



GISVM 14.04.3 POSTGIS

YOUR POSTGIS SERVER COMPANION

QUICKSTART & PASSWORDS

Beta Version - 20160130

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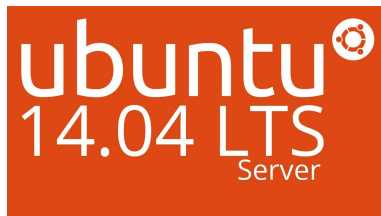
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REMEMBER, USE GISVM AT YOUR OWN RISK.

What's inside



Ubuntu 14.04.3 LTS Server 32bit

- + Private (NAT) & Local (Bridge) networks
- + Apache2 Web server & PHP5
- + Samba - windows network
- + OpenSSH
- + Webmin 1.780
- + Shellinabox



PostgreSQL 9.5.0

- + PostGIS 2.2.1
- + phpPgAdmin 5.1
- + postgis sample database
- + natural earth 2 sample data

Passwords

	LOGIN	PASSWORD	URL
Ubuntu shell (&sudo)	gisvm	gisvm	http://gisvm:4200 (shellinabox)
Local site (Apache2)	gisvm	gisvm	http://gisvm
PostgreSQL (Database: postgis)	postgres	gisvm	http://gisvm/phpPgAdmin/
Webmin	gisvm	gisvm	http://gisvm:10000
Samba share (/home/gisvm/gisdata) (/samba/gisdata)			(Windows Shortcut) \\gisvm\gisdata



First time run

Three simple steps: Download, unzip and run

1. Download

GIS Virtual Machine is a complete and independent computer on a file. It is optimized to use less than 2 GB of space on your disk at start. You can download and get it in a compacted 7z file that is less than 200 MB.

2. Unzip

After download it you must uncompress the 7z file. You must have a uncompress program installed or install 7z available as free software: <http://www.7-zip.org/download.html>

3. Run

To run it you must have a Virtual Machine Player installed or install a free available:

- Install **VirtualBox**, available as free software:

<https://www.virtualbox.org/wiki/Downloads>



- Or **VMware Player**, available for free:

<https://www.vmware.com/go/downloadplayer>



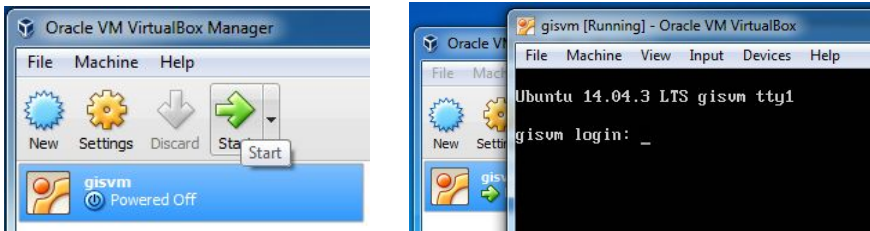


Run on VirtualBox:

- Run VirtualBox and File> **Import Appliance...** and select the **“gisvm.ovf”** file found inside the gisvm unpacked folder.

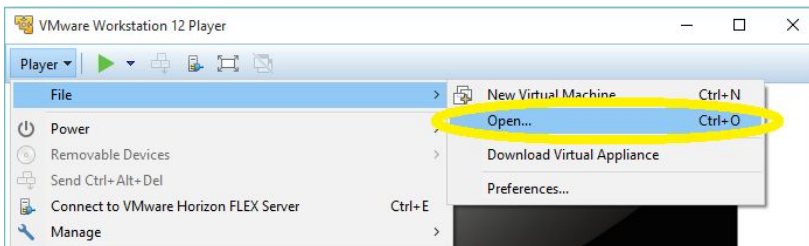


- After importing, that only takes a min, you can **“Start”** the **gisvm** virtual machine

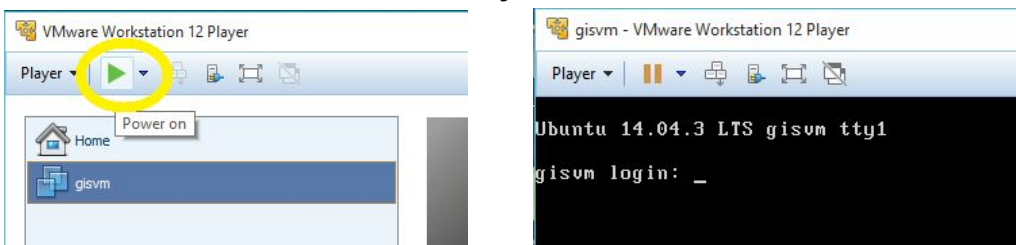


Run on VMware Player:

- Start VMware Player and Player > File > **Open...** and select the **“gisvm.vmx”** file found inside the gisvm unpacked folder.



- Then click on **“Power on”** or **“Play virtual machine”**



Or just **double click** the file **“gisvm.vmx”** found inside the gisvm unpacked folder.

