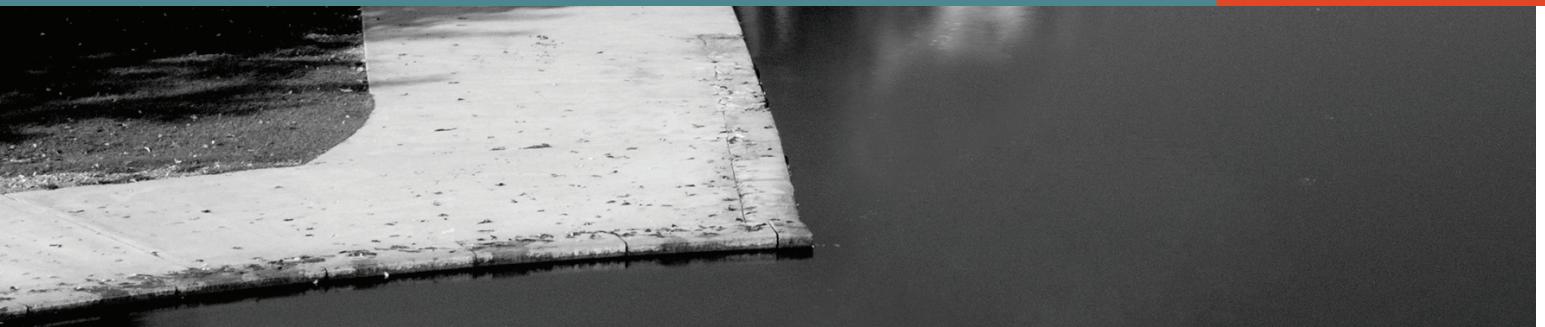




With SurvalentONE SCADA, Huntsville Utilities operates at a lower cost and greater efficiency than utilities that maintain separate solutions for their electric, gas, and water networks.

Case Study



Survalent.

Huntsville Utilities Kicks Off Modernization Initiative with SurvalentONE SCADA

Huntsville Utilities is a municipally owned utility serving 180,000 electricity customers, 51,000 gas customers, and 93,000 water customers in the city of Huntsville, Alabama. Until recently, Huntsville had been administering all three of their utility distribution networks with the same 1980s-vintage SCADA system.

This SCADA system was limited compared to modern solutions because it had long since reached the limits of its development. The user interface was far from intuitive, documentation was spotty, technical support was inadequate, and – because it was an antiquated system – it didn't have much of a user community left.

Built on a proprietary, OpenVMS-based operating system, the SCADA software was not even interoperable with common mobile web applications. In fact, to make line diagrams of the distribution networks available to corporate computer users, operators had to call in the IT department to individually reproduce them because they couldn't be exported. Since the utility was making daily changes to the network, the burden of transferring information between systems eventually became significant. Needless to say, modern features such as web services were not even an option.

At one point, Huntsville attempted to increase the number of SCADA users to allow more people to access the system, but this caused the software to crash. Worse still, the system could only run on one brand of server, so the utility was stuck in a sole-sourcing situation for its hardware and software. All of these factors, combined with a new modernization initiative, motivated Huntsville to find a SCADA system capable of supporting their operations going forward.

Choosing Future Proof Technology

For ease of maintenance, Huntsville Utilities decided that their new SCADA system should be Windows-based, with support for view only web services and support smart grid technology. The user interface would have to be well-organized and highly intuitive, allowing operators, dispatchers, engineers, and other users to quickly learn the system and perform their jobs more efficiently.

Huntsville's goal is to limit the outage from several thousand customers to just a few. Any system that Huntsville adopted would also have to be part of a larger suite of integrated ADMS applications, such as OMS and FLISR, which the utility could gradually implement in the coming years.

The deficiencies of the current SCADA system highlighted the importance of choosing a forward-looking product with a robust user community and comprehensive documentation. In particular, Huntsville Utilities wanted to partner with a vendor known for excellent technical support.

After taking all of their requirements into consideration, Huntsville Utilities selected Survalent's SCADA system to replace their now obsolete software.

Survalent was particularly well-suited for this project, having successfully completed more than 80 conversions from the same SCADA system at other utilities.

Managing a Successful Transition

Replacing a SCADA system involves critical systems such as computer servers, communication infrastructure, and field hardware, so care must be taken to prevent any disruption of daily operations, especially when electric, gas, and water networks could all be affected. To ensure a smooth transition, the Survalent implementation team worked closely with Manuel Nin, Huntsville Utilities' Communications Supervisor, to mobilize internal stakeholders and get their input on the new system.

"This was our biggest upgrade in 30 years," said Nin. "With people at three different utilities, contractors, the IT department, plus management at each utility, a lot of coordination was required. The reason we were successful is because we were able to work so well with Survalent's experienced team."

As soon as the combined project taskforce had finalized a list of deliverables that would meet Huntsville's current and future needs, the changeover began in earnest. Survalent maintained an onsite presence in Huntsville for six weeks, working closely with the utility's IT department, and three operations departments to complete the process.

Behind the scenes, Survalent's engineering team spent three months converting Huntsville's old system graphics (i.e., single-line diagrams) into a usable format and migrating network data into the new database. Station names in the old database had been limited to just four characters, which often caused confusion among operators. Because of Survalent's experience with the type of SCADA system Huntsville was replacing, they were able to rename 13,000 database points according to an expanded naming convention, eliminating this source of operator error.

After conducting SCADA training sessions for Huntsville Utilities personnel, the Survalent team went on to commission the new system as scheduled, successfully switching over the electric, gas, and water networks on the same day. Nin credits the success of the project to excellent planning and Survalent's attention to detail. "Survalent's support during the transition was absolutely excellent," he said. "Their experienced engineers worked with us to find a solution to every problem."

Building Upon Success

Now that Huntsville has completed their SCADA conversion, the utility is in a position to gradually add new functionality, such as a GIS connectivity model of their electric distribution network.

This will enable Huntsville to harness the full suite of Survalent's ADMS applications including OMS, FLISR, and Volt/VAR Optimization once planned investments in advanced metering infrastructure (AMI) and fiber technologies have been made.

Huntsville Utilities expects to benefit, in particular, from SurvalentONE Dynamic Voltage Regulation (DVR), an application that can leverage smart meters to achieve cost-saving load reductions.

Achieving a Low Total Cost of Ownership with a Single System

Huntsville Utilities remains strongly committed to overseeing their three principal distribution networks using a single SCADA solution.

With one software system to administer, one computer hardware platform to maintain, and one supplier to deal with for training and support, Huntsville Utilities operates at a lower cost and greater efficiency than utilities that maintain separate solutions for their electric, gas, and water networks.

Control your critical network operations with confidence

With Survalent, you can control your critical network operations with confidence. We're the most trusted provider of advanced distribution management systems (ADMS) for electric, water/wastewater, gas, and transit utilities across the globe.

Over 600 utilities in 30 countries rely on the SurvalentONE platform to effectively operate, monitor, analyze, restore, and optimize operations. By supporting critical utility operations with a fully integrated solution, our customers have significantly improved operational efficiencies, customer satisfaction and network reliability.

Our unwavering commitment to excellence and to our customers has been the key to our success for over 50 years.

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- Huntsville Utilities

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