

## Key Facts:

**Industry:** Government

**Problem:** End user access to disparate spatial data is time-consuming and difficult

**Solution:** FME Server

**Results:** Fast, efficient access to the local area's spatial data from one central source

**Location:** Graubünden (the Grisons), Switzerland

## CASE STUDY

*"I can finally say goodbye to the old, lengthy data ordering process. FME Server has made it possible for us to access our area's geodata any time, day or night, in the formats our applications require."*

– Sascha Flury,  
Planner

## Summary

GeoGR Inc. needed a system which could provide users with immediate online access to the Graubünden area's spatial data. Using FME Server for data translation and distribution, Safe Software reseller TYDAC developed a custom data accessibility solution that enables GeoGR to achieve this primary goal. Data users, including both professionals and the general public, can now view, order and download datasets in the format they require, without burdening data authors.

## The Organization

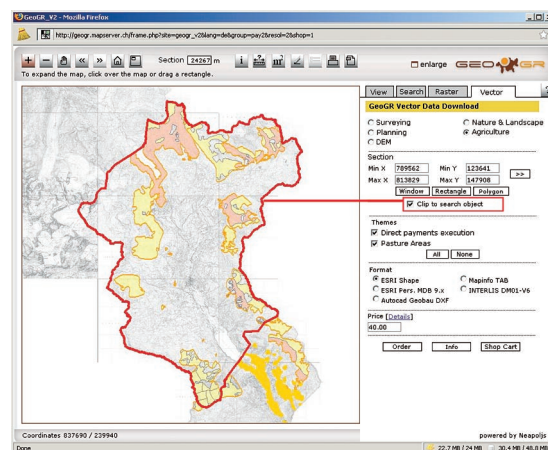
Graubünden, the largest canton (or partially sovereign state) in Switzerland, formed GeoGR Inc. in 2007 alongside private surveyors and planners in an even-thirds ownership structure. This public-private partnership was founded specifically to address the increasing need for all kinds of data users, including various professionals and the general public, to access the area's spatial data.

## The Situation

Spatial data relating to land within Graubünden is stored in many disparate locations. The datasets are managed by various authors including cantonal and federal institutions, private surveying companies, and public utility companies focused on areas such as transportation.

These authors create and maintain a wide range of data types including raster maps, high precision digital elevation maps, orthographic imaging, and cadastral maps. Their datasets contain spatial information related to zoning, including danger areas and protected areas; ski resorts and other tourism sites; agricultural land; water management; natural resources management; forestry management; and wildlife protection.

All of this valuable information is regularly used by the general public and an extensive group of professionals across Graubünden including land developers, infrastructure firms and various levels of government. Prior to the creation of GeoGR Inc., accessing this data required a lengthy process in which data users were required to locate the institution that held the data they required, submit a paper-based request, and then wait to receive the data, manually prepared by a staff member at that institution, 2-3 days later by email or postal mail.



*Powered by the translation and distribution capabilities of FME Server, the GeoGR data accessibility system enables users to select the data they wish to purchase and specify the format and data model they require.*



## The Challenge

GeoGR's mission was to eliminate the time-consuming, manual process of spatial data distribution by designing both a centralized data repository as a single access point, and a web-based, automated data delivery system.

To centralize data and ensure real-time updates, the system would need to be capable of:

- translating and transforming data from an extensive list of formats and sources into a central database;
- integrating various data types such as vector and raster;
- providing an efficient process for keeping the system up-to-date.

For end users, the web-based system would need to provide an intuitive, self-service way to request any required spatial data.

## The Solution

GeoGR commissioned Safe Software Reseller TYDAC to develop the GeoGR data access system based on TYDAC's own data accessibility solution, Neapoljs Mercato, which uses FME Server as the translation and distribution backbone.

Through scheduled batch updates, FME Server automatically loads disparate vector and raster data from their original sources into the required data model for storage in a central PostGIS database. This ensures that when end users access the Graubünden area's spatial data using the system's MapServer-based web viewer, they are getting the most up-to-date information available.

Users who wish to purchase data can do so using the system's WebGIS viewer which allows them to geographically select the data using a rectangle, polygon, or existing object such as a municipal border. The viewer also enables the users to select the required format output such as ASCII Grid, AutoCAD DXF, GeoTIFF, the Swiss INTERLIS format, Geodatabase, and Shape, as well as the required data model. Alternatively, users can choose pre-processed "off the shelf" datasets which are available in a variety of formats for download.

Once a purchase request is submitted, FME Server quickly transforms the selected data on-the-fly and

makes the output dataset available in the web interface for the user to download. If an "off the shelf" dataset has been selected from the online store, the web browser simply displays a link to that database. Payment is handled by the Drupal backend which allows for purchase via PayPal or special project accounts.

## The Benefits

The data accessibility system now provides users with immediate access to the Graubünden area's spatial data through an easy-to-use, web-based system which is available 24/7. The old manual process, which often required users to wait days for the ordered data, has now been replaced with an automated system that allows users to gain access to the data they need in just minutes. Moving forward, FME's flexible transformation capabilities and its support for a growing list of 200+ formats will ensure that the system continues to scale as users' needs evolve.

For data authors, the new system provides a hands-off approach by automatically gathering their data and integrating it into a central repository. Because of the system's automated data ordering process, authors no longer need to manage invoices and payments or the paperwork required to sell their data to end users. These system capabilities ensure that data can be gathered and distributed without impacting the current infrastructure or requiring human intervention.

## What They're Saying

"The biggest fear of the data authors in our area was that our new system would force them to change their spatial data storage infrastructures. Using FME Server, we were able to centralize our area's geo-related data and make it accessible to users while leaving our existing databases intact. During implementation, we were impressed by FME Server's surprisingly fast performance and how easy it was to use for altering data structures."

– Peter Huser, CEO of GeoGR Inc.

## Learn More

To see TYDAC's Neapoljs Mercato system in action, visit [mercato.mapserver.ch](http://mercato.mapserver.ch). To find out how more about how FME Server can enable you to share your spatial data, visit [www.safe.com/FMEServer](http://www.safe.com/FMEServer).