Migrate Lease Register to SOLA

The guide explains how to migrate lease register database (Access) to SOLA (PostgreSQL) using *Talend Open Studio* as the data integration tool.

# Preparation

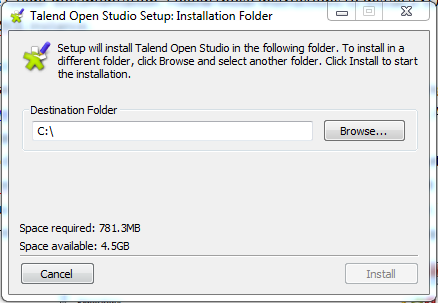
Before performing the migration it is essential to prepare the computer that will perform the migration with the necessary software. Talend Open Studio and PostgreSQL with the PostGIS extension.

# Download/Install PostgreSQL

1. Instructions for installing PostgreSQL can be found in the SOLA Development Environment Exercise Guide documentation. Follow those instructions to install a SOLA compatible PostgreSQL instance.

# Download/Install Talend Open Studio (TOS)

1. Download the latest version (v5.2.2) of Talend Open Studion (Data Integration) from <http://www.talend.com/download/data-integration> (approx 480Mb). After download you will get an application file called **"TOS\_DI-Win32-r99271-V5.2.2.exe"**
2. Double-click **"TOS\_DI-Win32-r99271-V5.2.2"** to run TOS installation setup**.**
3. Select a destination folder for your installation. This folder will contain all your TOS source data.



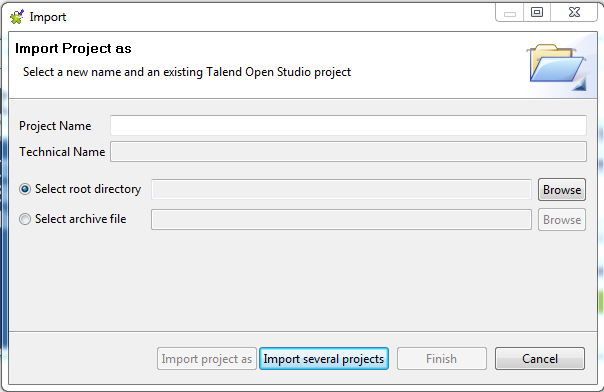
1. Click **Install** and wait for installation to proceed, when completed click **Close**.

# Running the Migration

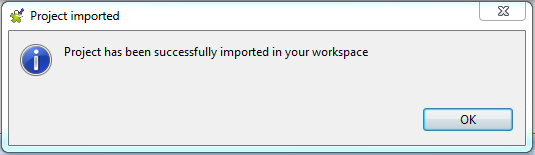
## Access to PostgreSQL

A project called 'SOLALease' has been created to migrate data from Lease register to SOLA (PostgreSQL). Data in Lease register is stored in an Access application called **lease.mdb**. In order to run this project we will need to import it into TOS.

1. Open **TOS** (Start menu > All Programs > TOS\_DI-Win32-r99271-V5.2.2 > TOS\_DI-Win32-r99271-V5.2.2)
2. Click **Import...**



1. Type a name in the **Project Name** field. This is just the imported name for the project.
2. Make sure the **Select root directory** radio button is selected.
3. Click **Browse** button to locate directory where you saved the SOLALEASE project.
4. Click **Finish** to import project. You should get the dialog box below if successfully imported. Your imported project will now appear in the Project list.

