The Sage Advisor

SCADA, SECURITY & AUTOMATION NEWSLETTER

Volume 24, Issue 1 • Spring/Summer 2014

A Publication of Sage Designs, Inc.

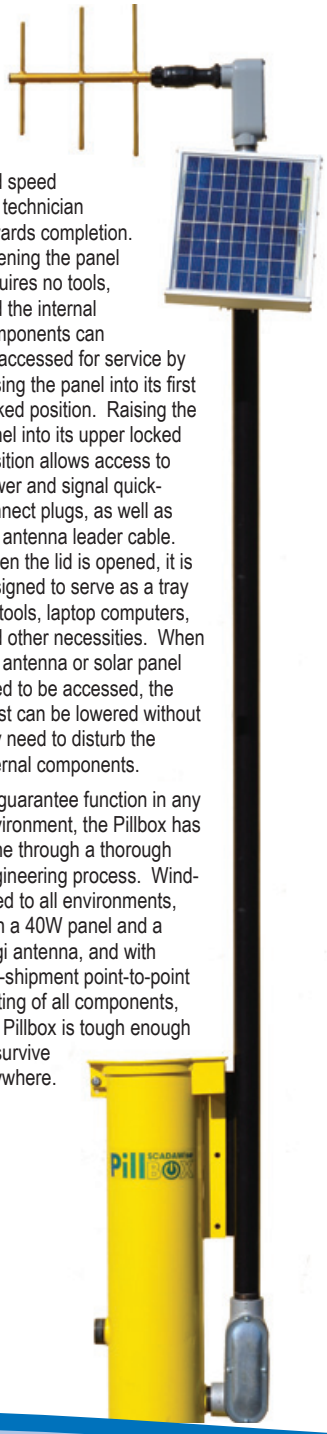
Thinking Outside The Box

Sage Designs is pleased to announce a new product, two years in development, the SCADAWise Pillbox!

What excites us most with the Pillbox is the ease of use, security, and installation advantages it offers. Designed for RTU installations in remote areas, The Pillbox houses an RTU station in its secure tamper-resistant enclosure. The Pillbox can extend the life of heat-sensitive batteries, and components are easy to access when maintenance is required.

The Pillbox drops into the ground like a fence post, installing into a 2'3" cubical hole faster and easier than typical larger housings requiring a concrete pad for installation. Installation of panel-mounted components takes a few minutes with basic hand tools. The Pillbox can be up and running the day after a site is selected.

To prevent tampering or disruption of the RTU, the Pillbox includes innovative defenses. The Pillbox discourages initial interest with an intentionally unobtrusive profile, accented by availability in multiple earth-tone colors to match the install site or in bright colors to accent visibility. The strong body of the Pillbox supports a 15' to 20' mast, placing the antenna and solar panel out of reach even to someone standing on the Pillbox lid. The lid itself has a protective cowling that prevents bolt cutters from accessing or cutting the lock and prevents the mast from being lowered.The Pillbox reduces maintenance needs and equipment costs by a clever feature of design: Batteries are stored at the base of the unit, which is below ground level, reducing the average temperature of their operating environment. Battery manufacturers state that a 10° C reduction in temperature above 20° C will double battery life. The body, internal cage and panel are fully powder-coated to offer protection from the elements, providing a long trouble-free installation.Since all RTUS eventually require maintenance, the Pillbox is designed to increase efficiency, and speed the technician towards completion. Opening the panel requires no tools, and the internal components can be accessed for service by raising the panel into its first locked position. Raising the panel into its upper locked position allows access to power and signal quick-connect plugs, as well as the antenna leader cable. When the lid is opened, it is designed to serve as a tray for tools, laptop computers, and other necessities. When the antenna or solar panel need to be accessed, the mast can be lowered without any need to disturb the internal components.



To guarantee function in any environment, the Pillbox has gone through a thorough engineering process. Wind-rated to all environments, with a 40W panel and a Yagi antenna, and with pre-shipment point-to-point testing of all components, the Pillbox is tough enough to survive anywhere.

Introducing WIN-911 Enterprise Edition

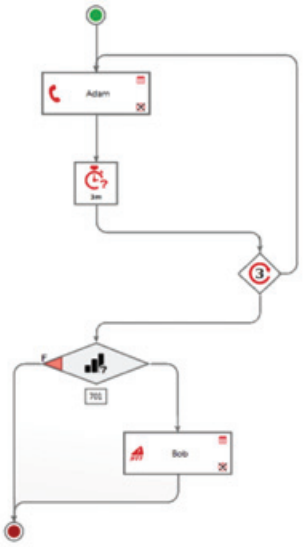
WIN-911 Enterprise Edition represents a total rethinking of alarm notification software. Designed for tomorrow's technologies, the new modern codebase is built upon Microsoft's latest version of the .NET platform, Windows Communication Foundation technology and the Entity Framework allowing support for SQL databases. This architecture insures that WIN-911 Enterprise Edition will have unprecedented reliability, security, flexibility, and performance now and in the future.

