GISVM 16.04 POSTGIS

YOUR POSTGIS SERVER COMPANION

QUICKSTART & PASSWORDS

Version - 20180309

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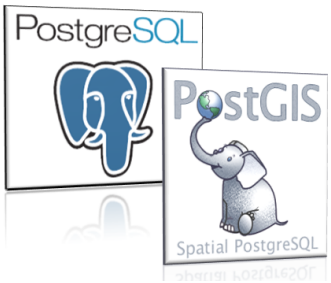
REMEMBER, USE GISVM AT YOUR OWN RISK.

What's inside



Ubuntu 16.04 LTS Server 64bit

+ Private (NAT) & Local (Bridge) networks
+ NGINX 1.13.8
+ Samba - windows network
+ OpenSSH
+ Webmin 1.880
+ Shellinabox



PostgreSQL 10.3.1

+ **PostGIS 2.4.3**
+ postgis sample database
+ natural earth 2 sample data

Passwords

	LOGIN	PASSWORD	URL
Ubuntu shell (&sudo)	gisvm	gisvm	http://gisvm:4200 (shellinabox)
Local site (nginx)	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

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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 250 MB.

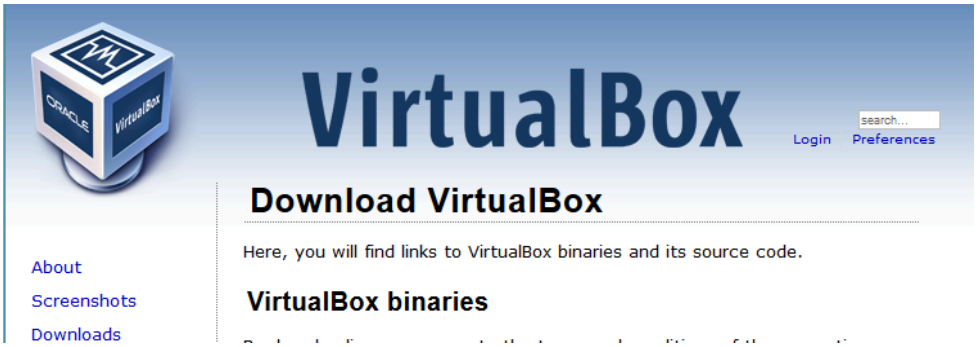
2. Unzip

After downloading 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

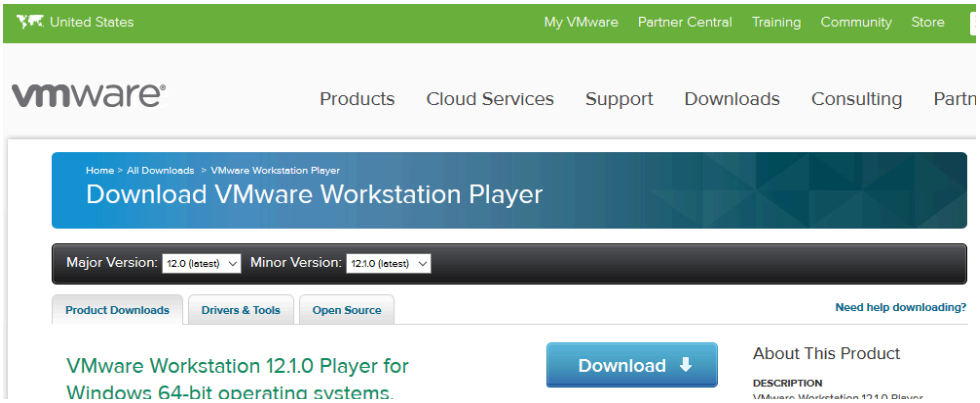
3. Run

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



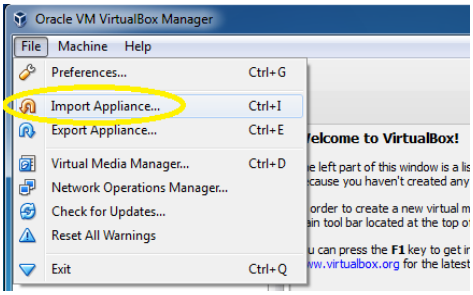
- Or install **VMware Player**, available for free:
https://www.vmware.com/go/tryplayer

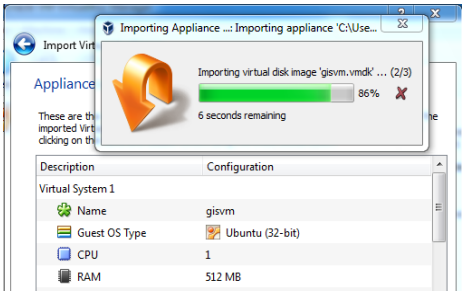


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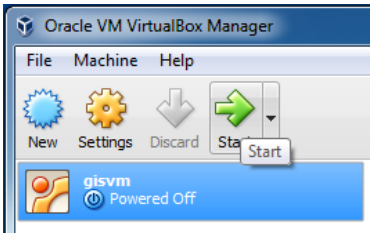
Run on VirtualBox:

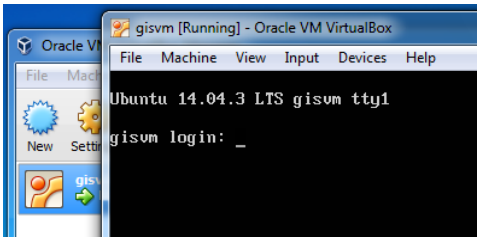
- **Start VirtualBox**. From the menu: **File** > "**Import Appliance...**" select the **"gisvm.ovf"** file found inside the gisvm unpacked folder.