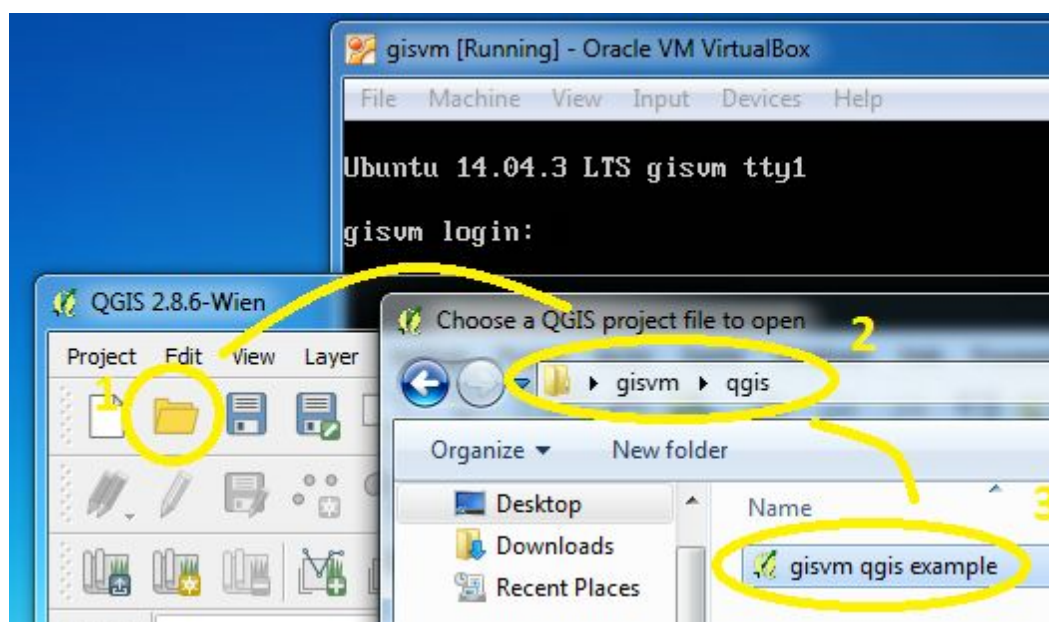


How to use it

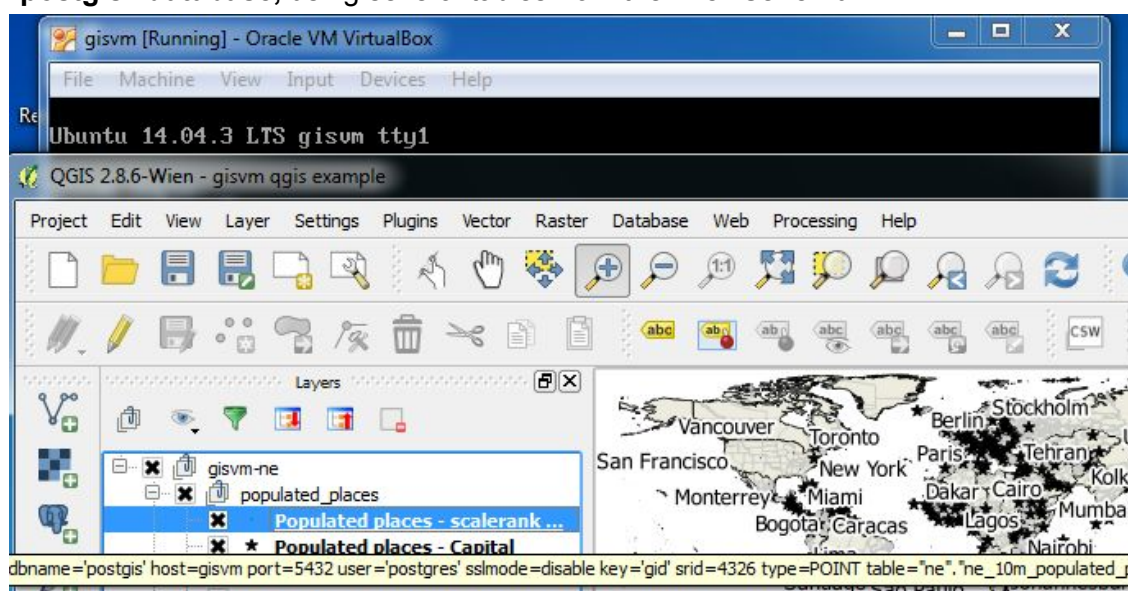
1. Open QGIS sample project to view the included Natural Earth data

Use the QGIS installed on your computer or on any other computer at your network, to open the included QGIS sample project file: “**gisvm qgis example.qgs**” found in the qgis subfolder inside the gisvm unpacked folder.

Note: If you don't have QGIS installed, just download it from the official site and install it, it's free software: <http://www.qgis.org/>



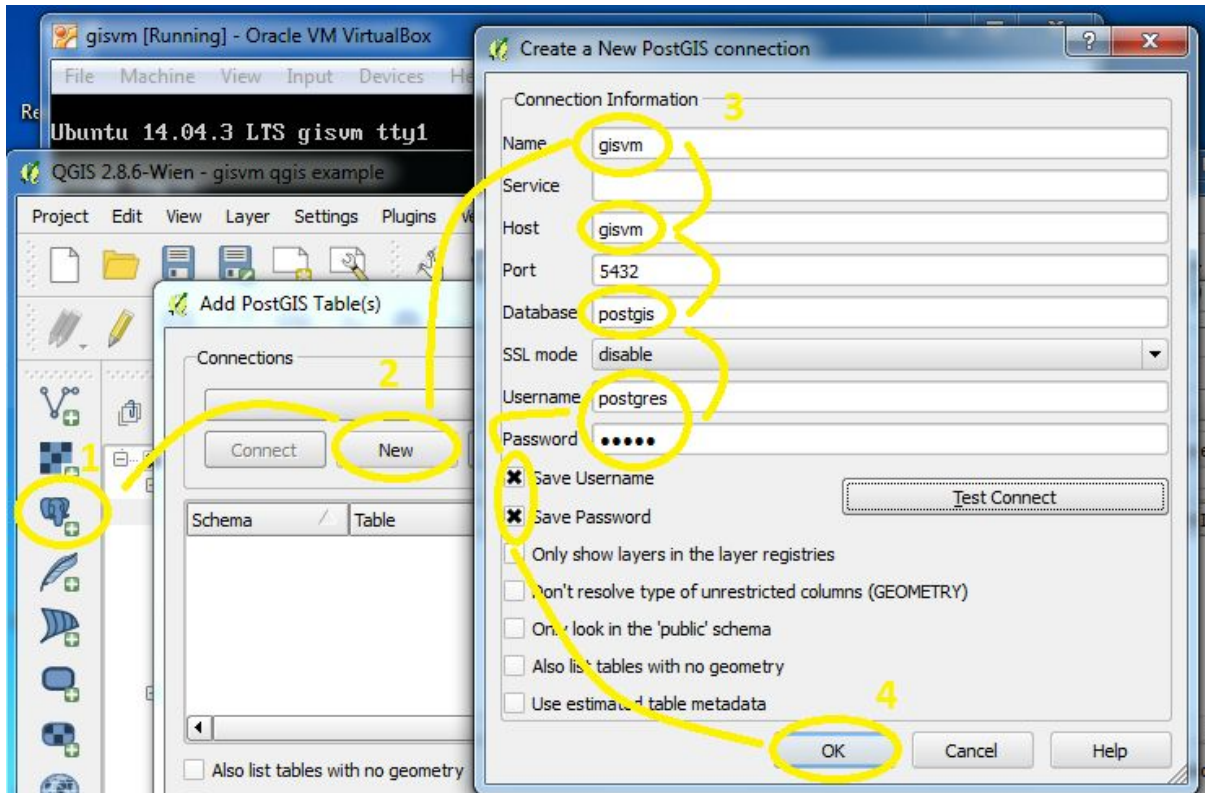
When you open the project all the data is store on the gisvm virtual machine, inside the “**postgis**” database, using several tables from the “**ne**” schema.



