



Introduction to OpenGeo Suite

Tutorial ID: IGET_WEBGIS_001



This tutorial has been developed by BVIEER as part of IGET web portal intend to provide easy access to geospatial education. This tutorial is provided under creative common licenses. Your support will help our team to improve the content to continue to offer high quality geospatial educational resources. For suggestions and feedback please visit www.iget.in

Introduction to OpenGeo Suite

Objective:

- Downloading and installing OpenGeo Suite
- Introduction to OpenGeo Suite's dashboard

Software: OpenGeo Suite

Level: Beginner

Time: required: 1-2 Hour

Prerequisites and Geospatial Skills:

- OpenGeo Suite 3.0 setup
- Active internet connection

Reading

1. Introduction to WebGIS 'link to be given'

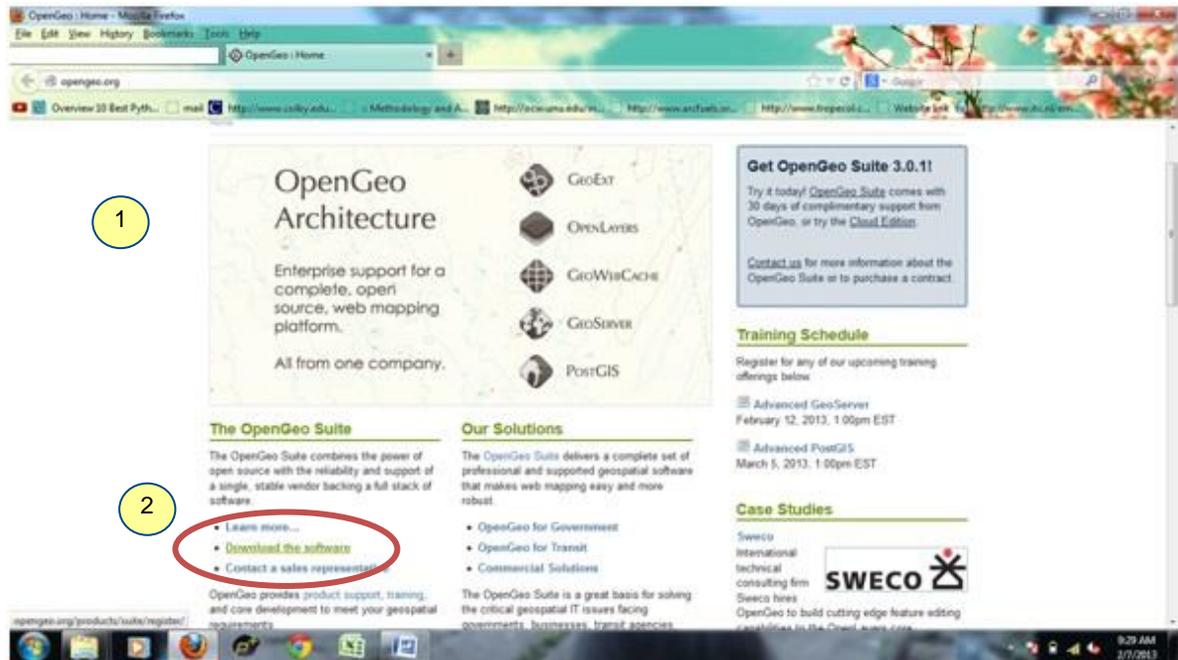
Introduction

OpenGeo Suite is a powerful Open source web mapping software. It is rich in web mapping tools, documentation, examples and sample applications. It supports a number of OGC services (WMS, WFS, WCS), tiles (Google, Bing, WMTS, TMS, WMS-C), and formats (KML, PDF, SVG, GML, GeoJSON, CSV). It has good editing and publishing capabilities as well as provides a great support to Google earth and Google maps. The Dash board in *OpenGeo Suite* facilitates easy access to all its components through one interface (Source: [OpenGeo suite.org](http://opengeo-suite.org)). OpenGeo Suite includes following software components:

