ch/trac/lcgutil/wiki/gfal2>

* <http://dmc.web.cern.ch/projects>

* <http://dmc.web.cern.ch/projects/gfal-2/home>

== Testing epel.gfal2.s15.x86_64-2.5.5 ==

```

{{{
[root@test13 yum.repos.d]# cat EPEL.gfal2.s15.x86_64.repo
# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) -
(7258,1598,1527)

```

```

[EPEL.gfal2.s15.x86_64]
name=EPEL.gfal2.s15.x86_64
baseurl=http://admin-repo.egi.eu/sw/unverified/umd-3.epel.gfal2.s15.x86_64/2/5/5/
enabled=1
protect=1
priority=1
gpgcheck=1
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/3/RPM-GPG-KEY-emi
}}}

```

=== Updating ===

* yum clean all;yum update

{{{

=====
=====
=====

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

Updating:

gfal2-all	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	8.4 k	
gfal2-core	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	54 k	
gfal2-devel	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	34 k	
gfal2-doc	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	124 k	
gfal2-plugin-dcap	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	14 k	
gfal2-plugin-gridftp	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	67 k	
gfal2-plugin-http	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	23 k	
gfal2-plugin-lfc	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	26 k	
gfal2-plugin-rfio	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	14 k	
gfal2-plugin-srm	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	42 k	
gfal2-python	x86_64	1.4.1-1.el5
EPEL.gfal2.sl5.x86_64	131 k	
gfal2-transfer	x86_64	2.5.5-2.el5
EPEL.gfal2.sl5.x86_64	19 k	

Transaction Summary

=====
=====
=====

}}}

==== Testing =====

* It is necessary to configure iptable on LFC or SE before trying gfalFS and in order to give mount permissions:

{{{

(!) Open the following TCP IPV6 ports in my case:

```
TCP port 33632 on LFC
TCP port 33631 on LFC
TCP port 51155-51180 on DPM-MYSQL
}}}
```

* Information about how to use gfalFS is provided in the following link,
<https://svnweb.cern.ch/trac/lcgutil/wiki/gfalFS>

(!) Before starting, must be executed as root user the following command:

```
{
{
{
[root@test13 ~]# usermod -a -G fuse esfreire
}}}
```

```
{
{
{
[esfreire@test13 ~]$ gfalFS -v /home/esfreire/mount_lfc_test09
lfc://test09.egi.cesga.es/grid/ops/
verbose mode....
```

```
[esfreire@test13 ~]$ ll /home/esfreire/mount_lfc_test09
total 0
-rw-rw-r-- 1 102 105 38 Jul 15 14:45 filefgtest150714_v2
```

```
[esfreire@test13 ~]$ mount
/dev/hda1 on / type ext3 (rw)
proc on /proc type proc (rw)
sysfs on /sys type sysfs (rw)
devpts on /dev/pts type devpts (rw,gid=5,mode=620)
tmpfs on /dev/shm type tmpfs (rw)
none on /proc/sys/fs/binfmt_misc type binfmt_misc (rw)
sunrpc on /var/lib/nfs/rpc_pipefs type rpc_pipefs (rw)
fuse on /home/esfreire/mount_lfc_test09 type fuse (rw,nosuid,nodev,user=esfreire)
}}}
```

```
{
{
{
[esfreire@test13 ~]$ cat /home/esfreire/mount_lfc_test09/filefgtest150714_v2
#!/bin/bash
```

```
##sleep 60
hostname
date
}}}
```

```
{
{
{
[esfreire@test13 ~]$ gfalFS -v /home/esfreire/mount_lfc_test09
srm://test08.egi.cesga.es:8446/srm/managerv2?SFN=/dpm/egi.cesga.es/home/ops/
verbose mode....
[esfreire@test13 ~]$ ll /home/esfreire/mount_lfc_test09
total 0
-rw-rw-r-- 1 daemon daemon 266 Jul 15 12:29 cattest_150714
drwxrwxr-x 1 daemon daemon  0 Jun 19 01:38 generated
```

```
drwxrwxr-x 1 daemon daemon 0 May 16 2013 mytest
-rw-rw-r-- 1 daemon daemon 266 May 16 2013 my_test
-rw-rw-r-- 1 daemon daemon 38 Jul 15 12:39 test150714
-rw-rw-r-- 1 daemon daemon 20 Jul 2 09:25 testfile-put-1404293132-
52addc5eb585.txt
```

```
[esfreire@test13 ~]$ cp hola.sh /home/esfreire/mount_lfc_test09
[esfreire@test13 ~]$ cat /home/esfreire/mount_lfc_test09/hola.sh
#!/bin/bash
```

```
##sleep 60
hostname
date
```

```
[esfreire@test13 ~]$ rm -rf /home/esfreire/mount_lfc_test09/hola.sh
[esfreire@test13 ~]$ ll /home/esfreire/mount_lfc_test09
total 0
-rw-rw-r-- 1 daemon daemon 266 Jul 15 12:29 cattest_150714
drwxrwxr-x 1 daemon daemon 0 Jun 19 01:38 generated
drwxrwxr-x 1 daemon daemon 0 May 16 2013 mytest
-rw-rw-r-- 1 daemon daemon 266 May 16 2013 my_test
-rw-rw-r-- 1 daemon daemon 38 Jul 15 12:39 test150714
-rw-rw-r-- 1 daemon daemon 20 Jul 2 09:25 testfile-put-1404293132-
52addc5eb585.txt
```

```
[esfreire@test13 ~]$ gfaFS_umount /home/esfreire/mount_lfc_test09
}}}
```