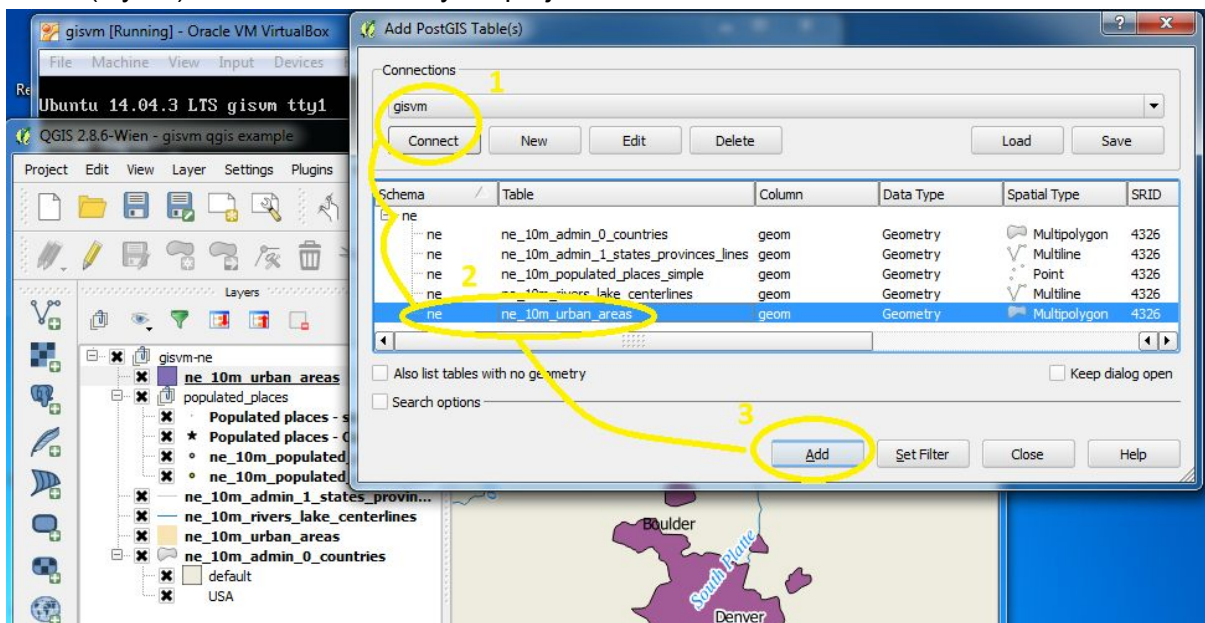
2. Add a new PostGIS layer to your QGIS project from GISVM

To create a new PostGIS connection on QGIS, simply type: **Name = gisvm ; Host = gisvm ; Database = postgis ; Username = postgres ; Password = gisvm**

You can also **activate: Save Username & Save Password** so you don't have to type in each type you use the connection.

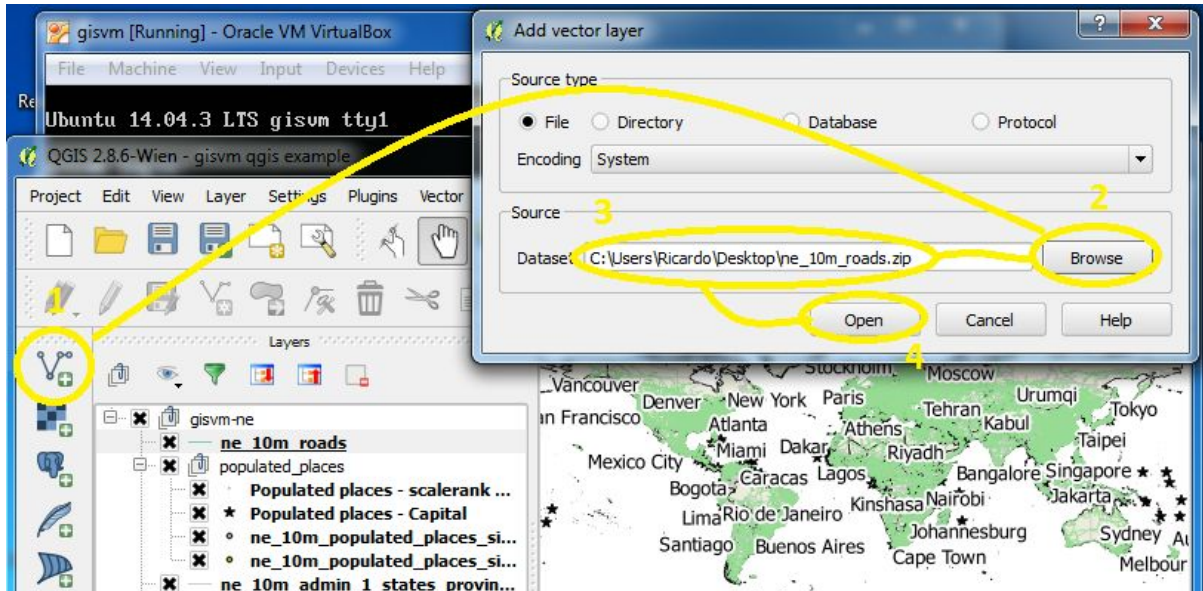


After creating the connection you just **select it (gisvm)** and click on **Connect** to display all tables (layers) available to add to your project.

