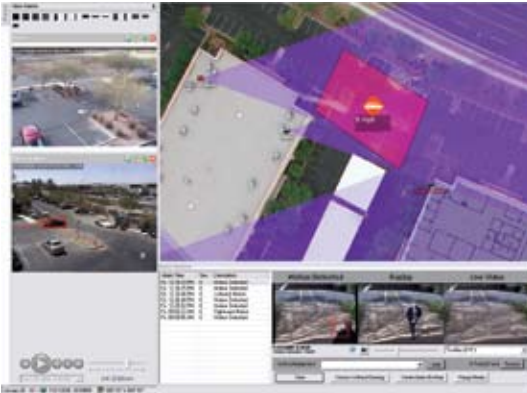


The Sage Advisor

SCADA, SECURITY & AUTOMATION NEWSLETTER

Volume 18, Issue 1 • Spring/Summer 2008

A Publication of Sage Designs, Inc.



Classification of a Car using PureActiv Software

Reduce False Alarms with Intelligent Video

Intelligent Video is a leading edge technology provided by systems, such as PureActiv, that transforms regular security cameras into smart sensors. When intel-

ligent video algorithms are applied, these sensors can now aid existing security forces to effectively monitor and react to an increasing number of sensors and potential security situations. Various types of algorithms exist in the intelligent video realm, including things like image stabilization to

remove camera shake, motion detection, directional analyzers, background filtering, behaviors like dropped object, loitering and counting and speed identification, etc. Another very useful algorithm provided through a system, such as PureActiv, is referred to as classification.

Classification is the ability for the software to evaluate the video image, and not only detect the object, but identify it as a "class" of object. The software subjects the object to several algorithms which can determine with a specified degree of confidence whether the object is a animal, human, car, truck, boat, etc. This in turn allows the camera to be even smarter, by allowing it to look for very specific situations. For example, rather than looking for motion along a fence line, the system can be smart enough to look for humans and vehicles only, eliminating trips due to vegetation, animals or lighting. This processing can take place near the camera via an edge device, such as the Scene Analyzer, or back at the central monitoring location. The PureActiv system also has a learning capability, whereby it can be presented with new types of objects which can be "learned" as new classes of sub-classes.



Making Waves

CONTROL MICROSYSTEMS

Control Microsystems recently launched **SCADAWave**, another innovative product line from the manufacturer of SCADAPacks and ClearSCADA. The SCADAWave line of radio modems can be ordered as either a stand-alone radio, or fully integrated into CMI's SCADAPack product suite. The Ultra-Series, M-Series and the E-Series radios can be used across a wide range of industrial markets in point-to-point and point-to-multipoint applications. They are often used for wireless remote interconnection of PLCs, RTUs, Data Loggers, Data Monitoring and Control Devices.

SCADAWave Ultra-Series radio modems are designed to provide reliable and secure serial data communication in the license-free 900MHz ISM band. Ultra-Series radios use advanced digital modulation and signal processing techniques to achieve exceptionally high data throughput efficiency and the product's advanced frequency-hopping technology satisfies the most demanding SCADA requirements. Using innovative bridging and repeating techniques, the ver-

satile Ultra-Series extends the operational radio range well beyond that of traditional spread-spectrum systems. A few key features are the data throughput speed which is programmable up to 256Kbps, 2-serial data-ports, simultaneous multiple protocols, as well as AES 256-bit encryption. The product is available today in the ISM band at 902-928MHz and soon to be released 2.4GHz band. All SCADAWave radios carry a standard 3-year parts and labor warranty which is the best warranty in the industry.

SCADAWave M-Series licensed UHF radio modems are designed to provide the reliable transmission of data for SCADA, telemetry and other information, and control applications at an economical price. M-Series radios are available in the range of 370-518MHz. They use advanced digital modulation and signal processing techniques to achieve exceptionally high data throughput efficiency using traditional licensed narrow band radio channels at 12.5KHz and 25KHz. The M-Series data throughput is programmable up to 19.2kbps.

