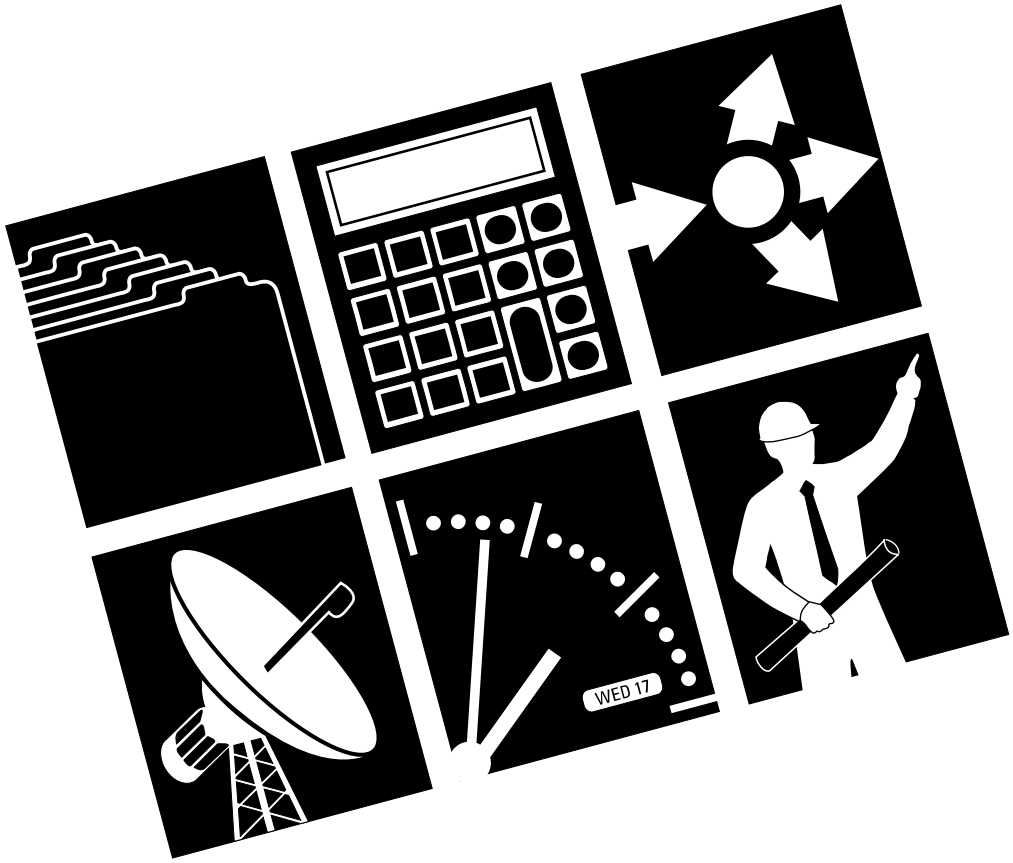
HEWLETT® PACKARD

# RTAP Solutions Catalog

**Real-Time Applications Platform**



The following is a quick reference of available RTAP scan tasks. For more detailed information, please see individual scan task vendor listings in this catalog.

**Summary of RTAP Scan Tasks**

| Equipment Vendor | Equipment/Software | Scan Task Vendor |
|---|---|---|
| ABB | MOD 300 | ABB, Kenonic |
| | ModcelI | Kenonic |
| Allen-Bradley | Data Highway Plus | HP |
| | NetDTL (Interchange) | HP |
| | KT card | HP |
| Bailey | Net90 (CIU 02/03/04) | tesserNet |
| Eurotron | P900 PID | Sinformat |
| Federal Pioneer | DMS-2 power meter | tesserNet |
| Ferranti | Mark 3/Mark 4 | SYSECA |
| | Transmitton RTU | Ferranti |
| Fisher Rosemount | Provox CHIP | tesserNet |
| | ROC-300 RTU | tesserNet |
| Foxboro | I/A API-DBM | Logica |
| | I/A Integrator 30 | Kenonic |
| | 760 controllers | tesserNet |
| Gensym | G2 bridge | Siemens |
| Harris | DNP | tesserNet, SEPAC |
| | 5000 | SEPAC |
| Hewlett-Packard | VXI instruments | HP |
| | HP 3852 | HP |
| | HP 48000 | HP |
| Honeywell | TDC 3000 | Logica |
| Landis & Gyr | Telegyr | tesserNet, SEPAC |
| Leeds & Northrup | Conitel 2020 | SEPAC |
| Logica | Micro Medina RTU | Logica |
| Mettler | Balance | Sinformat |
| Mitsubishi | Plant I/O | SYSECA |
| Modicon | Modbus | HP |
| | Modbus Plus | tesserNet |
| | AEG SEAB-1F | Logica |
| | Modbus master | tesserNet |
| | Modbus slave | tesserNet |
| Moore Products | APACS controller | Moore |
| Oil Systems | PI | CPU |
| Siemens | S5/H1 | HP |
| | Sinec/L1 | HP PSO |
| | Sinec/AP | HP PSO |
| | TELEPERM M | Siemens |
| | PLC Simatic S5 | Sinformat |
| | Profibus | HP PSO |
| | 3964R | HP PSO |
| TRW | RTU | tesserNet |
| Waugh | Microblender | Sinformat |
| Westinghouse | WISP+ | DECTRA |
| Yokogawa | Hybrid recorder | Sinformat |
| Others | CIC XAR2/4 | SEPAC |
| | Orion RTUs/Celeste protocol | DECTRA |
| | Scan task mux | tesserNet |

