RAMTECH

Southwest Gas Improves the Spatial Accuracy of its GIS Data with RAMTeCH's Small Area Conflation Solution *uConflate™*

PS Professional Services

*"With RAMTeCH's **uConflate™** solution, SWG will save thousands of man-hours in conflating their legacy data to high-precision GPS coordinates. The user-friendly tool provides our team with the confidence and assurance that our GIS data is conflated accurately and correctly every time".*

- SWG's Luminita (Lumi) Matthys, GIS Manager

AT A GLANCE

CLIENT CHALLENGES

- With embarking on implementing high-accuracy GPS facility data collection, the spatial accuracy of its legacy gas facility data in relation to the landbase was critical
- A more simplified process needed for conflation on small areas
- A user-based tool was required to support enhancements to existing conflation methods

CLIENT BENEFITS

- Leveraging RAMTeCH's proven ***gConflate™*** technology, our IP ***uConflate™*** enables end-users to perform their own conflation on localized areas
- Automated solution that quickly and effectively improves the spatial accuracy of existing GIS data
- Minimizes the level of effort and time requirement
- An accurately calibrated and configured ***uConflate™*** tool aligns with the business processes

Business Need

Southwest Gas Corporation (SWG), a natural gas service provider to over two million residential, commercial, and industrial customers, was looking to enhance the effectiveness and efficiency of its existing conflation processes. With RAMTeCH releasing ***uConflate™***, our intellectual property (IP) for small-area conflation, SWG was interested in collaborating with RAMTeCH to improve the spatial accuracy of its gas distribution network. Understanding SWG's current process and the challenges that occur when repositioning its landbase and facility data is critical to ensure RAMTeCH configures and calibrates the ***uConflate™*** tool to support SWG's high-growth operating areas.

RAMTeCH Solution

Stemming from RAMTeCH's proven ***gConflate™*** technology, ***uConflate™*** is automated and packaged into a more streamlined tool for end-users to use when performing conflation on localized areas. The comprehensive solution includes setup, configuration, and testing of the ***uConflate™*** software to align with SWG's business processes, on-premises installation, end-user training conducted with a superuser selected and "train-the-trainer" concept, user documentation on the functionality of the ***uConflate™*** software, as well as hypercare to support the transition of SWG's system to its ownership. A complete and detailed understanding of SWG's GIS data model and architectures along with its business rules was required. This knowledge ensured the ***uConflate™*** software would be calibrated and configured accurately. During the ***uConflate™*** process, the landbase control model is established by adjusting the source centerlines. The quality of the control model is essential to the facility conflation. Based on the landbase control model, the facilities will replicate their exact relative accuracy, and the surrounding data will be conflated to the new spatially accurate location. From defining a conflation boundary where the conflation will need to be conducted to applying the conflated results to the production features, RAMTeCH's ***uConflate™*** automated process improved the spatial accuracy of SWG's existing GIS landbase and facility asset data.

Results

RAMTeCH provided a simplified, user-based tool to SWG to streamline its conflation process and increase user efficiency. SWG's effort level and time required to relocate or align its existing GIS data is significantly reduced while providing a more spatially accurate landbase. By licensing the technology, SWG now has a tool that can be used to continuously maintain the spatial accuracy of their GIS, even as their system grows and changes over time.