Schneider Electric Launches ClearSCADA 2017

• Enables greater efficiency in remote asset management
• Further strengthens the Schneider Electric HMI/SCADA software portfolio

Schneider Electric, the global specialist in energy management and automation, is pleased to announce the availability of ClearSCADA 2017 with innovative location services and integrated mapping functionalities. The driving force behind this product upgrade was to enhance insight and control for customers managing geographically dispersed operations; particularly those within the upstream oil & gas, water and wastewater sectors.

Schneider Electric SCADAPack 575 RemoteConnect

Unity Pro-Compatible rPAC

While structurally similar to the existing 530/535 models, the SCADAPack 570/575 product range will be the first to be managed with RemoteConnect software, a new tool built with Schneider Electric shared technologies including industry standard FDT2/DTM and the Modicon Unity Pro logic engine. This innovation allows the 575 to share programs with other Schneider Electric PACs from the Modicon range. While the rPAC database of the 570/575 utilizes objects with user-defined names to make configuration and programming easier than ever before, RemoteConnect software helps operators to remotely manage rPACs to reduce the number of on-site visits necessary for configuration changes, program uploading, firmware updating, and diagnostics.

The SCADAPack 570/575 rPACs are compact, with conformal coated electronics boards, and can cold-start at -40°F. Regular operation will be possible for the 570/575 rPAC in temperatures up to 158°F.

Highlights of the SCADAPack 570/575:
• Database with user-defined object names
• Open standard IEC 61131-3 programming environment able to share programs with Modicon M340 and M580 PACs
• Open standard telemetry protocols DNP3 level 4 with Secure Authentication and IEC 60870-5-101-104
• Open standard industrial protocol Modbus RTU and MODBUS TCP
• Support of HART™ pass-thru to smart instruments and actuators
• Data concentrator for DNP3 and Modbus devices
• Multiple active SCADA masters, up to 200 remote/local slave devices and up to 90 remote peer devices plus an Modbus scanner for SCADA master RTU station applications
• Remote maintenance (ability to remotely perform configuration changes, program downloads, firmware update and diagnostics)
• 1ms resolution time-stamped digital inputs, 30ms sampled analog inputs
• 3 Ethernet and 4 Serial ports, 1 USB device port for configuration, 1 USB host port for external storage
• Tool-less DIN rail mounting system
• Withstands 15g acceleration
• IP2X terminal blocks
• Operation from –40 to +70°C (–40 to +158°F)
• Compact form factor
• Conformal coating

Typical applications for the SCADAPack 570/575 rPACS

Like the existing ranges of SCADAPack and SCADAPack E Smart RTUs, the
Introduces Advanced Architecture and Strategic Alarm Notification Workflows

WIN-911 announced earlier this month availability of three new products: WIN-911 Standard, Interactive and Advanced. The new products provide customers with reliable alarm notification that can be easily configured from a basic call out list to sophisticated workflows and dynamic alarm routing for highly complex environments.

“For organizations requiring remote monitoring systems, WIN-911 has represented state-of-the-art alarm notification software for 25 years,” said Greg Jackson, WIN-911 CEO. “The new release continues that legacy with new features that support strategic alarm notification as well as an advanced technical architecture capable of working with the latest SCADA and HMI platforms.”

Features

Strategic Alarm Notification Workflows

Used together, advanced tactics and strategies can model complex escalation workflows, taking actual condition reports into consideration. Using a drag and drop interface, integrators can design multiple workflows, routing notifications by severity, type, role and based on dynamic conditions. Highly configurable policies govern notification, enabling dynamic response as events unfold. These features ensure the right message gets to the right personnel at the right time, for improved time to resolution and efficient staff management.

Roles and Scheduling for Personnel Management

All editions provide sophisticated scheduling including shared schedules, holiday schedules, and 24-hour rollover. Roles can be assigned to each personnel to ensure alarms are sent to the correct people. For example given roles like ‘engineering,’ ‘maintenance,’ or ‘operations’ based on the type of alarm condition, WIN-911 determines who is available in real time from the appropriate group. This feature reduces system maintenance as well: when someone leaves the organization, or a new person joins, no alterations to the system are required. In addition, roles enable stepped call-outs. If one person in the role is unavailable, the system can send a notification to the next person in the role or to all contacts in a role.