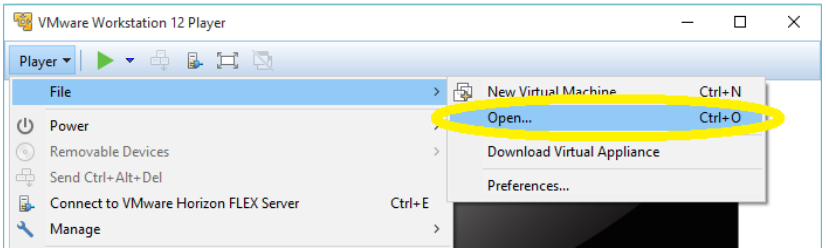
- After importing, that only takes a min, you can click **"Start"** the gisvm virtual machine



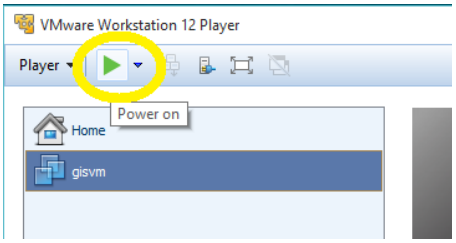


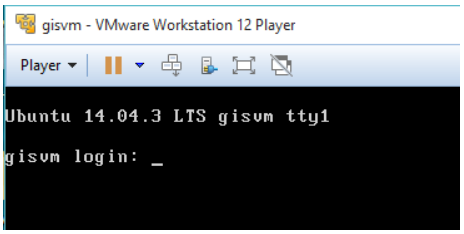
Run on VMware Player:

- **Start VMware Player**. From the menu: **Player** > **File** > "**Open...**" select the "**gisvm.vmx**" file found inside the gisvm unpacked folder.



- Then click on **"Power on" or "Play virtual machine"**





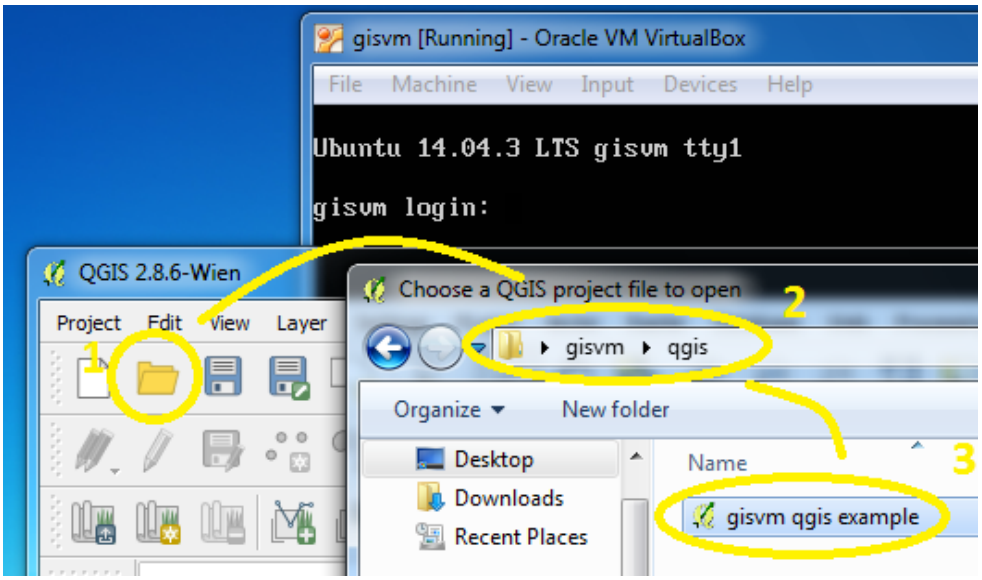
Or just **double click the file "gisvm.vmx"** found inside the gisvm unpacked folder.

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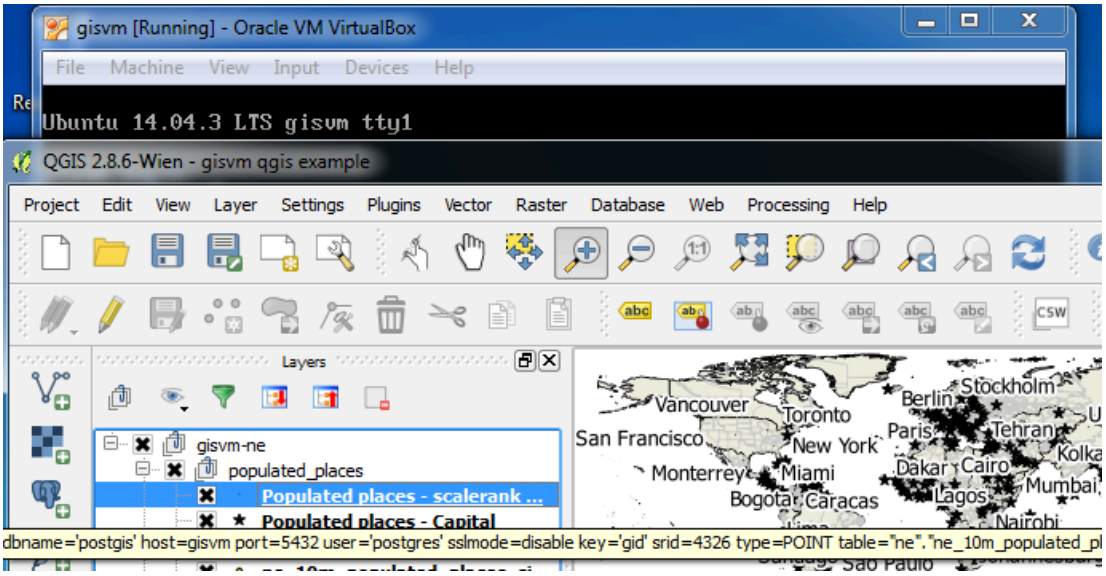
How to use it

