

# PolarGrid Virtual GIS Server

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Software Release page: <http://polargrid.org/polargrid/software-release>

## Contents

Virtual server.....	1
How to run GIS Server.....	1
User/Passwords .....	1
Sample datasets.....	2
GeoServer: .....	2
PostgreSQL:.....	3
How to test server.....	3
Work with server (QGIS) .....	4
GeoServer WMS service: .....	4
PostgreSQL.....	4
Work with server (Matlab).....	5

## Virtual server

1. The virtual machine is designed for PolarGrid developers to explore the potentials to integrate GIS services into their data processing toolbox.
2. The virtual machine is built on GIS virtual machine (Ubuntu 11.04) from [GISVM](#) processor, and configured with 1 virtual CPU and 512 M memory.
3. The virtual machine runs with [VMware Player](#) and [VirutalBox](#), and fully tested with VMware player.
4. The virtual machine is compressed with [7Zip](#), it takes 5GB harddisk space once unpacked.
5. The virtual machine is intended for the internal testing only; please don't use it directly as the public server without consulting IT support.

## How to run GIS Server

1. Install VMware player
2. Download compressed image file, unzip with 7-zip (<http://www.7-zip.org/download.html>)
3. Double click gisvm.vmx or use "Open" from VMware player
4. In your machine (not the virtual server), open (<http://gisvm>)

## User/Passwords

Ubuntu OS passwords:

- User login : user
- User password: user
- Root password: user

PostgreSQL password:

- Login : postgres
- Password: postgres

TOMCAT password:

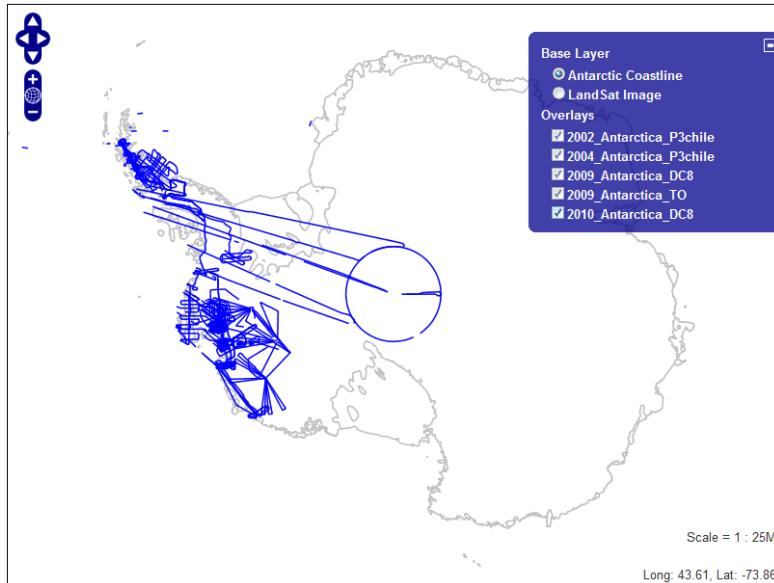
- Manager login: admin
- Password : admin

Samba server: Share = gisdata {/home/user/data} as {\gisvm\gisdata}

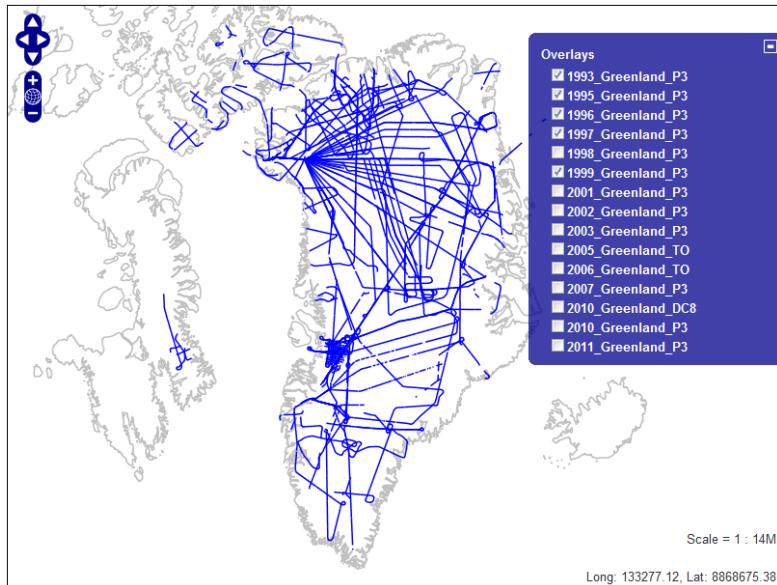
## Sample datasets

### GeoServer:

1. Antarctica (5 missions): 2002\_Antarctica\_P3chile, 2004\_Antarctica\_P3chile, 2009\_Antarctica\_DC8, 2009\_Antarctica\_TO, 2010\_Antarctica\_DC8



