Software Requirements:

OpenClinica version 3.1.4.1

PostgreSQL 8.4

Oracle 10g

ESF Database Migration Toolkit – Professional (version used 8.0.31)

Steps:

1. Download PostgreSQL 8.4. Here is the link for the download and installation document.
   1. Download PostgreSQL link for Windows - <http://www.enterprisedb.com/postgresql-8421-installers-win32?ls=Crossover&type=Crossover>
   2. Download Linux link from the following link https://openclinica.app.box.com/files/0/f/2186649969/linux
   3. Instructions for installing PostgreSQL on Linux - <https://docs.openclinica.com/install-3-2-linux#install-postgres>
   4. Instructions for installing PostgreSQL on Windows - <https://docs.openclinica.com/installation/install-openclinica-3.3-windows#install_postgres>
2. Setup PostgreSQL and create a blank database in PostgreSQL and name it (E.g.: openclinica).
   1. Here is the link to setup and create blank database in windows <https://docs.openclinica.com/installation/install-openclinica-3.3-windows#set_up_postgres_db>
   2. Here is the link to setup and create blank database in Linux <https://docs.openclinica.com/install-3-2-linux#setup-postgres>
3. Connect the newly created database to an OpenClinica 3.1.4.1 application and start tomcat, verify you can see the OpenClinica login page, please “do not login”
   1. Option 1: You can do this by editing your datainfo.properties file of your current OpenClinica instance that is connected to Oracle if you are using OpenClinica 3.1.4.1 and restart tomcat
   2. Option 2: Install a new OpenClinica version 3.1.4.1 webapp and connect it to the newly created PostgreSQL database and restart tomcat.
4. Stop Tomcat
5. Verify/Update Timezone : This step will verify if your Oracle and PostgreSQL database are in the same time zone. If not, please make sure you update your PostgreSQL timezone to match the Oracle timezone. This step is important.
   1. Before Migration - In Oracle, find out the origin country/State time zone name code of the source (Oracle) db using the following command.
      1. SELECT SESSIONTIMEZONE FROM DUAL
   2. In Postgres,
      1. The following script will display list of all available timezone namecodes:
         1. select \* from pg\_timezone\_names
      2. The following script will display current timezone :
         1. select current\_setting('TIMEZONE')
   3. If the timezone do not match between Oracle and Postgres, the following script will alter the timezone to match your Oracle database location
      1. ex: ALTER DATABASE openclinica SET timezone TO 'Europe/Rome'
      2. ex: ALTER DATABASE openclinica SET timezone TO 'America/New\_York'
   4. Restart postgres server and verify the timezone has updated
      1. SELECT current\_setting('TIMEZONE')
6. Buy the ESF Database Migration Toolkit - Professional Edition and download it. Here is the link to the download page - <http://www.easyfrom.net/order/>.
7. Double click the ESP Migration toolkit icon to open the ESF Migration toolkit and follow the steps below to configure it.
   1. Click Next
   2. In the Choose a Data Source field page,
      1. Source : select oracle database
      2. Server: Enter your oracle server IP
      3. Port: 1521
      4. Username and password: enter the username and password for your schema
      5. Database: SID / XE
      6. Schema: your oracle schema name
   3. Click next
   4. In the choose a Destination page,
      1. Destination: Select Postgres Database
      2. Server: localhost/IP of your postgres database
      3. Port:5432
      4. Username and password: enter the username and password for your PostgreSQL database
      5. CharSet: UTF8
      6. Database: select the newly created database(e.g: openclinica)
      7. Schema: public
   5. Click next
   6. In the Select source table & view(s) page: Check the archived\_dataset\_file table from the list of tables or any one table, click next, click save as job and save it to your work directory(e.g.:migration\_properties.mjf)
   7. Open the saved file in a text editor(preferably notepad ++)
   8. Under the Source section, copy from Type through Schema(8 lines)
   9. Scroll to the bottom and under the Destination section, copy from Type through Schema(8 lines)
   10. Open the migration.mjf file that is provided in a text editor(like notepad++) and replace the source and destination properties from type through schema with the one you copied from the previous step and save the migration.mjf file.
   11. Exit the ESF migration toolkit and open it again. Click “Load job” button and browse the saved migration.mjf file and select it, click next 4 times and click submit.
8. Wait for the migration tool to complete and make sure the migration log file returns no errors. The process can take anywhere between 10-20 minutes or longer depending on the size of your database. Once the migration process is completed, you can click the browse log button located at the bottom of the tool to view the migration log file.
9. In PostgreSQL , either using PgAdminIII or from the command line, execute scripts 1 through 9 sql files in order, one at a time on the migrated database. In Windows, before executing script 9, please right click the database (openclinica) and click refresh. The order of execution is very important and make sure you don't get any errors.

Script 1\_Alter\_Tables\_Set\_Owner\_To\_Clinica  
Script 2\_Create\_Constraints\_&\_Indexes  
Script 3\_Create\_Sequences  
Script 4\_Alter\_Table\_Set\_nexVal  
Script 5\_Update\_Sequences\_Start\_value  
Script 6\_Alter\_Sequence\_OwnedBy  
Script 7\_Create\_Views  
Script 8\_SetOIDsToTables  
Script 9\_AddTriggersOnly

1. Re-start Tomcat, Login to OpenClinica application and Verify Data Integrity.