GISVM OPENGEO SUITE

YOUR FREE GIS SERVER PLATFORM

QUICKSTART & PASSWORDS

Beta Version - 20160227

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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

OpenGeo Suite 4.6.1

+ PostgreSQL 9.3.11 / PostGIS 2.1.4
+ GeoServer 2.6 (WCS, WMS, WFS,)
+ GeoWebCache
+ OpenLayers 2 & 3
+ Boundless SDK
+ GeoExplorer
+ natural earth sample

PostgreSQL 9.3.11

+ **PostGIS 2.1.4**
+ phpPgAdmin
+ postgis sample database
+ natural earth sample data

Passwords

	LOGIN	**PASSWORD**	**URL**
Ubuntu shell (&sudo)	gisvm	gisvm	http://gisvm:4200 (shellinabox)
GISVM internal site			http://gisvm
OpenGeo dashboard	gisvm	gisvm	http://gisvm/dashboard
GeoExplorer Geoserver	admin	gisvm	http://gisvm/geoexplorer http://gisvm/geoserver
PostgreSQL (postgis)	postgres	gisvm	http://gisvm/phppgadmin/
Webmin	gisvm	gisvm	http://gisvm:10000
Samba share (~/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.

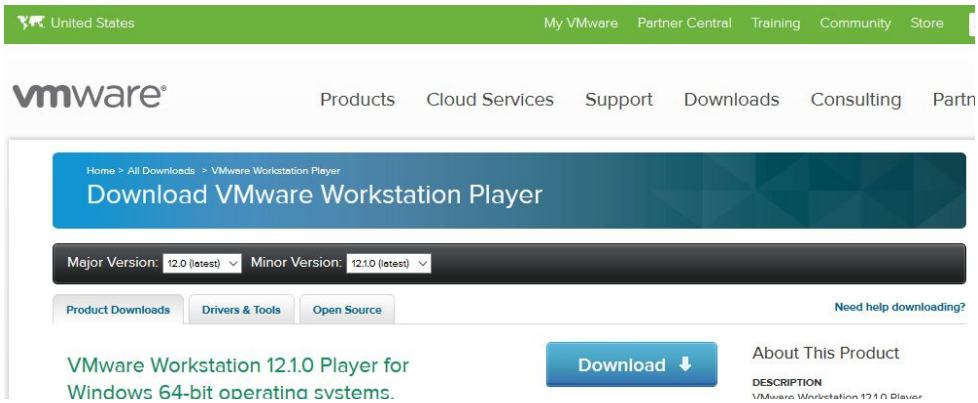
2. Unzip

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

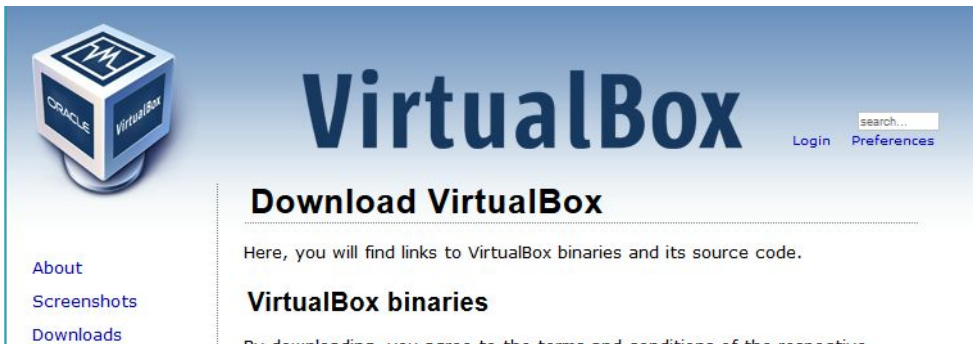
3. Run

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

- Install **VMware Player**, available for free (recommended):
https://www.vmware.com/go/downloadplayer

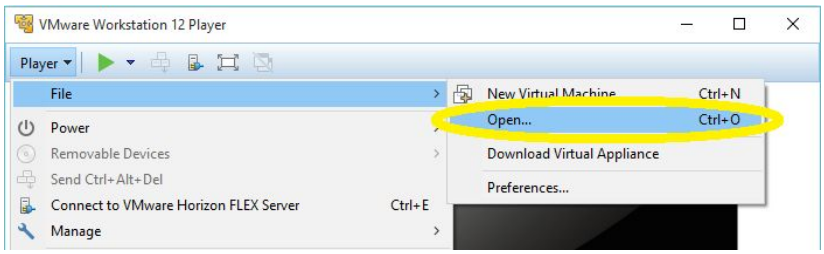


- Or install **VirtualBox**, available as free software:
https://www.virtualbox.org/wiki/Downloads

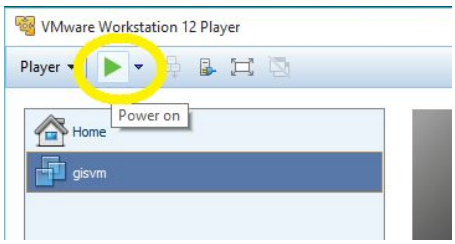


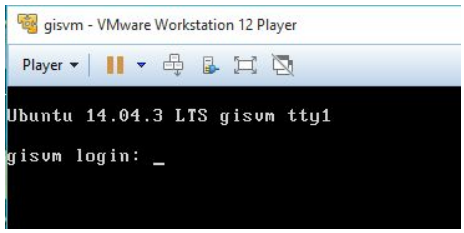
Run with VMware Player

- 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"**

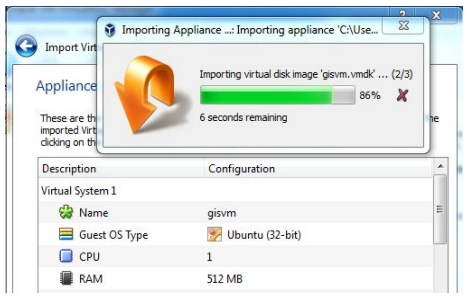




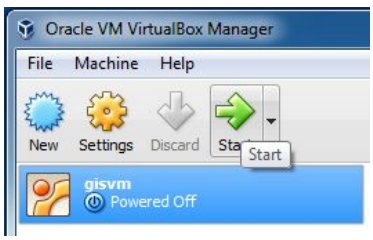
Or just **double click the file "gisvm.vmx"** found inside the gisvm unpacked folder.

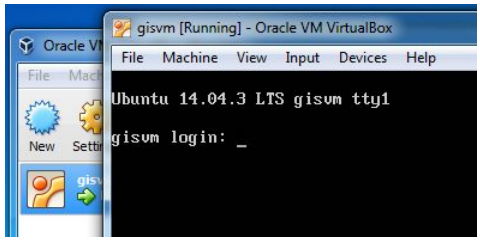
Run with VirtualBox

- Run VirtualBox and from menu: File> "**Import Appliance..." 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

