OpenSource GIS Integration

2 day Course

Pre-requisites

Experience using GIS software and knowledge of GIS concepts is preferential.

Who Should Attend?

Those who wish to learn more about using OpenSource software to load, transform and publish GIS data for web mapping.

Objectives

This two-day intensive course introduces you to the core functionality of PostGIS, QGIS, GeoServer and OpenLayers, taking you through all the tools you will need to load, spatially analyse, publish and share geospatial data. This course is designed specifically by Open Source GIS software specialists to demonstrate how to setup and successfully utilise Open Source GIS, spatial databases and web mapping services in an integrated environment.

The course is delivered using instructor-led real world examples where you learn by 'doing'.

The course covers topics including, installation and configuration of all software, loading vector data into a spatial database, connecting to a spatial database and then undertaking GIS analysis, manipulating spatial data, publishing and connecting to WMS and WFS services and utilising OpenLayers to explore web mapping capabilities.

Benefits of your course

- Experienced Open Source GIS trainer
- Hands-on training exercises
- One PC per delegate
- All course software and comprehensive training materials provided
- Lunch and refreshments
- Certificate on course completion
- 30 days post training support

Agenda

Note: We normally train on the latest version. During the course delegates will cover:

Day One:

Introduction to Open Source GIS
- Open Source Software
- Open Standards
- Open Data

Getting Started and Loading Datasets
- Installing and Configuring the Software
- Loading Data into PostGIS
- Spatial Indexing and Table Maintenance in PostGIS
- Attribute and Spatial Queries in PostGIS

Data Access and Publishing Data
- Accessing PostGIS Data in QGIS
- Updating PostGIS Data using QGIS
- Accessing PostGIS Data in GeoServer

GeoServer Loading Data
- Workspaces
- Data Stores (Shapefile, Folder, PostGIS and Raster)
- Layers
- Layer Groups

Day Two:

GeoServer Styling Layers
- Styling Points, Lines, Polygons
- Rule Based Styling
- Zoom Based Styling
- Styling with Labels
- Styling Raster Layers

QGIS
- General Mapping Tips in QGIS
- Selecting and Querying data in QGIS
- Symbolising Data in QGIS
- Data Editing and Data Creation in QGIS
- Accessing WMS and WFS Data Services from GeoServer

OpenLayers
- Displaying Map Data from GeoServer
- Applying Attribute Filters
- Applying Spatial Filters

OpenSource GIS Integration
- Practical session applying all the techniques learnt to load, access, analyse, edit and then publish spatial data in an integrated environment

The above may be varied to suit client's preferences and requirements.

Accreditation

Completing this course allows you to collect **8 AGI CPD** points towards your professional development.