WIN-911 Enterprise Edition will allow users to create or make configuration changes at runtime using powerful new alarm escalation tools called 'Strategies and Tactics'. These patent-pending tools, along with the new robust scheduler, will offer the user unprecedented flexibility in creating strategic notification scenarios that logically flow with your process. More efficient use of personnel is possible with the use of roles and policies that are executed dynamically allowing WIN-911 Enterprise to grow with your organization. The Tactic workspace is graphical in nature and the toolset includes notification and decision blocks that offer the ability to create highly customizable notification workflows that are easy to configure and script-free giving the user escalation logic beyond a simple callout list.

Strategies are used to specify actions during the life of alarm. These actions include stop, start, restart tactics and more. Any available alarm state can be used in a Strategy.

In addition, the WIN-911 Enterprise Edition modular architecture will utilize Windows Communication Foundation (WCF) technology for inter-module communications, allowing the WIN-911 system to be self-organizing, distributable and redundant with no user configuration required.

WIN-911 Enterprise Edition will offer many other features and enhancements including robust VOIP, rich email notifications that now include alarm acknowledgements and support for Mobile-911 smartphone apps along with scheduled reports and much more.



Tactic using single notification block and severity decision block.

Please contact Sage Designs for more information about this unique way of delivering critical information about your process.

— Frank Grygier, VP Sales Specter Instruments

WIN-911® SOFTWARE

4 New Products Inside

- SCADAWise Pillbox
- WIN-911 Enterprise Edition
- SCADAPack 50
- Trio Q Series

More Style & More Substance: ClearSCADA 2014

Software development, like SCADA technology, can often be about spreading your bucks out over the largest possible bang. Many developers accomplish this by focusing either on functionality or on an attractive interface. Schneider Electric Struxureware SCADA Expert ClearSCADA 2014, however, adds new functions and packages them within a better-than-ever interface. Let's look in detail at the changes in this revision.

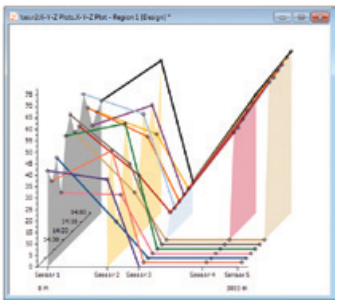
Simplified Internal Point Calculations: New internal calculation points have been defined allowing the combination or transfer of data between database points without the complexity of using a separate logic program. These point calculations use the familiar mimic 'expression' interface to define the required calculation and support a variety of execution trigger conditions, data quality, and timestamp generation options.

Automated Data Visualization Management: A Data-Grid-style collection has been created which provides separation of table definition (called the "Data Set") and rows (called a "Data Set Row"). This separation allows for individual rows to be included within templates, referencing the local template data points, while still maintaining their link to the master data set. The end result is a self-maintaining data set (table) that automatically expands to include new rows as template instances are created. This new feature is designed to assist in a wide variety of applications, including general site lists and data consolidation.

Increased Control Over Secure Information: ClearSCADA 2014 has several upgrades to support increased security and control over critical assets. For assets behind firewalls or NATs, allowing driver configuration to occur over user-specified port ranges for client browsing requests allows those points to be mapped through the firewall for secure remote ViewX connections. To keep those connections safe, all web links served from ClearSCADA are now relative, so the ClearSCADA server address can be masked behind an NAT device. For users within the system, ClearSCADA 2014 now allows configuration of the ClearSCADA Server Label through the Database Explorer, removing visibility of the actual IP address or Node name. New restrictions on the Event Journal relating to server synchronization, workstations connections, and user logon events now prevent visibility of the Server IP Address or Node Name through the Event Journal.

Enhanced Operational Intelligence: The DNP3 drivers have been updated to be more compatible with the SCADAPack E-series RTUs, and the SNMP Driver support has been updated to include support for version 3, including asynchronous notification functioning (traps and informs), and integrated security. The SNMP implementation also includes an SNMP "device" component which can be associated with points to allow more efficient configuration with inheritance of communication option on new points.