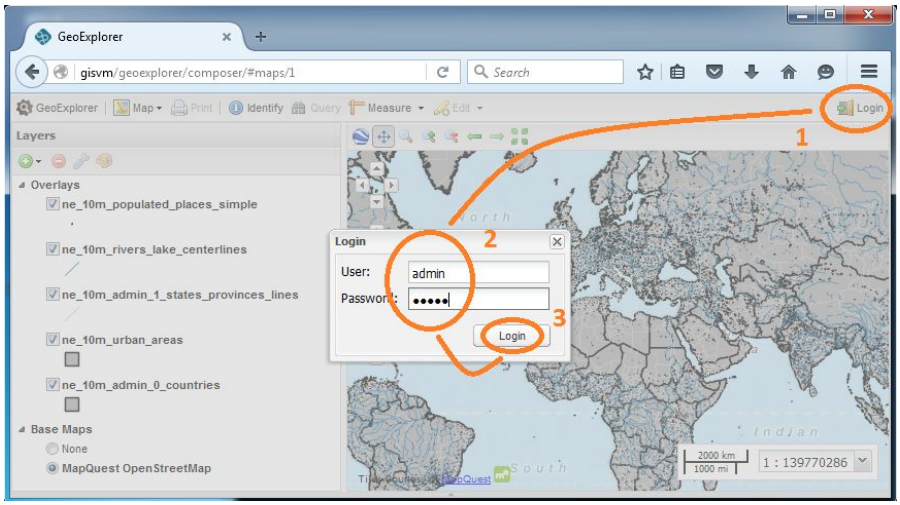




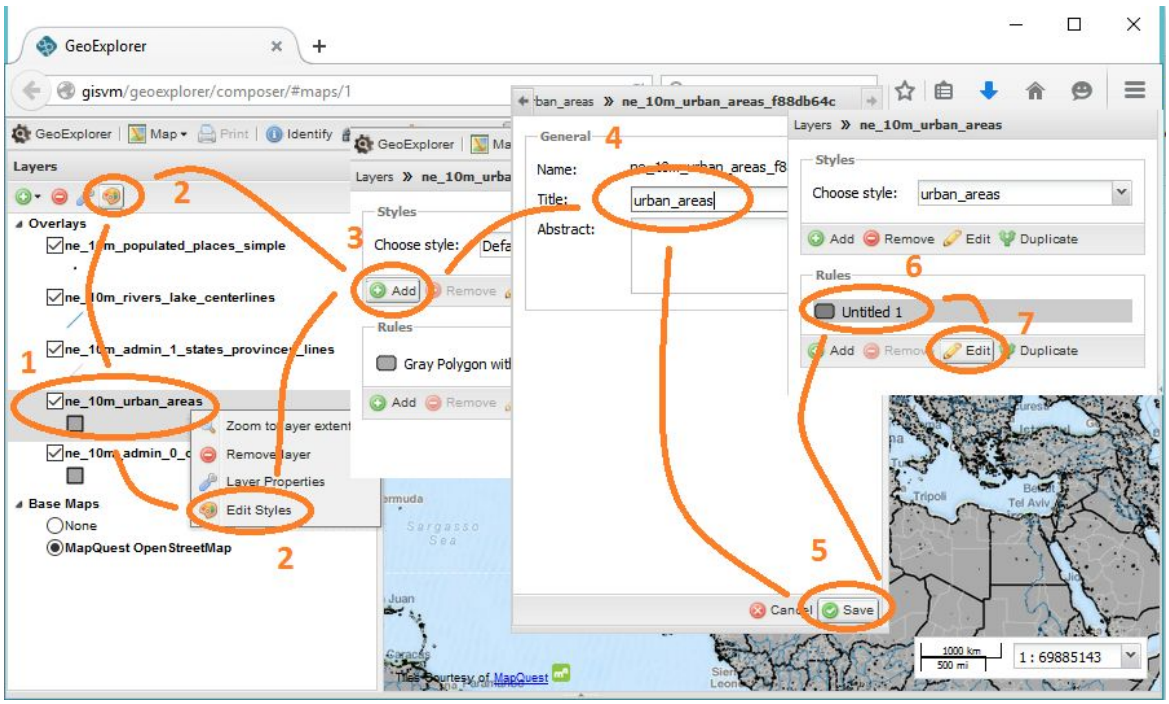
How to use it

1. Use GeoExplorer composer to edit and create Web Maps

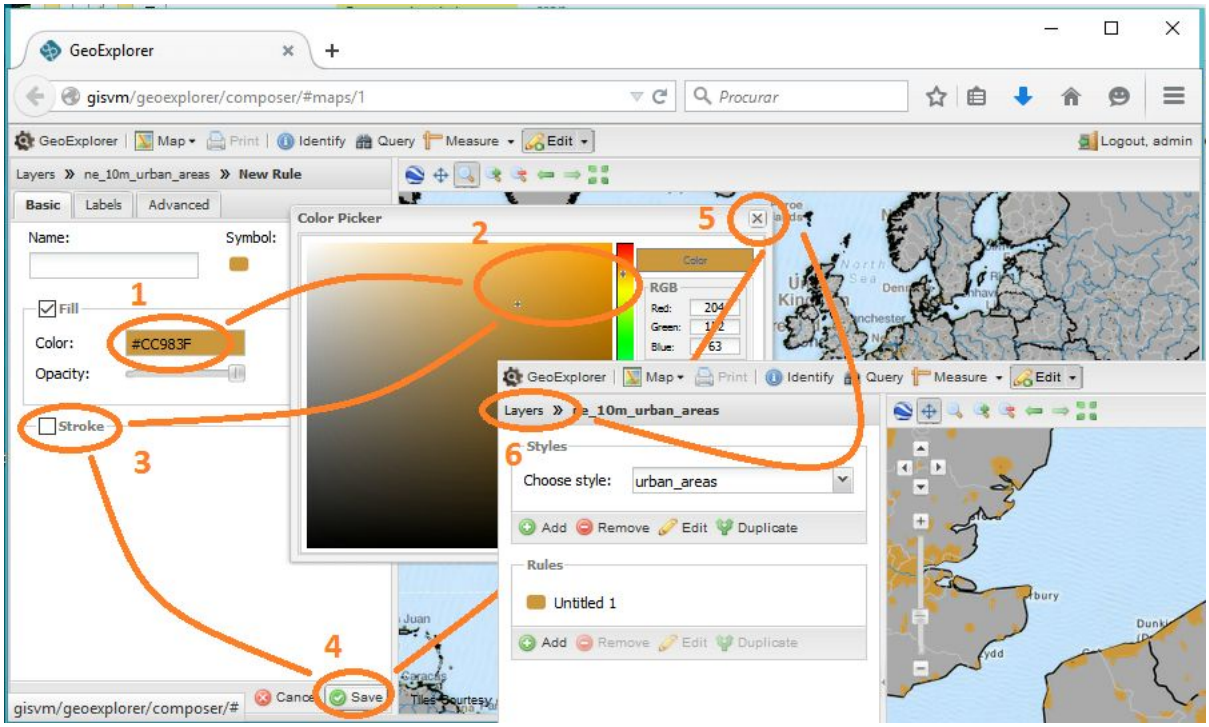
Use your browser to open the existing Web Map #1:
http://gisvm/geoexplorer/composer/#maps/1
And **login** as **admin** with password = **gisvm**



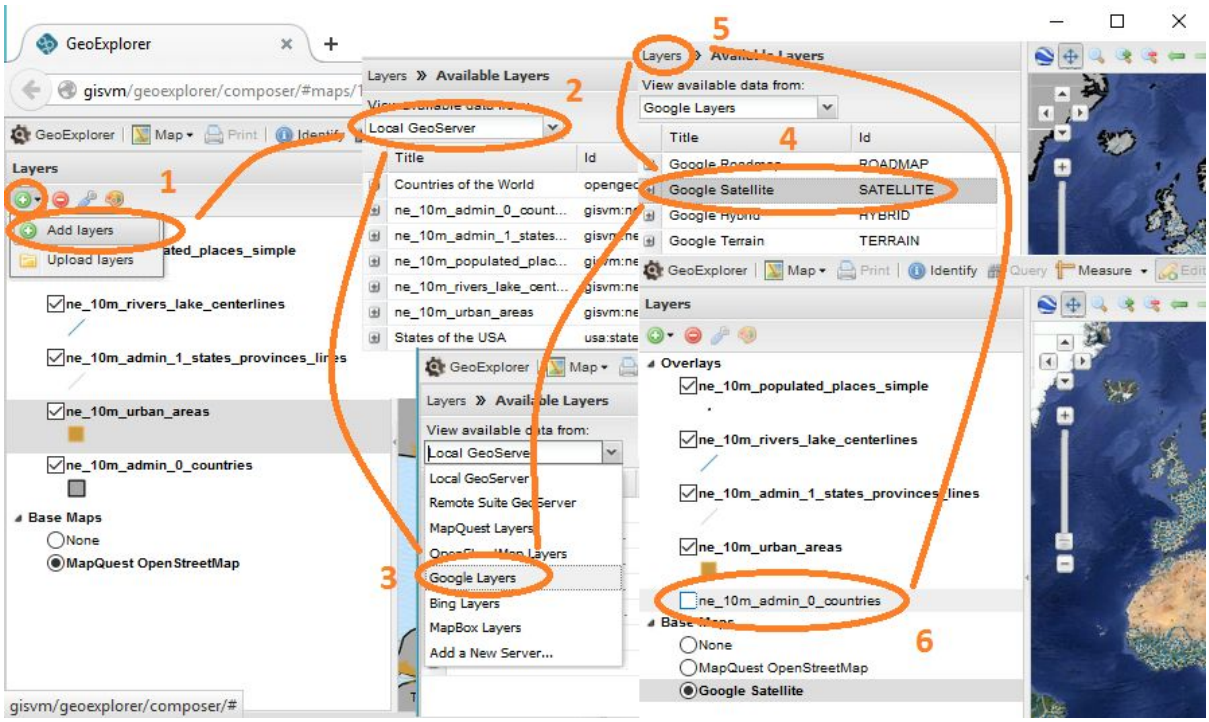
You can now **edit the map settings, add new layers and also edit and create new data inside each layer.**
First let's **change the urban areas layer style.** Select the "ne_10m_urban_areas" layer **(1)** and click up on manage styles icon **(2)** or right-click and select Edit Styles **(2)**. Add a new style **(3)**, call it "urban_areas" **(4)**, save **(5**), select "Untitled 1" **(6)** and edit **(7).**



