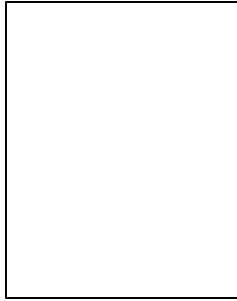


## Coming Together



Those of you currently working with SISCO know of our dedication to standards. Over the years we have participated in, and in some cases lead, the develop-

ment of several international standards. The results of these efforts are represented in our products as can be seen in the pages of this newsletter.

As I review these products and how our customers use them, it strikes me as to how useful our standards efforts have been. With products for embedding software into devices, products for interfacing computer systems to those devices, and products for tying together enterprise applications, the standards we have worked on are the glue that allows all these systems to come together to improve the operations of our customer's businesses. I sincerely hope that we will have the same opportunity to continue to serve our customers, and to serve those of you we have yet to work with, in improving your operations as well.

Jon Martin  
President and CEO

## PsyCor uses SISCO's AX-S4 ICCP to implement EPRI RSDD

PsyCor International, Inc. recently installed the web-enabled Real-Time Security Data Display that is accessed via the North American Electric Reliability Council's (NERC) Security Coordinator Information System website. The work was done for EPRI who then posted the facility on NERC's website for electric utility Security Coordinators to visually monitor system security. The site displays power flows over specific transmission paths (flow gates) that indicate the system status. The RSDD also displays real-time bus voltages on critical buses in the grid. The site has been designed to display up

**"Our use of SISCO's AX-S4 ICCP product, and most importantly SISCO's support, helped make this project happen on schedule."**

*Steve Mauser*  
PsyCor

to 50 flow gates and 300 bus voltages, although it has significantly more capacity. Up to 200 users may access the site simultaneously.

PsyCor used their ODMS Viewer/Editor software package to produce images used

### Advantages of using SISCO's AX-S4 ICCP

- "Plug-in" ICCP-TASE.2 connectivity without programming.
- No proprietary interfaces.
- Lower implementation cost using off-the-shelf Windows NT applications.
- Uses field proven ICCP-TASE.2 technology.

by the website. This software provides a viewport into the data contained in an underlying Common Information Model (CIM) schema. For the RSDD, the ODMS Viewer/Editor obtains the real-time data from SISCO's AX-S4 ICCP for the points defined in the CIM database and displays it on various backgrounds. The backgrounds for the RSDD system include a transmission line map of North America, or a simple North America map illustrating the various reliability regions of the USA. The AX-S4 ICCP software feeds the data to the CIM database for use by the ODMS Viewer/Editor.

*See PsyCor uses AX-S4 ICCP, page 2*

### Inside...

OPC enhancements for AX-S4 MMS  
Utility Integration Bus  
AX-S4 ICCP enhancements  
MMS-EASE *Lite* for embedded systems  
Restructured support and maintenance  
SISCO's Employee Edge

### Check out SISCO's website

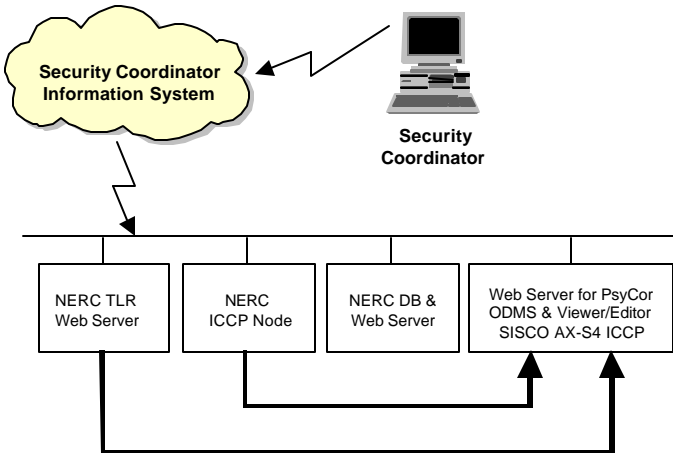
Go to <http://www.sisconet.com> to obtain all the information you need about SISCO products, company information, and news. Download the latest pieces of marketing literature from our product pages or simply read about our newest product features or technical information online.

Recently, for your convenience, we have added a contact form for you to easily add yourself to our mailing list. Take advantage of this feature and make your requests known to us.

# PsyCor uses AX-S4 ICCP

Continued from page 1

The diagram below provides an overview of the activities performed in the RSDD site. SISCO's AX-S4 ICCP provides the interface from the ODMS Viewer/Editor to both the ISN and the NERC ICCP node. The system is laid out in a fashion to provide for the NERC firewall to provide the needed security without duplication.