New Graphical Interface: ClearSCADA 2014 debuts a new graphical interface which brings the software into a modern, convenient feel. The new system includes options like 3D plotting through XYZ coordinates, allowing for monitoring of the



relationships between multiple sets of historic values (See photo above for example) with 'Z' operating as a time coordinate. The new plot provides enhanced visualization and operation of pressure/flow profile in pipeline or water distribution applications, with its consistent structure allowing immediate historic comparison for simpler detection of abnormal conditions.

For quick help on working with the new Struxureware SCADA Expert ClearSCADA 2014 R1, Tony Sannella can be reached at 415-331-8826, or contact us to sign up for a full training course!

Schneider Electric

SAGE DESIGNS, INC.
SCADA & Security Products

Earn Contact Hours

Schneider Electric

SCADAWise™ Training Classes

ClearSCADA

SCADAPack

ClearSCADA Level 1 Training Course

May 12-15, 2014 — Buena Park, CA
October 27-30, 2014 — Mill Valley, CA

Day 1 (8AM– 4PM)	Installing ClearSCADA, Introduction to ClearSCADA, Components, Using ViewX, Using WebX, ClearSCADA Help
Day 2 (8AM - 4PM)	Configuring using ViewX, Database Organization, Basic Telemetry Configuration, Creating Mimics, Creating Trends
Day 3 (8AM - 4PM)	Configuring using ViewX, Templates & Instances, Logic Languages, Security, Communications Diagnostics
Day 4 (8AM - 4PM)	Reports, System Configuration, System Architecture, Questions

Cost: ClearSCADA Training Course $2,200

Sage Designs' ClearSCADA Level 1 Course has been certified by (a) the California Department of Public Health as courses qualifying for contact hour credit for Water Operator Certification for Drinking Water Treatment or Distribution in the State of California and (b) the State of Nevada Department of Environmental Protection, Bureau of Drinking Water for contact hours towards the Nevada Drinking Water Operator Certification Program.

(28 Contact Hours)

Telepace Studio Training Course

May 6-8, 2014 — Buena Park, CA
September 23-25, 2014 — Mill Valley, CA

Day 1 (8AM - 4PM)	SCADAPack controller operation, Series 5000 I/O, Telepace Studio introduction
Day 2 (8AM - 4PM)	Telepace Studio advanced programming techniques and advanced functions
Day 3 (8AM - 2PM)	Controller communications, Modbus Master/Slave protocol, Diagnostics, Modems

Cost: SCADAPack Telepace Studio Course $1,650*

* You must have a licensed copy of Telepace Studio installed on your computer for this course. If you do not have a licensed copy, you may purchase one with the class at a special course price. Course price for Telepace Studio: $510 + applicable CA sales taxes

Sage Designs' Telepace Studio Course has been certified by (a) the California Department of Public Health as courses qualifying for contact hour credit for Water Operator Certification for Drinking Water Treatment or Distribution in the State of California and (b) the State of Nevada Department of Environmental Protection, Bureau of Drinking Water for contact hours towards the Nevada Drinking Water Operator Certification Program.

(20 Contact Hours)

ClearSCADA Level 2 Training Course

August 12-14, 2014 — Denver, CO
November 4-6, 2014 — Alpharetta, GA

Day 1 (8AM– 4PM)	Installation, Understanding the Architecture of ClearSCADA, Application Design Considerations, Server Automation Interface, ClearSCADA Logic Engine, Using ODBC and SQL with ClearSCADA
Day 2 (8AM - 4PM)	Advanced Mimic Design and Techniques, Data Grids and Data Tables.
Day 3 (8AM - 1PM)	Accessing Historical Data, Ad Hoc trends, Archiving

Prerequisite: ClearSCADA Level 1 Training Course

Cost: ClearSCADA Level 2 Training Course $1,650

Instructor: Schneider Electric | Telemetry & Remote SCADA Systems factory trainer.

Instructors: ClearSCADA Level 1 & Telepace classes will be taught by Tony Sannellla, Sage Designs, a Factory-Certified Instructor. Telepace Studio classes will be taught by a SEUSA training instructor. The ClearSCADA Test drives will be conducted by Sage Designs or a factory representative.

Location: See individual course registration form. Those requiring overnight accommodations should call the hotel directly for reservations.

What should I bring? Laptop computer with minimum requirements as shown on the specific course registration forms, plus necessary permissions to install software on your computer.

***You must have a licensed copy of Telepace Studio to take the Telepace course. We offer a course price for a license or you may purchase through your local Schneider Electric TRSS representative.**

What is provided? Course manual, daily continental breakfast, lunch & beverages.