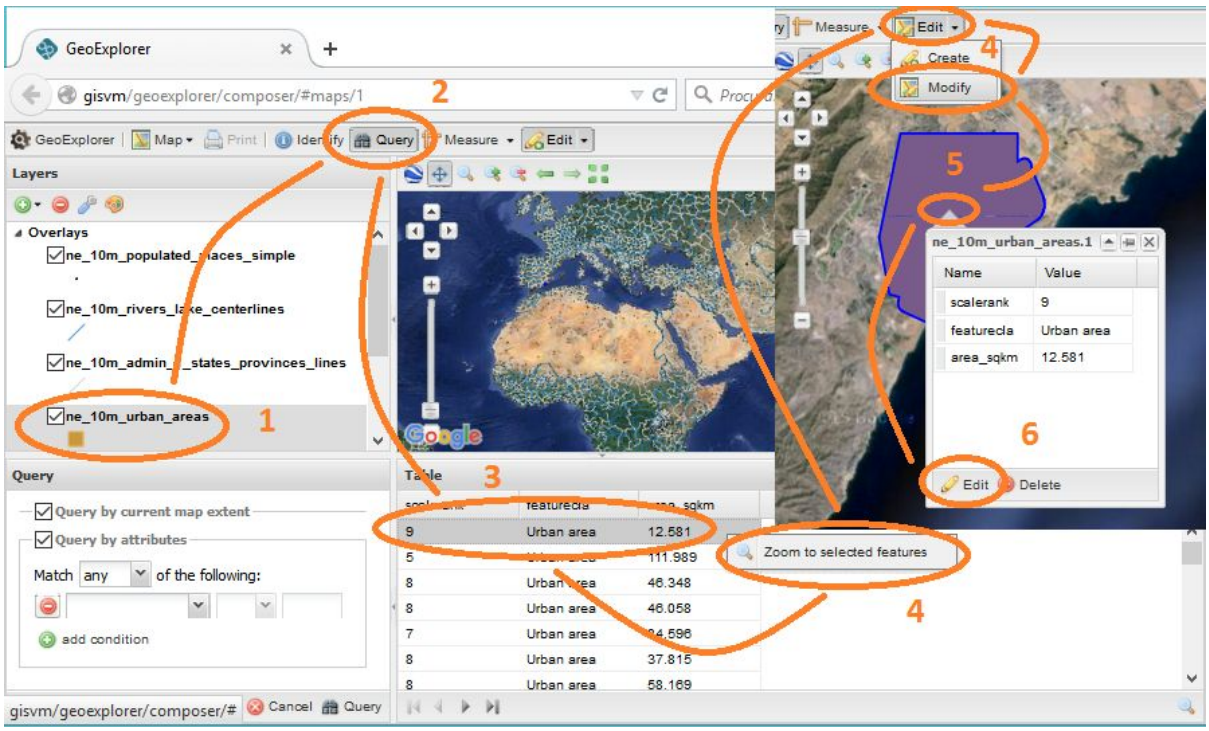
Click on the Fill color **(1)** and using the Color Picker select a color of your choice **(2)**, remove the Stroke line **(3)**, Save the Style **(4)**, close the Color Picker window **(5)** and return to the Layers Toolbar **(6).**



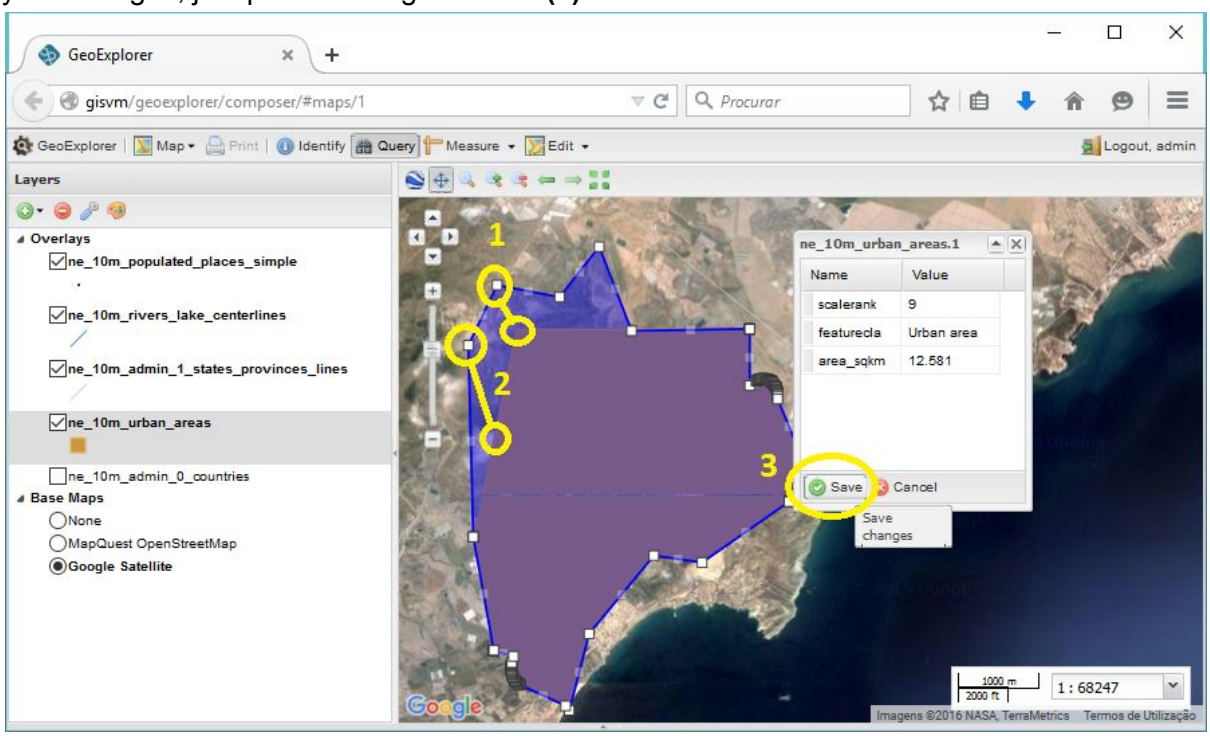
Now let's **add a new Google Satellite Base Map layer**. Click on the green cross icon **(1)** to Add layers, select available data from **(2)** Google Layers option **(3)**, double click on Google Satellite **(4)**, return to Layers **(5)** and deactivate "ne_10m_admin_0_countries **(6)** to view the Satellite data on the map.



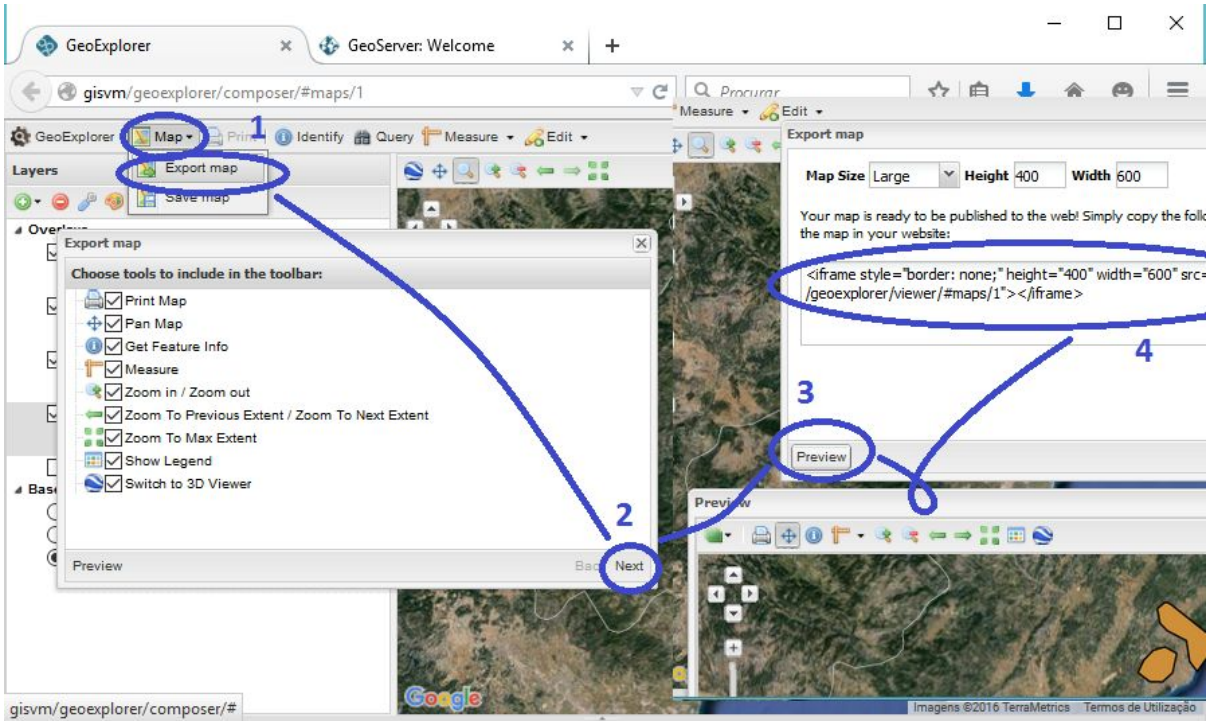
Let us now **edit a polygon from the urban areas layer**. First activate the "ne_10m_urban_areas" layer (1), click the Query menu icon (2), right-click on a table line (3) to zoom to that feature. Now click the Edit menu icon (4) and select the Modify option, click on the feature polygon (5) and on the pop-up window click "Edit" icon (6)