SCADAWave E-Series licensed UHF radio modems are designed to efficiently transmit data for SCADA, telemetry and other information, and control applications. E-Series

radios use the most advanced digital modulation and signal processing techniques to achieve exceptionally high data throughput efficiency using traditional licensed narrow band radio channels. Like the M-Series, this radio is also available in the 12.5KHz and 25KHz channel bandwidths and are available in the frequency range of 395-520MHz. Actual data throughput speeds are programmable up to 57.6kbps. They also feature 2-serial data-ports, simultaneous multiple protocols, as well as AES 128-bit encryption. When integrated into legacy systems or used as the communications backbone of a new system, SCADAWave radios bring up-to-date communication technology and performance to the forefront.

These radios all feature the most complete and easiest to use programming and diagnostic software available today. The **SCADAWave Manager** offers a full range of advanced features like Alarming, trending, Logging (date and time), BER Testing, Channel Occupancy, Client / Server and ODBC. One program that is capable of managing all SCADAWave products. CMI uses its advanced technology, coupled with easy to use and reliable SCADAWave products to bring you the capability of offering a complete SCADA solution to our customers.



Olympic Security

Sage Designs is proud to be a certified Vicon dealer, offering products like the popular SurveyorVFT camera dome line. This summer, SurveyorVFT domes will face an Olympian size task securing the Beijing National Stadium for the 2008 Summer Olympics.

Vicon's camera domes and pan-and-tilt drives have been chosen to be part of an integrated video surveillance system to be installed at the Stadium. Vicon SurveyorVFT day/night PTZ domes with 23x optical zoom will be a key component of the system currently being installed. In addition, Vicon pan-and-tilt drives will be used around the exterior and throughout the interior of the stadium to provide operational stability for a variety of other manufacturers' cameras to guarantee that security management can control and focus on areas of concern.

The opening and closing ceremonies of the 2008 Summer Olympics, as well as some of the athletic events, will be held at this newly constructed venue. When completed in March 2008, the stadium will have a seating capacity of 91,000.

For more information on this Vicon installation or other interesting case studies, visit www.vicon-cctv.com.

Inside This Issue

- ClearSCADA Seminars
- IEC 61131-3 vs TelePACE
- Intelligent Video
- Master Station SCADA Software
- New SCADA System at VVCS
- SCADAWave Radios
- Training Classes
- Win-911 News



Left to Right: Ken VandeVeer (Sage), Tony Sannella (Sage), David Henry (MWD Program Manager), David Edwards (MWD CIO).

Control Microsystems' Innovators Award to the Metropolitan Water District of Southern California for Innovation and Excellence in SCADA Applications

Control Microsystems Inc. (CMI), global developer of advanced SCADA equip-

ment and software, announced at the recent Remote Monitoring and Networking Conference in Scottsdale, AZ, that the Metropolitan Water District (MWD) of Southern California has won their Innovators Award for

2007 for their display of Leading Edge Design and Implementation of Advanced SCADA Systems. This annual award acknowledges the finest SCADA design and implementation program within Control Microsystems' customer base.

"We are delighted to recognize MWD for their innovative approach and execution of a truly advanced SCADA network," stated Dana Krause, President of Control

Microsystems. "We commend the entire MWD team on this winning effort."

The Control Microsystems Innovators Award is given to the engineering team that displays the highest level of excellence and innovation in solving complex SCADA applications using Control Microsystems technology. MWD won the award for their unique work in developing a secure, state-of-the-art system for use in their resource management program including the distribution of fresh water over a wide area of Southern California. MWD contracted with FluidIQs, headquartered in Napa, CA, to implement this project.

"It is always rewarding to be recognized for hard work and forward-thinking solutions. Our team, in which we include Frank He as our Project Manager, our many professional IT, field and operations staff, FluidIQs as our system integrator and CMI as a major solutions provider, has been focusing on this project for a long time," said David Henry, Program Manager at MWD. "We are proud of our accomplishments in ensuring that Metro-

politan's customers receive only the highest level of available technology, security and service."

The Control Microsystems Innovators Award is issued annually following a comprehensive review of all the major SCADA projects that the company has been involved with. A committee of engineering and product line experts decides who will be honored each year.

About Metropolitan Water District

The Metropolitan Water District of Southern California is a cooperative of 26 cities and water agencies serving 18 million people in six counties. The district imports water from the Colorado River and Northern California to supplement local supplies, and helps its members to develop increased water conservation, recycling, storage and other resource-management programs. For more information visit www.mwdh2o.com or FluidIQs.com.



