

Table of Contents

DPM upgrade to >= 1.6.0	1
Stop all daemons.....	1
Install the new RPM.....	1
Database backup.....	1
Run the migration script.....	1
Example for a Mysql DPM.....	1
Example for an Oracle DPM.....	2
Troubleshooting.....	2
Existing indexes.....	2
Error on rename.....	2
Undefined subroutine.....	2
SRM2.2 daemon.....	3
Restart the daemons.....	3

DPM upgrade to >= 1.6.0

Below, all the steps needed to upgrade the DPM from version < 1.6.0 to version >= 1.6.0.

Stop all daemons

In the following order, on the appropriate machines:

- `service dpm-gsift stop` on all disk servers
- `service srmv2 stop` on the SRM host
- `service srmv1 stop` on the SRM host
- `service dpm stop` on the DPM host
- `service rfiod stop` on all the disk servers
- `service dpnsdaemon stop` on the DPNS host

Install the new RPMs

All of them, on the appropriate node(s):

- `DPM-server`
- `DPM-name-server`
- `DPM-srm-server`
- `DPM-rfio-server`
- `DPM-gridftp-server`
- `DPM-client`

Database backup

IMPORTANT

As the migration script modifies the database content, **we highly recommend that you take a backup of the DPM database before running the migration script.** Please backup both databases `cns_db` and `dpm_db` beforehand.

Run the migration script

To support SRM2.2, a database schema change is needed. The migration script is included in the `DPM-name-server` RPM

Requirements:

- `Perl-DBD` (for `Mysql` or `Oracle`)
- `Perl-DBI`

NOTE Depending of the number of entries in the database, the script takes more or less time. So, be patient !

Example for a Mysql DPM

```
$ cd /opt/lcg/share/DPM/dpm-support-srmv2.2/
```

DpmSr mv2Support < LCG < TW ki

```
$ ./dpm_support_srmv2.2 --db-vendor MySQL --db localhost --user dpm_user --pwd-file /tmp/pwd \  
--dpns-db cns_db --dpm-db dpm_db --verbose
```

Example for an Oracle DPM

```
cd /opt/lcg/share/DPM/dpm-support-srmv2.2/
```

```
$ ./dpm_support_srmv2.2 --db-vendor Oracle --db db_oracle_sid --user dpm_user --pwd-file /tmp/pwd
```

Troubleshooting

Existing indexes

Don't worry if you get the following "error" output, it is harmless. It will appear if the G_PFN_IDX and P_PFN_IDX indexes already exist. In this case, you can consider that the migration script has been successfully run.

```
failed to query and/or update the DPNS/DPM databases : DBD::mysql::db do failed:  
Duplicate key name 'G_PFN_IDX' at UpdateDpmDatabase.pm line 264.  
Issuing rollback() for database handle being DESTROY'd without explicit disconnect().  
Issuing rollback() for database handle being DESTROY'd without explicit disconnect().
```

Error on rename

We believe the following error Error on rename is due to a bug in Mysql.

```
failed: Error on rename of './dpm_db/#sql-4083_25' to './dpm_db/dpm_pool' (errno: 150)  
at UpdateDpmDatabase.pm line 118.  
Issuing rollback() for database handle being DESTROY'd without explicit disconnect().  
Issuing rollback() for database handle being DESTROY'd without explicit disconnect().
```

You should:

- drop the foreign key
- run the script again
- re-create the foreign key

```
mysql> use dpm_db;  
mysql> alter table dpm_fs drop foreign key fk_fs;
```

```
$ ./dpm_support_srmv2.2 --db-vendor MySQL --db localhost --user dpm --pwd-file /tmp/pwd \  
--dpns-db cns_db --dpm-db dpm_db --verbose
```

```
mysql> alter table dpm_fs add CONSTRAINT fk_fs FOREIGN KEY (poolname) REFERENCES dpm_pool (poolna
```

Undefined subroutine

You get:

```
Undefined subroutine &UpdateDpmDatabase::modify_dpm_db_before_updating_fields_mysql  
called at ./dpm_support_srmv2.2 line 113.
```

To solve this, you should (re)define the \$PERLLIB environment variable:

```
$ export PERLLIB=/opt/lcg/share/DPM/dpm-support-srmv2.2:$PERLLIB
```

SRMv2.2 daemon

A new daemon - supporting SRMv2.2 - has to run.

Same step as for the other daemons: `cp /etc/sysconfig/srmv2.2.template /etc/sysconfig/srmv2.2`

Then, edit `/etc/sysconfig/srmv2.2`, and replace `<DPM_hostname>` and `<DPNS_hostname>` according to your setup:

```
# - DPM host : please change !!!!!
export DPM_HOST=<DPM_hostname>

# - DPM Name Server host : please change !!!!!
export DPNS_HOST=<DPNS_hostname>
```

Checkconfig it on:

```
/sbin/chkconfig srmv2.2 on
```

Restart the daemons

- `service dnssd daemon start` on the DPNS host
- `service rfiiod start` on all the disk servers
- `service dpm start` on the DPM host
- `service srmv1 start` on the SRM host
- `service srmv2 start` on the SRM host
- `service srmv2.2 start` on the SRM host **don't forget this new one**
- `service dpm-gsift start` on all disk servers

-- SophieLemaitre - 20 Mar 2007

This topic: LCG > DpmSrmv2Support

Topic revision: r6 - 2007-03-20 - SophieLemaitre



Copyright &© 2008-2019 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

Ideas, requests, problems regarding TWiki? Send feedback