EMR
integrated solutions

Leitrim County Council
Leading the charge in the battle against 'unaccounted for' water

About Leitrim County Council

Stretching from the north midlands to the Atlantic coast, Leitrim is one of Ireland's least densely populated counties. The population of 31,000, spread across 1,588 km^2 is served by two regional water supply schemes run by Leitrim County Council.

Project Benefits

- Delivers more visibility and manageability of the network with real-time control

- Plays a key role in leak management and in the battle against 'unaccounted for' water

- Staff can remotely change pumping plans, adjust set-points and monitor performance

- Comprehensive electronic reporting which informs future investment decision-making

- Automatic alarm notifications provide for enhanced operational efficiencies and control

"The SCADA and telemetry system has proven invaluable in day-to-day network management as well as a tool for emergency response and the planning of future investment."
Peadar Griffin, Leitrim County Council.

EMR Integrated Solutions recently announced its selection by Irish Water to upgrade the water utility network in Leitrim, in a six-figure deal.

The upgrade gives Irish Water greater control over the water distribution network, allowing for a higher degree of automation and closer management and monitoring of water flows, pressure and quality.

It also plays a significant role in the battle against 'unaccounted for' water.

Business Challenge

This contract follows ongoing work with Leitrim since the late 1990s, when the county's first SCADA system at the main treatment works in Carrick-on-Shannon was deployed. With the addition of other standalone systems in treatment plants in Moneyduff and Glenade in the years that followed, the need for an overarching system to allow management have a real-time view of the network became apparent. EMR was awarded a contract to provide a server based SCADA system and a radio communications network to link all outstations with the centre.

The Solution

A recent network expansion and the integration of the water conservation logger system have increased the system size to cover the three major water treatment works, over 50 reservoirs, pumping stations and critical network meters and over 100 district meters.

Under the latest expansion project, the EMR team installed 100 metering and telemetry points throughout the county, tying them back to the centralised SCADA system in Carrick-on-Shannon.

Due to the demands placed on the system and the need for high availability, the central server infrastructure was upgraded to provide redundant servers with connections to the local authority and government networks. This provides high levels of security and reliability to the many remote access users in treatment plants and offices throughout the county.
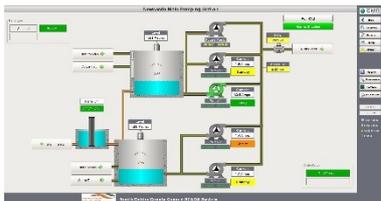
Leitrim County Council
Leading the charge in the battle against
'unaccounted for' water

The Solution

- Ignition Redundant SCADA Server Software
- Motorola Moscad ACE RTUs x 50
- Motorola High Power Radio Network
- EMR LiveLog GSM RTUs x 50
- HWM Radcom LX data loggers x 150
- Ignition Water Treatment Plant On-Site SCADA Systems x3

Automatic alarm notification using SMS messaging and email notification together with comprehensive reporting tools ensure that operators, maintenance personnel and management have up to date, reliable information from their laptops, desktops or mobile phones.

Benefits

The inbuilt report generation tools provide scheduled, targeted reports on key system parameters. These reports are stored on the server for retrieval on-demand or emailed to relevant users on a scheduled basis.

In addition ad-hoc reporting is supported with all data stored on the SCADA servers or on any associated database allowing complex reports to be formatted and generated to cater for exceptional requirements.

Where there is onsite telemetry, Irish Water can control the water network remotely, increasing operational efficiencies, reducing waste and providing faster response times to adverse events as they occur.

Utility providers are increasingly adopting the concept of smart networks and EMR is at the forefront of designing and deploying the technology to help them plan for the future.

"EMR Integrated Solutions have supplied Leitrim County Council with the SCADA and telemetry system which currently monitors and controls all major water production and distribution elements," said Peadar Griffin, senior executive with Leitrim County Council.

"The system has proven invaluable in day-to-day network management as well as a tool for emergency response and the planning of future investment," he said.