Taking Advantage of True Master Station SCADA Software Capabilities

Introduction

True Master SCADA software usually performs the role of polling the remote field devices through its integrated polling engine, however when the system has an HMI designed as a plant based SCADA product it is common to find that they employ a MTU as the polling engine for the remote devices. This article emphasizes the advantages of having the SCADA host perform the system polling as is the case with ClearSCADA

Creating and Maintaining the Telemetry Interface.

Creating the telemetry interface for a SCADA system using a MTU requires configuration and/or programming with logic for data retrieval from other remote devices within the SCADA system. The SCADA host software requires configuration so that it can retrieve data from the MTU for display and historic storage.

In ClearSCADA the telemetry configuration is completed once. ClearSCADA takes the configuration from user input and uses it to set a telemetry driver with the information it needs to collect data from what remote devices. This information input takes the form of check box and combo boxes on configuration forms within the ClearSCADA development environment, removing the need for complex logic.

The use of a SCADA Master Station uses powerful but simple to use tools that allow the configuration rather than the programming of the master polling elements. This can become very important if the system needs to have flexibility in polling routines that are very difficult to build and manage in a Master Terminal Unit (MTU).

Further, the ClearSCADA Master SCADA Station manages the configuration so that it can be easily created, replicated and deleted using advanced functions called templates and instances. Upon creation of telemetry configuration the SCADA host updates the drivers with information on the new remote controllers it needs to communicate with.

ClearSCADA easily adapts to the SCADA system changing environment by implementing the telemetry configuration that is easy to use and maintain.

Advanced communications diagnostics.

With complex and large distributed telemetry networks using multiple channels and multiple media types e.g. Ethernet, serial radio and modem dial-up to communicate to remote devices, checking and maintaining the health of such systems is critical if reliable communication is to be maintained.

Using a MTU, the SCADA host can only reliably monitor the communication link between the MTU and the SCADA host itself. This single link is responsible for retrieving all data, requiring a high bandwidth and is exposed as a critical link in the system architecture.

If a rich set of diagnostic information were required from the MTU to all the communication channels extending to all remote devices, this functionality would need to be programmed and integrated into the MTU to relay to the host via protocol registers. This would be difficult and costly to implement and even more difficult and costly to maintain.

ClearSCADA provides diagnostic information for channel and remote devices when the items are created within ClearSCADA. The driver handles the analysis of communica-

tions to each remote device and each channel.

Further diagnostic tools are available in live telnet sessions to each driver process, text communications logs; communication logs translation tools and a text driver log that logs the internal driver process.

A telnet session can be created to the relevant driver for each communication channel created within ClearSCADA. This will display real-time communication exchanges between the driver and remote devices connected to each channel. Filtering functions allow an individual remote device communications to be displayed.

The driver can also record text communication logs to a specific location on a hard drive. These can be translated in html page with a break down of the raw telemetry protocol calls into a more meaningful description of values and actions.

Redundant Systems

Many modern SCADA products offer some form of redundancy in SCADA host software. The redundant system normally offer some form of standby partner should a failure occur in the primary server. In ClearSCADA the entire database in terms of data, configuration and Alarm/Events are synchronized across the two server applications.

Using a MTU raises the level of complexity in managing such a system. The cheap and easy solution is to use a single MTU communicating data to both main SCADA applications. This, however, defeats the purpose of redundancy to some extent, as there is a single point of failure with the MTU.

Producing redundancy with most MTUs is a massive undertaking, requiring logic to maintain a link between controllers and support redundancy functionality, and produces



Translated communication files

a system which is difficult to maintain and control. Those that have better redundancy tools still fall victim to the most of the difficulties mentioned above.

ClearSCADA offers up to quadruple redundancy, this includes the functionality of the driver suite. The main server in the redundant relationship is responsible for collecting all the data from remote sites. Should this ClearSCADA application fail, another partner ClearSCADA application will take on the role of main server and start retrieving data using its driver suite that has been dormant up to that point. As the system is developed on any of the servers, all servers are automatically updated to incorporate changes made at any of the others.

Summary

Using the driver suite in ClearSCADA to resolve the requirements for a distributed telemetry network provides a more versatile solution, is easier to implement and maintain than the traditional MTU solution. Further, it provides a rich set of diagnostic tools that assist in managing the demands of modern SCADA telemetry networks.

— by Ian Metcalfe, ClearSCADA US Sales, Control Microsystems

New!