Modern Architecture

Industrial control and SCADA systems are evolving to enable customers to meet the demands of increasing complex operating environments and regulatory requirements, and they are adopting the latest operating systems. WIN-911 Standard/Interactive/Advanced runs on the latest 64-bit operating systems and is engineered as a “runtime all the time” product to eliminate downtime during configuration. WIN-911 connects directly with the latest versions of industry-leading SCADA, HMI and OPC systems, and a modular architecture improves security. Easy, browser-based configurations are now stored in a SQL database for increased scalability. The software now supports VoIP and SMS messaging via Ethernet modem in addition to previously supported email, voice calls via analog lines, and smartphone/tablet apps.

About WIN-911

WIN-911 is the most widely used alarm notification platform in industry, protecting over 10,000 facilities in 70 countries on six continents. WIN-911 delivers machine alarms and other key data via proven, industry recognized methods to smartphones, tablets, VoIP, analog voice, SMS, and email. The software leverages a built-in logic engine that determines in real-time who should receive critical alarms and how notifications should escalate. The company is headquartered in Austin, Texas, USA, with an office in Europe, and has a network of authorized distributors and system integrators around the globe. For more information on WIN-911 products and services, contact Sage Designs.
## ClearSCADA Level 1 Training Course
### October 16-19, 2017 — Mill Valley, CA

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>8AM - 4PM</td>
<td>Installing ClearSCADA, Introduction to ClearSCADA, Components, Using ViewX, Using WebX, ClearSCADA Help</td>
</tr>
<tr>
<td>Day 2</td>
<td>8AM - 4PM</td>
<td>Configuring using ViewX, Database Organization, Basic Telemetry Configuration, Creating Mimics, Creating Trends</td>
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<tr>
<td>Day 3</td>
<td>8AM - 4PM</td>
<td>Configuring using ViewX, Templates &amp; Instances, Logic Languages, Security, Communications Diagnostics</td>
</tr>
<tr>
<td>Day 4</td>
<td>8AM - 4PM</td>
<td>Reports, System Configuration, System Architecture, Questions</td>
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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)

## ClearSCADA Level 2 Training Course
### 2018 Dates TBD

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
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<tbody>
<tr>
<td>Day 1</td>
<td>8AM - 4PM</td>
<td>Installation, Understanding the Architecture of ClearSCADA, Application Design Considerations, Server Automation Interface, ClearSCADA Logic Engine, Using ODBC and SQL.</td>
</tr>
<tr>
<td>Day 2</td>
<td>8AM - 4PM</td>
<td>Advanced Mimic Design and Techniques, Data Grids and Data Tables.</td>
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<tr>
<td>Day 3</td>
<td>8AM - 1PM</td>
<td>Accessing Historical Data, Ad Hoc trends, Archiving</td>
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**Prerequisite:** ClearSCADA Level 1 Training Course

Cost: ClearSCADA Level 2 Training Course $1,650

### (20 Contact Hours)

## Telepace Studio Training Course
### October 3-5, 2017 — Mill Valley, CA

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<tr>
<th>Day</th>
<th>Time</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Day 1</td>
<td>8AM - 4PM</td>
<td>SCADAPack controller operation, Series 5000 I/O, Telepace Studio Introduction</td>
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<tr>
<td>Day 2</td>
<td>8AM - 4PM</td>
<td>Telepace Studio advanced programming techniques and advanced functions</td>
</tr>
<tr>
<td>Day 3</td>
<td>8AM - 2PM</td>
<td>Controller communications, Modbus Master/Slave protocol, Diagnostics, Modems</td>
</tr>
</tbody>
</table>

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)

## 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**

**Free Hands-On Test Drive**

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

***Registration Deadline: 4 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.

150 Shoreline Hwy., Suite #8A • Mill Valley, CA 94941-3634 • 1-888-ASK-SAGE (1-888-275-7243) • SCADAWise.com • SageDesignsInc.com
Many sites in municipal applications lay outside the reach of the normal SCADA system, but it is still important that they be monitored. It is important that these sites are provided with secure access and also to a speedy response when there may a potential problem or critical state that needs to be addressed. These municipal sites can range from lift stations, remote pump stations, to outlying irrigation delivery points.

