



BACKUP-RESTORE


Yatrik Patel, yatrik@inflibnet.ac.in

Why Backup?

- It is almost certain that you will be storing valuable information in your Dspace server. Even assuming that the Dspace code is 100% bug free and that you will never delete 8000 records when you run the wrong script, you still need to back up! Drives and fans break. Computers get stolen. Server rooms get flooded. Without proper backups this could be a disaster.

What to backup?

- Dspacefiles
 - [tomcat]/webapps/dspace(if customized directly)
 - e.g.
 - /usr/local/tomcat/webapps/dspace
 - Contains JSP files and other classes
- [dspace]/
 - This contains configurations
 - Make sure directory [dspace]/assetstoreincluded
 - full text files (pdf, word files etc.)
- PostgreSQLdatabase
- Metadata and other information

- 
- It is strongly recommend that you:
 - Regularly backup your Dspace files and PostgreSQL database.
 - Keep multiple sets of backups.
 - Keep a recent backup physically separate from the archive -either in another room or ideally another site.
 - Regularly check that you can actually restore from your backup. It's not uncommon for people to produce a daily backup for years without checking it. When they come to need it, they discover that something has gone wrong and the backup is useless.

How to take backup?

- Go to some directory where you have sufficient disk space (e.g cd/data)
- `tar -zcvf <nameof-archive-file.gz> <dspace-direcory>`
- `tar -zcvf dspace_tar.gz /dSPACE`
- Makes tar archive file and compresses
- Can do it from Linux Windows (X Windows)
- Copy the file .tar.gz to safe place like CD-ROM, DVD, tape, another system etc.

PostgreSQL database backup

- Go to a directory where sufficient space available
- -Login as dspace Linux user (su-l dspace) if have already logged in as root user
- **-pg_dump dspace > dspace.backup**
- e.g.
- -Copy the file **dspace.backup** to safe place like
- CD-ROM, DVD, tape, another system etc.

How to restore Dspace repository when system crashes?

- Install the Linux (FC) OS of same version (works with higher version of OS also)
- Use the same IP No and host name as previously used
- Install all the dependent software (JDK ,tomcat, ant, postgresql)
- Shutdown the tomcat server
- Start postgresql server (if not running)

Copy backup files into Linux

- Login as root Linux user
- Copy `dspace_tar.gz` (backup file taken earlier) into `/` directory
- Use the command below to uncompress and extract the files
- `tar -zxvf dspace_tar.gz`
- You will see a directory `dspace` has been created

Create dspace Linux user and change ownership

- Create dspace user with home directory as /dspace
- `adduser -d /dspace dspace`
- Change the ownership and group of /dspace as dspace user)
- ant fresh_install Login as dspace (`su -l dspace`)
(Linux

Restore dspace database from backup

- Drop and recreate dspace postgresql database using the command
- **dropdb dspace**
- **createdb-U dspace -E UNICODE dspace**
- Restore dspace database from backup
- Login as postgres (su -l postgres)Linux user
psql-f dspace.backup dspace □

Copy webapplication files to tomcat directory

- Login as dspace (Linux user)
- Copy webapps folder again to your tomcat's webapps