SCADAWave

Industrial Strength Data Radios



Reliable and Secure Wireless Networks



SCADAWave Ultra-Series

Flexible Spread Spectrum Radios

- Industry leading performance with unique practical features



SCADAWave E-Series

High Reliability Licensed Radios

- The fastest, most advanced licensed digital radios available



SCADAWave M-Series

High Value Licensed Radios

- Easy to use, reliable and rugged

SCADA Product Solutions

From the company that brought
you SCADAPack

SCADAPack



**CONTROL
MICROSYSTEMS**

SCADA products... for the distance

SCADAWave

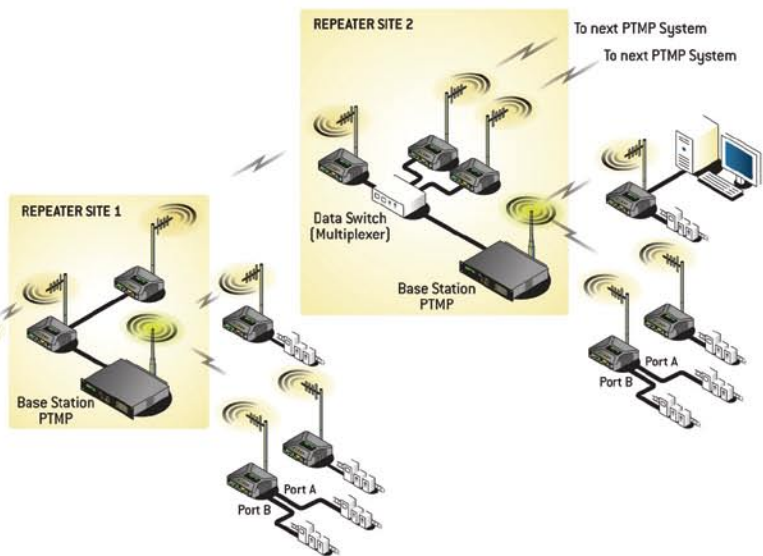
**Rapid deployment
and reliable connection
for your SCADA system**

The SCADAWave Series includes remote, base station and hot standby/redundant station variants in both licensed and unlicensed radio formats. This advanced radio series offers unique features and functionality. Whether it's the support for simultaneous multiple data streams of the Ultra-Series, the single and redundant base station configurations of the E-Series, or the cost-effective simplicity of the M-Series, SCADAWave radios have the versatility and power to handle the most challenging SCADA installations.

All SCADAWave products come with our industry leading 3-year warranty.

SCADAWave Manager

Free software for over-the-air configuration, firmware upgrades, diagnostics, alarming and performance data. This tool helps to eliminate system down-time and reduce maintenance costs.



SAGE DESIGNS, INC.
SCADA & Security Products

Representative of Control Microsystems Inc.

ClearSCADA *Test Drive*



April 8, 2008

Ayres Hotel & Suites-Ontario Convention Center
1945 East Holt Blvd.
Ontario, CA 91761
9AM-4PM

April 10, 2008

Courtyard by Marriott-Merced
750 Motel Drive
Merced, CA 95341
9AM-4PM

Test Drive the Future by signing up for one of our free, hands-on ClearSCADA seminars, designed to introduce you to the range of capabilities of ClearSCADA software by Control Microsystems, a global developer of advanced SCADA equipment and software. Students will have an opportunity to hear about and try for themselves many of the features in ClearSCADA that set it apart from other SCADA software on the market. This is a must for those wishing to evaluate ClearSCADA in a short time. Computers and SCADAPack RTUs will be provided for your use. Lunch is included. The event will start at 9AM and wrap up between 3-4PM.