* Checking world writable files (OK)

```
{{{
```

An easy way to find world-writable files is using the find command:

```
find / -type f -perm -002 -exec ls -l {} \;
```

```
[ ... ]
```

```
/proc/*
```

For finding world-writable files in the packages contents:

```
[root@test13 yum.repos.d]# rpm -qalv | egrep "^[^-d]([-r][-w][-xs]){2}[-r]w"
drwxrwxrwt 2 root root 0 Jul 20 2011 /tmp
drwxrwxrwt 2 root root 0 Jul 20 2011 /var/tmp
}}}
```

== Testing epel.gfal2.sl6.x86_64-2.5.5 ==

```
{}  
[root@test13 yum.repos.d]# cat EPEL.gfal2.sl6.x86_64.repo  
# EGI Software Repository - REPO META (releaseId,repositoryId,repofileId) -  
(7264,1602,1531)
```

```
[EPEL.gfal2.sl6.x86_64]  
name=EPEL.gfal2.sl6.x86_64  
baseurl=http://admin-repo.egi.eu/sw/unverified/umd-3.epel.gfal2.sl6.x86_64/2/5/5/  
enabled=1  
protect=1  
priority=1  
gpgcheck=1  
gpgkey=http://emisoft.web.cern.ch/emisoft/dist/EMI/3/RPM-GPG-KEY-emi  
}}
```

```
{}  
[root@test13 yum.repos.d]# yum clean all;yum update  
Loaded plugins: security  
Cleaning repos: EPEL.gfal2.sl6.x86_64 UMD-3-base UMD-3-updates epel rocci.cli-sl-  
6-x86_64 sl sl-security  
Cleaning up Everything  
Loaded plugins: security  
EPEL.gfal2.sl6.x86_64  
| 1.9 kB 00:00  
EPEL.gfal2.sl6.x86_64/primary_db  
| 11 kB 00:00  
UMD-3-base  
| 1.9 kB 00:00  
UMD-3-base/primary_db  
| 228 kB 00:00  
UMD-3-updates  
| 1.9 kB 00:00  
UMD-3-updates/primary_db  
| 590 kB 00:01  
epel  
| 4.4 kB 00:00  
epel/primary_db  
| 6.2 MB 00:04  
rocci.cli-sl-6-x86_64  
| 2.5 kB 00:00  
rocci.cli-sl-6-x86_64/primary_db  
| 5.2 kB 00:00  
sl  
| 3.6 kB 00:00  
sl/primary_db  
| 4.1 MB 00:24
```

```
sl-security
| 3.0 kB   00:00
sl-security/primary_db
| 3.0 MB   00:17
Setting up Update Process
No Packages marked for Update
}}}
```

(!) There are already newer gfal2 versions on the EPEL production repository than in the EPEL.gfal2.sl6.x86_64 repository, see for example the following link:
http://mirror.switch.ch/ftp/mirror/epel/6/x86_64/

