Visualize Db2 spatial data with uDig open

David Adler
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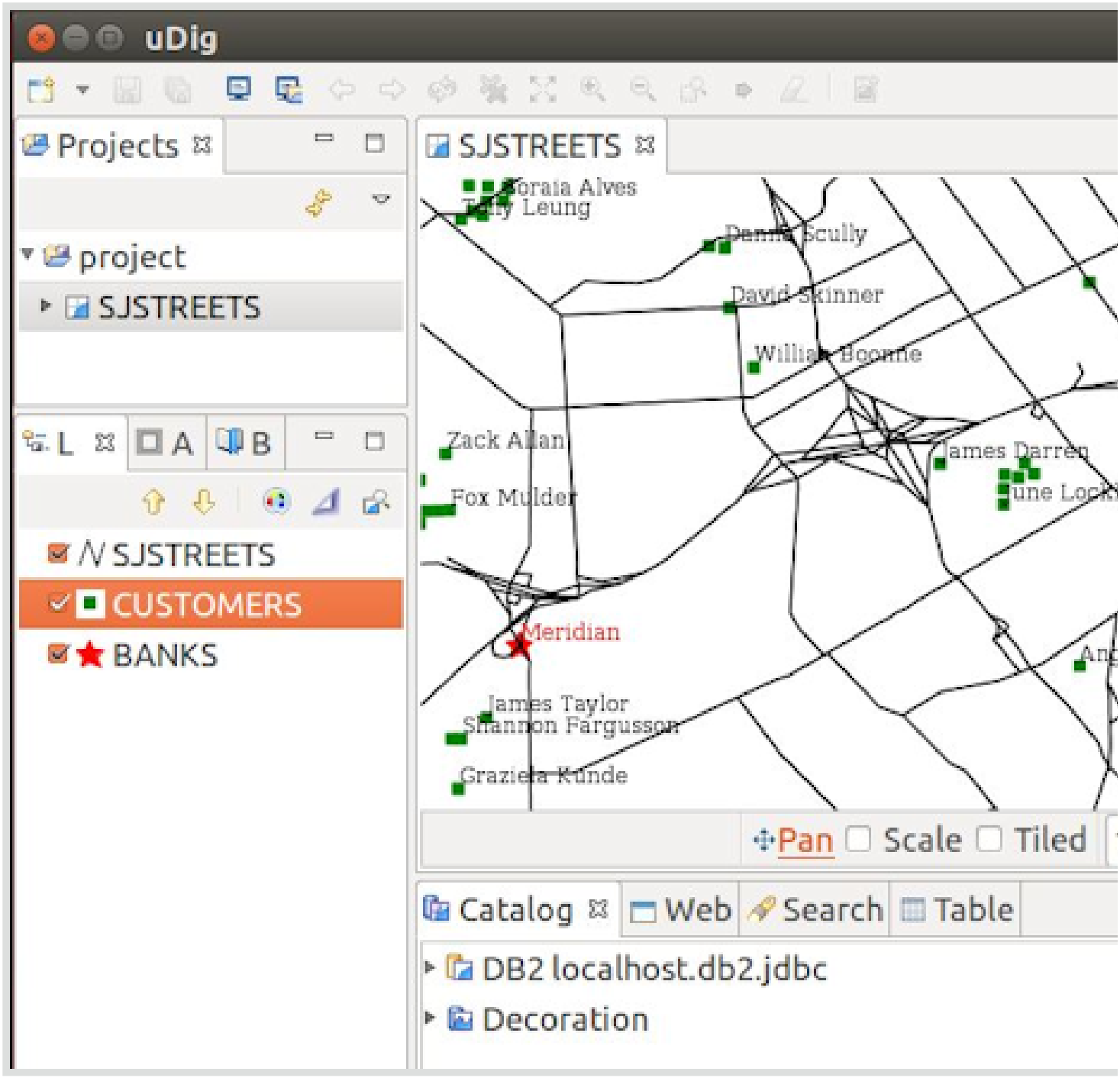