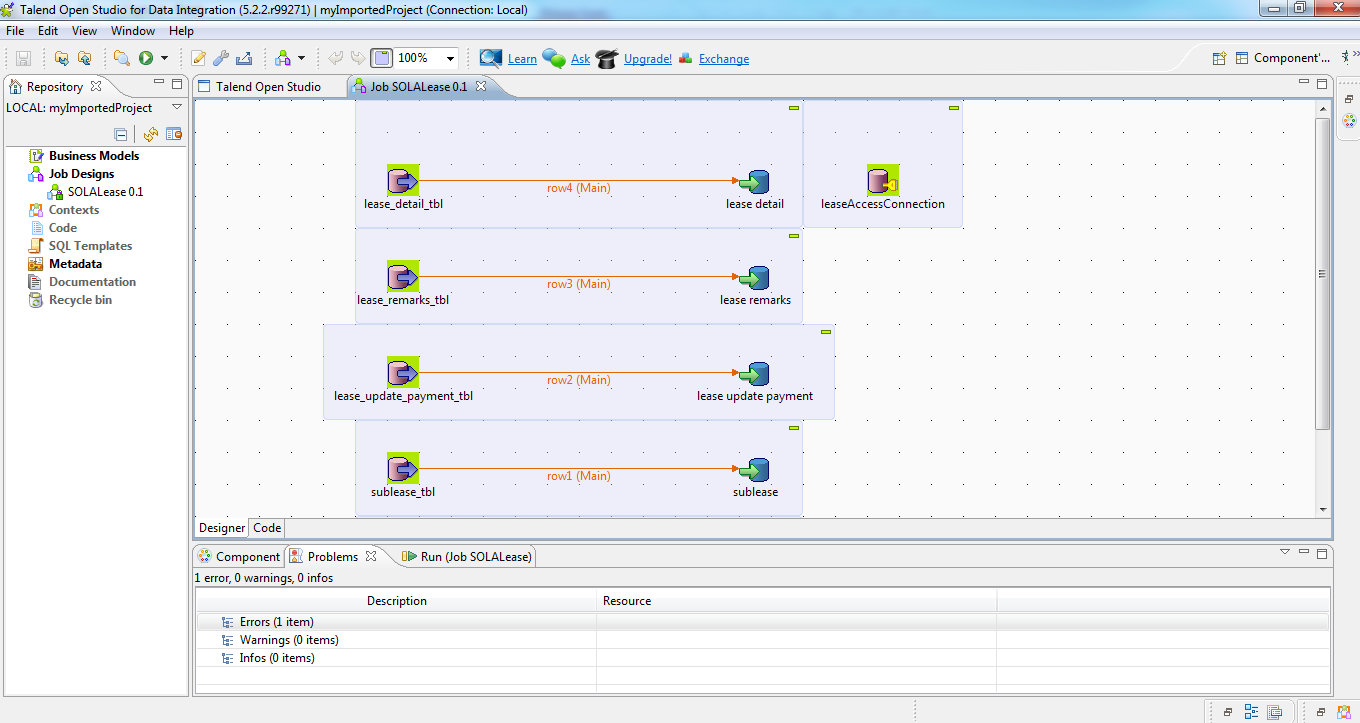


1. **Select** your imported project from the Project list and then **Click Open.**

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Note*: If* ***Generation Engine Initialization*** *is processing, wait for it to finish.*

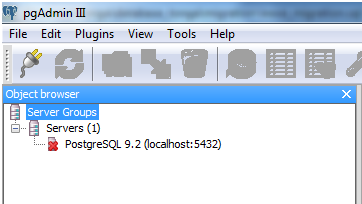
1. **Click "SOLALease 0.1"** under the **Job** category to load SOLALease project. You should be able to view the lease migration job as illustrated below.



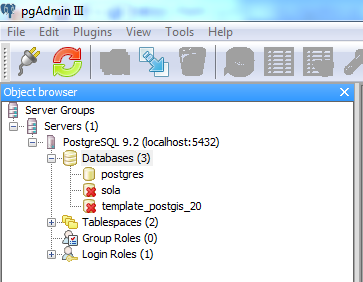
**Note:** *Make sure original database is loaded and storage directory is correct. In case of errors action required to changes component values.*

1. Click the **Run button** or press **F6** to run the current job.

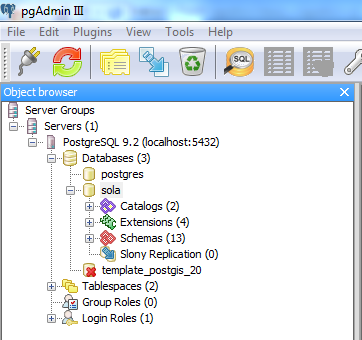
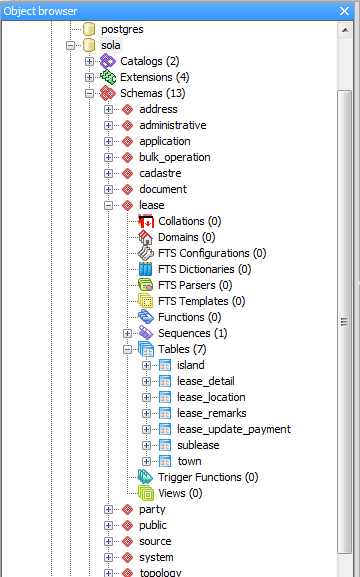
All data from Lease register (Access) are now migrated into SOLA (PostgreSQL). You can check the output by opening pgAdmin III (Start menu > All Programs > PostgreSQL 9.2 > pgAdmin III).



1. Double click **PostgreSQL 9.2 (localhost:5432)**
2. You will be asked for a username and password, if you store your password you won't be asked to input username and password. If prompted please ask your IT administrator for login details.
3. After you have logged in expand **Databases**, three databases will be shown.



1. Expand **sola**. This is the postgreSQL database that your output migration is stored.

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1. Expand Schemas. You will be displayed with SOLA schemas already implemented.
2. Find and expand **lease** schema and expand **Tables**. You will be displayed with the new tables migrated from the lease register. eg. lease\_detail, lease\_location, etc.
3. If you want to check data in the tables. Right click the table you want to view > View Data > View Top 100 Rows (**View Top 100 Rows** will show the first 100 records if you want to view all the data, choose **View All Rows**)

# Transferring Data to SOLA Tables

Once the data from the Lease Register Database has been moved into Postgres, it must be transferred into the SOLA tables. To do this, run the following SQL scripts from pgAdmin in the order specified

1. **prep\_migration\_tables.sql** – This script will update the tables in the lease schema with additional columns that will help with the data transfer to SOLA
2. **lease\_migration.sql** – This script transfers the data from the lease schema into the SOLA tables creating BA Units for each lease and setting up parties and RRR.

# Validating the Migrated Data

Once complete, the migrated data should be checked for any inconsistencies. The **validate\_migration.sql** script provides a number of checks of the migrated data. All validation messages are inserted into to the lease.validation table. Extract any messages in this table and use them to further cleanse the data in the Lease Register Database.