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/



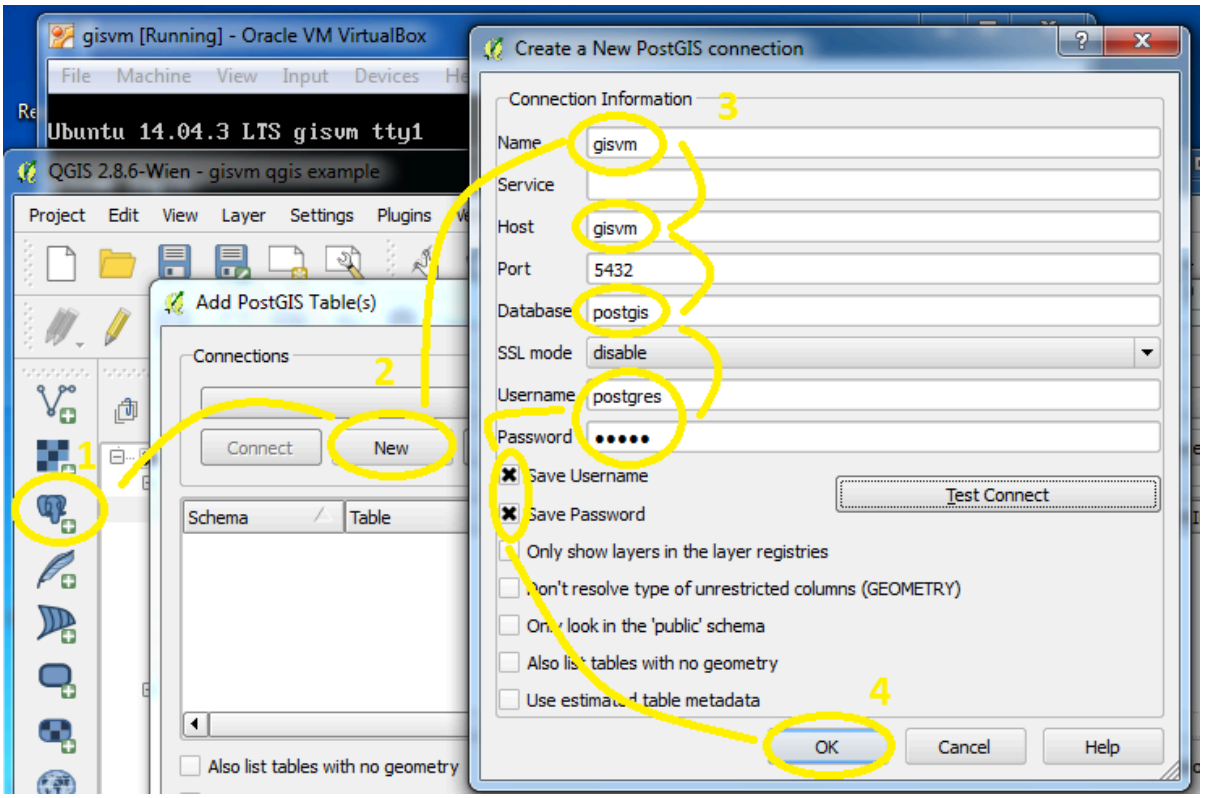
When you open the project all the data is store on the gisvm virtual machine, inside the **"postgis" database,** using several tables from the **"ne" schema**.



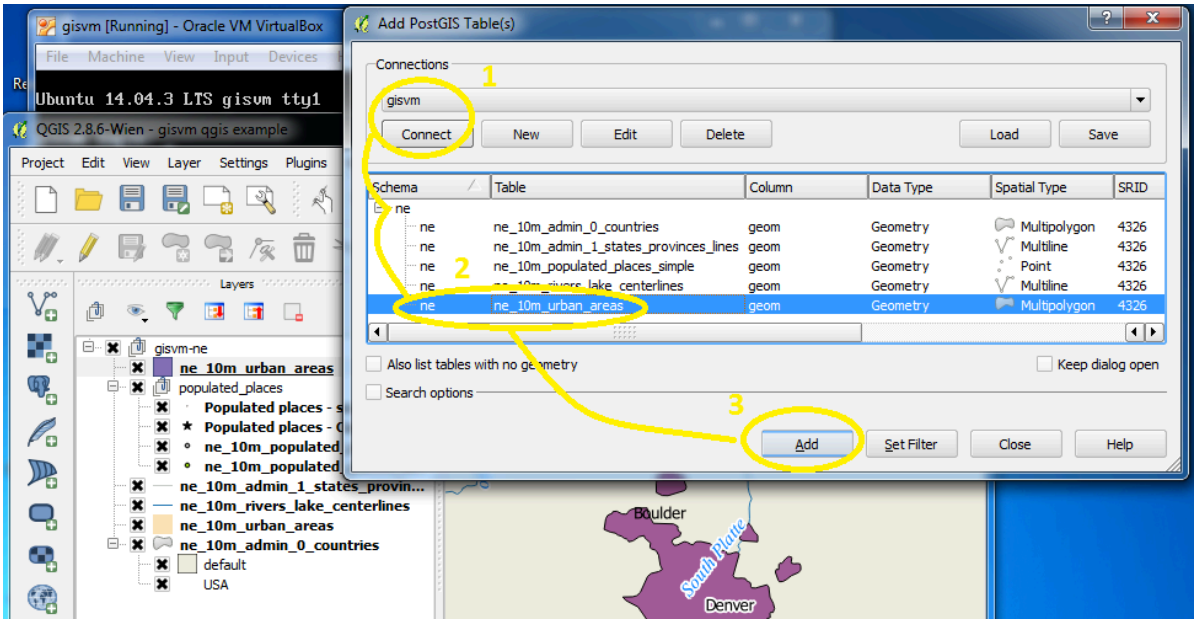
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2. Add a new PostGIS layer from GISVM to your QGIS project

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.



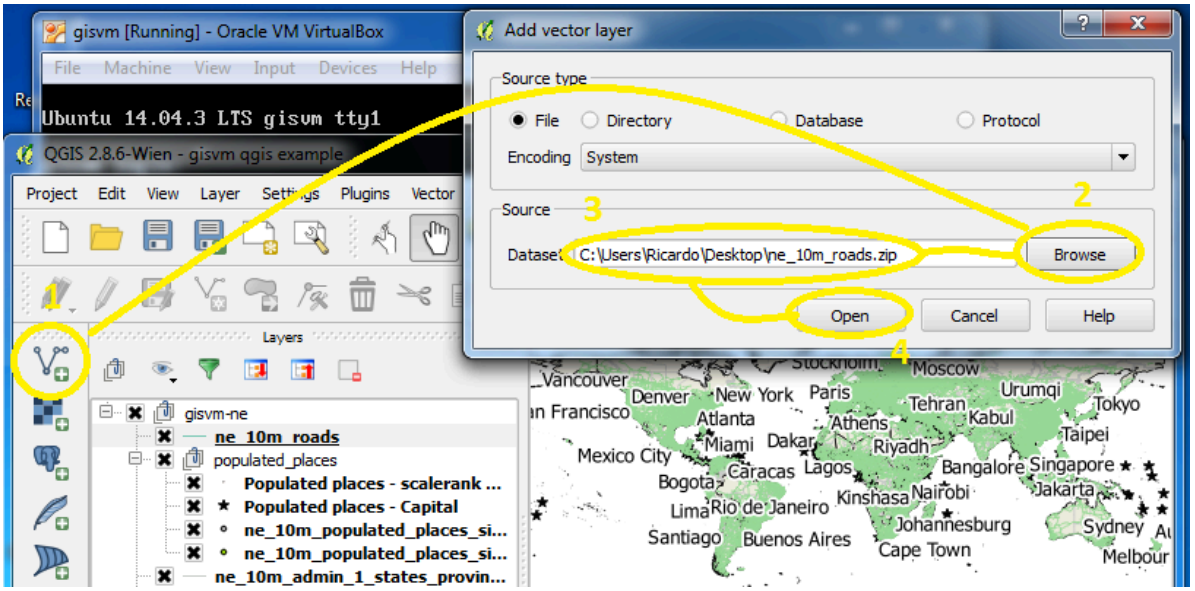
After creating the connection just **select it (gisvm) and click on Connect** to display all tables (layers) available to add to your project.