Schedule Your Own

ClearSCADA Test Drive

Free Hands-On Test Drive
Call to Schedule a Test Drive
Call 1-888-ASK-SAGE
email: info@scadawise.com

SAGE DESIGNS, INC.
SCADA & Security Products

Download the Registration form at: http://www.SCADAWise.com

*** * * Registration Deadline: 3 weeks before 1st day of course * * ***

All registrations are subject to cancellation fees. A confirmation notice will be sent to all registrants on or before the deadline date.

Need help in transforming remote asset data into valuable business insight?

Let's talk!

Make the most of your remote assets with complete end-to-end solutions for monitoring and controlling field operations across a widely dispersed infrastructure

Controlling cost of ownership

The installation, operation and maintenance of remote site SCADA operations is often the most significant overall long term expense factor. With scalability,flexibility and ease-of-use in mind, Schneider Electric's Telemetry and Remote SCADA Solutions are tailored to help lower this total cost of ownership.

Secure and Reliable SCADA

Safety and availability are must-have characteristics of critical infrastructure. This especially holds true when considering security for SCADA systems that monitor and control remote operations across a wide array of communications technologies. At Schneider Electric, our Telemetry and Remote SCADA Solutions incorporate solid security at all levels, from the field to the enterprise.

Minimising risk by improving safety and regulatory compliance

Many industries are challenged with increasing requirements for operational safety, compliance with environmental regulations and the overall security of assets. Schneider Electric's Telemetry and Remote SCADA Solutions address all of these critical requirements through flexible end-to-end integration and comprehensive feature sets.

Innovation at work

ClearSCADA Software – Providing functions to reliably and securely manage remote SCADA assets across a wide range of communication options, with easy integration into business systems.

Trio Data Radios – Ensuring data integrity over short and long-haul distances with versatile and reliable data transmission options.

SCADAPack Smart RTUs -The monitoring and communication capabilities of a Remote Terminal Unit (RTU) combined with the processing and data-logging power of a Programmable Logic Controller (PLC).

Accutech Wireless Instrumentation – Configurable startup and failsafe conditions, enhanced diagnostics and years of maintenance free operation.

Make the most of your energy℠

Schneider Electric

150 Shoreline Hwy., Suite #8A • Mill Valley, CA 94941-3634 • 1-888-ASK-SAGE (1-888-275-7243) • SCADAWise.com • SageDesignsInc.com

A Masterful Program

A common architecture for a SCADA system is to make use of a Polling Master RTU which handles the communications with all remotes in a system, or as a Sub-master that handles communications to remotes that are a part of a segmented system. Reasons for this vary, but include systems where a group of RTUs must share data in the event of a loss of communications with the SCADA Master and be able to run autonomously, in SCADA systems where the Master Station is unable to communicate directly with some remotes or in systems where there is no redundancy at the Master Station and the reliability of an Head-end RTU is desired. In any event, with the exception of DNP3 in a SCADAPack, this Polling or Sub-master must be programmed to perform this task.

Since Modbus protocol uses multiple messages to query a single remote for different types of data, as many as 4 master blocks (MSTR in Telepace or Telepace Studio) must be configured per remote and some sort of mechanism to sequence through them. One traditional approach is to set up a counter that counts polls (successful or not) and use comparison blocks to enable MSTR blocks in such a sequence. This works well but, if there are very many remotes, you could end up with many networks of MSTR blocks. Another approach is to take advantage of the fact that Telepace Studio stores the configuration of function blocks in Modbus registers that are accessible to both the SCADA system and to the program within the remote. For example, if you change the value in the third configuration register, you have changed the remote slave address, the fourth will change which registers you wish to access.

In theory, changing the appropriate registers could turn a MSTR block from one that reads analog values at remote 10 from port 1 into one that sets coils in remote 20 on port 3; however, it is probably best to keep things a little simpler and use one MSTR block for each function on each port, or even more, depending on how similar the messages will be.

Taking the simplest case, where a Master RTU needs to gather identical information from multiple remotes, this becomes a simple task; all that you need to do is set up a MSTR block for each function (one to read Analogs and one for Statuses) and change the remote station ID and the destination in the master so that information from one remote isn't written over that of another.

The first step is to set up a counter that keeps track of polling. In this example, the +20 is the highest address of the remotes for a total of 19, as address 0 is not used:

The UCTR is advanced whenever a poll is complete or the MSTR blocks time out, as seen later.