Topology of the RSDD System - Numbers Correlate Action Order for Data Push to ODMS Viewer/Editor and for a User Data Request

Flowgate flows and bus voltage points are obtained from the ISN directly, and some data, such as the Transmission Loading Relief, is obtained from another page in the NERC website. These sources bring their data into the CIM database such that the ODMS Viewer/Editor sees all data in one contiguous model for display.

ODMS Viewer/Editor determines where the information should be displayed on the screen relative to the geographic background. Also, based on predetermined limits, ODMS Viewer/Editor displays the information in various colors to indicate normal, caution, or out of limits operation for each data element displayed.

This project began in April 2000 and was delivered in June. To meet this ambitious schedule required close cooperation by all contracting parties. SISCO provided support not only in their delivery and installation of AX-S4 ICCP, but they also provided valuable on-site assistance through their New Jersey office location being minutes away from the NERC facilities in Princeton, NJ.

# OPC enhancements for AX-S4 MMS

The latest release of AX-S4 MMS (V4.30) has added important new features to the OPC interface:

- Support for receiving MMS InformationReports from remote devices.
- Support for controlling and receiving UCA Reports from UCA devices.

These new features provide higher system performance by eliminating the need to poll for data. Instead, devices can report the data to AX-S4 MMS on a report by exception basis. Reporting by exception significantly improves overall system performance, network bandwidth consumption, and CPU utilization.

AX-S4 MMS is a MMS/UCA interface for applications like InTouch, Fix, Cimplicity, Excel, as well as any other OPC or DDE program and is being used successfully in a variety of industries across many different kinds of applications including:

- Substation SCADA involving PLCs, meters, and protection relays
- Supervisory control of machine tools utilizing MMS based CNC
- Test systems for testing/verifying functional characteristics of MMS/UCA devices
- Operator interface for PC based controls

# UIB, providing a more efficient enterprise

SISCO's Utility Integration Bus (UIB) is an implementation of a scalable utility specific integration framework. It is based upon the following standards and emerging standards: EPRI's Common Information Model (CIM), OMG/IEC Data Access Facility (DAF), OMG/IEC Data Acquisition for Industrial Systems (DAIS), OPC, and others. The UIB product family is predicated upon the premise that information exchange, between applications, needs to be facilitated regardless of the application environment in which the application is developed. Some benefits of the UIB include:

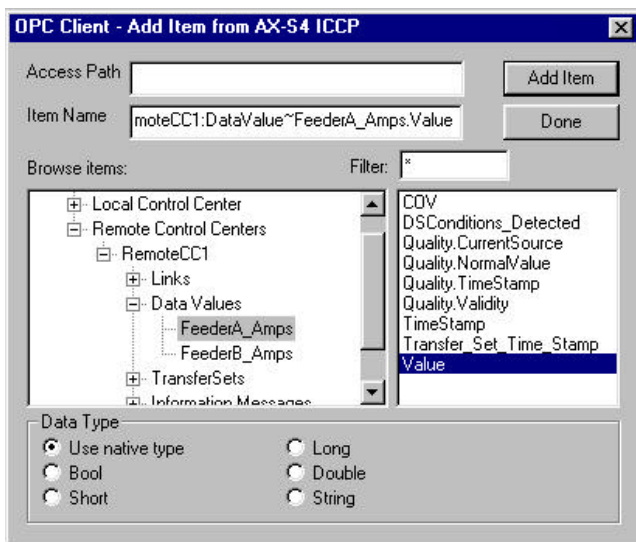
- Low deployment and development risk
- High performance
- Lower integration costs
- Use of XML eases interface to third party adapters (e.g., SAP, Peoplesoft, etc.)

Go to SISCO's website at <http://www.sisconet.com/uib.htm> to view a series of UIB technology tutorials for more information.

## AX-S4 ICCP enhancements

AX-S4 ICCP is an OPC Server that acts as a gateway between Client Applications and ICCP-TASE.2 control centers. With AX-S4 ICCP, any Microsoft® Windows™ Software Application Package that supports OPC (OLE for Process Control) as a client can use the ICCP-TASE.2 protocols to access real-time data in networked control centers and applications. It also allows Windows applications to communicate with control centers and other applications over ICCP-TASE.2 based Ethernet networks.

Using DCOM, Windows applications on other PCs can communicate with ICCP control centers and applications through AX-S4 ICCP. The diagram below illustrates how an OPC client can access ICCP-TASE.2 data.



AX-S4 ICCP allows an OPC client to browse ICCP-TASE.2 data points for easy configuration of applications

The following are the latest enhancements added to AX-S4 ICCP.