Combining the SCADADroid R2 Alarm Management/Remote Access system with the SCADAPack rPAC (remote Process Automation Controller) is an ideal solution for all of these sites. Taking the typical lift station as an example, the SCADAPack is ideal for the normal control functions of a lift station. It can cycle pumps based on level transmitters and/or floats and can also alternate pumps based on various conditions. The SCADADroid is then able to connect seamlessly to the SCADAPack via Ethernet or hardwired signals to generate alarms and notifications. In addition, the SCADADroid can also pass through remote access using secure encrypted VPN access to the SCADAPack; more on this later.

**Obtaining Alarms:**

The SCADADroid, using Modbus TCP/IP, can tap directly into the SCADAPack’s database to provide detailed alarm notification of parameters such as motor/pump faults, transmitter malfunctions, and high or low level conditions. The SCADADroid can also use its 8 digital inputs to directly monitor parameters outside the control system such as hatch access alarms or direct level switch high monitoring as a backup to the SCADAPack.

**Escalating Alarms:**

The SCADADroid R2 monitors and provides notifications to operators in a number of ways depending on the person’s preference. These notifications include text (SMS), voice call or email. If the SCADADroid is unable to contact the person via text for example, the next contact will be via voice call and so on. If no acknowledgement is made, the SCADADroid will then move on to the next group of contacts until an acknowledgement is received.

**Sending Alarms and Notifications to Multiple Individuals/Groups:**

SCADADroid provides a comprehensive solution for monitoring and notifying operators and maintenance personal about operating and alarm conditions. Whether it is through the Modbus registers or through direct digital inputs, each input can be assigned to single or multiple alarms.

As a case in point, a pump fault can be assigned two alarms. The first alarm is assigned to the operators group to notify them that there is a problem at the lift station and that there may be a reduction in pumping capacity. A second alarm is assigned to the maintenance group and can be very specific as to the nature of the pump fault problem. For instance, depending on the information available, the maintenance group may receive that the pump failed to start, the pump overload tripped, or more details if the SCADAPack is tied into a smart motor starter or VFD.

For purely operational alarms such as unauthorized access or a high level (ie. rain event) condition, only the operators group would receive notification as the maintenance group responsible for these conditions.

**Using the Scheduling Tool for Notifications:**

SCADADroid contains a powerful scheduler for all alarm notifications that are sent out. For instance, the scheduler can be used to send only text messages during the day, but switch to voice when most people, especially when sleeping, do not wake up to text and/or emails. Additionally, schedules can be used to change who is notified during normal business hours (Monday to Friday) and who gets scheduled for the after hour and weekend calls, or one week on call, one week off call.

A separate schedule can be made so every alarm is emailed to a particular account so there is a running record of the callouts to a particular station. No matter what your response situation is, the scheduling tool most likely will meet your needs.

**Secure VPN Access:**

For accessing your SCADAPack, the SCADADroid, in addition to being an alarm notification system, provides users with remote access via a secure encrypted VPN tunnel over the cellular network. Because SCADADroid is a VPN client, it connects to a VPN server. This means no static IP SIM card is needed to access the SCADADroid on a cellular network. Static IP SIMs can expose devices to the public/outside world and can result in hacking attacks and denial of service. This also causes the user costly and exorbitant cellphone data plan bills. With SCADADroid, the IP address is hidden behind the cellular networks firewall and is not exposed. Because SCADADroid is the client, the rules for VPN and access are made by the VPN server. This allows tighter control of the central IT to access from external sites.

Even with the Ethernet port on the SCADADroid, the server determines the client IP addresses and/or MAC addresses on the remote network that can connect through the SCADADroid, as well as the ports that these devices can use. The server can also limit which clients have access to, and can be accessed from the remote Ethernet network attached to the SCADADroid.

