The State of Tyrol

Tyrol, Austria

Key Facts:

Industry: Government

Problem: Frequently updated data quality assurance and distribution of CAD and GIS data is manually intensive and time consuming.

Solutions: FME® Server

Results: Automated QA improves accuracy and reduces hours spent inspecting and correcting data, while the self-serve GIS and CAD data delivery system provides flexible access to the central database.

Crystal Clear Quality Assurance with FME Server

The State of Tyrol in Austria is world-renowned for its alpine majesty. Host to two Winter Olympic games, it is a mountaineering and skiing haven. Young innovator Daniel Swarovski established his first factory there in 1895 – revolutionizing cut glass crystal production and setting a quality standard that endures to this day.

And quality – data quality – was a primary driver behind the State of Tyrol Planning Department's vision of a seamless spatial data management system they call the Electronic Zoning Plan. FME Server, we're proud to say, handles much of the heavy lifting behind the scenes.

Like many regional authorities, Tyrol's systems and data requirements had evolved over the years into a mix of applications, formats, and processes, all the while dealing with multiple data sources. It was time to sit back and take a hard look at where efficiency gains could be had and errors reduced, while meeting the needs of both CAD and GIS users.

The resulting project plan consisted of two primary components – an online data validation service for quality assurance, and on-demand data delivery. Knowing that axmann geoinformation, FME experts in nearby Vienna, had been doing extensive work on data QA, they called them in to handle the FME Server configuration and implementation.

Online QA and Data Validation Service

The existing procedure for submitting a plan for QA was manually intensive – the planner would login, send the data, notify the council that the update was there, and then a different person would open it, view, check it, and send back any errors. Then the process would be repeated on the corrected data. Once clean, the data was imported to the central ArcSDE™ database.

Now, the QA workflow is a simple one. When a planner is ready to submit a new or modified plan, they simply upload it via a web interface in the Electronic Zoning Plan application. Then FME Server uses pre-configured workspaces to check for errors in geometry and attribution, and sends back a quality report and error details to assist the planner in correcting their work.

Heinz Grottenegg of axmann tells us more about the quality checks performed by FME. "The inbound data is tested against both the zone data in the master ArcSDE database and the cadastral. We're checking for areas that fall outside rule-defined size limits, proximity to the cadastral, and valid attributes and geometry – flagging overlaps, gaps, and slivers. If there are errors, FME generates and sends the planner an HTML error report, a geospatial PDF overview, and a shape file to overlay and locate corrections."

With the new QA system in place, the recipient no longer has to manually check the submitted data for errors. Corrections have become an iteration between the planner and FME Server. As Heinz put it, "Manual testing and the ping pong game of corrections are over now. And that saves time and produces higher quality data".

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*– Heinz Grottenegg
  axmann geoinformation*

Data Distribution for CAD and GIS Users

The second component of the system is on-demand online data delivery. Heinz tells us that most Austrian planners prefer to do their work in AutoCAD® – and so a flexible DXF export is a must-have. Dynamic workspaces were key to the FME Server-driven delivery system – users request an area of interest through the Electronic Zoning Plan, select Esri shape or DXF output, and also have multiple choices for layers, attribute inclusion and labeling. Once their work is complete, it makes its way full circle back into the master ArcSDE database by way of the QA tool.

When we asked Heinz if they could have accomplished this without FME, he replied, "We could have coded it, used pieces of functionality from different applications. But to do it all in one run, with multiple formats, and the flexibility on data delivery that dynamic workspaces provide? For us, there is no better way than FME Server".

Automation, time savings, improved accuracy, flexibility and convenience – clearly an FME Server success story.

To learn more about FME Server, visit **www.safe.com/fmeserver**