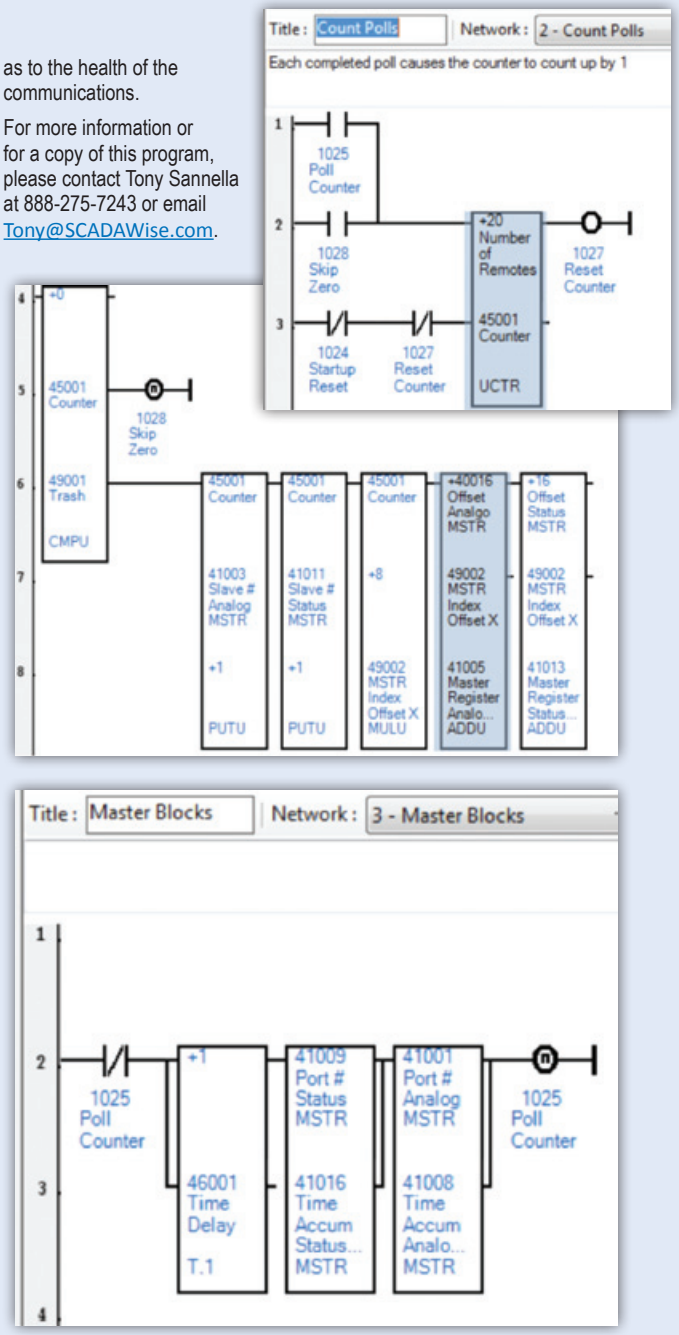
Next, you need to write values into the appropriate registers to alter the MSTR block which can be done with PUT statements or by using registers to store the results of calculations:

Here, the destination address in the Polling Master is above where the local physical I/O are mapped.

The T.1 Delay allows the program to cycle through once and get the new register data from the PUT and other blocks that re-task the MSTR blocks.

This short program will read 8 analog and 8 status values from over 200 remotes sequentially by increasing the counter value. Port diagnostics can be added to the Polling Master Register Assignments to inform the SCADA Master Station as to the health of the communications.

For more information or for a copy of this program, please contact Tony Sannella at 888-275-7243 or email Tony@SCADAWise.com.



Element	Variable	Types	Value	Description
Part 1	Message	holding register	4nnnnn	Address of the first register in the message control block. There are 7 registers in the block at addresses message+0 to message+6. +0 = port +1 = function code +2 = slave controller address +3 = slave register address +4 = master register address +5 = length +6 = time-out in 0.1s increments
Part 2	Timer	holding register	4nnnnn	Timer accumulator register.

Coming Soon: A Rugged Compact SCADA Solution

Do you need to monitor a few remote points with no power? No problem! Schneider Electric presents the SCADAPack 50, a new addition to the SCADAPack family. SCADAPacks are Schneider Electric's line of compact smart remote terminal units. SCADAPacks combine capabilities of remote terminal units with the power of programmable logic controllers and are designed to run in challenging remote environments.

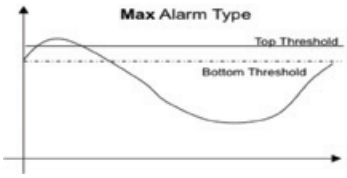
Remote Terminal Units (RTU) are a critical piece of remote applications. RTU's are in water and wastewater applications, power distribution applications, oil and gas fields, wind farms, solar farms, environmental monitoring applications, and other applications where communications, monitoring and/or control is required.