Contents

Overview

Skill Level: Beginner

Experience using SQL and Db2 is helpful

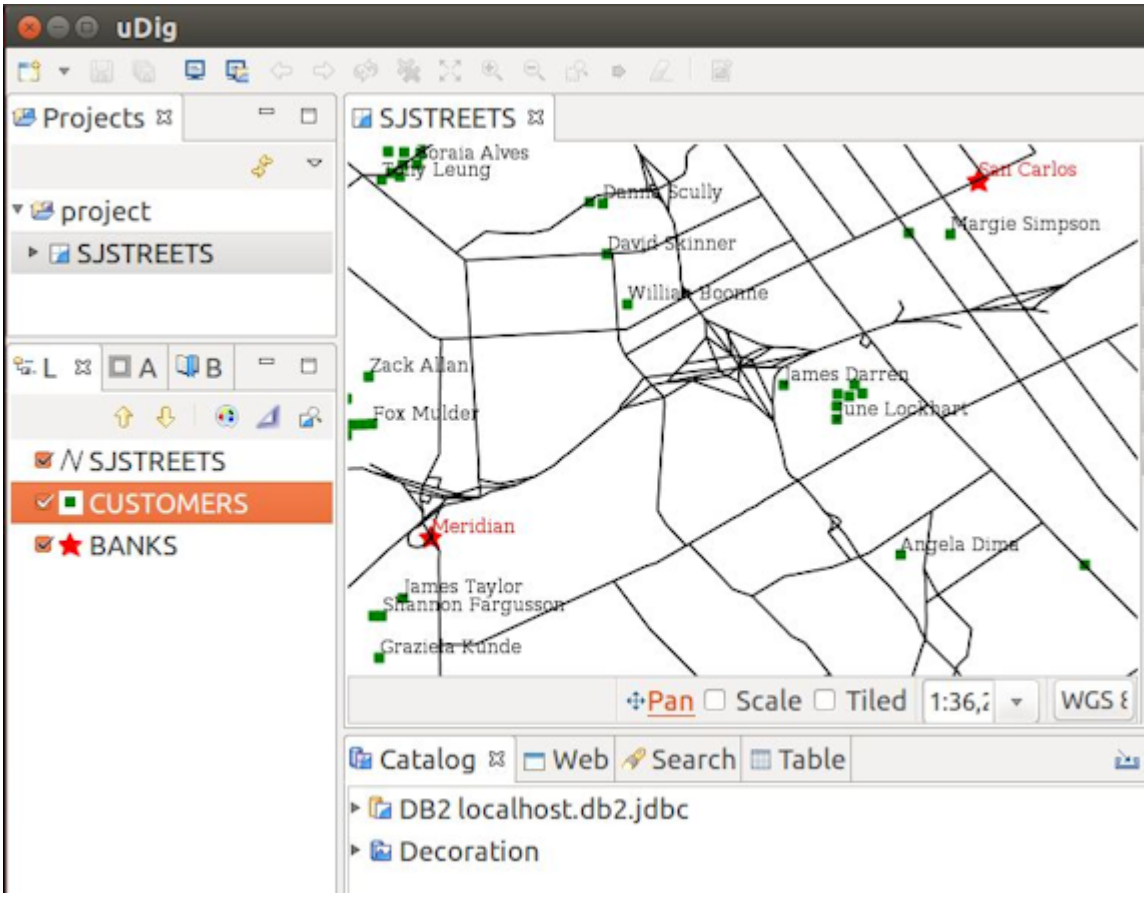
uDig is a full-function GIS tool for displaying and analyzing spatial data.

This recipe takes you through the steps to load spatial data into a Db2 database, connect uDig to Db
spatial tables.

Ingredients

- Db2 client and server(Free DB2 download)
- uDig installation (download)
- Sample data (download)
- Db2 spatial documentation as appropriate for your environment:
  - Db2 for z/OS Knowledge Center
  - Db2 LUW Knowledge Center

With this recipe you will create a map of San Jose streets, two bank branches and a number of sample
like the following screen capture from uDig on Ubuntu Linux. The appearance will be similar on the oth
Windows and Mac OS/X.



Step-by-step

1 Setup Db2 and sample data

1. Note: this recipe uses the database name **OSTEST** and the database connection userid **OS** values in the examples to your database name and userid.
2. Download and unzip the sample data to a convenient directory.
3. Open a DB2 command window where you can execute SQL statements. If you are using a sure it is cataloged locally. You can use the scripts **catalog-luw.sql** or **catalog-zos.sql** as a changes for the remote server location.
   You can execute the script with a command like:
   db2 -tvf catalog-zos.sql

4. Import sample spatial for banks, customers and San Jose streets.
   – Modify the scripts **import-luw.sql** or **import-zos.sql** as appropriate to change the userid procedure. (The scripts contain descriptions of each of the steps and any modifications ne

– Execute the script with a command like:
db2 -tvf import-zos.sql
– Check that there were no processing errors

5. Verify the imported data with the SQL statement (change "**osuser**" to your connection use
db2 select name, street, varchar(db2gse.st_astext(geom),32) from osuser.banks
which should return the name, street address and location of the **Meridian** and **San Carlos**

2 Install and setup uDig

This example uses Ubuntu Linux with a local Db2 LUW database but the operation is very simil
Mac OS/X.

1. Download and install uDig using the instructions at the download link in the **Ingredients** se
2. When starting uDig for the first time, you need to specify the location of the JDBC driver fil
preferences by selecting **Window->Preferences** from the menu bar, then expand the **Cata**
DB2.
3. Use the **Browse** buttons to navigate to the Db2 installation java directory and select the **db**
db2jcc_license_cu.jar for your Db2 release.. The actual path and DB2 version will depend
Db2 and the version installed. uDig should work correctly with currently supported version
result in a window like the following:

4. Click on **Apply** which will prompt you to allow uDig to be restarted.

3 Select and display spatial data

1. To add spatial tables from DB2 as layers, from the menu bar select **Layer->Add** and then s
   show a dialog to add the connection information similar to the image below. Enter the con
   then click the **Get schemas** button to get a list of the schemas with spatial tables. Select tl
   then click the **Finish** button.

2. This will display a list of tables that can be included in the map. Select the BANKS, CUSTOI
   tables and click **Finish**.
3. A map like the following will be displayed. (If it doesn't display, right-click on the SJSTREE
   "Zoom To Layer")

4 Customize the map display

uDig allows you to customize the style for symbols, color and labels based on table attributes.

1. To change the style of a layer, right-click on a layer name and select **Change Style...**

2. This will display a window like the following where you can change aspects of the style suc
   displayed, its size and color and labels to be associated with each feature. Make your chan

5 Conclusion

With uDig you can integrate spatial data from many different sources – other databases, files a
uDig to gain insight into spatial relationships of your data.

The current map state can be saved as a project for subsequent use and also printed or export

You may also find these tutorials on Developer Works useful:

- Manage spatial data with IBM DB2 Spatial Extender, Part 1 – Acquiring spatial data and de
- Manage spatial data with IBM DB2 Spatial Extender, Part 2 – Implementing typical spatial

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TAGS DASHDB, DB2, GEOSPATIAL, GIS, SPATIAL, UDIG

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by David Adler

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