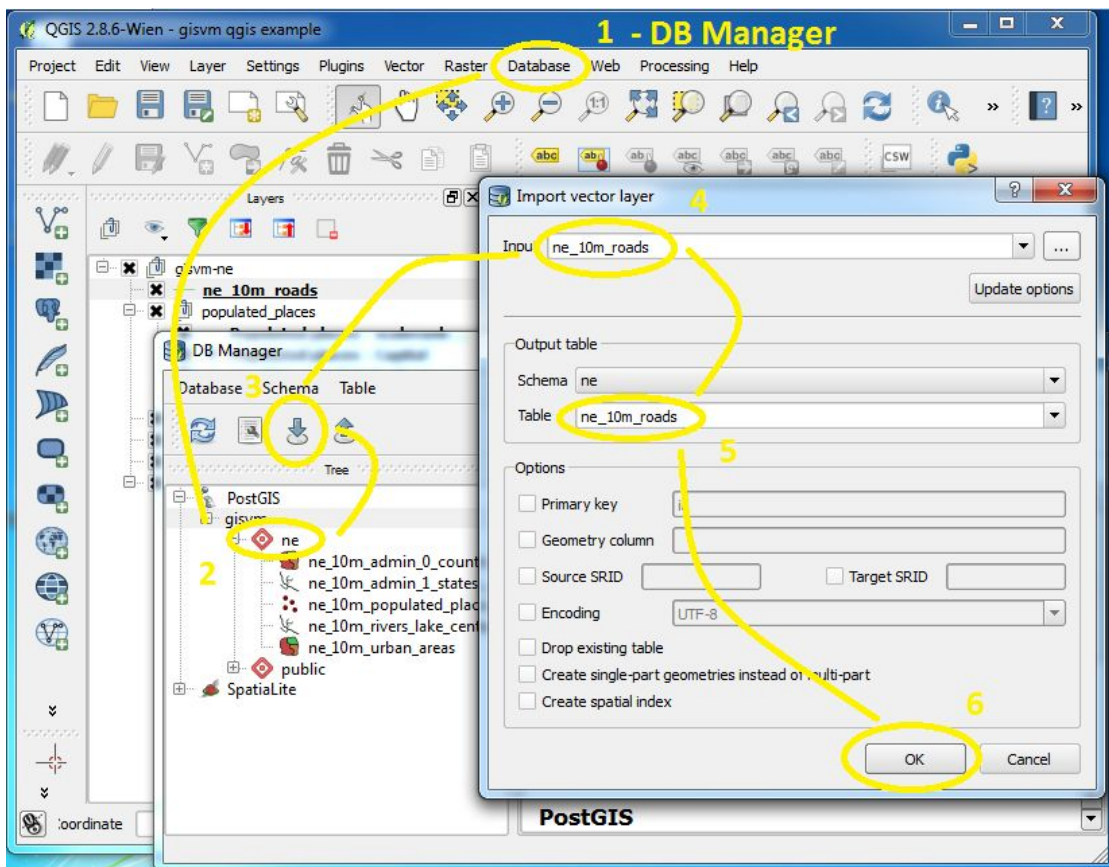


3. Upload a new PostGIS layer to GISVM using QGIS

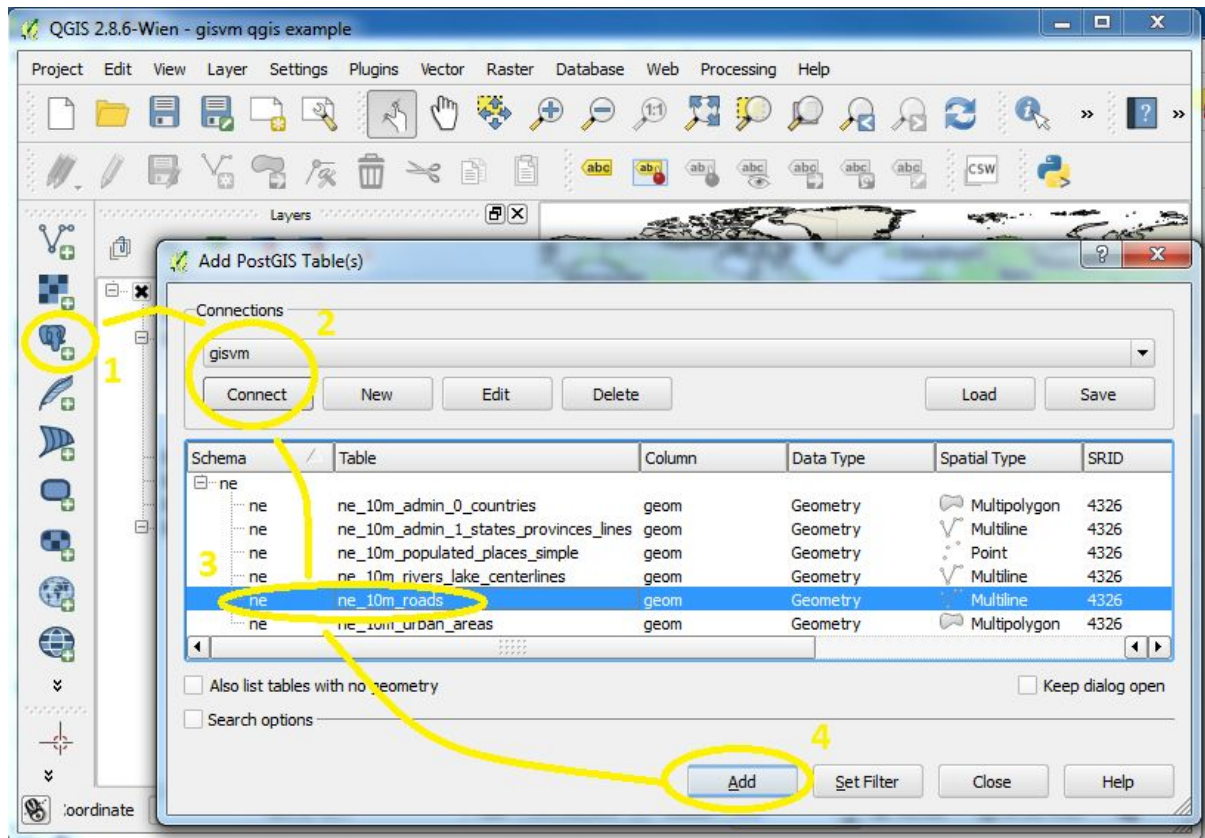
Add any layer to your QGIS project, for instance, the roads shapefile (**ne_10m_roads.zip**) from Natural Earth dataset: <http://www.naturalearthdata.com/downloads/10m-cultural-vectors/>