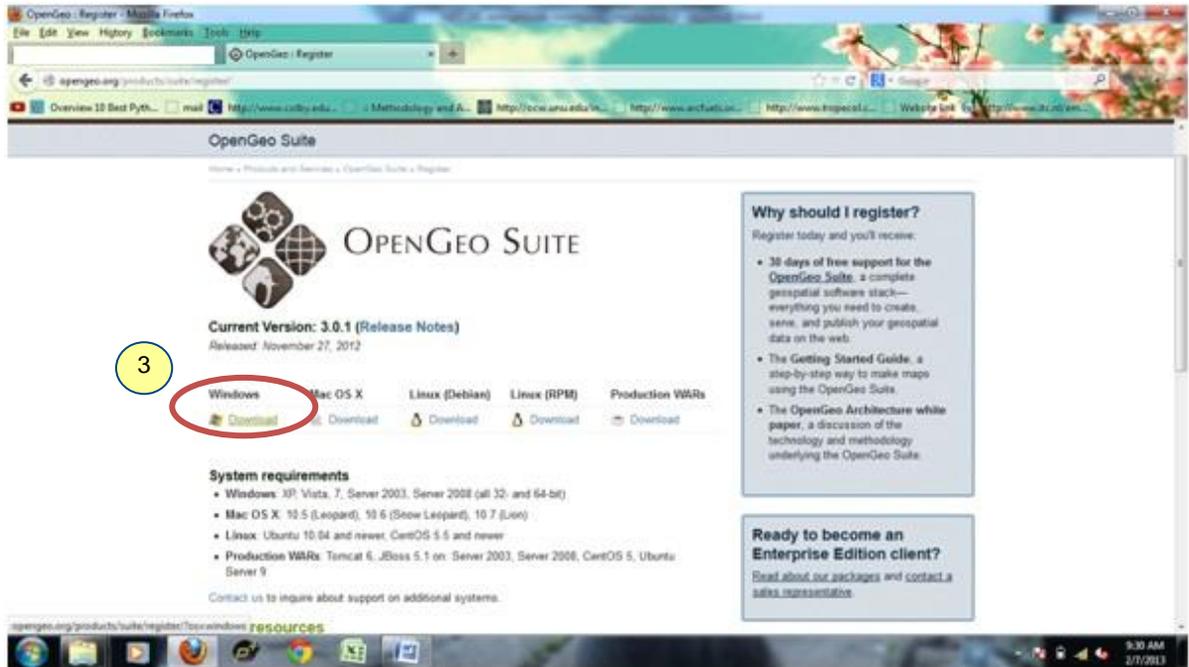
1. **PostGIS:** A robust, full featured PostgreSQL open source relational database system.
2. **GeoServer:** A software server facilitates to edit and publish the geospatial data.
3. **GeoWebCache:** A tile cache server that accelerates the delivering the images and data.
4. **GeoExplorer:** is a browser, used to view and publish the data locally and remotely.
5. **Client SDK:** is a software development kit provides tools to develop web mapping applications.