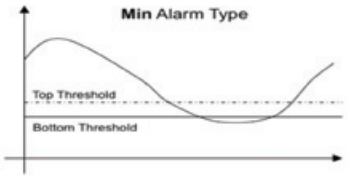
The SCADAPack 50 (SP50) is a battery-powered wireless data logger that communicates through 3G and 4G cellular networks to a remote host.

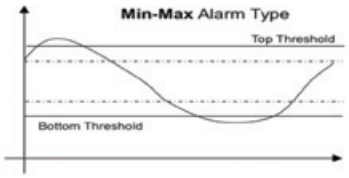
The SCADAPack 50 is a solution designed for remote data logging where power and network access is either not available or prohibitively challenging. Because the SCADAPack 50 doesn't require a power source, a SP50 network is a cost effective way to deploy monitoring systems for assets that are widely dispersed. The binary data files come into the SCADAPack 50 through different types of ports. The SCADAPack 50 can accommodate a combination of digital inputs, analog inputs, and a Modbus input. The SP50 is IP68 rated for use in harsh environments including submersion.

Once deployed, the data loggers need limited maintenance for the life of the battery. Depending on data logging and transmission rates, the field units can operate autonomously for over five years on a single battery. The SP50 operates by logging data at a configured rate with a minimum rate of one minute and a maximum rate of once a week. Those binary data files are stored and transferred via a SMS message over a 3G or 4G network at a configured transmission rate. The transmission rates can be set to be as short as several times a day or as long as only on a monthly basis. However, a configurable alarm could initiate and unscheduled transmission.

To help increase battery life, the SP50 enters a sleep mode between data logging periods and data transmissions. During sleep mode, the unit is only capable of monitoring digital channels for the purpose of immediate alarming. Through configuration, the SCADAPack 50 can send an immediate alarm from a state change in the digital channel. The state change in a digital channel is set up to wake up the SCADAPack 50. Immediate alarming starts when the SCADAPacks 50 wakes up from the state change and sends a transmission of the alarm. Analog signals and Modbus channels are not monitored during sleep mode. Then, the unit reads all channels without logging them in order to detect any other configured events. Finally, the unit sends all logged data.







Analog channels can be configured to send alarms when the SCADAPack 50 is not in sleep mode. The SCADAPack 50 sends an alarm for the analog channel during scheduled measurements of the analog channel or when the unit has woken up due to a digital channel alarm.

There are three different alarm types for analog channels. The three different options are Min, Max and Min-Max. Each alarm type includes both top and bottom thresholds which can be used to determine the severity of the alarm. The top and bottom thresholds can also trigger different modes of communications for the alarms. A couple examples of the communication options are an SMS sent directly to a phone or the data being sent to a host system. The top threshold on a max alarm could send out an SMS direct to a phone, while the bottom threshold would only result in the data being sent to the host system in a standard manner.

Aside from process data transmissions the unit can be configured to send diagnostic transmissions at regular intervals. For easier installation, configuration of the SCADAPack 50 is possible locally and remotely. Total number of transmits and retries, battery state, and radio strength are a few of the different diagnostics messages available in the SP50. Look for the SCADAPack 50 to be available later this year.

— Jordan Heldrich, Offer Marketing, Schneider Electric

Schneider Electric

Trio Q Series

Schneider Electric is introducing the Trio Q series later this year. Trio Radios are Schneider Electric's line of Ethernet and serial industrial data radios. Trio Radios are designed to provide complete, versatile, and reliable system solutions for long range wireless data communications in a wide range of SCADA and telemetry applications. The Trio Q series is a brand new licensed radio offer to join the M series and the licensed-free offer which includes the J series and K series.

The Q series will be available in two different bands to start. The 400 to 450MHz band and the 450 to 520MHz band with only 10 watts of transmit power at highest speed. The most impressive feature of the Q series is the speed that it is able to transmit information. This new radio is able to provide more speed and dynamic speed selection through improved bandwidth and efficiency. Look for more detailed information about this new offer in the next newsletter.

— Jordan Heldrich, Offer Marketing, Schneider Electric

Sage Designs would like to extend a warm welcome to our latest addition, Customer Service Manager David Gunderson!