We will discuss, demonstrate and receive hands-on experience with:

- ClearSCADA architecture
- Security
- Object based SCADA
- Vector based graphics
- Roll out new templates
- Connection to the RTU
- Point Attributes: alarming and logging
- Critical alarms and business rules
- Advanced alarming
- Zero configuration WEB clients
- Embedded lists
- Integrated reporting
- Trending and analysis tools
- Integrated EFM Management

Pre-registration Required

Registration Form

Complete and fax to 1-888-FAX-SAGE (888-329-7243) or 415-331-8969

- I would like to attend:**
- ClearSCADA seminar in Ontario, CA on April 8, 2008 from 9AM-4PM
 - ClearSCADA seminar in Merced, CA on April 10, 2008 from 9AM-4PM

Name: _____ **Title:** _____

Company: _____

Street Address: _____

City, State Zip: _____

Phone: _____ **Fax:** _____

Email: _____

Hotel Directions can be found on the Events Page of our website: <http://www.sagedesignsinc.com/events/index.htm>

*There is no charge for this event, but we would appreciate a call if you need to cancel your reservation.
Seating is limited.*

Training Classes

ClearSCADA

SCADAPack

ClearSCADA Training Course

May 20-21-22-23, 2008 – Mill Valley, CA

August 12-13-14-15, 2008 – 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 \$1,800

SCADAPack & TelePACE Training Classes

May 14-15-16, 2008 – Mill Valley, CA

August 6-7-8, 2008 – Mill Valley, CA

An optional SCADAPack or SCADAPack32 is available at a special price with the course—an excellent way to get started using Control Microsystems' Controllers.*

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

Cost: SCADAPack TelePACE Course \$1,125

- * Optional SCADAPack350 Training Kit – adds \$990
- * Optional SCADAPack 32 Training Kit – adds \$1,060
- * Optional SCADAPack Training Kit – adds \$970

Instructor: Tony Sannella, Sage Designs, a Control Microsystems' Factory-certified Instructor.

Location: Holiday Inn Express, 160 Shoreline Highway, Mill Valley, CA 94941. Those requiring overnight accommodations should call the hotel directly for reservations at 415-332-5700.

What should I bring? Laptop computer with minimum of Win 2K or XP with 15mb free disk space, CD ROM, mouse with a scroll wheel, working serial port, and necessary permissions to install software on your computer.

What is provided? Lunch and coffee, soft drinks and snacks each day.

Optional SCADAPack Training Kits at special course pricing: **Limit one (1) for every two (2) students per organization. Training Kits will be shipped N/C to training facility, provided your registration is received approximately 3 weeks before the first day of the course. Training kits include a SCADAPack 2, SCADAPack32 or SCADAPack Controller, TelePACE Software, Hardware Manual (on CD-ROM), I/O Simulator board, AC/2 Transformer, & programming cable. Prices do not include applicable California sales taxes.*

----- Download the Registration form at: <http://www.sagedesignsinc.com/events/index.htm> -----

Please send me the Registration Form

- ClearSCADA: May 20-23, 2008 August 12-15, 2008
4-Day Course
- SCADAPack TelePACE: May 14-16, 2008 August 6-8, 2008
3-Day Course



Name (please print):	Title:
Company:	Phone:
Address:	Fax:
	Email:
City/State/Zip:	

*** * * 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.

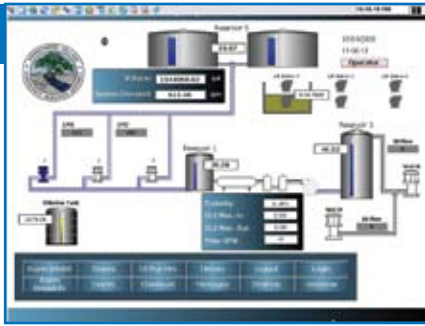
SAGE SITING

New SCADA System for Vandenberg Village CSD

Vandenberg Village CSD was established in 1983 to provide Water and Wastewater services to the community of Vandenberg Village. Situated North of Lompoc in Santa Barbara County, the District currently operates 26 miles of water distribution system, three ground-water wells, three 500,000 gallon tank reservoirs, two 1,000,000 gallon steel tank reservoirs, three booster stations and a pressure filter treatment system. The District also operates 24 miles of wastewater collection system, with four pumping lift stations. Until 1978, wastewater treatment was also provided locally. Since then, the Village's wastewater system has been connected to the City of Lompoc's Regional Reclamation Plant for treatment and disposal.

The District's SCADA System consisted of an ailing soft logic Paragon HMI System. This put the control of the water system on the PC the operator used to view screens, print reports, and respond to alarms. The failure of the SCADA server would cause the failure of the process control, alarm monitoring and remote site control. The ageing of the hardware and software used in the SCADA equipment, the lack of system documentation and the difficulty of maintaining the SCADA System precipitated the district to look for a new solution, a modern SCADA System with open architecture that could be serviced by most any integrator. The collaboration of Vandenberg Village CWD, Sage Designs, Central Automation, and Control Microsystems engineers during the design specification process leveraged years of SCADA experience.