Downloading and installing

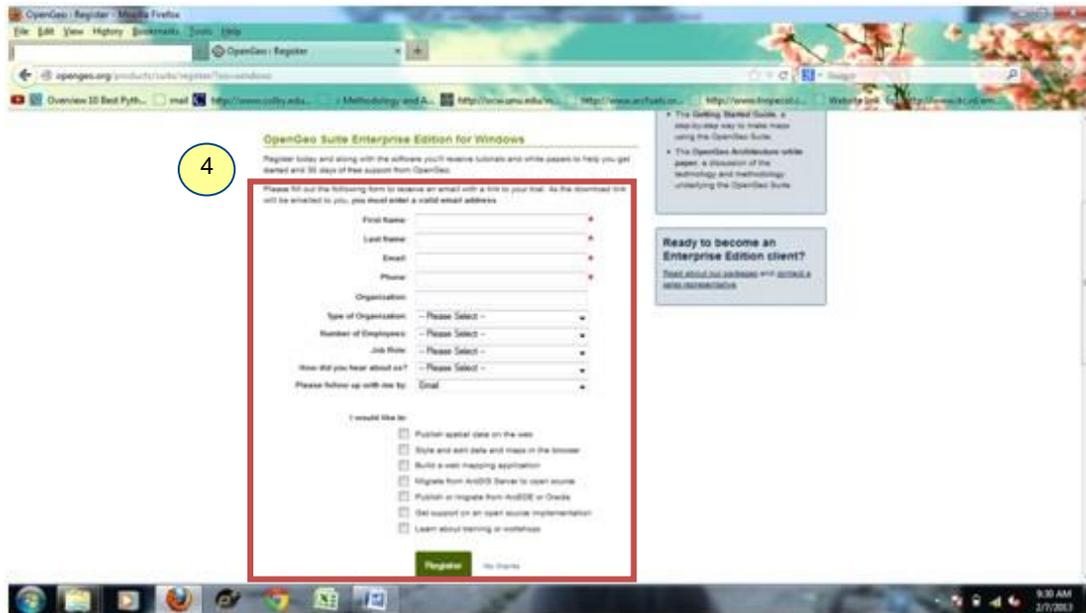
1. In order to download the *OpenGeo Suite* application open any of your internet browser and go to the *OpenGeo Suite* website, the corresponding link is: <http://opengeo.org/>



2. Now look for '**Download the software**' on the web page and click over it.
3. Now you will be redirected to a new window, select the appropriate Operating System (OS) that corresponds to you and click on it. In this tutorial we consider '*Windows*' as our OS.



- Now you will be redirected to the 'Registration' web page, register yourself to get a copy of *OpenGeo Suite* software via, your registered email address. If you don't want to register click on '*No thanks*' then you will redirect to a new window, select the '*Window installation*' file. Download it into your local hard drive.



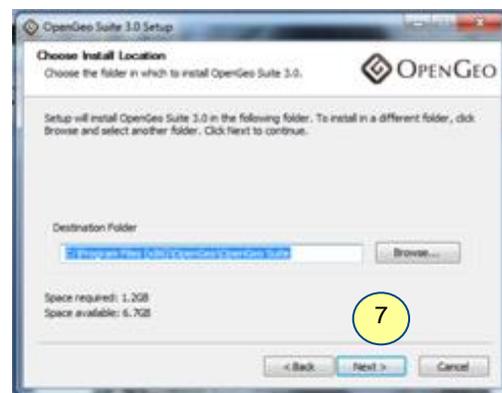
5. Now run the setup by double click on 'OpenGeoSuite-ce-3.0.exe', now you will be presented with 'OpenGeo Suite 3.0 setup', in this window click on 'Next' to proceed.



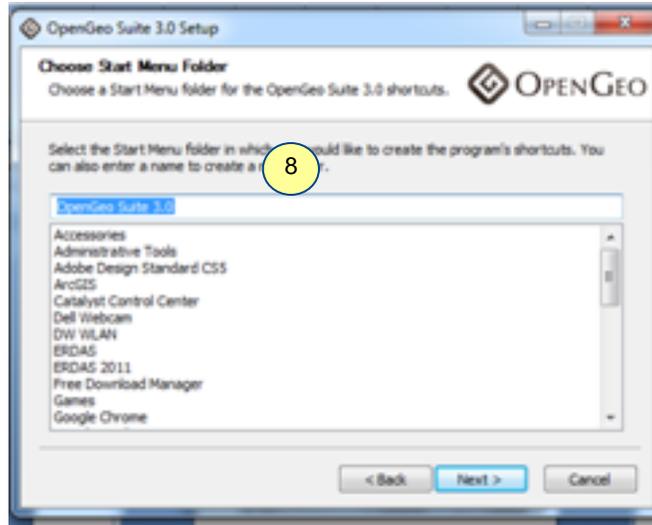
6. Now 'License Agreement' flashes in the window, read the terms carefully → Click on 'I Agree' to proceed.



7. Now you will be asked to choose the installation location. We suggest you keep this location as default → click on 'Next' to proceed.