**The Best Choice:**

If your site needs committed and up-to-date alarm notifications and/or the security provided with VPN technology, most systems or products require two separate products for alarm dialing and secure VPN access. With SCADADroid you have the option for both! For more information on the benefits and values of using SCADADroid, contact Sage Designs.
Monitoring and Accessing Autonomous Sites in Municipal Applications with SCADADroid and SCADAPack

Water network security here. For the ultimate water fight here.

Whatever the size and complexity, ensuring safe, reliable and secure operation from field to enterprise

Flexible I/O configuration to handle expansions
Reduce engineering time with replicated object templates

SCADA Components:
- SCADA Expert ClearSCADA management software
- SCADAPack Smart RTUs & rPACs
- Accutech wireless instrumentation
- Trio data radios

For more information, live equipment demonstrations, a listing of contact-hour certified classes near you, or to schedule a consultation on solving your SCADA challenges, contact your local Schneider Electric | TRSS representative:

(888) 275-7243
www.sagedesignsinc.com
www.scadawise.com

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Sage Designs is pleased to welcome to the team Ron Novak, a seasoned sales professional, as your new Southern California and Clark County regional sales representative. Ron comes to Sage Designs from previous positions with Wonderware West, Valin, and Siemens Energy, among others.

Based in Laguna Niguel, Ron is already meeting with customers and is excited to build new relationships. Ron is also excited to continue the positive customer service record left by Ken VandeVeer, who retired early this year.

Ron can be reached by email at Ron@scadawise.com, by phone at (949) 706-2668, or by contacting the Sage Designs main office.

RealStream Lift Station

The RealStream™ Lift Station solution is a fully configurable lift station controller and display designed to reduce total cost of ownership for everything from stand-alone pump stations to geographically dispersed municipal wastewater networks, the features and functionality embedded in the RealStream solution enable operators to help reduce costs across all levels of operation.

The RealStream™ Lift Station Solution brings the extensive Schneider Electric monitoring and control experience together with the proven SCADAPack™ E Smart RTU technology to address the on-going challenges of operating wastewater networks.

Features
- Fully configurable lift station controller that quantifies station efficiency to cost of operating each station, allowing comparisons between all lift stations in the network
- Supports DNP3 Level 4 with SAV2 offering security and built-in communication tuning capabilities
- Helps to ensure that data is available for regulation purposes and remote monitoring through local logging of station performance
- Increases asset life through advanced wet well level control and pump control
- Increases visibility to lift station operation through automatic alerts and alarms

8 Reasons for choosing Telemetry Solutions for your Water & Wastewater Applications

1. Maximizes Pump and Asset Life
   Reduces water hammer, increases pump impeller longevity and limits infrastructure stress using advanced pump control and paired with smart variable frequency drives.

2. Improves Energy Efficiency
   Decreases overall required pumping head with dynamic wet well level control and variable speed drives.

3. Increases Uptime
   Uses pump conditions to alert operators of issues before potential failure and leverages the multiple modes of operation to reduce unexpected service calls and environmental discharges. Advanced Lift Station Controls are available for de-ragging, fat-ring spreading, pipe scouring, and wet-well cleaning.

4. Secure, Remote Access
   Data logging and local display give access to operational parameters such as total volume and pump performance on site, with remote access available through DNP3 with an optional Secure Authentication or Modbus both via Ethernet and/or Serial (232/485).

5. Easy Installation
   The RealStream Lift Station Builder’s Kit can be adapted to multiple system configurations with easy installation options available for new and retrofit applications.

6. Improves Station Performance
   Pro-actively monitors the efficiency and cost of each station to inform performance based maintenance and the optimization of capital expenditures.

7. Helps Meet Environmental Regulations
   Helps to avert environmental discharges through self-diagnostics and early alerts, and meet environmental regulations through pro-active management.