2. Greenland (15 missions): 1993\_Greenland\_P3, 1995\_Greenland\_P3, 1996\_Greenland\_P3, 1997\_Greenland\_P3, 1998\_Greenland\_P3, 1999\_Greenland\_P3, 2001\_Greenland\_P3, 2002\_Greenland\_P3, 2003\_Greenland\_P3, 2005\_Greenland\_TO, 2006\_Greenland\_TO, 2007\_Greenland\_P3, 2010\_Greenland\_DC8, 2010\_Greenland\_P3, 2011\_Greenland\_P3

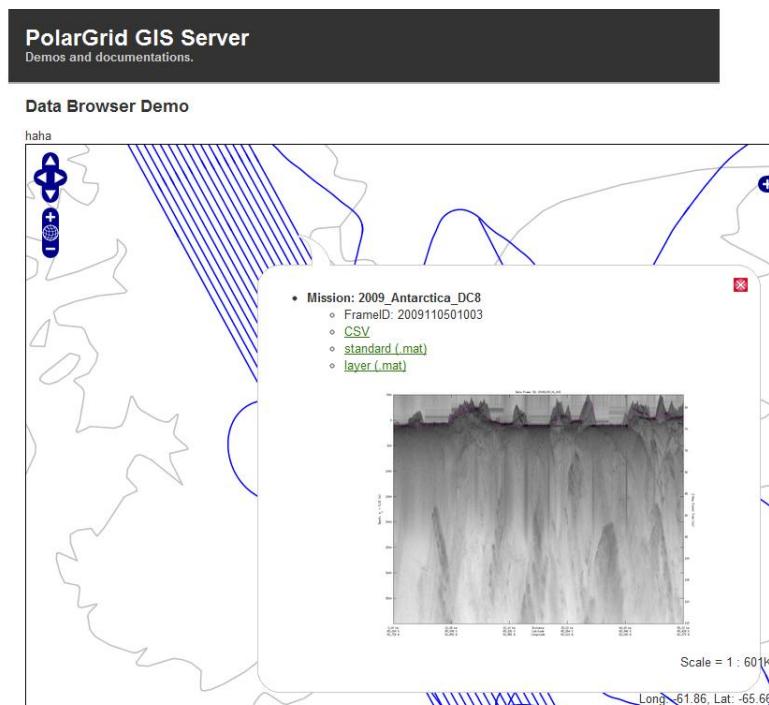


## PostgreSQL:

CSV file are stored as point type, currently loaded with all the csv files from Antarctica missions.

## How to test server

In your machine (not the virtual server), open (<http://gisvm>)