- A Connection State Window contains runtime statistics and connection information for all configured Remote VCCs (Virtual Control Center).
- The ability to pass ICCP-TASE.2 Error information to OPC Clients.
- The OPC Client can enable/disable communications to Remote VCCs.
- ICCP-TASE.2 Statistics are available to OPC Clients.
- Adding a Remote Control Center configuration or reloading an existing Remote Control Center configuration can be done while communications to other Remote Control Centers remains active.
- An OPC Automation Interface for use by Visual Basic and VBA applications is also provided.

## Look to MMS-EASE *Lite* for embedded systems

If you're interested in finding a unique and proven way to meet the requirements of embedded systems such as operating system independence, memory management, and resource limitation issues, look no further than MMS-EASE *Lite*.

Designed specifically for embedded environments to minimize CPU and memory requirements and maximize performance, MMS-EASE *Lite* allows MMS (Manufacturing Message Specification), UCA (Utility Communications Architecture), and ICCP-TASE.2 to be embedded within small devices.

Other benefits of MMS-EASE *Lite* include:

- MMS Object Foundry automates much of the programming needed to implement UCA compliant devices and objects.
- Field-proven implementation reduces development risk, minimizes development effort, and shortens time to market.
- ANSI C source code is provided for all functions to facilitate portation to virtually any environment.

## SISCO restructures support and maintenance

Effective August 1, 2000, SISCO is announcing a restructuring of extended support and maintenance contracts. For MMS-EASE on the PC (MMS-EASE-132-095), the cost of a yearly support contract is \$2,000.00 (add \$500.00 for International). To add an additional contact person, the price is \$1,000.00 (add \$250.00 for International).

For MMS-EASE on AIX (MMS-EASE-132-600), DEC Unix (MMS-EASE-133-025), and Sun/Solaris (MMS-EASE-133-015) workstation platforms, the cost of a yearly support contract is \$4,000.00 (add \$500.00 for International). To add an additional contact person or product, the price is \$2,000.00 (add \$500.00 for International).

The cost of an extended support contract for AX-S4 MMS is \$1000.00 (add \$250.00 for International).

The cost of an extended support contract for AX-S4 ICCP is \$2,500. This renewal is required in order to maintain run-time licenses. The cost of a run-time license renewal is \$500.00.

In addition, support and maintenance on the following MMS-EASE products, MMS-EASE for OpenVMS - DEC Alpha (MMS-EASE-600-024) and MMS-EASE for HP-UX (MMS-EASE-132-012) will only be available through separate contract arrangements. Contact Marketing for further information.

# Employee Edge

Dave Ludwig, Design Engineer

One of the reasons why SISCO has been so successful over the years is the influx of fresh, new talent. Dave began his tenure with SISCO while he was still working on a Computer Engineering undergraduate

degree from Oakland University. "I decided to go into computer engineering for the same reasons a lot of people do," Dave said. "I love computers but more than that, I saw an opportunity to grow professionally in a field that will be forever changing and improving. On the cutting edge, that's where I wanted to be."

In 1996, Dave started his work here and has since provided SISCO with a steady, reliable source of knowledge and productivity. He has been involved in a number of important projects such as **DGW** (a gateway that allows transparent integration of MMS based applications to devices like PLCs, robots, and other controllers that use custom or proprietary communications methods), our **Weld Schedule Utility** (a utility that is used to monitor welding devices), the enhancement of our **MMS-EASE Lite** product (see page 3 for more information), and the **Utility Integration Bus** (see page 2 for more information).

"Working here at SISCO has given me the opportunity to learn a lot about communication software and how important it is today in the manufacturing and utility industries," Dave said. "The great thing about SISCO is that we're the 'go to guys' for systems integration work and can provide the customer with a unique solution for their particular situation."

Not limited to his title of Design Engineer, Dave has also used his talents toward our website evolution. Working with the company webmaster, Dave helped in designing parts of the website and wrote CGI scripts for form email and downloading software. He also spent some time developing a Java-based security survey accessed through our website.

During his tenure here, Dave has shown a great willingness to learn and a desire to contribute in any way possible. And so we at SISCO are very pleased to have an employee like Dave as part of our team.

Asked about what he sees in SISCO's future, Dave said, "I see it as very bright. With our expertise in the field and our ability to give the customer what they need, SISCO will make a big splash. And I'm excited to be an integral part of it as we move into the 21<sup>st</sup> century."

SISCO, Inc.  
Systems Integration Specialists Company is a recognized leader of computer applications and real-time communications with end-users and OEM customers worldwide. SISCO is dedicated to 1) providing solutions that are based upon an understanding of our customer's needs and 2) providing solutions that are cost effective, open, interoperable, and maintainable.

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