Use the DB Manager tool, on the Database menu, to import a PostGIS vector layer to GISVM



The **ne_10m_roads** layer (table) is then available to be used from PostGIS on GISVM, and you can add it to your QGIS project, just like on the previous example:

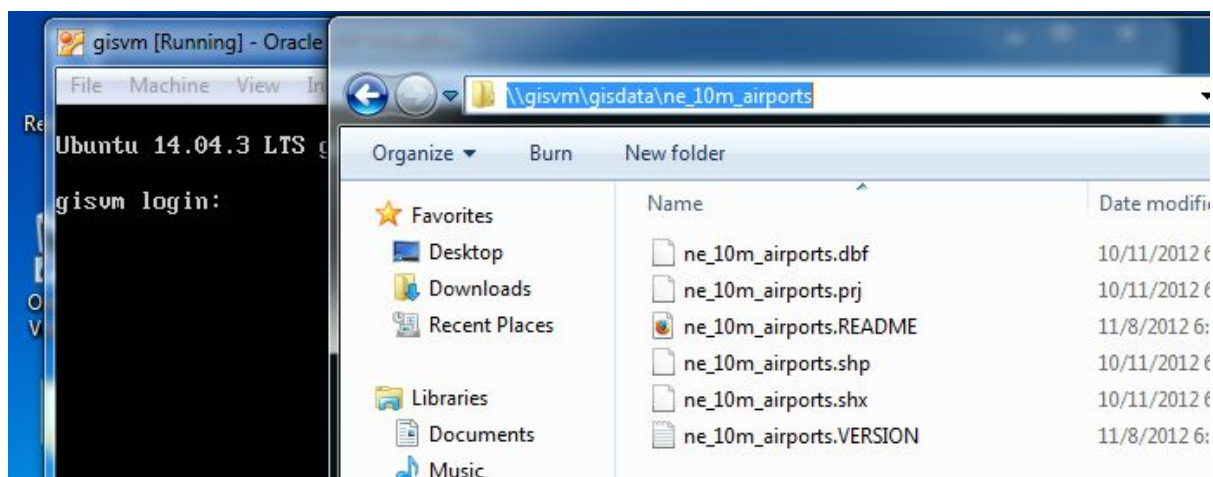


4. Upload a new PostGIS layer to GISVM using SHP2PGSQL

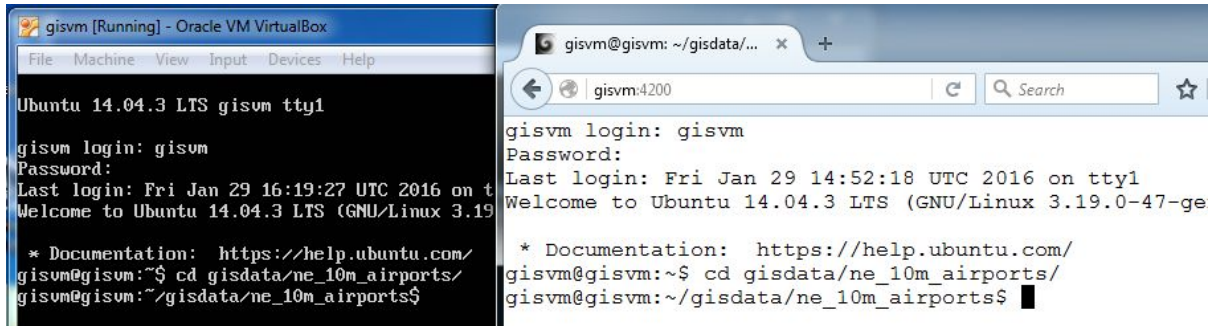
Add any shapefile layer PostGIS database with the included command line tool: shp2pgsql, for instance, the airports shapefile (**ne_10m_roads.zip**) from Natural Earth dataset:

<http://www.naturalearthdata.com/downloads/10m-cultural-vectors/>

Just download, extract and copy it inside GISVM, into "gisdata" shared folder: **\\gisvm\gisdata**

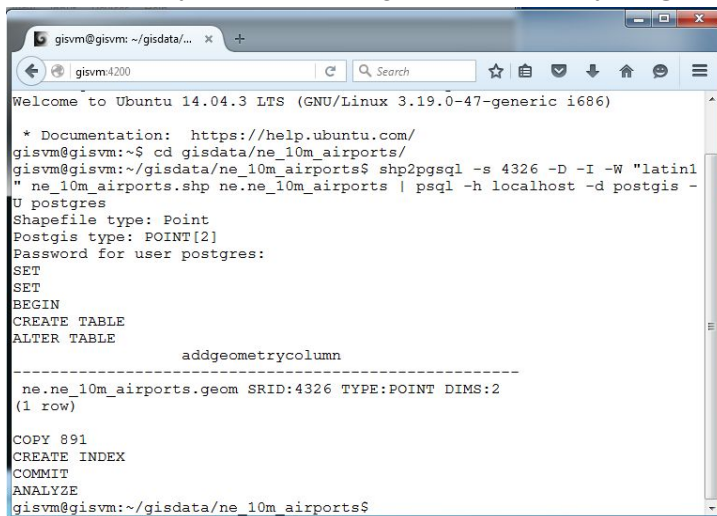


Go into terminal and **login as gisvm, password = gisvm**, using the Virtualbox or VMware player window or just your browser through the included shellinabox: <http://gisvm:4200>
 After login change directory to where you saved the shp file (**cd gisdata/ne_10_airports**)

