

# Migration: from Lower version to Dspace 5

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# Steps 1 : Database and file systems backup from old version of Dspace

1. Take backup of whole old dspace (with database and files system)

(Caution: please test it on a testing machine, if everything is working fine then deploy on live server)

1. Database backup

(use `pg_dump` command, for detail refer presentation of backup)

2. File system

(Important folder required to be replace with new dspace folder e.g.: **assetstore** and **log** folder, for detail refer presentation of backup)

# Steps 2 : Install latest version of Dspace 5

1. Install latest Dspace 5

**Note:** If already install latest version of dspace 5, you may ignore this step

# Steps 3 : Replace database and files of newly installed Dspace

1. Remove the new Dspace database (assuming database and user name is dspace)

```
#dropdb -U dspace dspace
```

1. Restore old database (which will be upgraded to latest Dspace )

1. Create a blank dspace database

```
#createdb -U dspace -E UNICODE dspace
```

2. Restore old dspace database (old database assume that put in Desktop)

```
#psql -U dspace dspace < /root/Desktop/oldDspaceBackup
```

1. Restore old folder backup in latest installed dspace

1. /dspace/assetstore

2. /dspace/log

2. Restore also customize jsp pages. (but **recommended** new jsp and other configuration files carefully with new files for benefit of higher version of Dspace look and feel)

# Steps 4 : Upgrade older database to new compatible database

## 1. Type command

- `#!/dspace/bin/dspace database info`

```
[root@localhost Back1.4new5]# /dspace/bin/dspace database info
Database URL: jdbc:postgresql://localhost:5432/dspace
Database Schema: public
Database Software: PostgreSQL version 9.0.11
Database Driver: PostgreSQL Native Driver version PostgreSQL 9.1 JDBC4 (build 901)
```

Version	Description	Installed on	State
1.1	Initial DSpace 1.1 databas		Pending
1.2	Upgrade to DSpace 1.2 sche		Pending
1.3	Upgrade to DSpace 1.3 sche		Pending
1.3.9	Drop constraint for DSpace		Pending
1.4	Upgrade to DSpace 1.4 sche		Pending
1.5	Upgrade to DSpace 1.5 sche		Pending
1.5.9	Drop constraint for DSpace		Pending
1.6	Upgrade to DSpace 1.6 sche		Pending
1.7	Upgrade to DSpace 1.7 sche		Pending
1.8	Upgrade to DSpace 1.8 sche		Pending
3.0	Upgrade to DSpace 3.x sche		Pending
4.0	Upgrade to DSpace 4.x sche		Pending
5.0.2014.08.08	DS-1945 Helpdesk Request a		Pending
5.0.2014.09.25	DS 1582 Metadata For All 0		Pending
5.0.2014.09.26	DS-1582 Metadata For All 0		Pending

NOTE: This database is NOT yet initialized for auto-migrations (via Flyway).

Your database looks to be compatible with DSpace version 3.0  
All upgrades *after* version 3.0 will be run during the next migration.

If you'd like to upgrade now, simply run 'dspace database migrate'.

```
[root@localhost Back1.4new5]#
[root@localhost Back1.4new5]#
[root@localhost Back1.4new5]# /dspace/bin/dspace database migrate
```

# Steps 4 : Upgrade older database to new compatible database .....

## 1. Type command

```
#!/dspace/bin/dspace database migrate
```

```
[root@localhost Back1.4new5]# /dspace/bin/dspace database migrate
```

```
Database URL: jdbc:postgresql://localhost:5432/dspace  
Migrating database to latest version... (Check logs for details)  
Done.
```

```
[root@localhost Back1.4new5]# /dspace/bin/dspace database info
```

```
Database URL: jdbc:postgresql://localhost:5432/dspace  
Database Schema: public  
Database Software: PostgreSQL version 9.0.11  
Database Driver: PostgreSQL Native Driver version PostgreSQL 9.1 JDBC4 (build 901)
```

Version	Description	Installed on	State
1.1	Initial DSpace 1.1 databas		PreInit
1.2	Upgrade to DSpace 1.2 sche		PreInit
1.3	Upgrade to DSpace 1.3 sche		PreInit
1.3.9	Drop constraint for DSpace		PreInit
1.4	Upgrade to DSpace 1.4 sche		PreInit
1.5	Upgrade to DSpace 1.5 sche		PreInit
1.5.9	Drop constraint for DSpace		PreInit
1.6	Upgrade to DSpace 1.6 sche		PreInit
1.7	Upgrade to DSpace 1.7 sche		PreInit
1.8	Upgrade to DSpace 1.8 sche		PreInit
3.0	Initializing from DSpace 3	2015-02-06 09:28:32	Success
4.0	Upgrade to DSpace 4.x sche	2015-02-06 09:28:32	Success
5.0.2014.08.08	DS-1945 Helpdesk Request a	2015-02-06 09:28:34	Success
5.0.2014.09.25	DS 1582 Metadata For All 0	2015-02-06 09:28:34	Success
5.0.2014.09.26	DS-1582 Metadata For All 0	2015-02-06 09:28:34	Success

```
[root@localhost Back1.4new5]#
```

```
[root@localhost Back1.4new5]#
```

```
[root@localhost Back1.4new5]#
```

```
[root@localhost Back1.4new5]# /opt/apache-tomcat-7.0.35/bin/startup.sh
```

```
Using CATALINA_BASE: /opt/apache-tomcat-7.0.35
```

# Steps 5 : Perform indexing, filter-media and re-start tomcat

## 1. Reindex Discovery

```
#!/dSPACE/bin/dSPACE index-discovery -b
```

```
#!/dSPACE/bin/dSPACE filter-media
```

```
#!/dSPACE/bin/dSPACE index-discovery
```

## 2. Optimize indexing

```
#!/dSPACE/bin/dSPACE index-discovery -o
```

## 3. Start Tomcat ()

**Note:** When start apache-tomcat (servlet container), Dspace 5 new features automatic update old database and all the content in your DSpace will be automatically re-indexed for searching / browsing (<https://wiki.duraspace.org/display/DSDOC5x/Upgrading+DSpace>)



Thanks