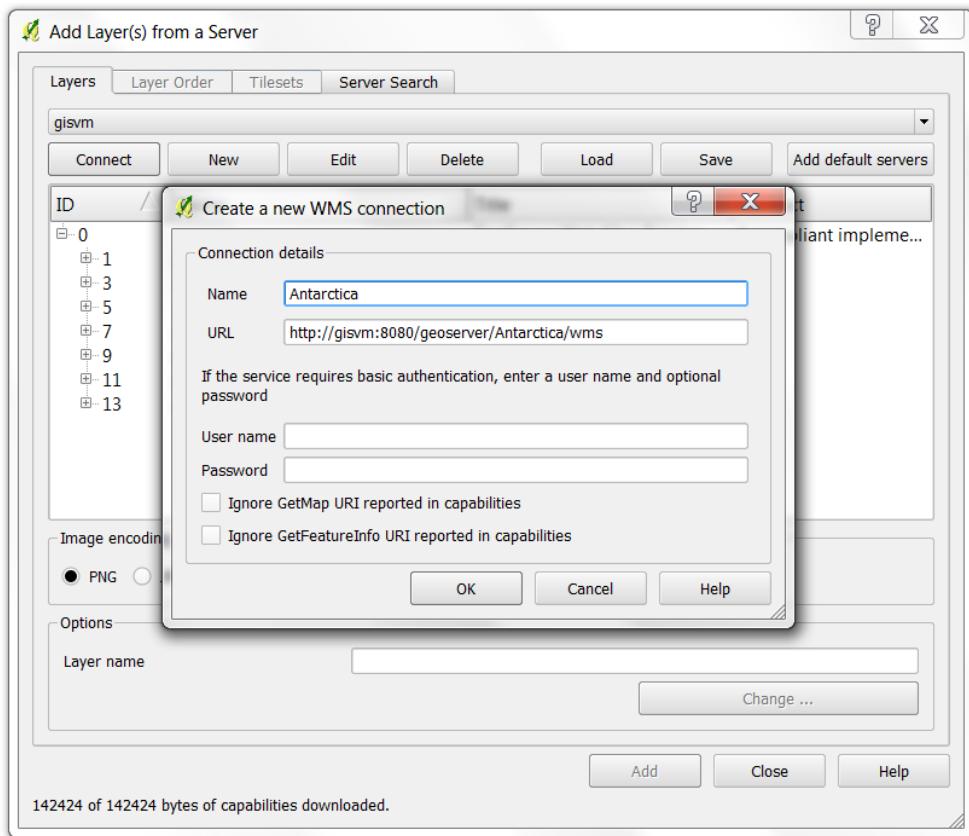
## Work with server (QGIS)

QGIS (<http://qgis.org/>)

### GeoServer WMS service:

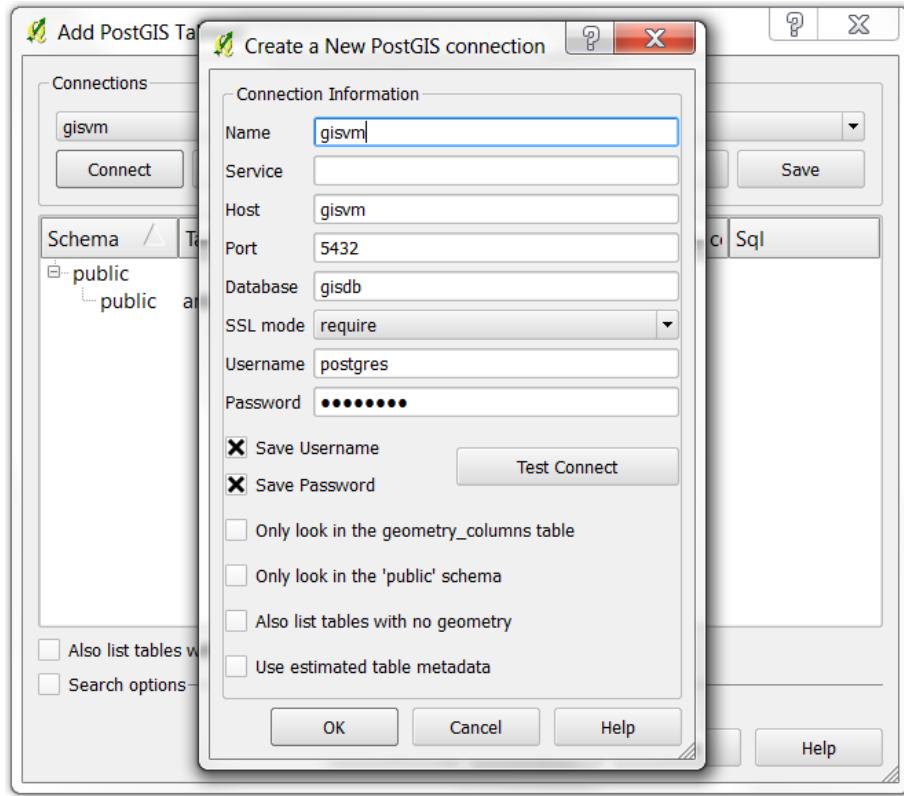
Antarctica <http://gisvm:8080/geoserver/Antarctica/wms>

Greenland <http://gisvm:8080/geoserver/Greenland/wms>



## PostgreSQL

Connection parameters: Host: gisvm, Port: 5432, Database: gisdb, Username: postgres, Password: postgres



## Work with server (Matlab)

Please refer to the Matlab Mapping Toolbox and Database Toolbox for the details.  
Sample codes will be included in the next release.