A native of San Jose, CA, Dave has previously worked with Silicon Valley tech companies, newspapers, and education for the underprivileged, most recently overseeing sales and production at a Santa Rosa home goods company. He holds a bachelor's degree in Psychology from San Jose State, and has completed courses in Organization Development from the master's program of Sonoma State University.

David is very excited to be the first voice you'll hear on the phone at Sage Designs, as well as a coordinating point underlying all Sage customer service. A novice to the SCADA industry, Dave is enjoying learning everything he can about these crucial systems and their vital contribution to our way of life.

At home David enjoys reading, documentaries, research, and as he puts it, "everything that gives us knowledge". He enjoys music, the arts, and performances of all kinds. On a regular weekend you can find him exploring the San Franisco Bay Area without a map, making new friends, hiking, or kayaking the many waterways of the central California region that he proudly calls home.

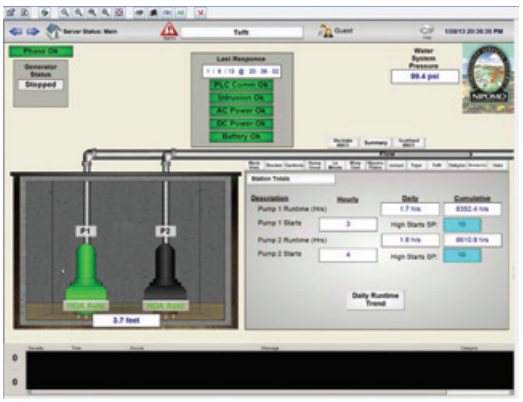
Quest for Reliable SCADA

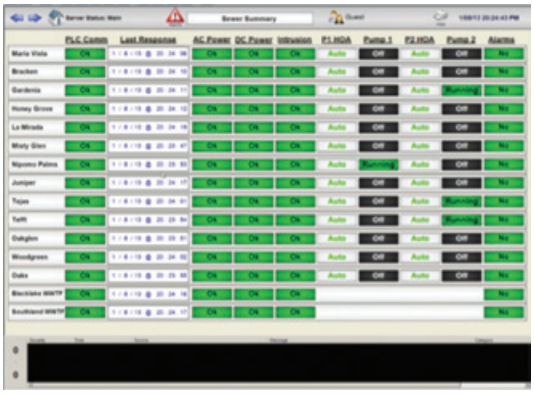
The Nipomo Community Services District is located in south San Luis Obispo County near the Pacific coast about midway between the San Francisco Bay Area and Los Angeles. The District serves over 4,000 water system connections, operates eight wells to produce water and has five water storage tanks with a combined capacity of over four million gallons of water. The District also serves approximately 2,500 connections to the District's 'Town' sewer system via ten sewer lift stations and the District's .9 MGD Southland Treatment and Reclamation Plant. In addition, the District also operates a stand-alone wastewater collection system with three lift stations and a .2 MGD wastewater reclamation facility that serves 560 connections in Blacklake Village.

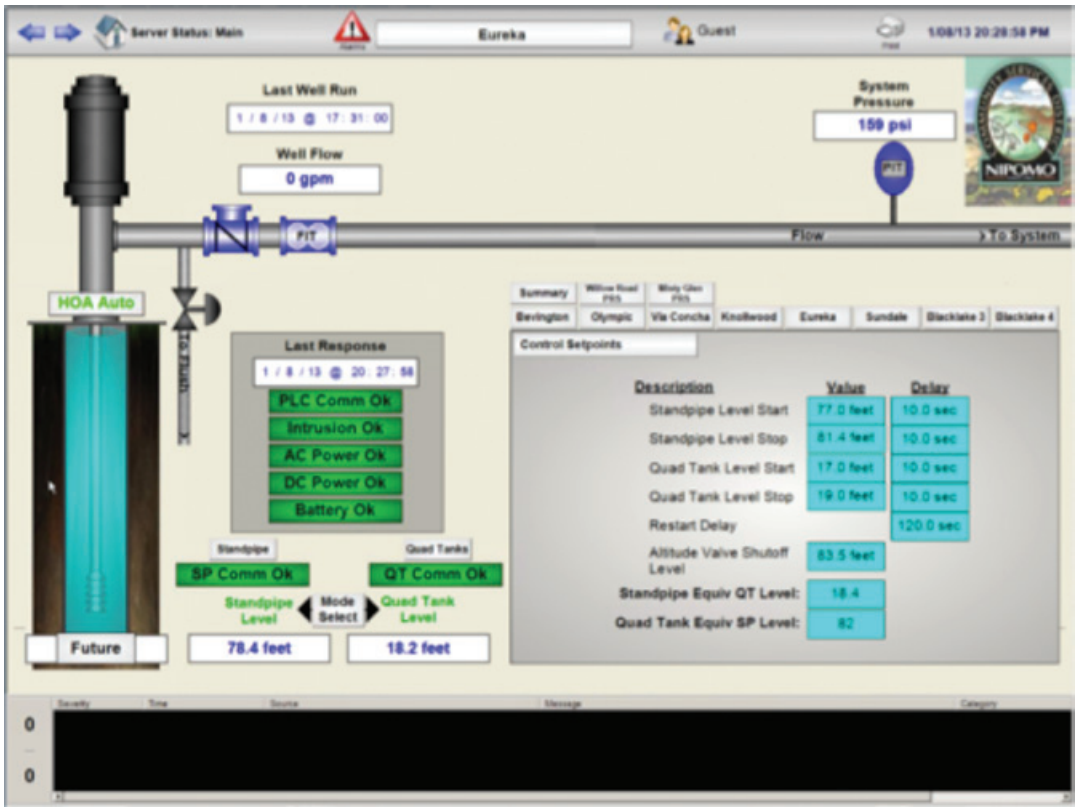
Until 2013, the District utilized a proprietary SCADA system to remotely monitor the operation of the District's water supply wells, sanitary sewer lift stations and wastewater treatment plants. The system utilized an interface that listed inputs/outputs in a tabular format only (not graphical), provided limited control capability, and had limited ability for historical data storage and retrieval. Changes to the system typically required custom programming that had to be outsourced.