# Table of Contents

The information in this catalog has been provided by Hewlett-Packard Company and independent HP Channel Partners. To the best knowledge of HP, these companies offer the types of products described, and the support services indicated. The companies are solely responsible for their software and support services. HP disclaims any and all liabilities for and makes no warranties, expressed or implied, with respect to these products, including without limitation the implied warranties of merchantability and fitness for a particular purpose. Distribution of these products, or information concerning these products, does not constitute HP's endorsement of the products, the companies or support services. Product information is subject to change without notice.

# Introduction

## 1996 RTAP Solutions Catalog

This catalog describes industrial automation solutions based upon Hewlett-Packard's RTAP.

RTAP third party applications are being developed for many sectors of industry today. These include chemical processing, discrete manufacturing, electrical utilities, facilities management, food processing, oil and gas production, pharmaceuticals, telecommunications, transportation, water and wastewater management.

RTAP was developed to bring the benefits of cooperative computing to your operation. Designed for open computing standards, RTAP runs on HP 9000 computers running HP-UX, Sun Microsystems machines running Solaris, IBM computers running AIX, and Digital Equipment workstations running Digital UNIX. It is based upon the X Window system and Motif, and it offers connectivity to OSI and TCP/IP networking for communicating with other computers. RTAP integrates PC clients using Wonderware's NetDDE.

Solutions included in this catalog have been provided by HP Channel Partners in order to assist you in finding the right solution. If you require further information on a specific application, please contact the Channel Partner representative directly. This list is continually being updated.

## Advant OCS Interface to RTAP

**Company:**

**ABB Industrial Systems Inc.**
Automation Products and Systems
PO Box 22685
Rochester, NY 14692-2685
USA

Telephone: 716-273-7161
Fax: 716-273-7014
Contact: David Bachman

email address: David.Bachman@USINY.Mail.ABB.com

**Product Description:**

The Advant OCS Interface for RTAP is applicable to all Advant OCS installations —independent of industry— and runs on an Advant Station 500 Series Information Management Station present in the control network configuration.

ABB brings global strength in process technology, automation and control systems installation and support. ABB can assist customers in developing applications on the control network to provide best use of information from Advant OCS, which includes using the RTAP connection and Enterprise Link as part of systems integration with business level systems such as SAP R/3. ABB, Hewlett-Packard and SAP have pooled their resources to provide advanced decision support by integrating business information processing and process control applications. This same application platform can integrate control systems information with other MES level activities, such as laboratory information systems, production scheduling systems and maintenance management systems.

The Advant OCS Interface can be used to connect Advant OCS control networks into the powerful, distributed architecture of RTAP. The interface runs on the Advant Station 500 Series Information Management Station. The interface provides object level access to the relational database structure of Advant OCS and includes features for access into user-developed data structures within the control system.

The interface allows users to define a list of objects and respective attributes to map into user-defined RTAP data structures. This enables users to fully utilize RTAP's capabilities to perform calculations, create triggers, monitor process events, share data between systems, etc. Users can also identify RTAP-based data values to be sent to Advant OCS on either a polled basis, when updated, or on an event basis.

The Advant OCS interface to RTAP is easy to use and easy to implement. The MMI features of RTAP combined with its support for distributed connections allow users to create a standard look and feel as part of a network-based application, supervising multiple control systems from different vendors. RTAP could also be used to create plant (or mill) information systems, as well as an executive information system.

**Hardware Platform:** HP

**Pricing Information:** Contact for pricing.

**Availability**: Contact for availability.

**Support:** Complete system and application support is available from ABB.

## SCADAIT/*open*

**Company:**

**AIT – Automação Industial, Informática e Telecomunicaçoes Ltda.**
SCADA
Rua Alvarenga 694, Butantã
São Paulo, SP
05509-000
Brazil

Telephone: +55 11 816-0900
Fax: +55 11 815-4199

Contact: Michael Peter Malden

**Product Description:**

SCADAIT/open is an open system SCADA product that integrates GIS technology with SCADA functions. Its main application is for utility companies in the control of distribution systems. It is an ideal product for use in electrical, water and gas distribution as well as oil pipelines and other systems where geographic location is as important as field real-time data and control.