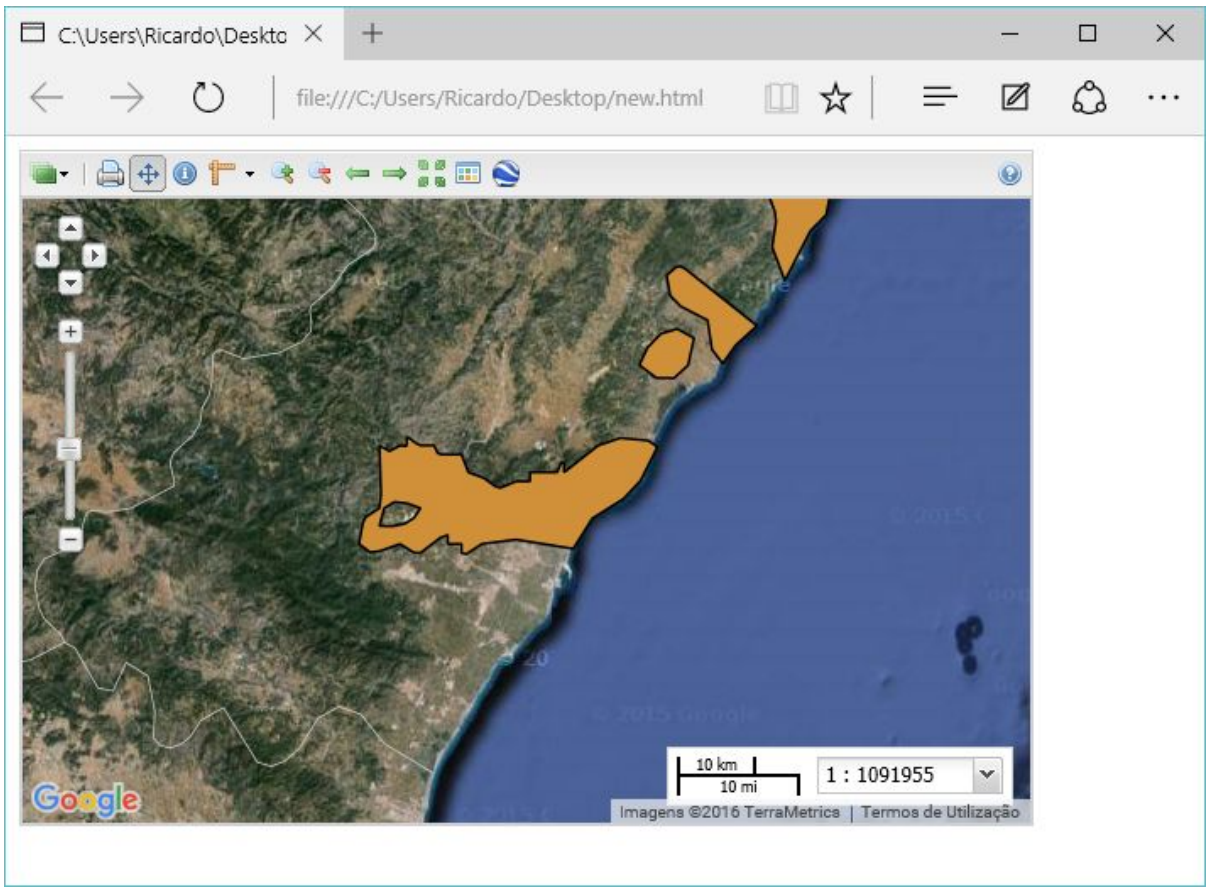
You are now on the edit vertex mode, so you can use your mouse to mode existing vertex **(1)**, add new vertex by selecting and dragging middle vertex **(2)** or remove existing vertex by placing your mouse over the vertex and pressing the Del key on your keyboard. After making your changes, just press Save green icon **(3)**.



Finally let us export the final map. Click menu Map icon **(1)** and select export map. Select the icons available and click “next” **(2)** , select the size of the map and click preview **(3)**, and you can now use the html code to include the map in your website **(4)**.

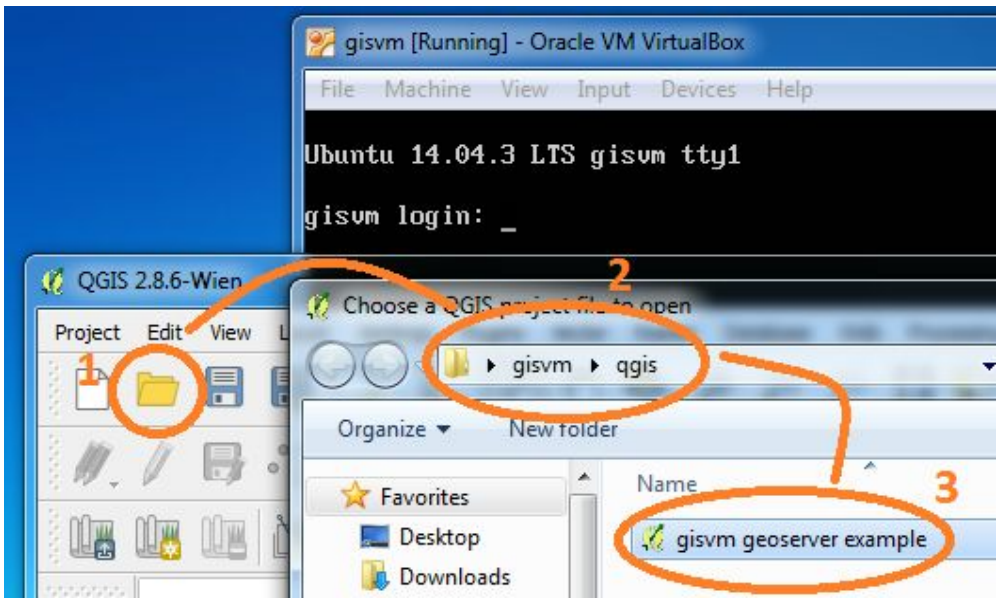


If you include the html code in a simple html file, you will get the following web map page:

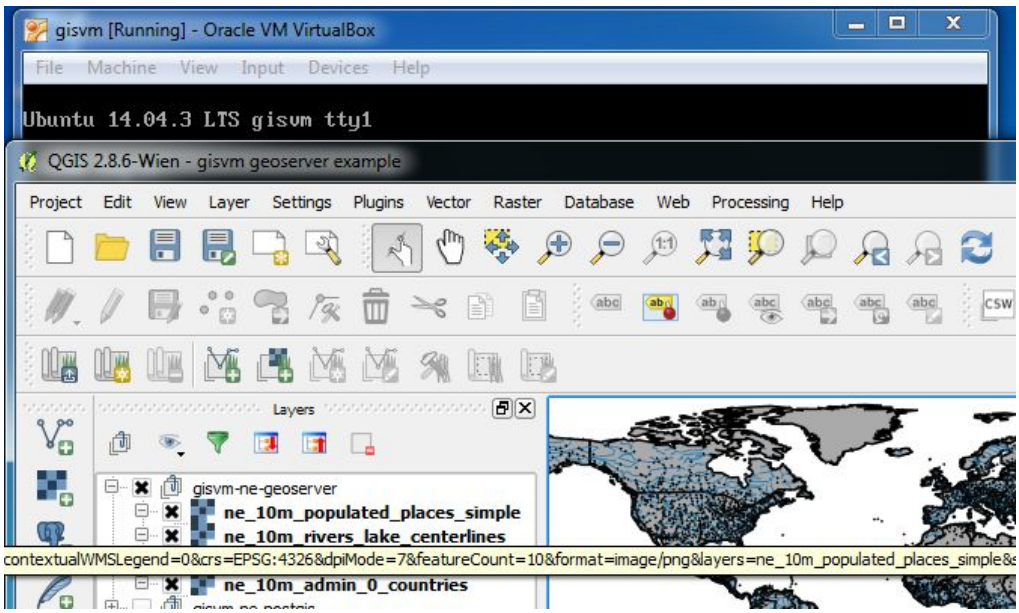


2. Open QGIS sample project to view the included Natural Earth data

Use the QGIS installed on your computer or on any other computer at your network, to open the included QGIS sample project file: "**gisvm geoserver 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/



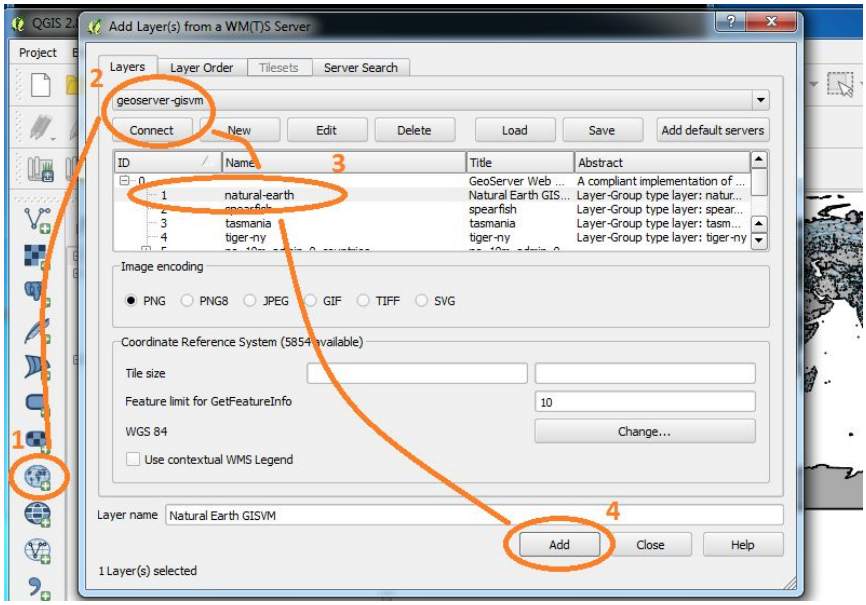
When you open the project all the data is store on the gisvm virtual machine, **published by geoserver using Web Map Services (WMS)** of data stored inside the "postgis" database.