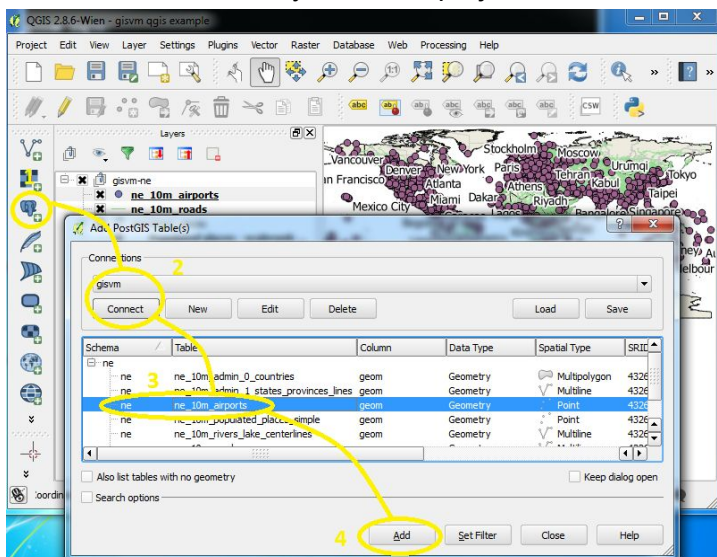


Just type or copy&paste the following command line to upload the shp file into the **ne_10m_airports** table, from **ne** schema , inside the **postgis** database.
shp2pgsql -s 4326 -D -I -W "latin1" ne_10m_airports.shp ne.ne_10m_airports | psql -h localhost -d postgis -U postgres

When it asks you for the postgres password, type: **gisvm**



You can now add it to your QGIS project:

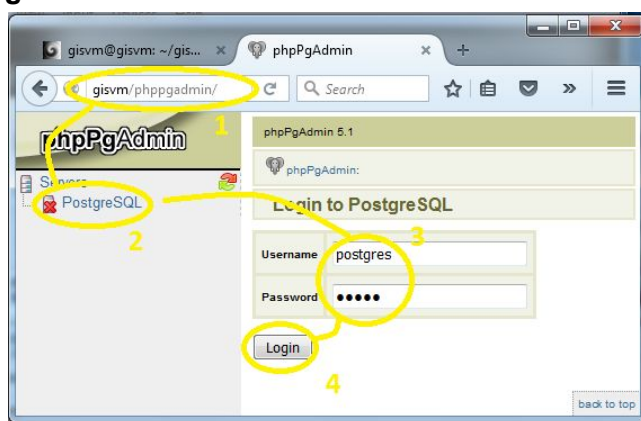


How to manage it

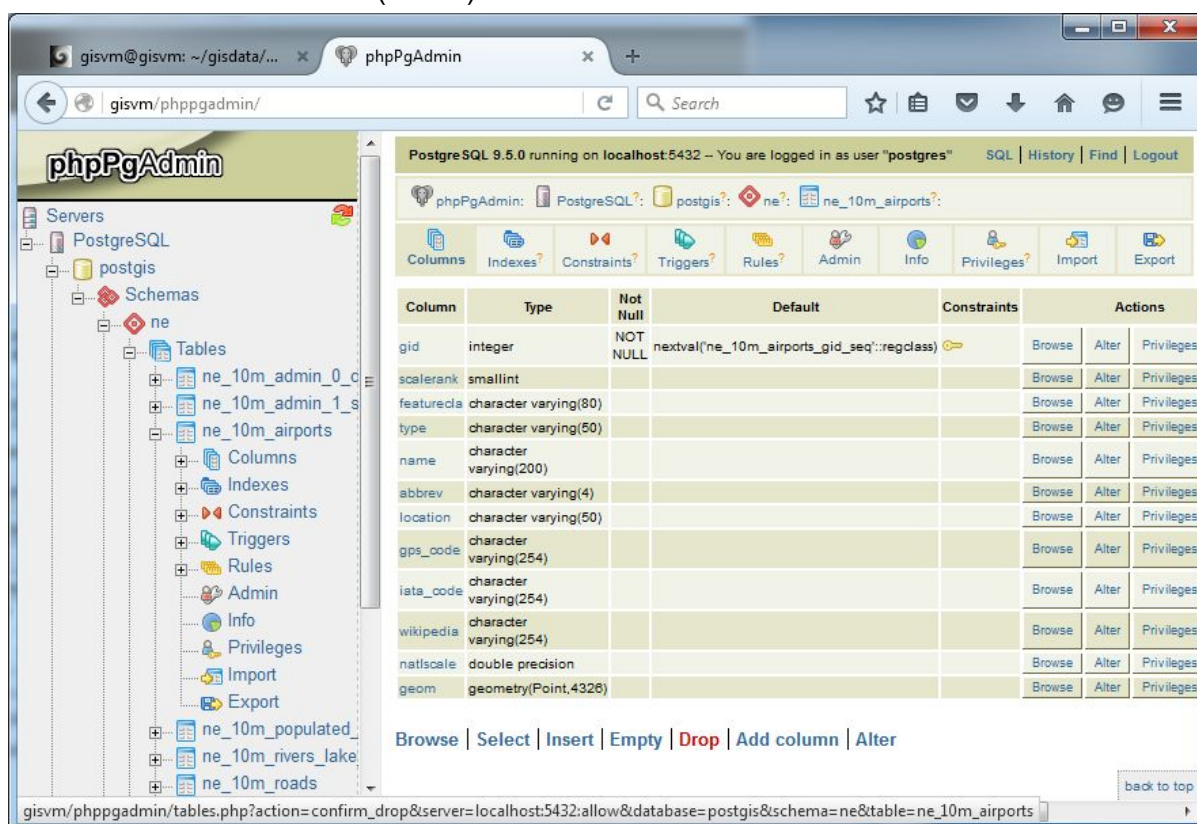
GISVM comes installed with two great full feature administration tools that you can use to manage it completely: **phpPgAdmin** and **Webmin**

1. Using phpPgAdmin to manage the PostgreSQL server

To manage the PostgreSQL running inside the GISVM you can use the included web application phpPgAdmin: <http://gisvm/phppgadmin/>, login with postgres, password = gisvm



After login just navigate through postgis database, ne schema and ne_10m_airports table. It allows the execution of all kinds of PostgreSQL operations, like browse and edit the data, add a new column or DROP (delete) the table.