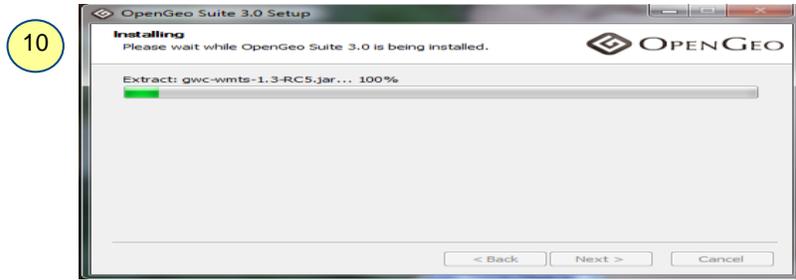
8. Now it is time to choose start menu folder, keep this as default → Click on 'Next' to proceed.



9. Now you will ask to choose the *OpenGeo Suite* component in the next window, check only '*Suite Services*' → Click on '*Next*' to proceed for installation.



10. Now '*Ready to Install*' flashes on your screen → click on '*Install*'. The installation will take around '*10 Minutes*'.



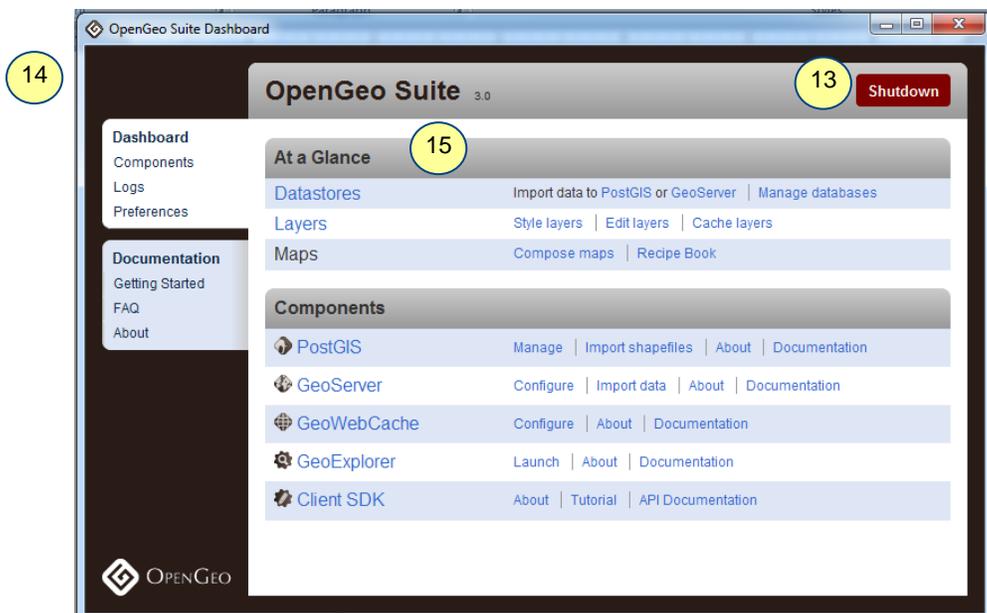
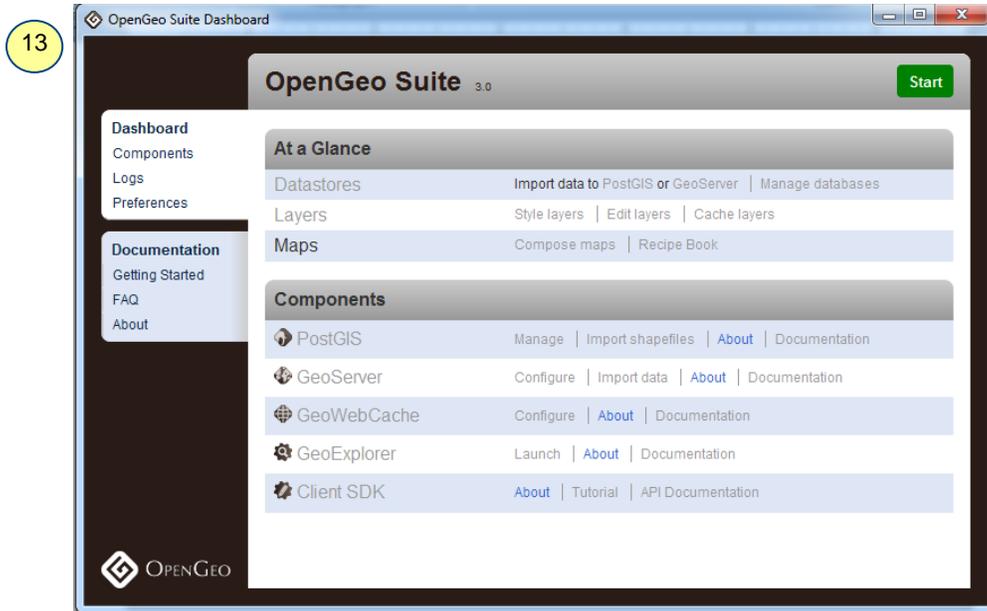
11. After completion of installation, you will present with completion setup window, make sure the check box of 'Launch *the OpenGeo Suite Dashboard*' was checked before click 'Finish'.