The District recognized the limitations of the existing SCADA system and began developing a plan in late 2011 to upgrade the system. The SCADA system characteristics that the District desired to efficiently and effectively manage the operation of the water system and sewer system compared to the proprietary SCADA system included HMI software that had graphics capabilities, was widely utilized and supported, provided control capability, provided historical data logging, provided reliable alarm notification, and was capable of providing automatically generated reports. Furthermore, staff's goal was to reuse the existing field installed hardware and integrate it with the replacement HMI hardware and software as necessary to provide the desired functionality.

In 2013, the District completed a $350K upgrade to its Supervisory Controls and Data Acquisition (SCADA) system. The system utilizes Schneider Electric ClearSCADA software running on two redundant servers for monitoring, data logging, remote control and alarming as well as WIN-911® for notification of on-call staff. The project finished on time and under budget. The project allows District operations staff to more effectively and efficiently monitor and control 27 remote facilities locations spread throughout the District's seven square mile service area. Operators monitor and control the system 24 hours a day, seven days a week. The new system automatically provides warnings and alarms to on-call operations staff. The advanced system allows the District to respond at the first sign of problems in order to mitigate and/or avoid operational problems altogether.







In the year that the system has been operational, it has proven to be reliable and easy for the operations staff to understand and utilize.

— Peter Sevcik, Director of Engineering & Operations, Nipomo Community Services District

SAGE DESIGNS, INC.
SCADA & Security Products

150 Shoreline Hwy., Suite #8A
Mill Valley, CA 94941-3634

STANDARD MAIL
US POSTAGE PAID
PERMIT 191
SANTA ROSA CA

SAVE A TREE
Return Service Requested

The Sage Advisor

SCADA, SECURITY & AUTOMATION NEWSLETTER

Calendar of Events

March 24-27, 2014	**CA-NV AWWA 2014 Spring Conference,** Anaheim, CA
April 30 – May 1, 2014	**CWEA 2014 Annual Conference,** Santa Clara, CA
May 6-8, 2014	**Telepace Studio Ladder Logic Training Course*,** Buena Park, CA
May 12-15, 2014	**ClearSCADA Level 1 Training Course*,** Buena Park, CA
June 8–12, 2014	**AWWA ACE14,** Boston MA - Visit our Manufacturers!
August 12-14, 2014	**ClearSCADA Level 2 Training Course,** Denver, CO
September, 23-25, 2014	**Tri-State Seminar On-The-River,** Las Vegas, NV
September 23-25, 2014	**Telepace Studio Ladder Logic Training Course*,** Mill Valley, CA
October 20-23, 2014	**CA-NV AWWA 2014 Fall Conference,** Reno, NV
October 27-30, 2014	**ClearSCADA Level 1 Training Course*,** Mill Valley, CA
November 4-7, 2014	**ClearSCADA Level 2 Training Course,** Alpharetta, GA
January, 2015 (TBA)	**U.S. Bureau of Reclamations Mid-Pacific Region Conference**
January, 2015 (TBA)	**California Irrigation Institute Annual Conference**

* Download the registration form from our website or call for more information.