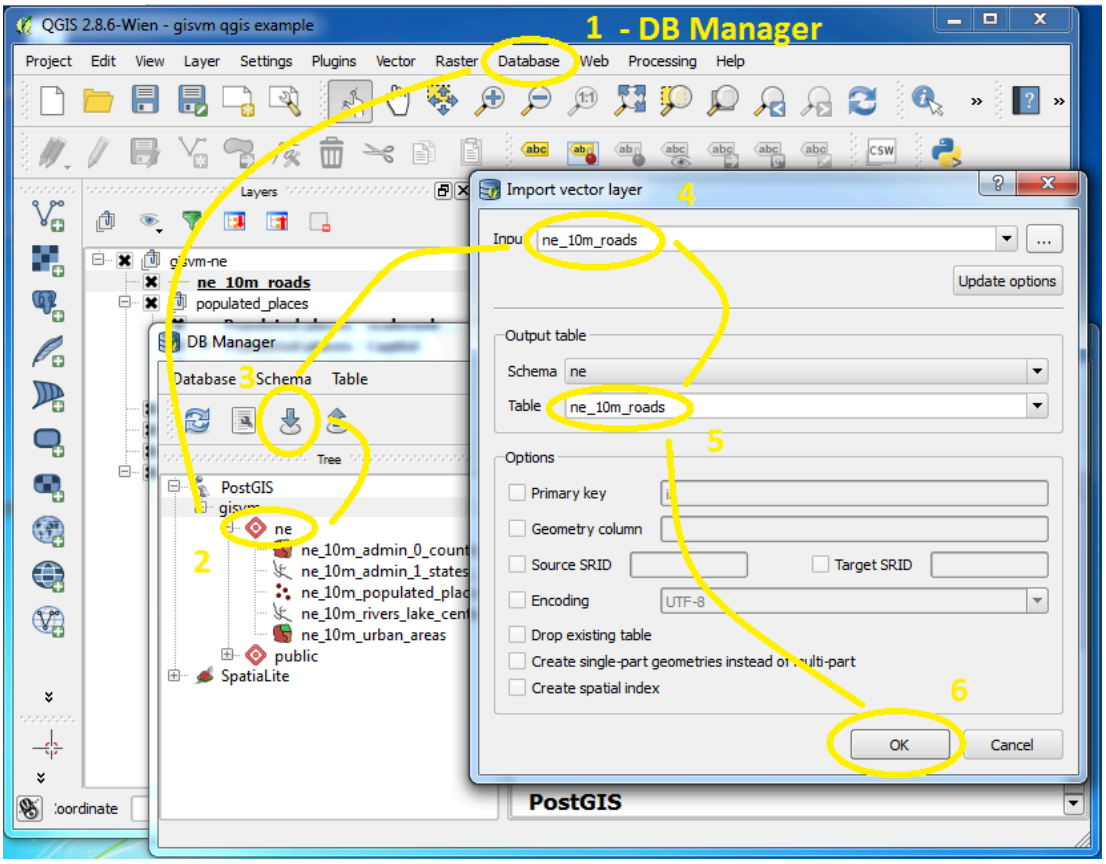
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3. Upload a new PostGIS layer to GISVM using QGIS