Operations Manager, Martin Damwyk recognized the need to replace the Water and Wastewater SCADA System. Martin



worked to get a budget for the SCADA up-grade, and develop a Request for Proposal for a new SCADA System. The Plan was to upgrade the SCADA System at the Central, and remote sites.

Control Systems Integrator Control Automation, located in Bakersfield, was chosen as providing the successful proposal to replace the SCADA System. Ray Spangler President of Central Automation chose Control Microsystems' SCADA-Pack32 and SCADAPack 350 Controllers, and ClearSCADA HMI Software. The new system architecture separated the functionality of the HMI from the control functions of the filtration plant. This transfer of the existing soft logic residing in the old HMI to the new SCADAPack 32 controller at the filtration plant, leveraged the time and energy that the District paid for during the evolution of the Software, such as timing of valve control for the filtration system, time of use control of pumps and the evolution of the process. Central Automation Engineers used the Modbus protocol for the Controllers, and up-graded the communication system by installing 900MHz Ethernet Radios. This gives the Vandenberg SCADA System more bandwidth and capability to add Video Security Cameras on future projects or as the need arises.

Central Automation submitted and provided the Design Engineering, Layout, Termination Drawings, and the Documentation for approval by the District. The documentation provided ensures that the District as the end user will have the library of information needed to maintain and expand their future.



Specter Instruments Introduces WEB-911 XTools

WEB-911 XTools is a suite of ActiveX controls that will allow users to embed WIN-911 configuration functionality into most SCADA displays. All WEB-911 XTools are WEB enabled and can run either on stand alone or distributed SCADA applications. The WEB-911 Server is installed with the basic WIN-911 Scan & Alarm. The XTool Clients may be located on any networked ActiveX container including SCADA clients and Internet Explorer.

The WEB-911 XTools include:

- XContact. Add Names, Phone numbers and Duty Schedules
- XGroup. Add or Remove contacts from alarm groups
- XSchedule. Change notification schedules for one or all users
- XApply. Apply changes on the fly.

For more information contact Sage Designs, your Win-911 distributor, or visit www.specterinstrument.com.



SAGE ADVICE

IEC 61131-3 OR TelePACE

What will best fit your needs?

A decision facing new SCADAPack customers is: *What programming environment will work best for their system?* While ISaGRAF (Control Microsystems' IEC 61131-3 programming environment) offers a powerful set of tools and utilizes multiple programming languages, these features come at a price. Yes, there is a cost in dollars but more importantly, there is a cost in the level of training required to effectively use these languages and features.

By standardizing the control system interface, this programming environment complements the manner in which technicians and engineers design, program, operate and maintain industrial control systems. The IEC 61131-3 software package includes the five main languages: Sequential Function Chart (SFC), Instruction List (IL), Ladder Diagram (LD), Function Block Diagram (FBD), and Structured Text (ST). In addition to these languages a sixth, called Flow Chart (FC) is included. This sixth language is graphics-based and used to describe sequential operations in an application. The skills needed to make use of these languages may present a real challenge to many, but once mastered, open a world of capabilities beyond the reach of simple ladders programming.

TelePACE, on the other hand, is simple to learn and use. The function blocks included in TelePACE provide functionality specifically tailored to the SCADA industry. Scaling, Flow Totalizing and Integrating, Modem commands, Mastering and other communications functions, as well as a healthy assortment of math, counters, timers and more are easy to use and understand in TelePACE. Although there is a similar library of functions in the ISaGRAF we supply, there is little comparison to the ease with which a newcomer can acquire the skills necessary to implement these powerful functions in TelePACE.

There are several things to consider when making a choice between the two. If your SCADA technicians are the ones program-

ming the RTUs and have little or no exposure to higher level programming languages, you can be assured that they will have your system up and running faster with TelePACE. If you have SCADA Engineers doing the work who have experience with other languages, they may be much more comfortable using Structured Text or one of the other IEC languages. If using an outside contractor for the programming, you must consider who in your organization will be maintaining the system and what their level of programming expertise is.

