

Creating and Loading a Spatial Database

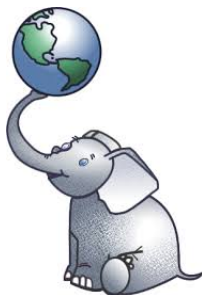
1. Install psql and postGIS

- **Mac**



[Postgres.app](https://postgres.app)

- **Linux**



- [PostgreSQL](https://www.postgresql.org/)
- [PostGIS](https://postgis.net/)

2. Create a database and connect to it

```
~> createdb --owner lucia --password nyc  
[ createdb -0 lucia -W nyc ]
```

```
~> psql --dbname=nyc  
[ Or \c nyc from psql prompt ]  
[ \l to list all ]
```

3. Enable spatial support

```
=# CREATE EXTENSION postgis;
```

```
=# SELECT postgis_full_version();
```

4. Create sql load commands from shape files

```
~> mkdir sqlloads
```

```
~> shp2pgsql -I -s 26918 data/nyc_census_blocks.shp nyc_census_blocks  
> sqlloads/nyc_census_blocks.sql
```

```
~> shp2pgsql -I -s 26918 data/nyc_neighborhoods.shp nyc_neighborhoods  
> sqlloads/nyc_neighborhoods.sql
```

```
~> shp2pgsql -I -s 26918 data/nyc_streets.shp nyc_streets >  
sqlloads/nyc_streets.sql
```

```
~> shp2pgsql -I -s 26918 data/nyc_subway_stations.shp  
nyc_subway_stations > sqlloads/nyc_subway_stations.sql
```

5. Load spatial data into db

```
~> psql -U lucia -d nyc -f sqlloads/nyc_census_blocks.sql
```

```
~> psql -U lucia -d nyc -f sqlloads/nyc_neighborhoods.sql
```

```
~> psql -U lucia -d nyc -f sqlloads/nyc_streets.sql
```

```
~> psql -U lucia -d nyc -f sqlloads/nyc_subway_stations.sql
```

```
~> psql -U lucia -d nyc -f data/nyc_census_sociodata.sql
```