12. Now you will be presented with 'OpenGeo suite Dashboard' application window. You will see 'GeoServer Administration' pop up window on the top of dashboard, please note down the Username and Password → Click on 'Close' to proceed.



13. OpenGeo suite is an application server so it has to be started before using, to start '*OpenGeo Suite*' → Click on the green '*Start*' button on the top right corner of dashboard. After few minutes¹ the green Start button will changed to red color '*Shutdown*' button. You can click on it when you close the *OpenGeo Suite*.

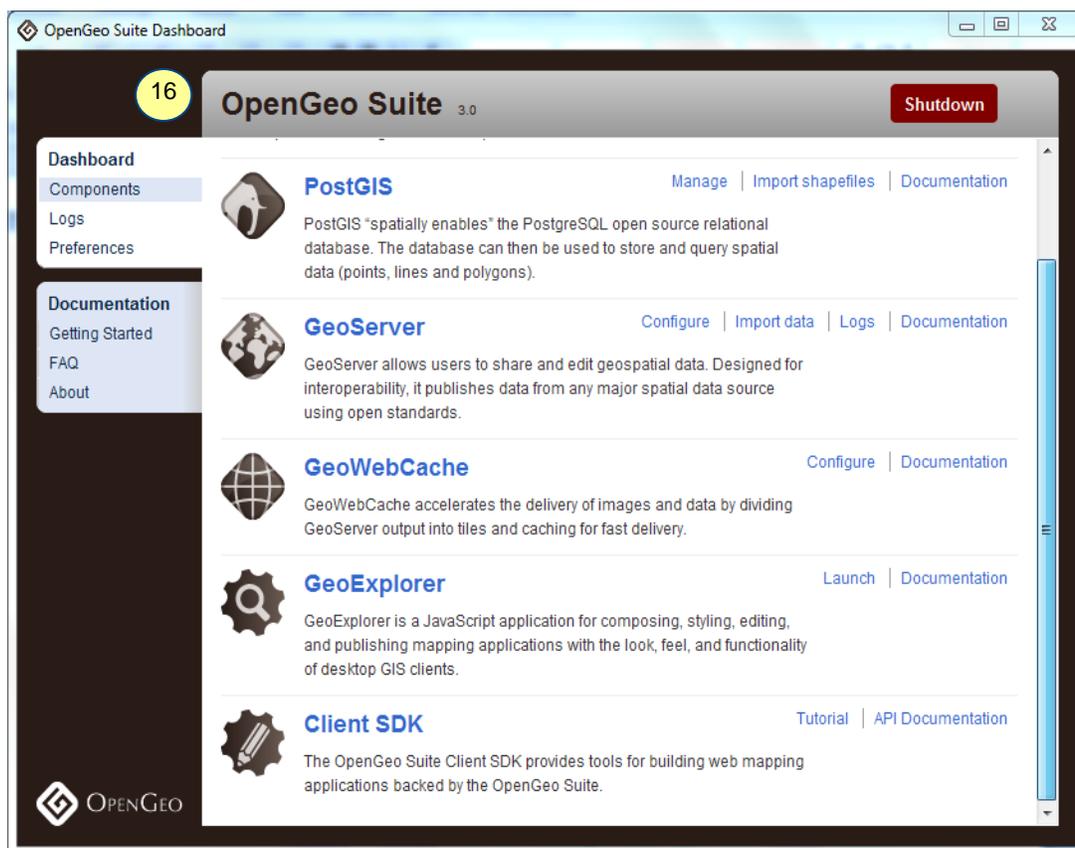


14. The *OpenGeo Suite Dashboard* is divided in two sections, first one is '*At a Glance*' and second is '*Components*'

¹ You might be alerted by '*Window Security Alert*' for both *PostgreSQL* and *Java Platform*, in this case click on '*Allow access*' button, because these two are trusted applications.