8. Ease of Use
   The solution supports multiple SCADA hosts and as a fully configurable system, no programming is required. Operators can manage the network using standard lift station solutions, operator loadable configurations and simple site swap-outs. One-click updating and deployment is available when paired with ClearSCADA™ software.

For more information on the RealStream Lift Station solution, contact Sage Designs.
SCADAPack 570/575 rPAC are designed for use at remote sites in Water applications such as Irrigation, Fresh Water Distribution, Wastewater Processing, etc., as well as for use in Oil & Gas (upstream and midstream) and other related applications.

The SCADAPack 570/575 rPAC Brings Innovation in Programming & Configuration.

RemoteConnect software is new all-in-one software tool used to configure and program the SCADAPack x70 range. With RemoteConnect, configuration and programming is possible both locally, through any of its communication ports (default: USB device port), and remotely, through communication devices such as: serial modems (GPRS/3G/LTE, PSTN, fiber optic, etc.), Ethernet routers (GPRS/3G/LTE, fiber optic, etc.) or Serial/Ethernet radio units such as Schneider Electric Trio™ Data Radios.

RemoteConnect software is built on Schneider Electric shared technologies such as industry-standard FDT2/DTM and Modicon Unity logic engine (IEC 61131-3 logic programming).

With RemoteConnect software on SCADAPack 570/575 systems, trained personnel can:

- create the rPAC configuration and logic file, offline
- download the rPAC configuration and logic file, locally or remotely
- upload the rPAC file including the logic program source for editing or debug, locally or remotely
- amend a configuration on the fly, locally or remotely through IP or non IP communication links
- amend a logic program on the fly, locally or remotely
- perform rPAC diagnostics, locally or remotely
- update the rPAC firmware, locally or remotely
- export and import bulk configurations managed by spreadsheets or other applications
- manage external equipment using FDT1.2 and FDT2 DTMs such as instrumentation, motor drives, etc., from inside the RemoteConnect environment
- perform rPAC diagnostics, locally or remotely
- update the rPAC firmware, locally or remotely
- export and import bulk configurations managed by spreadsheets or other applications

RemoteConnect software on the SCADAPack 570/575 is fitted with an import/export command that enables a user to exchange relevant parts of logic programs with Schneider Electric Modicon M340 and M580 PACs. This means that a program written with Schneider Electric Unity Pro for a Modicon M340 or M580 PAC may be imported by RemoteConnect software, compiled and loaded into a SCADAPack 570/575 rPAC.

The Pillbox™ is a self-contained housing for field installation of electronics packages that need protection from the elements as well as unwelcomed attention. Inside, there is up to 3 sq. ft. of panel space with 3’ of mounting DIN rail for mounting equipment and 3’ of wiring Panduit. The equipment panel slides in behind the retainer system which allows for easy removal of all mounted components. The bottom of the retainer system includes a battery tray allowing the removal and service of the batteries without tools for disassembly.

✔ Easy to Install
✔ Low Maintenance
✔ Tamper-resistant
✔ Engineered Solution

For more information contact:

SAGE DESIGNS, INC.
SCADA & Security Products
150 Shoreline Hwy., #8A, Mill Valley CA 94941-3634
1.888.ASK.SAGE / www.sagedesignsinc.com
Calendar of Events

August 16, 2017  CA-NV AWWA Spring Conference, Orange, CA
August, 2017  Wine Country Water Works, Rohnert Park, CA
August 24, 2017  CWEA DAMS Vendor Fair, Big Bear, CA
September 14, 2017  Monterey Bay Water Works, Monterey, CA
September 20-28, 2017  Tri-State Seminar, Las Vegas, NV
October 3-5, 2017  Telepace Studio Ladder Logic Training Course*, Mill Valley, CA
October 16-19, 2017  ClearSCADA Level 1 Training Course*, Mill Valley, CA
October 23-26, 2017  CA-NV American Water Works Assoc. Fall Conference, Reno, NV
October 24-27, 2017  USCID Conference, Sacramento, CA
January, 2018  USBR Mid-Pacific Region Water User’s Conference, TBD
January, 2018  California Irrigation Institute, TBD

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