3. Add a new WMS layer to your QGIS project from Geoserver

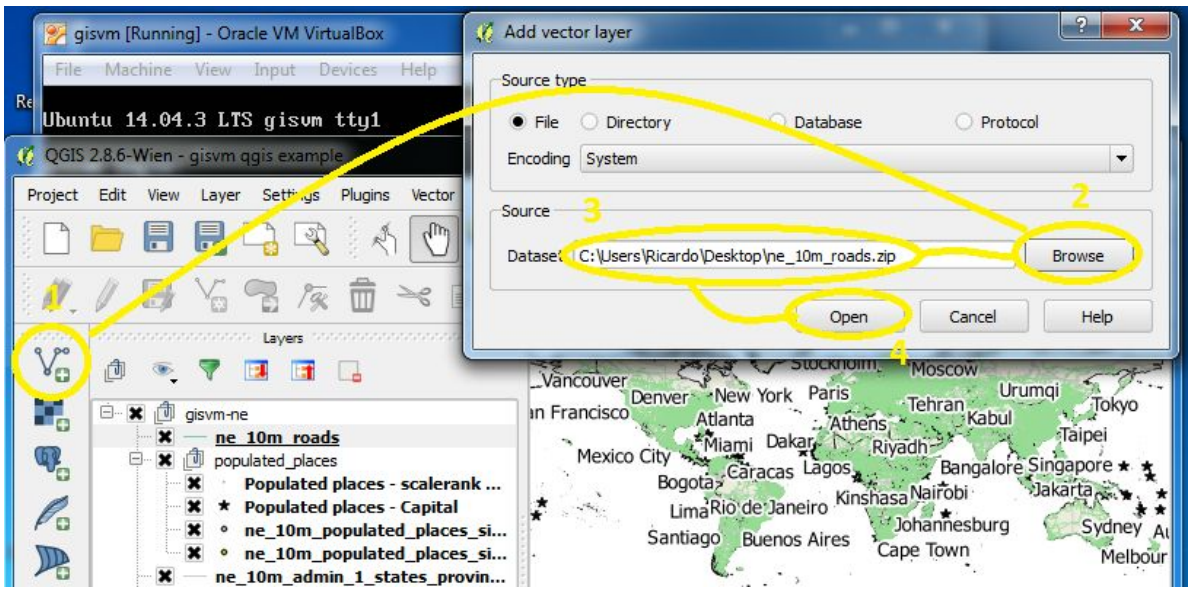
To create a new WMS connection on QGIS, simply type: **Name = geoserver-gisvm ; URL = http://gisvm/geoserver/gisvm/wms**

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

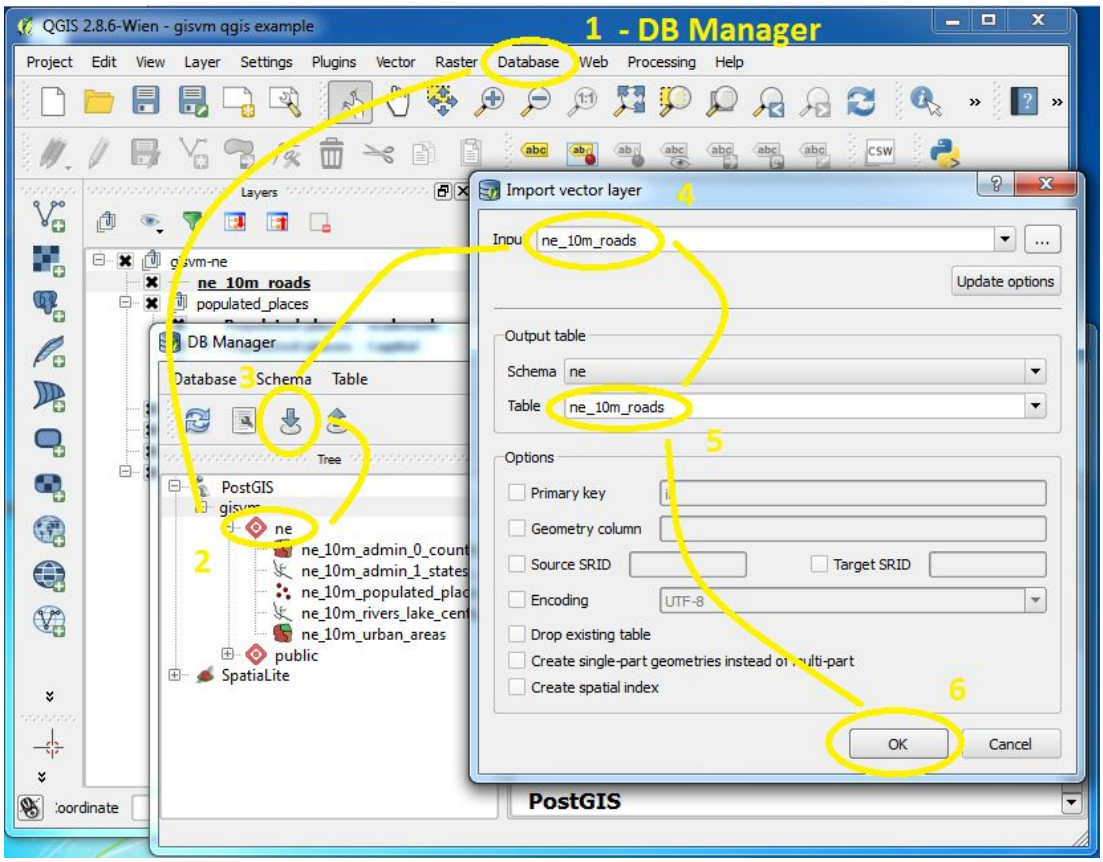


4. Create a new WMS layer with GSVM Geoserver and PostGIS

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/

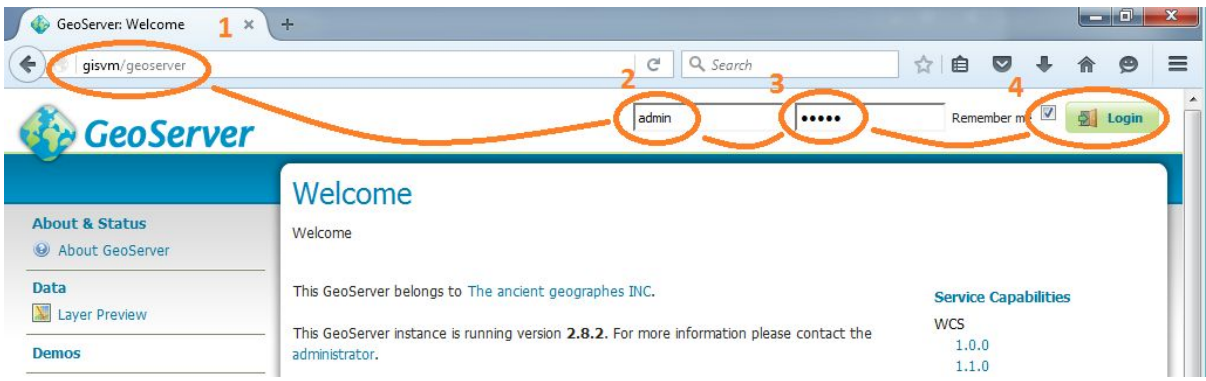


Use the **DB Manager** tool, in the Database menu, to import a PostGIS vector layer to GISVM



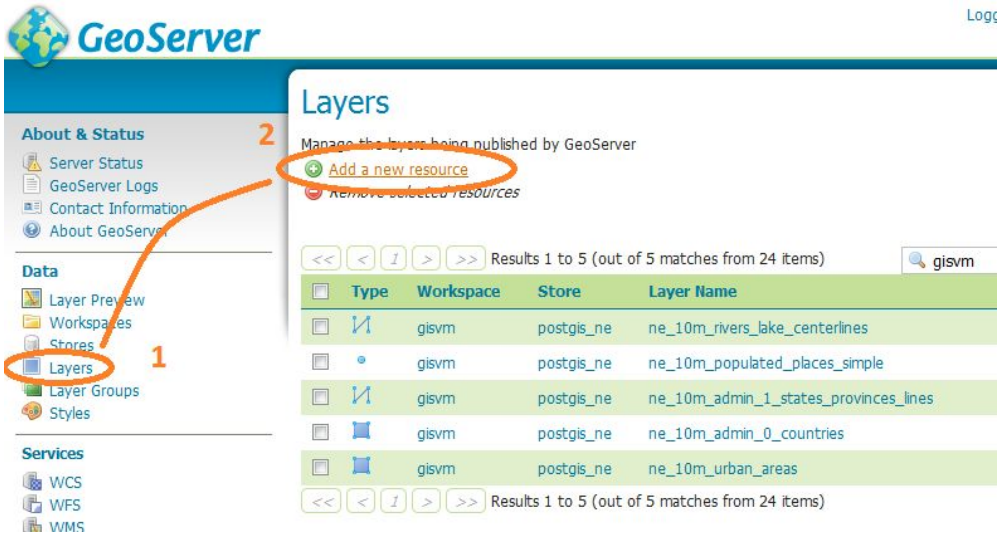
The **ne_10m_roads** layer (table) is now available to be used from PostGIS on GISVM. You can publish it as a WMS layer with Geoserver and add it to your QGIS project, just like before

To do that you must login in the geoserver web administration site: **http://gisvm/geoserver** , enter **Login = admin , Password = gisvm** , and select “Remember me” to avoid typing it again in the future:

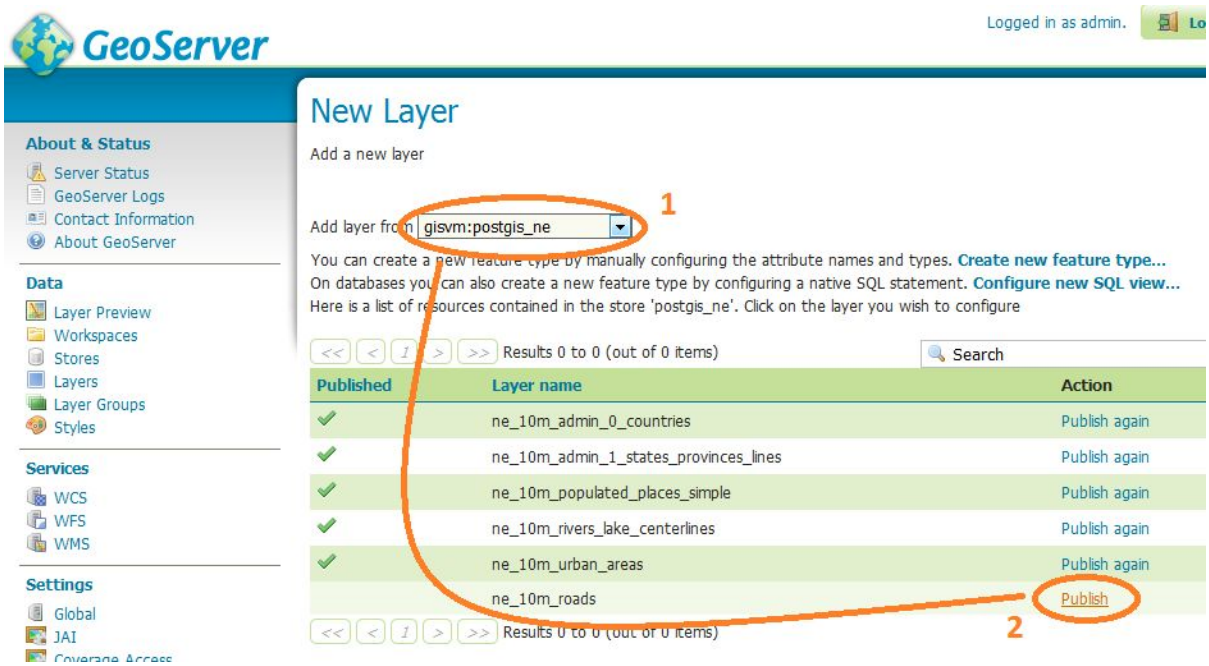


5. Create a new WMS layer from PostGIS store

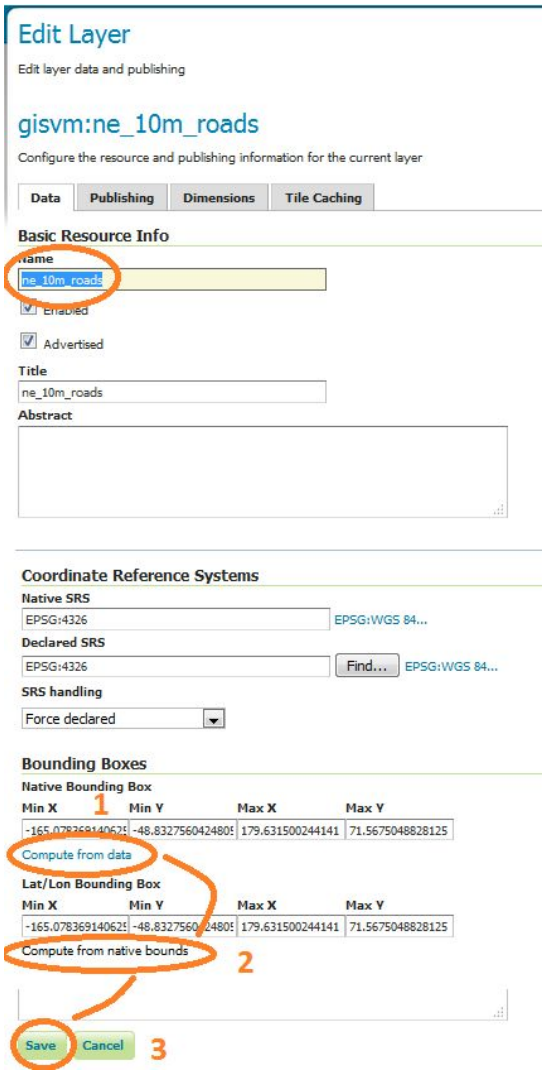
To add a new Layer, select the left **Data > Layers menu and click on "Add a new resource"**



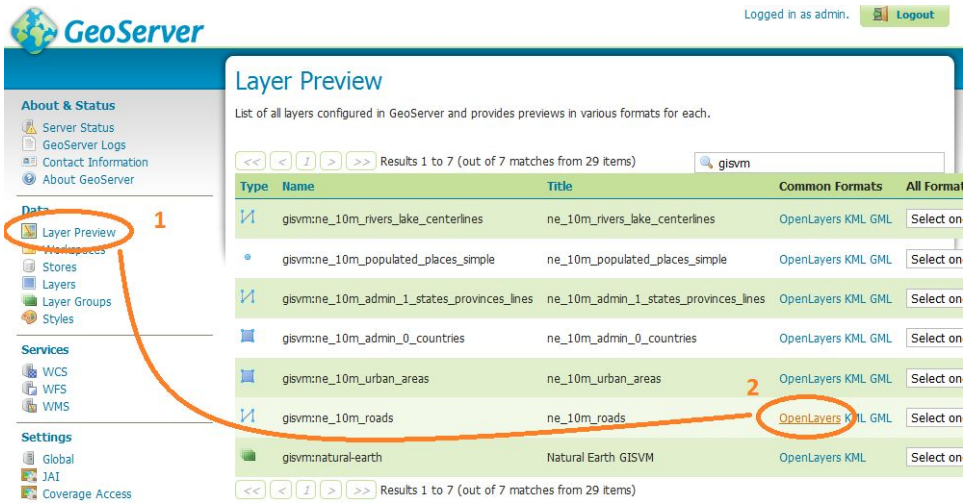
Select the **existing "postgis_ne" resource**, a postgis datasource created to access ne schema of postgis database. And **publish the new uploaded layer: ne_10m_roads** by clicking on **"Publish"**



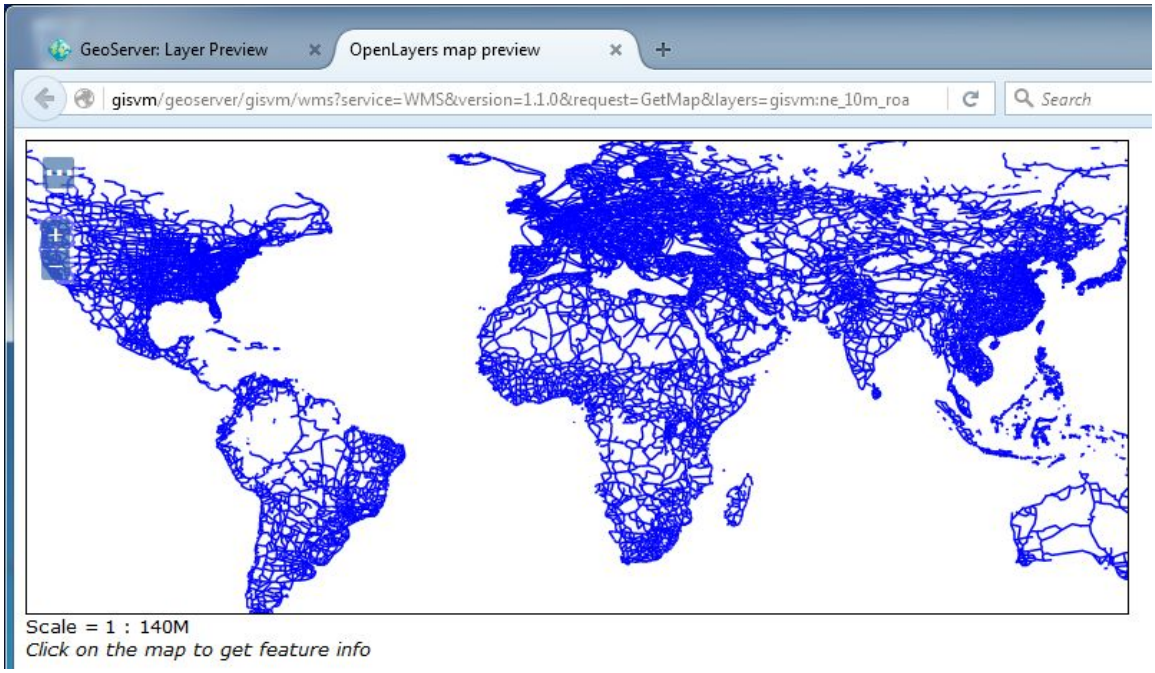
Use the default layer Name = **ne_10m_roads** , click “**Compute from data**” and “**Compute from native bounds**” to calculate both Bounding Boxes limits, and then **Save** the layer.