15. *At a Glance* provides access to the following section

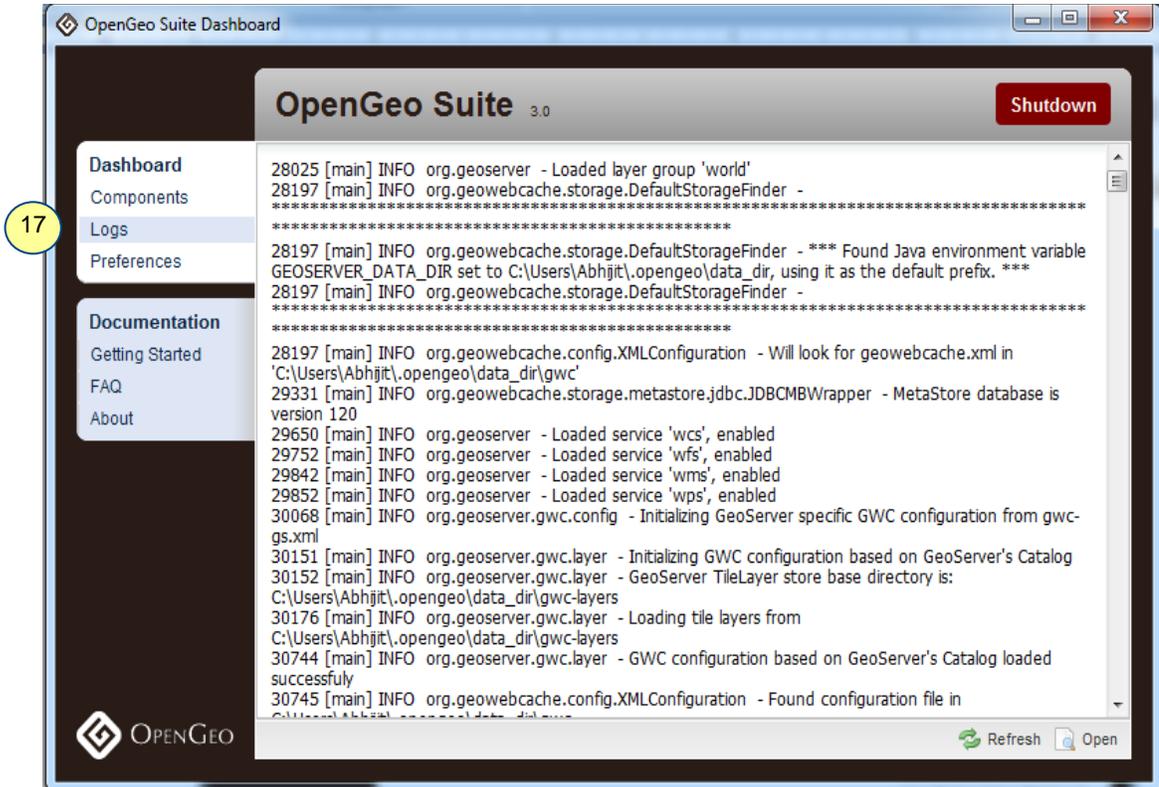
- 15.1 **Datstores:** is a user interface used for import and manage the data in *PostGIS* and *GeoServer*. Using *GeoServer* link you can import spatial files, postgis, Oracle and SQL server data while in the '*PostGIS*' you can import only shapefiles
- 15.2 **Layers:** The '*Layer*' link will open the '*GeoServer: Layer Preview*' window in your browser. It provides a list of configured layers in *GeoServer* and facilitates preview of each layer in various formats.
- 15.3 **Maps:** '*Compose maps*' will open the composer of *GeoServer*. '*Recipe Book*' is the guide that contains the samples on how to build your own custom application using *GeoServer*.



