TATSOFT

Case Study - Transportation Support Systems Management

Company	Industry	Location	Website
ANGI and MetroLink	Transportation	USA	https://www.angienergy.com/

Challenge

The goal was to allow for better control and monitoring for the company's processes, which included designing and controlling the compression systems; managing gas; and controlling the production of the Condensed Natural Gas (CNG) dispensers.

Solution

FactoryStudio from Tatsoft was chosen for its flexibility, ease of use and competitive pricing structure and proved to be more efficient than competitors' solutions as its structure allows for easy customization with little to no additional tags or scripts.

Results

The project only took a few weeks to complete (less than half the time of similar systems using competing SCADA packages) and it provided MetroLink with a wide array of benefits. Providing remote access through easy to use Web Clients means MetroLink personnel can access the system easily without needing to install and license software on every computer.

> *"FactoryStudio helps us to get the data we need and deliver meaningful information".*

- James Tuttle, Systems Administrator for MetroLink

Throughout the Illinois Quad Cities, the Rock Island County Metropolitan Mass Transit District, commonly known as MetroLINK, is moving Quad City citizens from one destination to another.

The organization provides the Metro bus service, ADA paratransit and Special Transportation Services, and seasonal passenger ferryboat service with the Channel Cat Water Taxi. Communities they serve include Moline, Rock Island, East Moline, Silvis, Milan, Carbon Cliff, Hampton, and Colona.

The 3.5 million rides a year taken on MetroLINK services provide a vital connection to jobs, education, healthcare, and retail; supporting the local economy and creating a vibrant quality of life. Their multi-modal organization keeps riders moving in the right direction, while easing trafic congestion and reducing air pollution—making the Quad Cities a better place to live.

To continue doing that, the company soon realized they needed a system that could monitor Condensed Natural Gas Refueling equipment, which is used to support Metro's fleet of alternative fuel buses.

The decision to use Tatsost FactoryStudio came from the suggestion of the project's system integrator, ANGI Energy Systems. ANGI has standardized on Tatsoft for all SCADA systems - flexibility, ease of use and competitive pricing structure were all reasons. Other software packages were not considered in this project - before Tatsoft, ANGI had some experience with Wonderware and InteractX, but chose Tatsoft as the standard.

The processes ANGI had for MetroLink included designing and controlling the compression systems; managing gas; and controlling the production of the dispensers. For this project, there was a particular requirement that had to be met: logging and reporting on dispenser KPIs. To do that, a custom data table was created, along with queries, and a data-grid object control with selectable parameters was used to select and view data, as well as send creative and informative reports. This was all done with a minimal amount of custom scripting within Tatsoft FactoryStudio.

> *The Name Spaces in FactoryStudio projects provide a wealth of information to use in projects without requiring additional Tags or Scripts to use. Just pluck the information from the Name Space to use in animations, scripts, alarms, wherever you'd like."*
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> *- Larry Stall, Controls Engineer for ANGI*

When it comes to the relation between price and benefits, FactoryStudio's license model also proved to be an important difference: although there are nearly 750 tags, there are only 454 communication points, or Tags using real-world I/O, defined thus allowing a lower cost license than tag-based systems.

Since this was their first Tatsoft project, there was a small learning curve, but after its completion, the project became a baseline for future projects. The fact Tatsoft leverages .NET technologies made it a lot more efficient to implement custom features (database, reporting, other miscellaneous scripting for display functions) than having to use proprietary scripting and features of competing SCADA packages. Also, Tatsoft is a complete package, which meant that the integrator didn't have to spend time making sure they had the required "modules" and that they were installed properly.

In the end, the project only took a few weeks to complete, less than half the time of similar systems using competing SCADA packages (Wonderware) and it provided MetroLink with a wide array of benefits. With Tatsoft FactoryStudio, they had real-time and historical Visual representation of the refueling process, and enhanced monitoring. The custom database/data table creation also helped facilitate associated reporting.