- Link about how to use gfal2:
<https://wiki.chipp.ch/twiki/bin/view/CmsTier3/HowToAccessSe>

```
}}}
voms-proxy-init --voms ops:/ops/Role=lcgadmin
export VO_OPS_DEFAULT_SE=test08.egi.cesga.es
export LFC_HOST=test09.egi.cesga.es
}}}
```

```
}}}
[esfreire@test13 ~]$ lfc-ls /dpm/egi.cesga.es/home/ops
generated
my_test
mytest
testfile-put-1404293132-52addc5eb585.txt
```

```
[esfreire@test13 ~]$ dpns-ls /dpm/egi.cesga.es/home/ops
generated
my_test
mytest
testfile-put-1404293132-52addc5eb585.txt
}}}
```

```
}}}
gfal-ls srm://se2.egi.cesga.es/dpm/egi.cesga.es/home/

gfal-ls -Hl srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/
```

```
gfal-ls -Hl srm://se2.egi.cesga.es/dpm/egi.cesga.es/home/
}}}
```

```
}}}
[esfreire@test13 ~]$ gfal-copy
srm://se2.egi.cesga.es/dpm/egi.cesga.es/home/ops/testfile-put-1401882691-
cf0388798004.txt file:/home/esfreire/testjul
Copying [DONE] after 3s
```

```
[esfreire@test13 ~]$ gfal-copy srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/testfile-put-1404293132-52addc5eb585.txt
file:/home/esfreire/testjul2
Copying [DONE] after 1s
```

```
[esfreire@test13 ~]$ gfal-copy file:/home/esfreire/hola.sh
srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/test150714
Copying [DONE] after 11s
}}}
```

(!) The following commands do not work, probably I am executing something wrong, I am trying to emulate the following lcg command:

```
{}{}
--> lcg-cr -v --vo ops file:/home/esfreire/hola.sh -l lfn:/grid/ops/filefgtest -d
test08.egi.cesga.es --> Copy & Register will be a two step procedure
}}}
```

```
{}{}
[esfreire@test13 ~]$ gfal-copy srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/test150714 lfn://test09.egi.cesga.es/grid/ops/filefgtest
Copying [FAILED] after 0s
gfal-copy: error: Invalid argument
```

```
[esfreire@test13 ~]$ gfal-copy srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/test150714 lfn://grid/ops/filefgtest
Copying [FAILED] after 0s
gfal-copy: error: Invalid argument
}}}
```

(!) The following command needs to configure the iptables on the destiny, in this case the LFC:

```
{}{}
[esfreire@test13 ~]$ gfal-ls lfn:/grid/ops/
filefgtest150714_v2
}}}
```

```
{}{}
[esfreire@test13 ~]$ gfal-ls -HI srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/
16893 1 2 2 Jun 19 01:38 0.0 generated
```



```
33204 1 2 2 May 16 2013 266 my_test
16893 1 2 2 May 16 2013 0.0 mytest
33204 1 2 2 Jul 15 11:45 38 test150714
33204 1 2 2 Jul 2 09:25 20 testfile-put-1404293132-52addc5eb585.txt
```

```
gfal-rm srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/test150714
```

```
[esfreire@test13 ~]$ gfal-mkdir srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/testdir150714
```

```
[esfreire@test13 ~]$ gfal-ls -HI srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/
```

```
16893 1 2 2 Jun 19 01:38 0.0 generated
33204 1 2 2 May 16 2013 266 my_test
16893 1 2 2 May 16 2013 0.0 mytest
16893 1 2 2 Jul 15 12:06 0.0 testdir150714
33204 1 2 2 Jul 2 09:25 20 testfile-put-1404293132-52addc5eb585.txt
```

```
gfal-rm -r srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/testdir150714
}}}
```

```
{{{
```

```
[esfreire@test13 ~]$ cat test.sh | gfal-save
srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/cattest_150714
[esfreire@test13 ~]$ gfal-cat srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/cattest_150714
#!/bin/bash
```

```
hostname
date
sleep 5
date
echo "I'm still alive.."
```

```
wget http://www.egee.cesga.es/gromacs_grid/gromacs-3.3.3.tar.gz
# Descomprimos el paquete y borramos el .tar.gz
tar xzvf gromacs-3.3.3.tar.gz
rm -rf gromacs-3.3.3.tar.gz
rm -rf gromacs-3.3.3
date
```

```
[esfreire@test13 ~]$ gfal-sum srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/test150714 MD5
srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/test150714 e8a436b9f55861dce93c946464a44d63
```

```
[esfreire@test13 ~]$ gfal-xattr srm://test08.egi.cesga.es:8446/srm/managerv2?
SFN=/dpm/egi.cesga.es/home/ops/test150714
user.replicas = rfio://test08.egi.cesga.es//storage/ops/2014-07-15/test150714.3957.0
user.status = ONLINE
}}}
```

* Information about how to use gfalFS is provided in the following link,
<https://svnweb.cern.ch/trac/lcgutil/wiki/gfalfs>