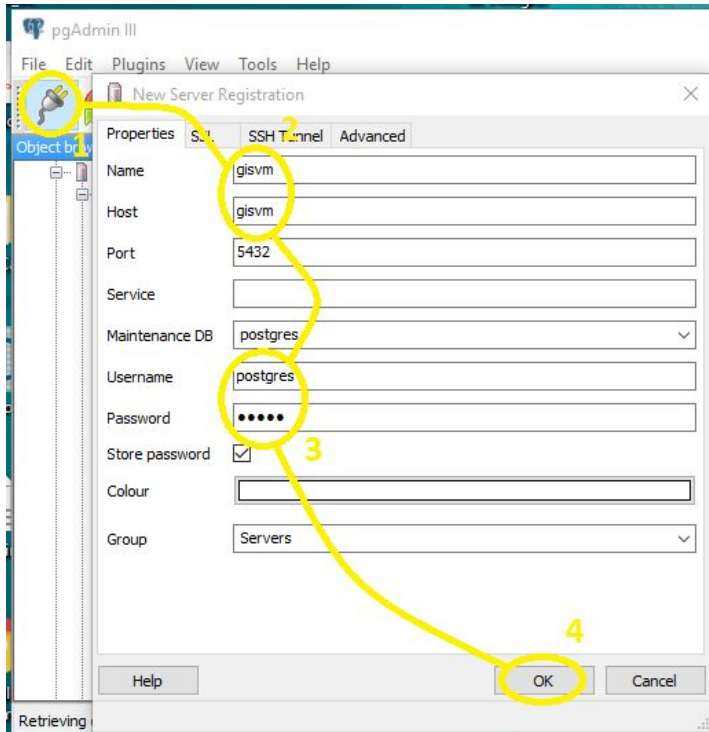


2. Using pgAdmin III to manage the PostgreSQL server

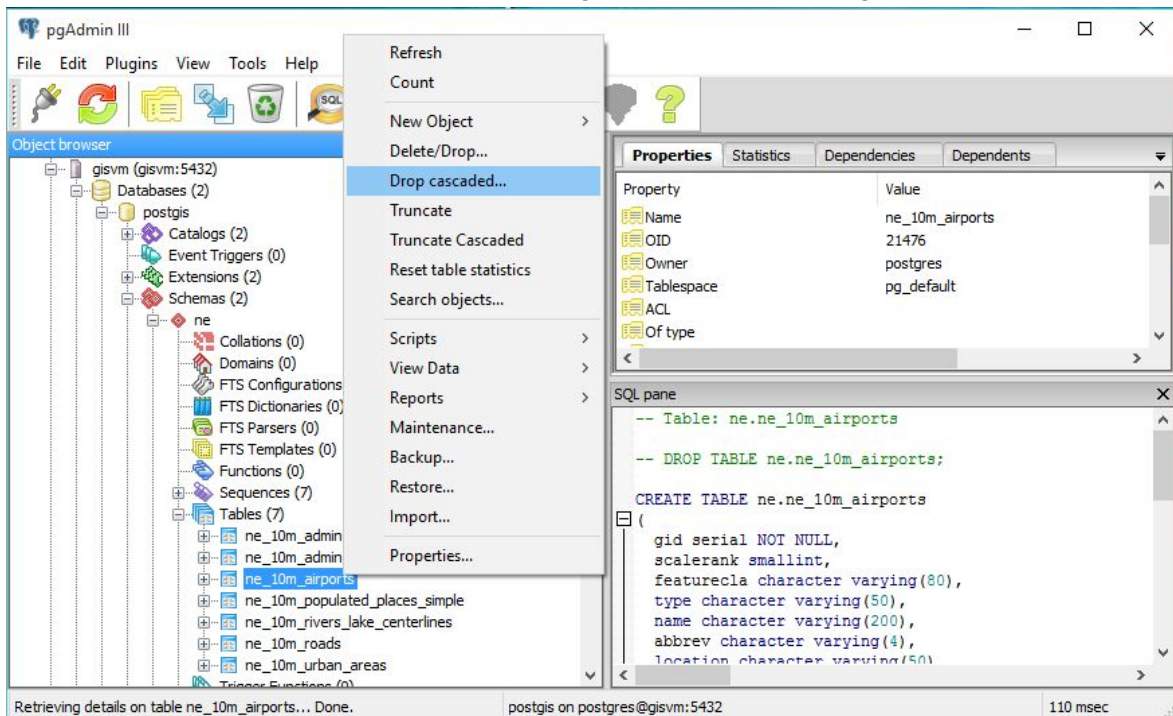
If you have installed the pgAdmin III on your computer you can also use it to manage the PostgreSQL server running on GISVM. If you don't you can install it for free from:

<http://www.postgresql.org/ftp/pgadmin3/release/v1.22.0/>

Run pgAdmin and create a new Server Registration with: **Name: gisvm, Host: gisvm, username: postgres Password: gisvm**