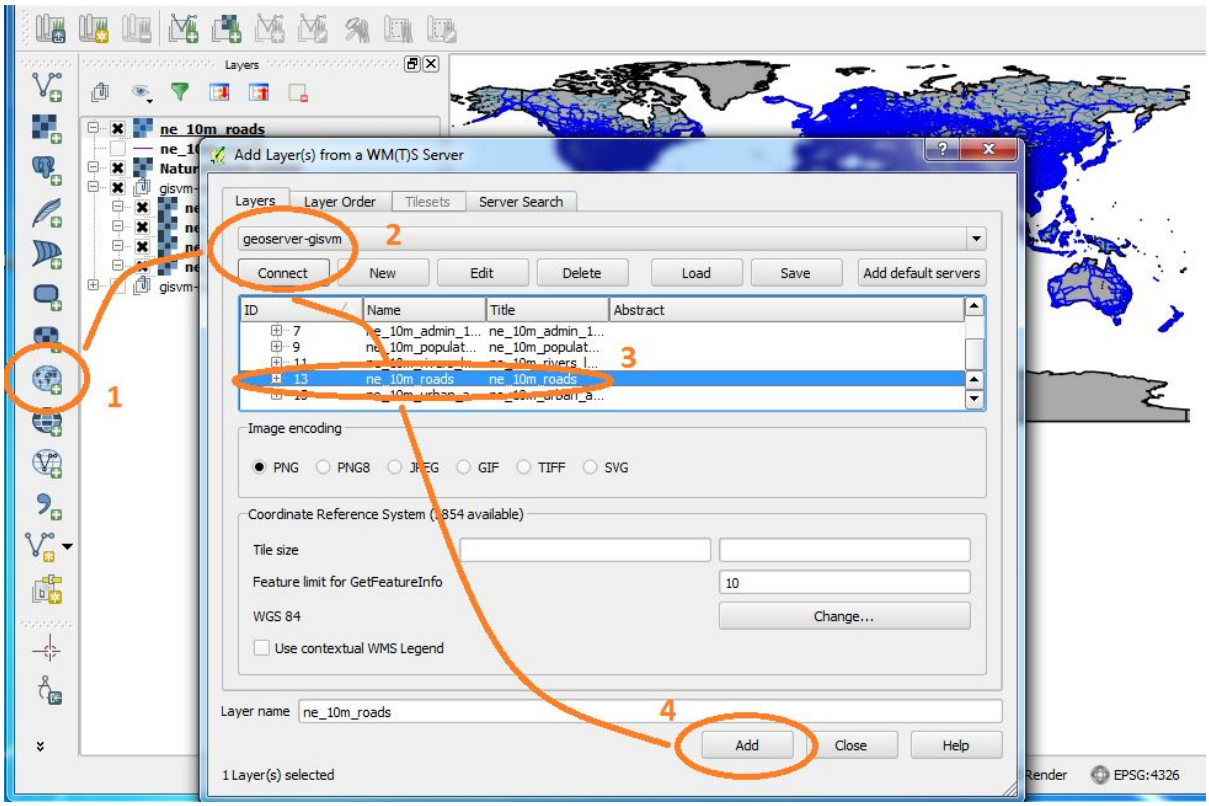
To Preview the just created layer, select the **Data > Layer Preview** menu and click on **“Open Layers” link on the “ne_10m_roads” line.**



It opens a new browser tab with a interactive webmap to navigate through ne_10m_roads WMS, using open layers:



You can now add it to your QGIS project. Use the "**Add WMS/WMTS**" layer button, select **geoserver-gisvm** to **Connect** to geoserver WMS, click on **ne_10m_roads** and **Add** it to your QGIS project. Click **Close** button to exit the Add layers windows.

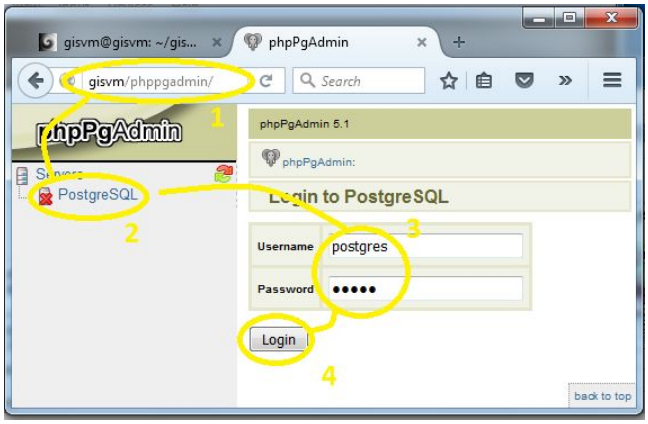


How to manage it

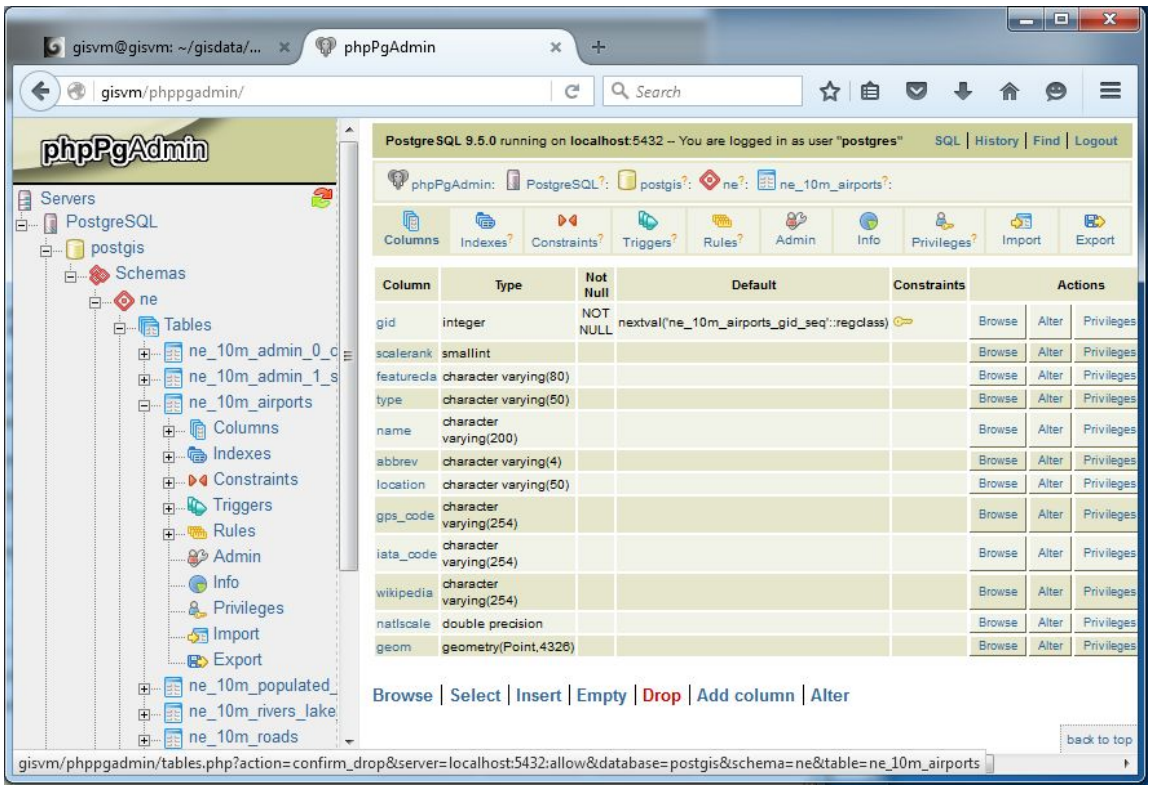
GISVM comes installed with two great full feature administration tools that you can use to manage it completely: **phpPgAdmin** and **Webmin**

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**



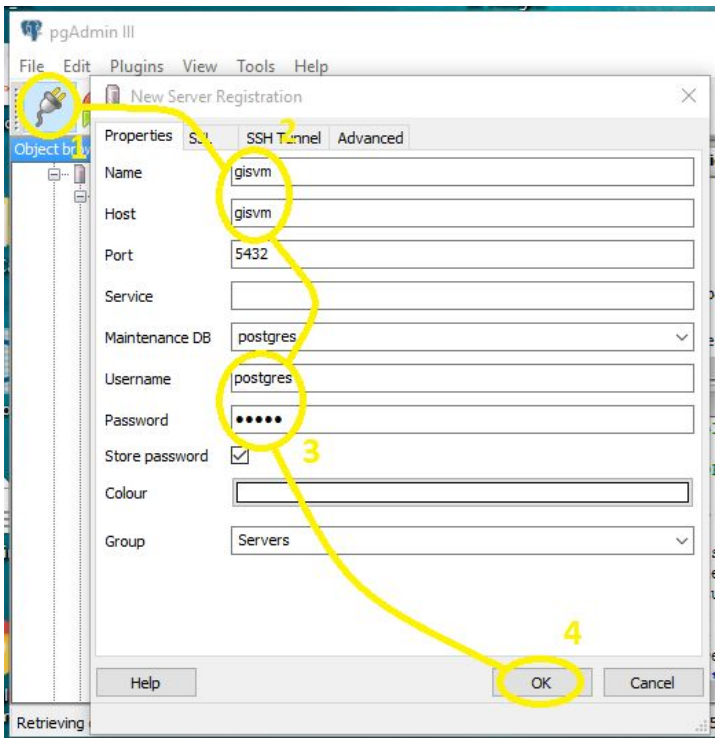
After login just navigate through postgis database, ne schema and ne_10m_airports table. It allows the execution of all kinds of PostgreSQL operations, like browse and edit the data, add a new column or DROP (delete) the table.