(!) Before starting, must be executed as root user the following command:

```
{
{
{
[root@test13 ~]# usermod -a -G fuse esfreire
}}}
```

* It is necessary to configure iptable on LFC or SE before trying gfalFS and in order to give mount permissions:

```
{
{
{
(!) Open the following TCP IPV6 ports in my case:
TCP port 33632 on LFC
TCP port 33631 on LFC
TCP port 51155-51180 on DPM-MYSQL
}}}
```

```
{
{
{
[esfreire@test13 ~]$ gfalFS -v /home/esfreire/mount_lfc_test09
lfc://test09.egi.cesga.es/grid/ops/
verbose mode....
```

```
[esfreire@test13 ~]$ ll /home/esfreire/mount_lfc_test09
total 0
-rw-rw-r-- 1 102 105 38 Jul 15 14:45 filefgtest150714_v2
```

```
[esfreire@test13 ~]$ mount
/dev/hda1 on / type ext3 (rw)
proc on /proc type proc (rw)
sysfs on /sys type sysfs (rw)
devpts on /dev/pts type devpts (rw,gid=5,mode=620)
tmpfs on /dev/shm type tmpfs (rw)
none on /proc/sys/fs/binfmt_misc type binfmt_misc (rw)
sunrpc on /var/lib/nfs/rpc_pipefs type rpc_pipefs (rw)
fuse on /home/esfreire/mount_lfc_test09 type fuse (rw,nosuid,nodev,user=esfreire)
}}}
```

```
{
{
{
[esfreire@test13 ~]$ cat /home/esfreire/mount_lfc_test09/filefgtest150714_v2
#!/bin/bash
```

```
##sleep 60
```

```
hostname
date
}}}
```

```
{
[esfreire@test13 ~]$ gfaFS -v /home/esfreire/mount_lfc_test09
srm://test08.egi.cesga.es:8446/srm/managerv2?SFN=/dpm/egi.cesga.es/home/ops/
verbose mode...
[esfreire@test13 ~]$ ll /home/esfreire/mount_lfc_test09
total 0
-rw-rw-r-- 1 daemon daemon 266 Jul 15 12:29 cattest_150714
drwxrwxr-x 1 daemon daemon  0 Jun 19 01:38 generated
drwxrwxr-x 1 daemon daemon  0 May 16 2013 mytest
-rw-rw-r-- 1 daemon daemon 266 May 16 2013 my_test
-rw-rw-r-- 1 daemon daemon  38 Jul 15 12:39 test150714
-rw-rw-r-- 1 daemon daemon 20 Jul  2 09:25 testfile-put-1404293132-
52addc5eb585.txt
```

```
[esfreire@test13 ~]$ cp hola.sh /home/esfreire/mount_lfc_test09
[esfreire@test13 ~]$ cat /home/esfreire/mount_lfc_test09/hola.sh
#!/bin/bash
```

```
##sleep 60
hostname
date
```

```
[esfreire@test13 ~]$ rm -rf /home/esfreire/mount_lfc_test09/hola.sh
[esfreire@test13 ~]$ ll /home/esfreire/mount_lfc_test09
total 0
-rw-rw-r-- 1 daemon daemon 266 Jul 15 12:29 cattest_150714
drwxrwxr-x 1 daemon daemon  0 Jun 19 01:38 generated
drwxrwxr-x 1 daemon daemon  0 May 16 2013 mytest
-rw-rw-r-- 1 daemon daemon 266 May 16 2013 my_test
-rw-rw-r-- 1 daemon daemon  38 Jul 15 12:39 test150714
-rw-rw-r-- 1 daemon daemon 20 Jul  2 09:25 testfile-put-1404293132-
52addc5eb585.txt
```

```
[esfreire@test13 ~]$ gfaFS_umount /home/esfreire/mount_lfc_test09
}}}
```

* Checking world writable files (OK)

```
{
An easy way to find world-writable files is using the find command:
```

```
find / -type f -perm -002 -exec ls -l {} \;
```

```
[ ... ]
```

/proc/*

For finding world-writable files in the packages contents:

```
[root@test13 yum.repos.d]# rpm -qalv | egrep "^[^-d]([-r][-w][-xs]){2}[-r]w"  
drwxrwxrwt  2 root  root          0 Jul 20 2011 /tmp  
drwxrwxrwt  2 root  root          0 Jul 20 2011 /var/tmp  
}}}
```

New Features/Fixed Bugs

Additional Info