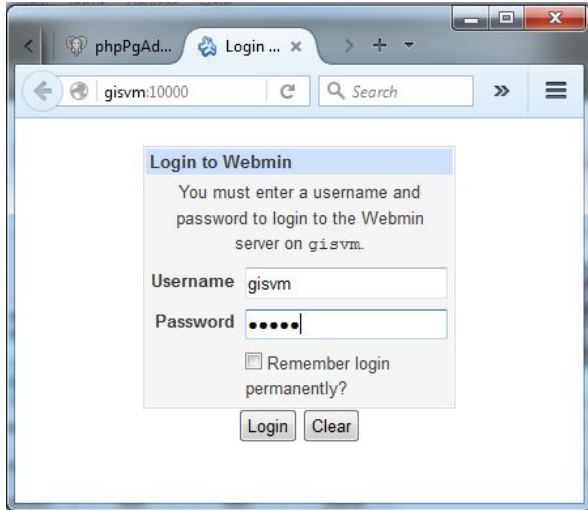
Then use that connection to access the PostgreSQL server running in GISVM:



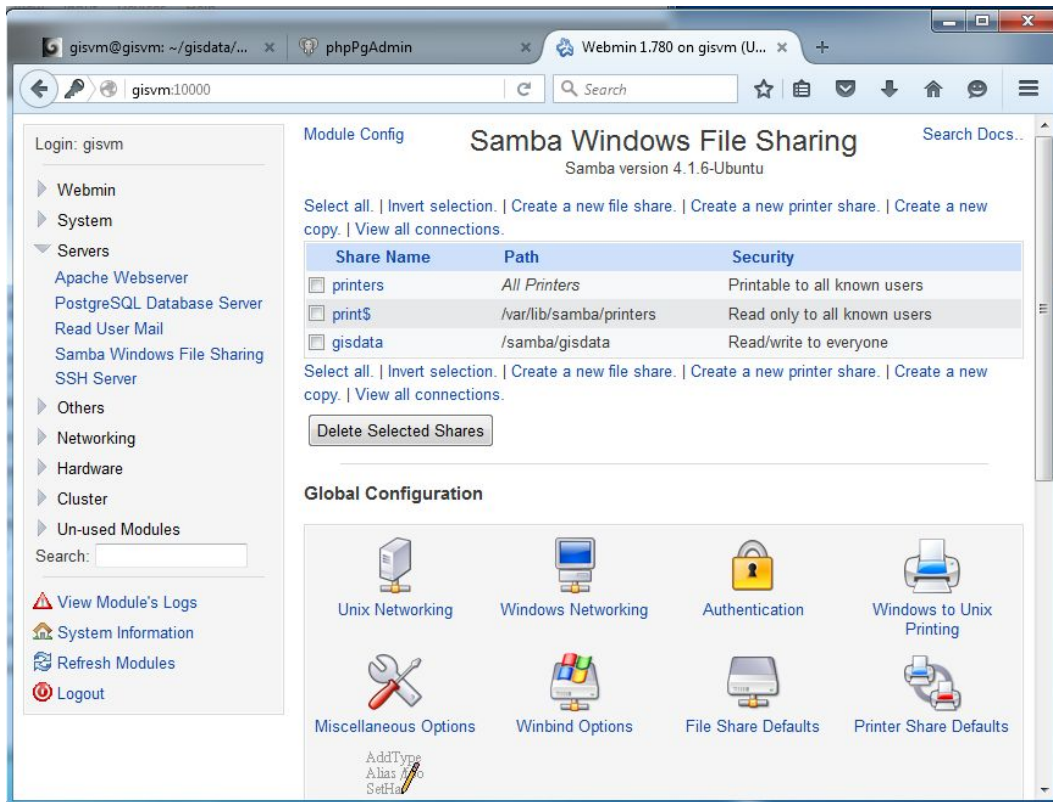
3. Using Webmin to manage the Ubuntu operating system

To manage the ubuntu operating system in GISVM just use the included web application Webmin inside your browser: <http://gisvm:10000>

Login with: gisvm and password: gisvm



After login you can completely manage the GISVM virtual machine, make updates, create new users, restart running services, configure network, server applications like SAMBA:



4. Use the local site to get more information on using GISVM

GISVM comes with a simple local site with more information and several other links to help you start using it: <http://gisvm>



The screenshot shows a web browser window with the address bar set to <http://gisvm>. The page features a header with logos for PostgreSQL, PostGIS, and Ubuntu 14.04 LTS Server. The main content area is titled "About GISVM PostGIS Server" and includes a sub-header "Just another incredible idea by GISVM project to bring you the power of Free GIS Server software." Below this, there are two paragraphs of text describing the virtual machine's capabilities and its configuration. A "Passwords" section is visible at the bottom, containing a table with login details for various services.

About GISVM PostGIS Server

Just another incredible idea by GISVM project to bring you the power of Free GIS Server software.

This Virtual Machine is based on Free Software, built on Ubuntu Server version 14.04.3 with a selected set of free GIS Server software to provide you a complete virtual GIS server companion that you can run when and where you need the power of free GIS server software. It can be easily adapted to meet one's personal needs, allowing the user to add new data or applications.

This particular PostGIS edition includes a relational database server (PostgreSQL) with spacial support (PostGIS), as well as net services and configurations that ease the data communication between the virtual machine and the physical machine in such a way that allows GISVM to function as a simple machine within your computer network.

Passwords

Name	Login	Password	URL
Ubuntu shell (sudo)	gisvm	gisvm	http://gisvm:4200
Local site (Apache2)	gisvm	gisvm	http://gisvm
PostgreSQL (Database=postgres)	postgres	gisvm	http://gisvm/postgisadmin/



REMEMBER, USE GISVM AT YOUR OWN RISK.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

THIS INFORMATION IS BEING GIVEN TO YOU GRATUITOUSLY AND THERE IS NO AGREEMENT OR UNDERSTANDING BETWEEN YOU AND THE GISVM PROJETO OR ME (RICARDO PINHO) REGARDING YOUR USE OR MODIFICATION OF THIS INFORMATION BEYOND THE [CREATIVE COMMONS ATTRIBUTION-SHAREALIKE 3.0 UNPORTED LICENSE](https://creativecommons.org/licenses/by-sa/3.0/) (CC BY-SA)

Please visit the GISVM project site regularly to get updates and help us to make it better!

<http://gisvm.com>

Thank you for using it.

THAT'S IT, HAVE FUN !!!!!!!!!!!

