**Purpose:**

To update GeoNetwork metadata database manually. This is required if the automated process does not work, as revealed in an examination of the logs/jetty.xml.

| **Step** | **Major Activity** | **References, Forms and Details** |
| --- | --- | --- |
| **1** | Back up the GeoNetwork database. If postgresql/PostGIS:  pg\_dump –U postgres  -f path/to/file/filename\_full.sql  <database\_name> | * Depending upon GeoNetwork version, there may be changes to the structure of the GeoNetwork database. Sometimes these changes are not successful, and the database may need to be migrated manually. * This will be a complete database dump in SQl (text) format, which is the safest and most portable. It is restored with psql   Another alternative is a compressed dump, appending parameter “-Fc” and extension “dmp” (not text). This is later restored using pg\_restore. Size is about ten percent of text version. |
| **2** | Create a geonetwork database copy:  createdb –U postgres -O <owner> <newdb>;  then  pg\_restore –U postgres –Fc –d <newdb> <backup path and file>  -OR-  psql –U postgres –d <newdb> -f <backup path and file>.sql | * Commonly the database is named to be suggestive of the planned ultimate version * Use pg\_restore for compressed backup/restore, * Use psql for text backup |
| **3** | Confirm that the new database was successfully cloned:   * In psql and for the <newdb>,   SELECT \* FROM postgis\_full\_version();   * Exit psql ( \q ) | * Should see something like:   POSTGIS="2.1.3 r12547" GEOS="3.4.2-CAPI-1.8.2 r3924" PROJ="Rel. 4.8.0, 6 March 2012" GDAL="GDAL 1.10.0, released 2013/0 4/24"  LIBXML="2.7.8" LIBJSON="UNKNOWN" TOPOLOGY RASTER |
| **4** | Obtain a copy of the planned geonetwork.war version | * Download or may already have a copy |
| **5** | Determine the database migration steps:   * create folder ‘geonetwork’ * Move a copy of planned geonetwork.war into folder * unzip the war * move to WEB‑INF/classes/setup/sql/migrate * copy the steps from existing version to planned into a text document |  |
| **6** | Modify the previously-created database   * psql <newdb> postgres * Implement the migration steps, starting with the next version after the existing * Check that each migration step is completed, or understand why not | * use \dt to identify the tables * as a frequent example, use   “select \* from settings”  if examining entries in the ‘settings’ table |
| **7** | Proceed to the Geonetwork upgrade process:   * It will be necessary to delete the metadata\_subversion folder in geonetwork data folder | * <gn\_dir>/data/metadata\_subversion/ |