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

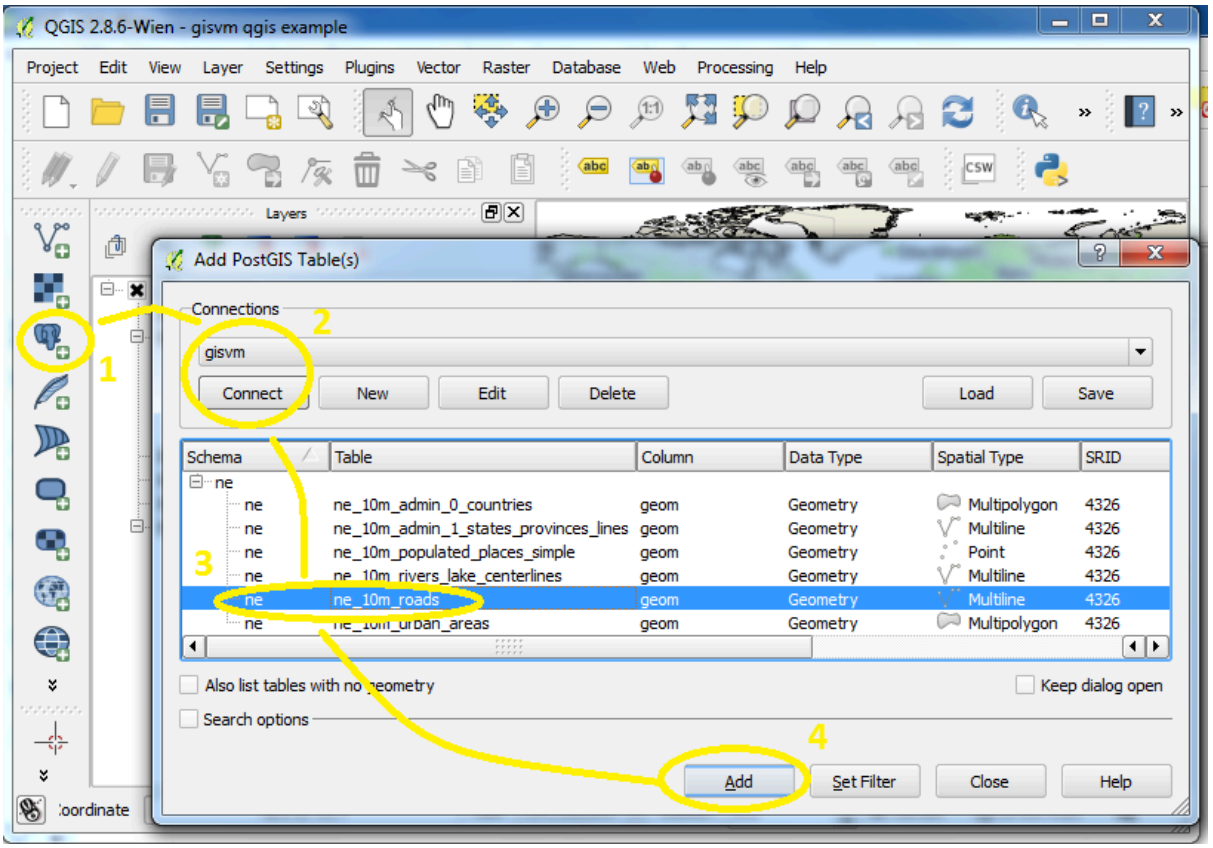


Use the **DB Manager** tool, in the Database menu, to import a PostGIS vector layer to GISVM



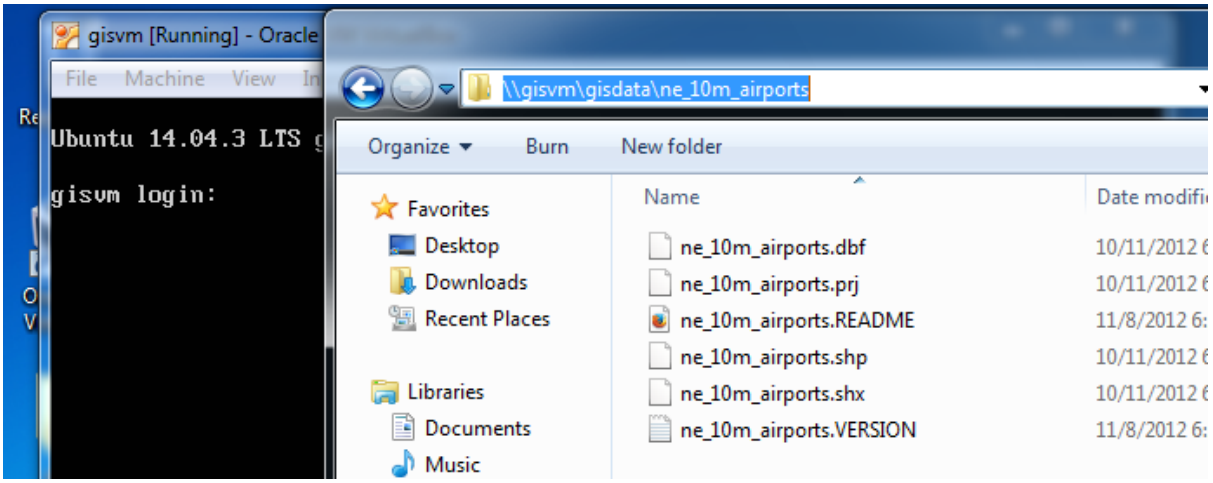
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The **ne_10m_roads** layer (table) is now available to be used from PostGIS on GISVM, and you can add it to your QGIS project, just like on the previous example:



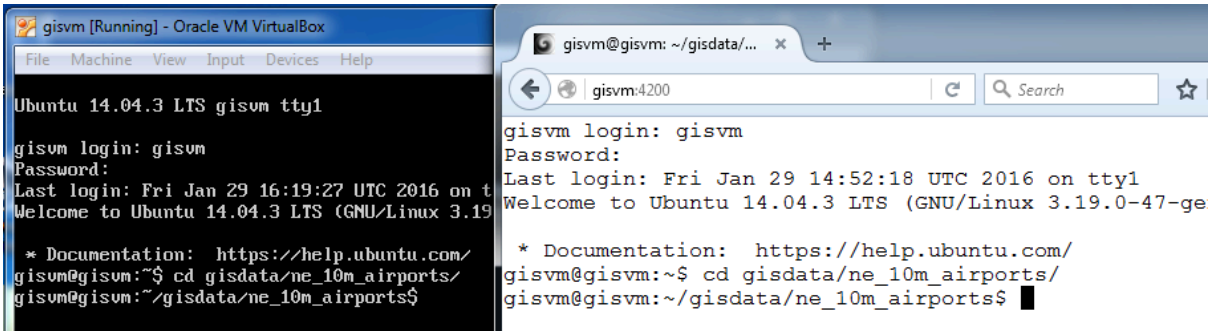
4. Upload a new PostGIS layer to GISVM using SHP2PGSQL

Add any shapefile layer PostGIS database with the included command line tool: shp2pgsql, for example, the airports shapefile (**ne_10m_airports.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**

