# DSpace

# Backup and Restore

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# Backup Vs. Export/Import

- Backup is meant for guarding the data from disk crash, virus attack, hacking or any calamity

- Export/Import is meant for exchange of digital objects across repositories

# Hardware Required for Backup

- Any one of the following
    - CD-ROM/DVD-ROM
    - DAT Drive
    - External Hard disk
    - Another system on the LAN

# DSpace Directory Structure

- /dspace/assetstore

- /dspace/assetstore (bitstreams – most important)

- /dspace/bin  (commands to be used at command line, can always be generated from dspace-source files

- /dspace/config  (you might have customized it, one time backup is good enough)

- /dspace/handle-server

# DSpace Directory Structure

- /dspace/lib (can always be generated from dspace-source)

- /dspace/logs (essential to generate statistical reports and bug tracing)

- /dspace/reports (can be generated from Log files)

- /dspace/search (can be regenerated using index-all command)

# Where DSpace stores data

- /dspace/assetstore directory will have all the
  - Bitstreams and licenses
- PostgreSQL databases contains information on
  - Communities
  - Collections
  - e-groups
  - E-persons, thier passwords
  - Host of other information

# What should be Backedup

- Your DSpace postgreSQL database
- /dspace/assetstore (minimum backup)
- /dspace (entire directory)

# Creating Backup Directory

- Create one directory where backup files will be stored

- Eg
  - #mkdir /dspacebkp
  - #chmod 777 /dspacebkp

# tar Command (compress)

- To back up /dspace directory
    - $tar zcvf /dspacebkp/dspace060913.tar.gz  /dspace


- To back up only /dspace/assetstore

$tar -zcvf /dspacebkp/asset060913.tar.gz /dspace/assetstore/

# Untar (uncompress)

- To untar and unzip the tar.gz file, you may use the following command

- $tar -zxvf /dspacebkp/dspace060913.tar.gz

- **WARNING:**The safer approach is to use the above command in temp directory and copy it to dspace directory only after successfully un-taring the file

# Backup of database

The following commands are for Postgresql database backup

- Run pg_dump as dspace user
    - Ex: #su  –  dspace

    Enter password for Dspace

    -  $pg_dump dspace >/dspacebkp/db06092013

# Backup of database

Where

- dspace is name of the database

/dspacebkp/db06092013

file is backup file in which  all the table definitions and contents will be stored

# Restoring the backup data

One can use any of the following commands:

- psql command OR
- pg_restore

# Restoring the Database

- **WARNING**: You do not need to restore, unless your data got corrupted.
- Not to be used as a routine
- Of course backup should be done periodically

# Using psql to Restore

- $ psql -d dspace -f /dspacebkp/dspace_db_060913

  - Where dspace is the name of database
  - dspace_db_060913 is the backup file taken on 6th September 2013.