Another thing to consider is the open vs. proprietary issue. Using the IEC 61131 standard means that your intellectual property is easily transferable between hardware platforms that also comply with the standard. In theory, programs written for one compliant device can be downloaded to others. In reality however, this is not usually the case as each manufacturer supplies a library of functions which will seldom work on another supplier's product. With TelePACE, you cannot transfer programs between non-Control Microsystems products without rewriting them from scratch.

Well over 90% of our customers have opted for TelePACE as it will do the job well in almost every case. Where we see problems is only in the most demanding applications which need very large programs that become easier to manage in ISaGRAF. Where we see ISaGRAF used is generally by large organizations with full-time SCADA Engineers that have a programming background and prefer the use of a more powerful tool set.

Either way, you can count on Control Microsystems' free and unlimited telephone support, as well as CMI and Sage Designs' training classes which are offered often and in a wide variety of locations. If you have further questions, feel free to call us and we can help you make the decision that will best suit your needs.

CONTROL MICROSYSTEMS

SCADA products...for the distance

Help evolve your ideas with ClearSCADA Training

Improve your team's knowledge and lower your risk...

Attend our training courses on ClearSCADA, the benchmark SCADA host offering true object-oriented architecture.

- Superior detailed instruction and hands-on experience
- High quality, self-paced, interactive education
- Efficient configuration techniques and enhancement of system performance



Register today! 888-ASK-SAGE

Representative of Control Microsystems Inc.

The Sage Advisor

SCADA, SECURITY & AUTOMATION NEWSLETTER

Calendar of Events

- April 2-4, 2008 **ISC West 2008, Sands Expo & Convention Center, Las Vegas, NV**
(Visit the PureTech Systems and Vicon booths)
- April 13-16, 2008 **CWEA Annual Conference, Sacramento, CA**
- April 21 – 24, 2008 **CA-NV-AWWA 2008 Annual Spring Conference, Hollywood, CA**
- April 29 – May 1, 2008 **CRWA 2008 Education & Exhibitor Expo, South Lake Tahoe, CA**
- May 6-9, 2008 **ACWA 2008 Spring Conference, Monterey, CA**
- May 14-16, 2008 **SCADAPack & TelePACE Ladder Logic Training Course***,
Mill Valley, CA
- May 20-23, 2008 **ClearSCADA Training Course***, Mill Valley, CA
- June 8-12, 2008 **ACE 08 Expo, American Water Works Association
Annual Conference & Expo, Atlanta, GA**
(Visit the Control Microsystems & FreeWave Technologies booths)
- August 6-8, 2008 **SCADAPack & TelePACE Ladder Logic Training Course***,
Mill Valley, CA
- August 12-15, 2008 **ClearSCADA Training Course***, Mill Valley, CA
- October 18-22, 2008 **WEFTEC '08 - 81st Annual Technical Exhibition
& Conference, Chicago IL**
(Visit the Control Microsystems & FreeWave Technologies booths)
- October 20-23, 2008 **CA-NV-AWWA 2008 Annual Fall Conference, Reno, NV**
- December 2-5, 2008 **ACWA 2008 Fall Conference & Exhibition, Long Beach, CA**

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

SCADA & Security

CONTROL MICROSYSTEMS

SCADAPack
Controllers

ClearSCADA
HMI Software

SCADAWave
Data Radios

Win-911 Alarm Notification Software

FreeWave Spread Spectrum Serial
& Ethernet Radio modems

ProSoft RadioLinX Industrial Hotspot
WiFi Radio Modems

TELEDESIGN UHF, VHF, MAS SCADA Radios

SLS Web-based SCADA Reporting

PureTech Security Camera Management
& Video Analytics

VICON Security Cameras, Recorders &
Networked Video Security Systems

SAGE DESIGNS, INC.

SCADA & Security Products

1-888-ASK-SAGE (1-888-275-7243)

1-888-FAX-SAGE

www.SageDesignsInc.com

Acknowledgements: SCADAPack™ and ClearSCADA™ are trademarks of Control Microsystems Inc. PureActiv™ is a trademark of PureTech Systems. Win-911® is a registered trademark of Specter Instruments. ViconNet® is a registered trademark of Vicon, Inc.

SAGE DESIGNS, INC.

SCADA & Security Products

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

♻️ **SAVE A TREE**
Address Service Requested

PRESORTED
STANDARD MAIL
US POSTAGE PAID
PERMIT 191
SANTA ROSA CA