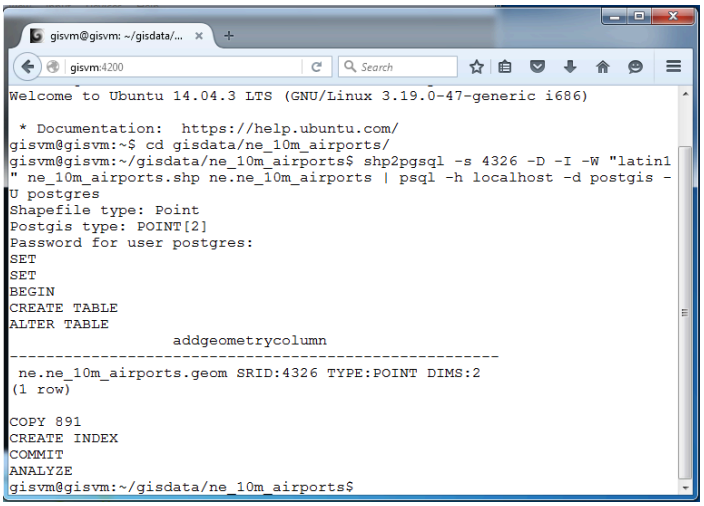


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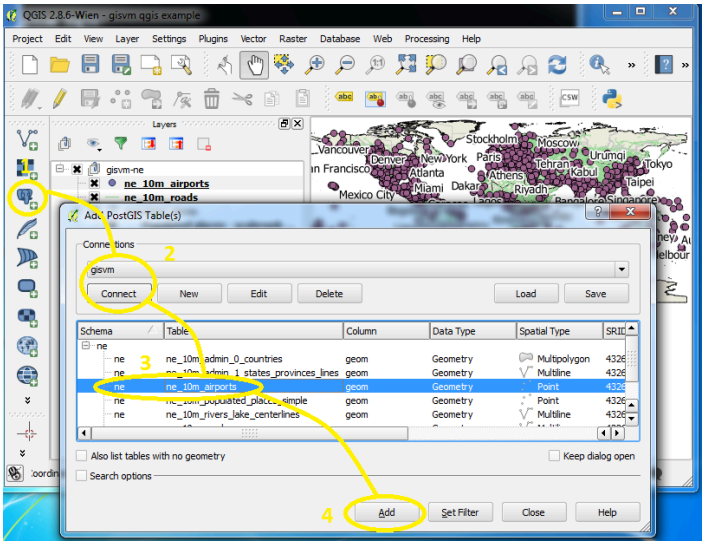
Go into gisvm terminal in Virtualbox or VMware player window and **login as gisvm, password = gisvm**. You can also use your browser with shellinabox: http://gisvm:4200
After login, change directory to where you saved the shp file (**cd gisdata/ne_10_airports**)



To upload the shp file into the **postgis database,** inside the **ne schema,** to the **ne_10m_airtports table**, type or copy&paste the following command line:
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 for the postgres password, type: **gisvm**



You can then add it to your QGIS project:



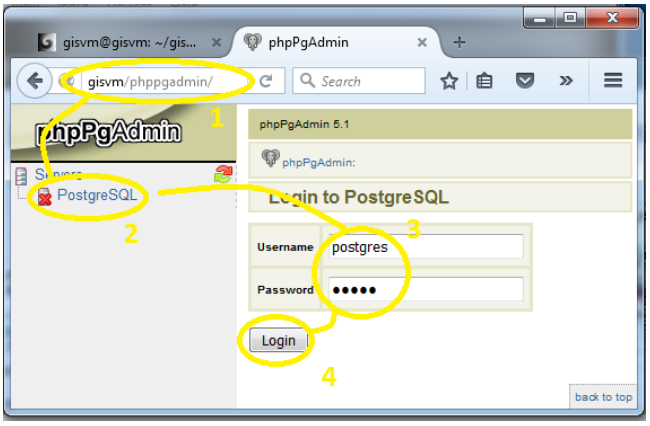
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How to manage it

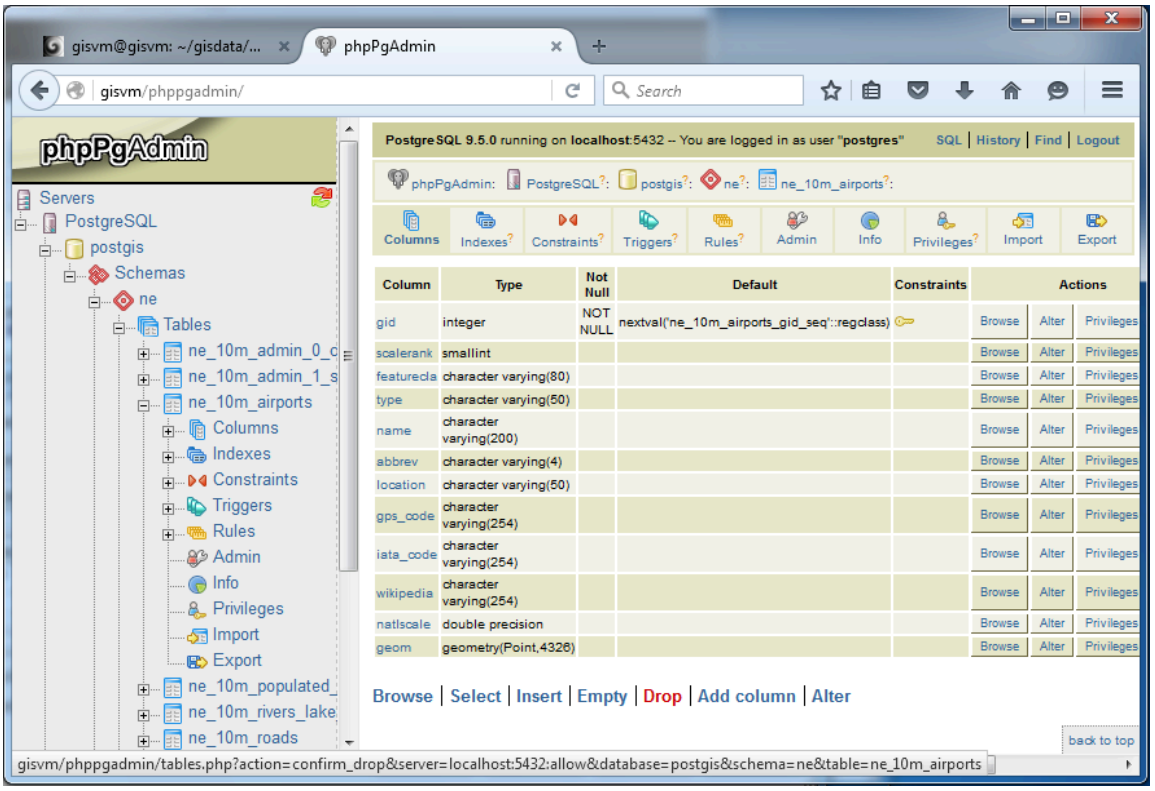
GISVM comes installed with two great full feature administration tools that can be used to manage it completely: **phpPgAdmin** and **Webmin**

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.