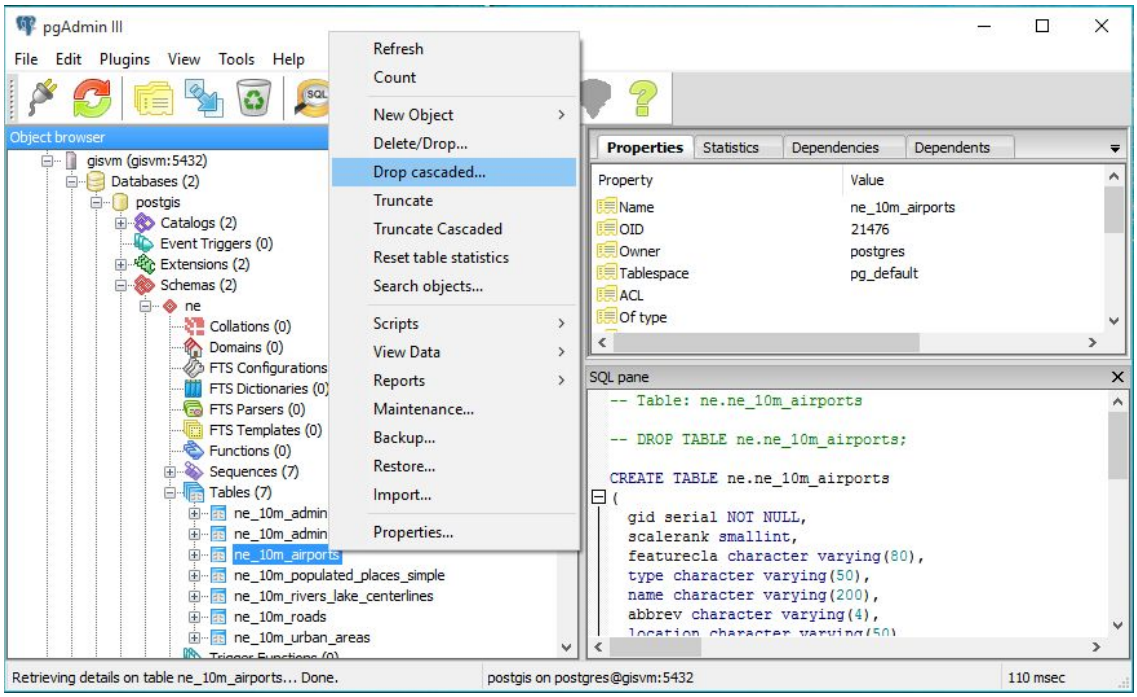
2. Using pgAdmin III to manage the PostgreSQL server

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:

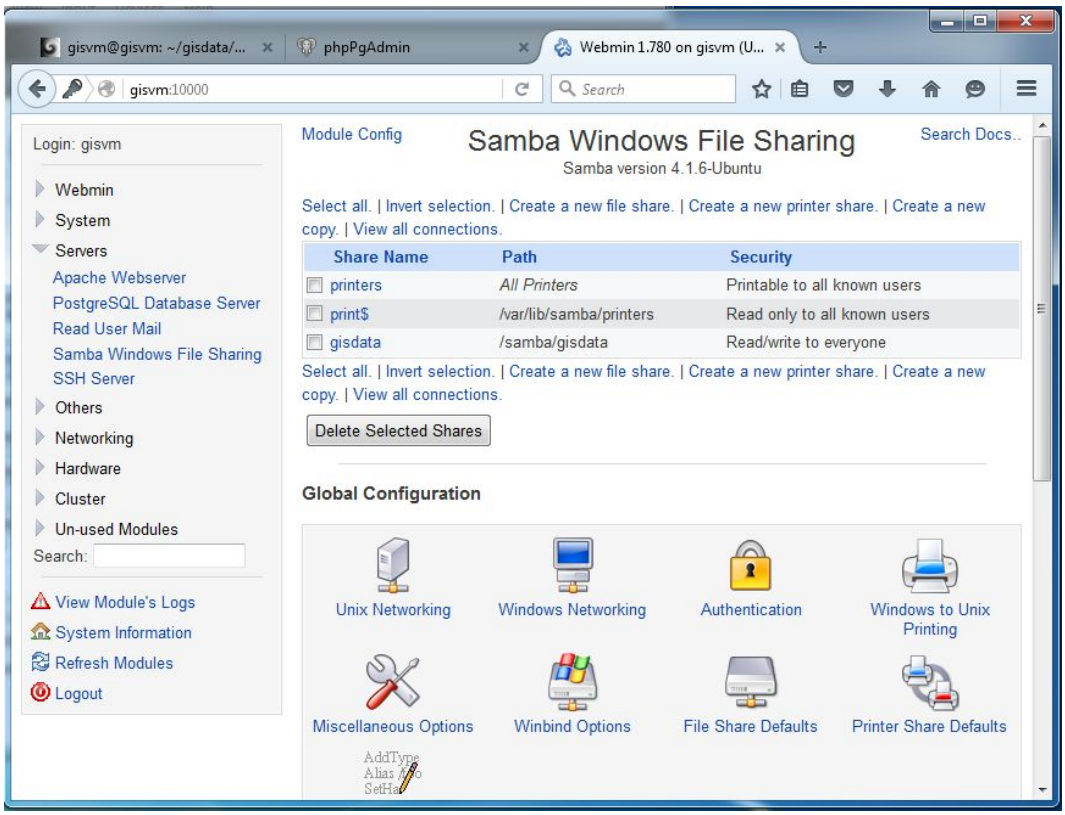


3. Using Webmin to manage the Ubuntu operating system

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

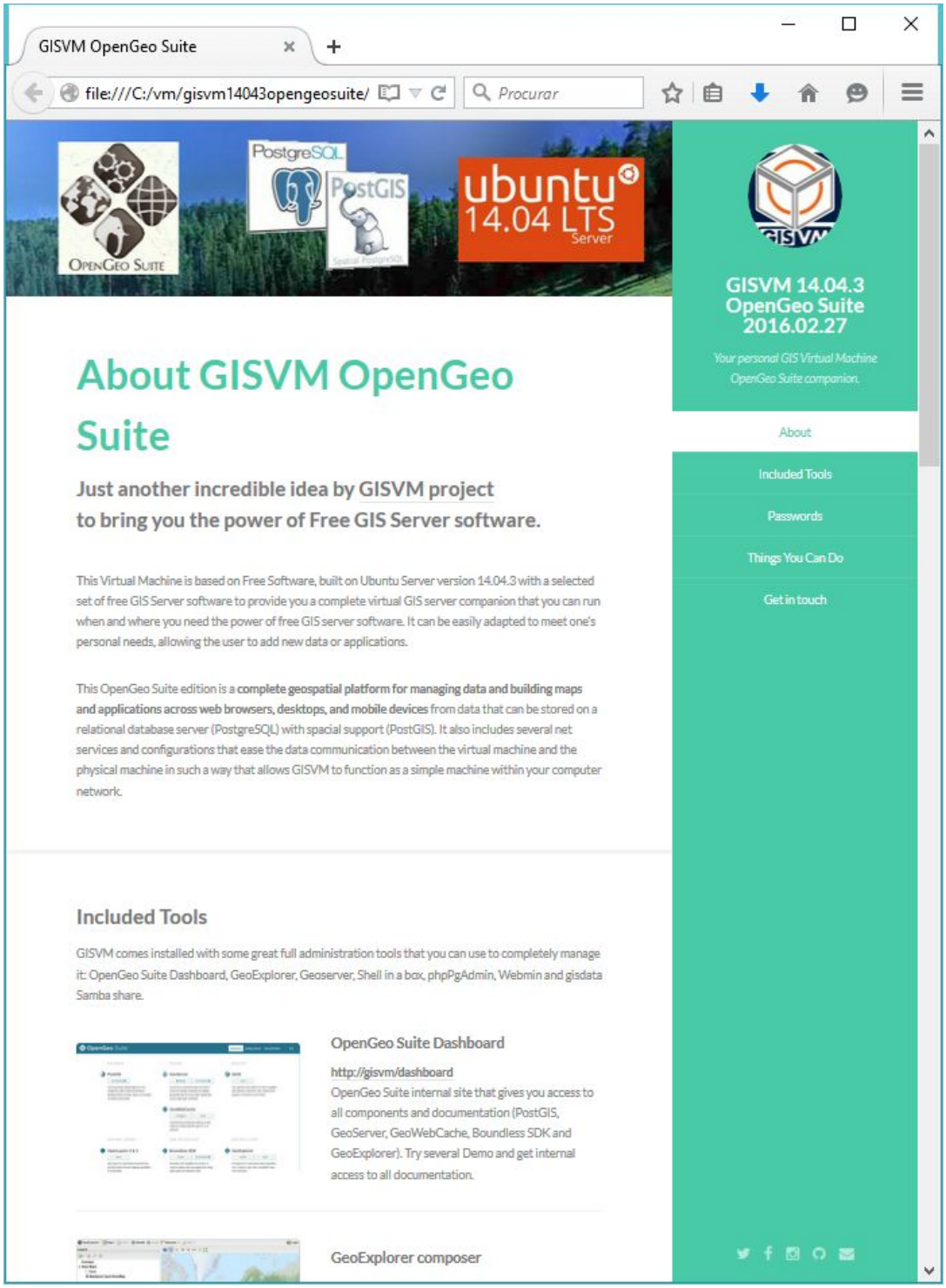
Login with: gisvm and password: gisvm

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



REMEMBER, USE GISVM AT YOUR OWN RISK

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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 !!!!!!!!