

INSPIRE CONFERENCE 2018
Workshop/Seminar proposal

TITLE DETAILS

Workshop title: Publishing INSPIRE services with GeoServer and HALE

Workshop length: 3 hours

Workshop type: *tutorial/demonstration*

Expected number participants: 15 to 30

WORKSHOP FACILITATOR DETAILS

Name: Simone Giannecchini

WORKSHOP DESCRIPTION INCLUDING LEARNING OBJECTIVES

GeoServer is a well-established multiplatform, open source server providing a variety of OGC services, including WMS (view services), WFS and WCS (download and edit services) as well as WPS (spatial data processing services).

Among the open source GIS web servers, GeoServer is well known for the ease of setup, the web console helping the administrator to configure data and services, the variety of OGC services available out of the box, as well as the rich set of data sources that it can connect to (open source, such as PostGIS as well as proprietary, such as Oracle or ECW raster).

Most WFS systems available online today trade (very) simple features, often a single geometry with a set of attributes exposed on the net for querying, reprojection and download. However, the world of WFS and GML does not stop there, the standard also foresees complex features, where each feature is an information tree, with lists, sub-features, and links to other features. GeoServer provides support for those via the app-schema plugin, which can map a heterogeneous set of simple features, coming from different data sources, onto a set of complex features described by a well-known application schema.

The workshop will provide a hands-on introduction to the basic GeoServer concepts, as well as usage and configuration, with particular attention to the setup of INSPIRE compliant services with a demonstration set of data in various formats, both raster and vector. We will show how complex features are configured and setup in GeoServer, the abilities and limitations of the app-schema module, as well as recent advances in producing a configuration starting point with the help of HALE mapping tool.

WORKSHOP REQUIREMENTS

Before the workshop, GeoSolutions will provide material to follow the instructor and execute the exercises on attendees' laptops as long they use a recent version of Windows or they can install VirtualBox or VMWare Player to run a Linux VM.

Otherwise, attendees can follow the workshop without executing exercises. The workshop reading material will be made available also as an online set of HTML pages.

DETAILED WORKSHOP AGENDA

Introduction

The workshop is intended for technicians that need to publish Inspire compliant services, as well as everyone interested in getting a better grasp of the workflow involved in publishing and styling geographic data through OGC services. Policy makers and manager looking for SDI platform components are also invited to attend to get an overview of the tool and its abilities. Basic GIS concepts knowledge is required for simple attendance, however familiarity with data formats and OGC services is recommended for those that want to follow the workshop hands on.

Outline

Brief introduction to GeoServer configuration and data models

Vector data configuration (shapefile, PostGIS)

Raster data configuration (GeoTIFF, Mosaics)

Basic usage of WMS and WFS

Styling data with SLD, assisted style creation with desktop tools

Setting up the extra metadata for INSPIRE compliant services

Complex-Features Support in GeoServer: points of strengths and limitations

Publishing Complex-Features in GeoServer with HALE