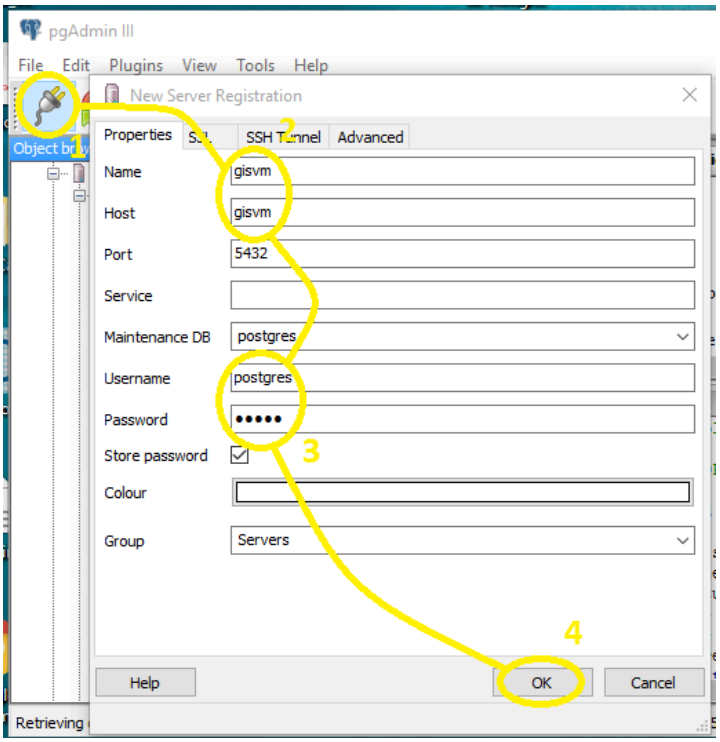


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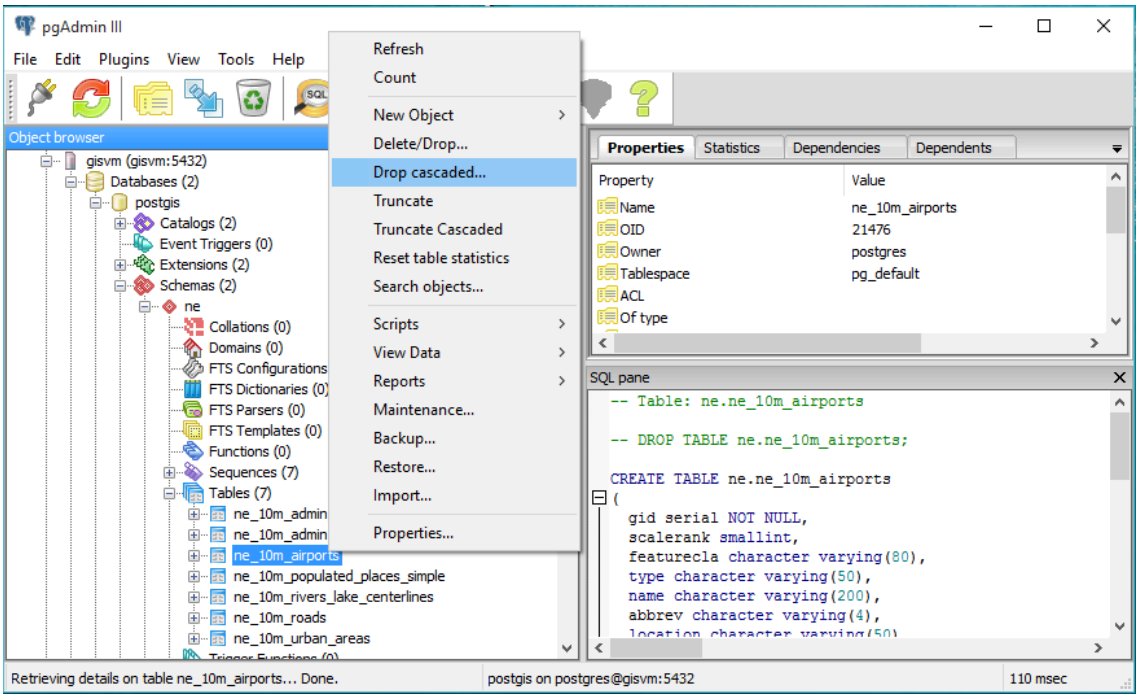
2. Using pgAdmin III to manage the PostgreSQL server

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:

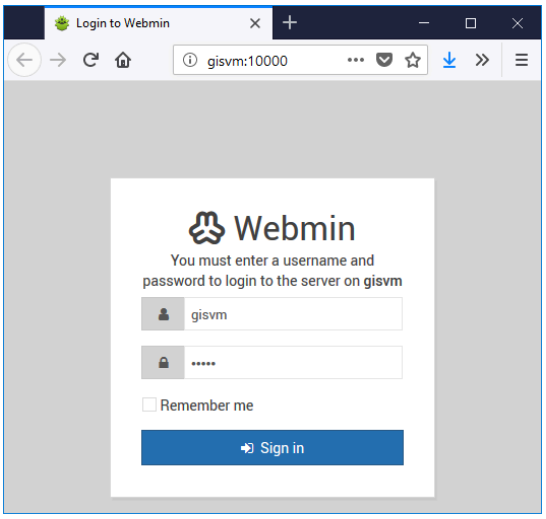


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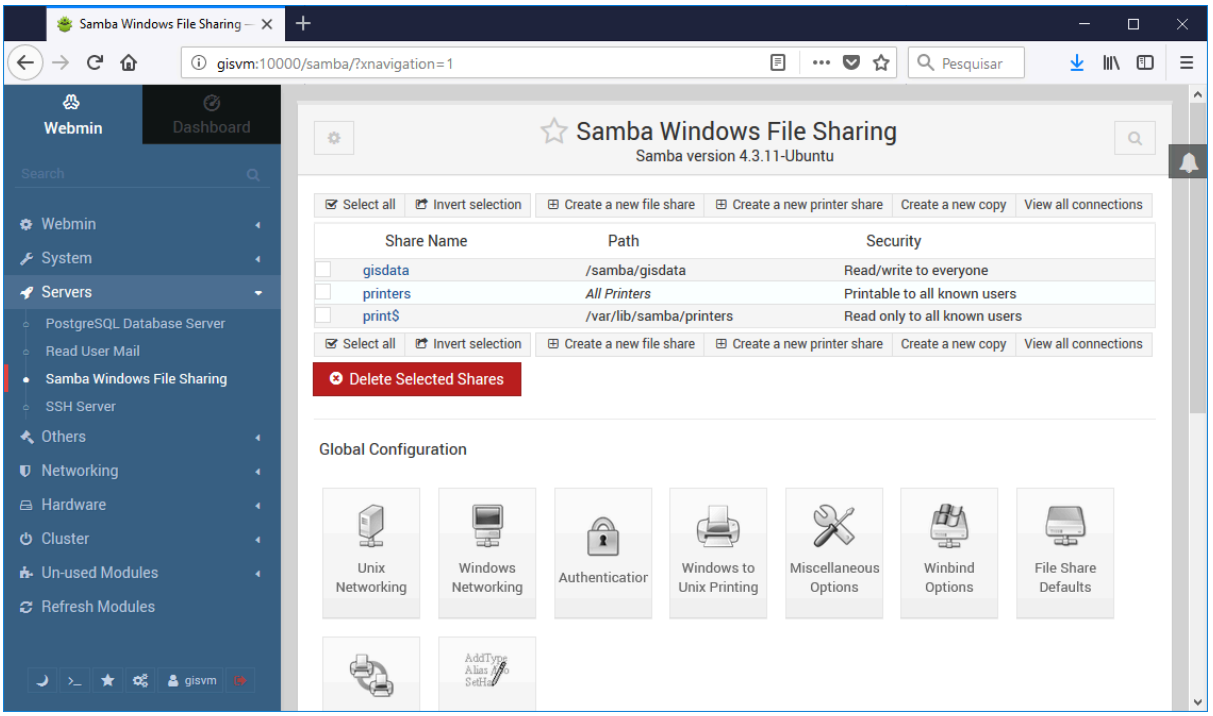
3. Using Webmin to manage the Ubuntu operating system

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

login: **gisvm** + password: **gisvm**



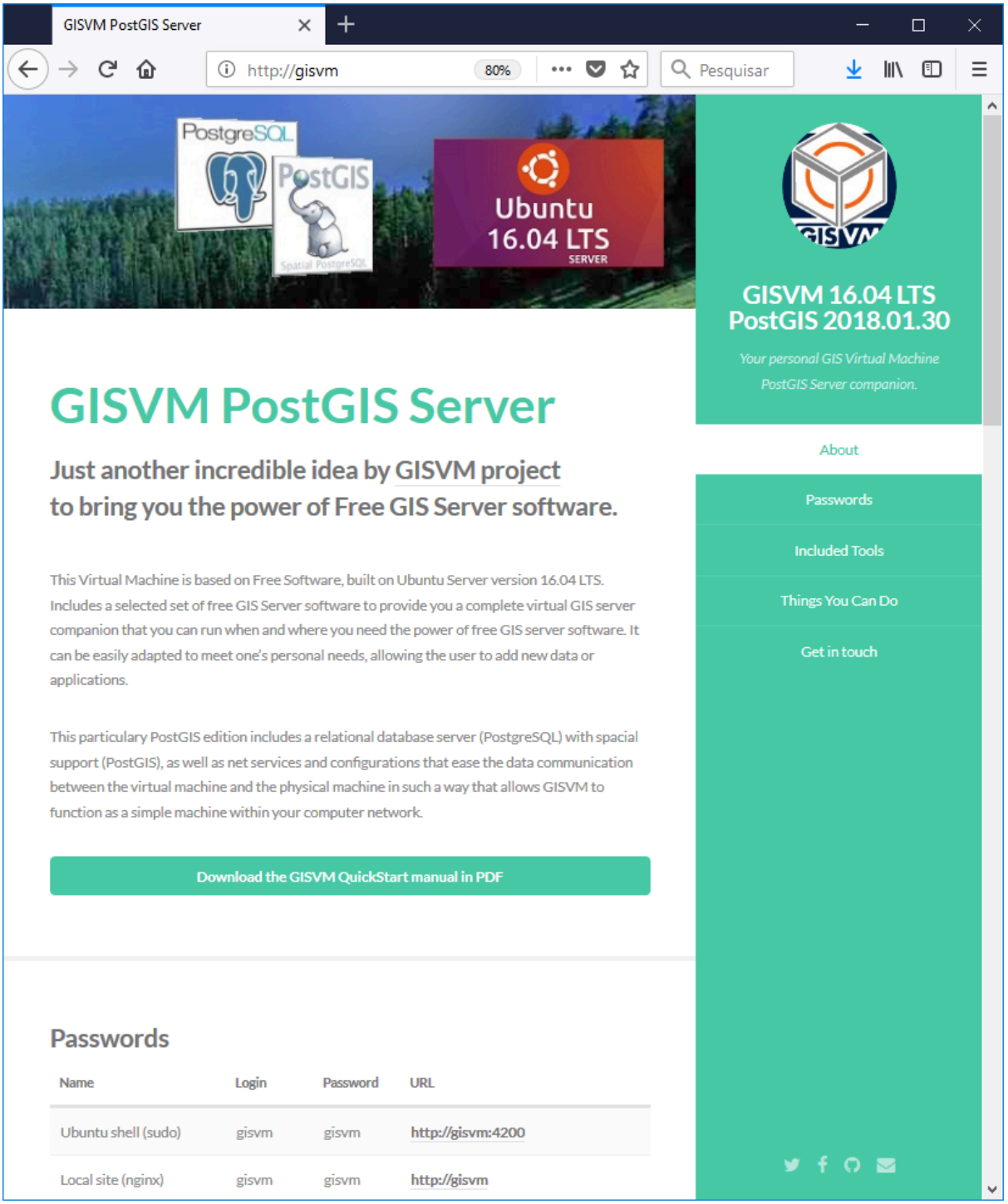
After login you can completely manage the GISVM virtual machine, make updates, create new users, restart running services, configure network, server applications like SAMBA:



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

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



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

http://gisvm.com

Thank you for using it.

THAT’S IT, HAVE FUN !!!!!!!!

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