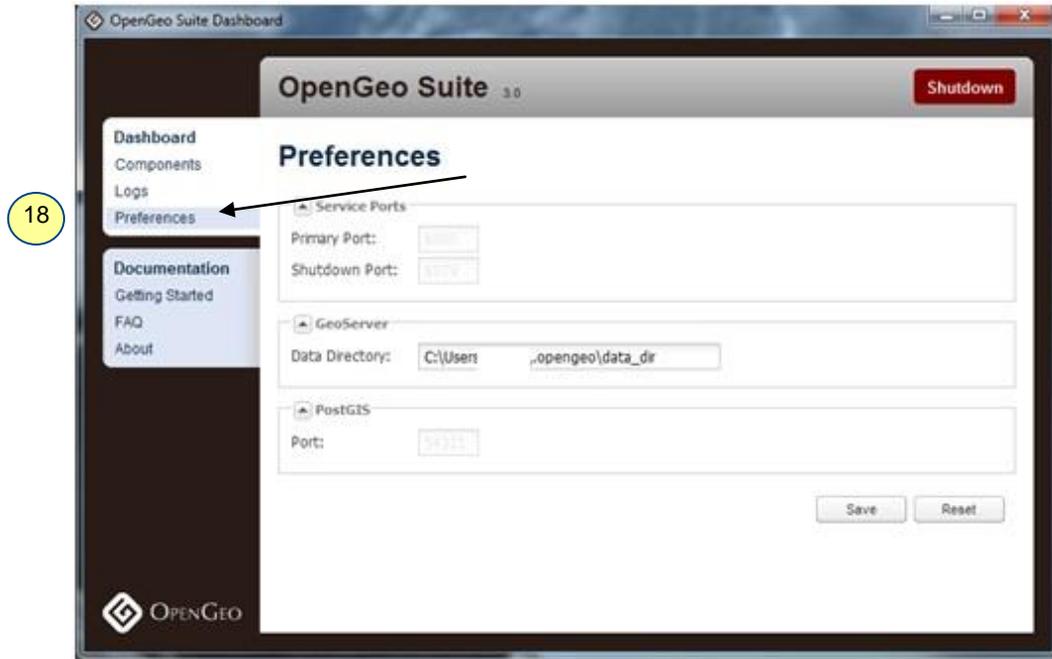
16. *Components* provide access to the following sections

- 16.1 **PostGIS:** '*PostGIS*' and the '*Manage*' links open the PostGIS Administrator III, i.e., '*pgAdminIII*'. '*Import shapefiles*' opens the '*PostGIS Shapefiles Import/Export Manager*'.
- 16.2 **GeoServer:** The '*GeoServer*' and '*Configure*' links open the welcome page of *GeoServer*. The '*Import data*' link opens the Import data page on *GeoServer* where you can import the data from Spatial files, PostGIS, Oracle, SQL Server then you can also select the data directory , specify the target for import.
- 16.3 **GeoWebCache:** '*GeoWebCache*' opens the *GeoWebCache* admin page where you can see all the hosted layers in the *GeoServer*.

- 16.4 **GeoExplorer:** The ‘*Geoexplorer*’ and ‘*Launch*’ links on the dashboard open the *GeoExplorer*’s composer.
- 16.5 **Client SDK:** Provides tools for building web mapping application backed by the *OpenGeo Suite*.



17. **Logs:** If there is an error at any point of time during the operations, you can check the logs for details about the error, it can help us for troubleshooting.



18. **Preference:** Here you can see the details such as Primary port, Shutdown port, *GeoServer* data directory and the port number of the *PostGIS*.