System features:

- Automatic generation of one-line schematics from topology net tables, which not only eliminates the manual generation of schematics, but also the potential problems with multiple database editing.
- Supports vector graphic displays of *Live Maps* with up to 5 layers of information and with field status updating map symbols in real time.
- Supports multiple control rooms on independent subnets with distributed RTAP database downloaded from Oracle server relational database.
- Fully-customizable man machine interface through the use of Control Sequence Language (CSL), specially developed for full interface with RTAP.
- Full Oracle database interface.
- ARC/INFO import and generation utilities.

**Hardware Supported:**

HP series 900 workstations and 8000 servers.

**Pricing Information:**

Available upon request.

**Availability:**

Delivery dependent upon project requirements.

**Support:**

Normally includes customization, configuration, installation, startup and training services.

## Interchange Software


**Company:** **Allen-Bradley Company**
A Divison of
Rockwell Automation
Rockwell Software
6680 Beta Drive
Highland Heights, OH 44143

Telephone: +1-216-646-7736
Fax: +1-216-646-7704
Contact: Matt Farrell

email: info@software.rockwell.com
Website: http://www.software.rockwell.com


**Product Description**:

INTERCHANGE Software is an Application Programming Interface (API) that provides a host computer running RTAP with a library of functions and executable commands for exchanging data with Allen-Bradley control devices. The library is accessed by including INTERCHANGE Software function calls in the application program.

INTERCHANGE Software provides the capability to send read/write commands to Allen-Bradley SLC and PLC programmable controllers, receive unsolicited read/write commands from these Allen-Bradley programmable controllers, check and clear diagnostic registers, convert data between host computer and control device types, configure data tables and upload, download and compare Allen-Bradley PLC-5 processor memory images. INTERCHANGE Software supports synchronous and asynchronous I/O calls.

**Hardware Platform:** HP, Sun, IBM, DEC, Windows NT and Windows 95

**Pricing Information:** Available upon request.

**Availability:** Immediate.

**Support:** International product support is available, including training and service. Rockwell Software offers a complete line of technical support services for INTERCHANGE Software including SupportPlus program which includes telephone support, software and documentation updates, technical subscription service, and SMART Diagnostics software for Microsoft® Windows. SMART Diagnostics software monitors system operation and alerts personnel in the event of abnormal conditions.

## ENMAC

**Company:**

**ASCADA Limited**
SSPC
South Queensferry
Edinburgh, Scotland
EH30 9TG
United Kingdom

Telephone: +44-31-331-7979
Fax: +44-31-319-1088

Contact: Ron Dunn

**Product Description:**

The electricity distribution industry is moving towards totally computer-based network management and control. ASCADA's Electricity Network Management and Control (ENMAC) system provides you with a fully automated distribution control room.

ENMAC is an advanced SCADA and Distribution Network Management System (DNMS) which directly replaces the traditional wall mimic diagrams and paper-based systems used in existing control rooms, providing the control engineer with the following capabilities:

- Continuous Network Diagram Display
- Full Network Connectivity (dead sections and feeder trace)
- Advanced Navigation Features (zooming, panning, selection)
- Integrated Plant Database
- Advanced Network Diagram Amendment
- Telecontrol (load shedding, voltage reduction, sequence switching)
- SCADA Event/Alarm/Dynamics/Trends
- Load Data Collection and Analysis
- Metering
- Hand Diagram Dressing
- Job Management
- Emergency/Fault Work
- Safety Rule Checking
- Switching Schedules (planned jobs)
- Automatic Outage and Restoration Generation
- Electronic Safety Documentation (permit to work, technical limitations, etc.)
- Integrated Power Analysis
- Customer Information Interfaces

ENMAC is a completely open software package which runs across a number of high performance graphics workstation clients and servers, providing an Advanced Graphic User Interface (AGUI) for the operator a view of a continuous dynamic network diagram. The diagram can be navigated by panning, zooming with full decluttering, i.e., removal of unnecessary data, or directly by the selection of a substation name, job name or alarm.

## ENMAC (cont'd)

The ENMAC product integrates the RTAP SCADA core with ORACLE relational database and the ASCADA AGUI as building blocks to provide a new generation DNMS and advanced SCADA package.

ENMAC greatly automates and rationalizes the electricity company's control rooms resulting in the improved operational efficiency and safety of the distribution network leading to significant cost savings and improved customer service.

**Hardware Platform:** HP, IBM, Sun

**Price Information:** Available upon request.

**Availability:** Current.

**Support:** European support by ASCADA. International support through third parties.

## NMAC

**Company:**

**ASCADA Limited**
SSPC
South Queensferry
Edinburgh, Scotland
EH30 9TG
United Kingdom

Telephone: +44-31-331-7979
Fax: +44-31-319-1088

Contact: Ron Dunn

**Product Description:**

The NMAC (Network Management and Control) product provides an Advanced Graphic User Interface (AGUI) with full Geographical Information Management (GIS) capabilities integrated with RTAP. The product is in full conformance with open system standards.

NMAC allows the operator to construct both a geographical and logical model of a network diagram using a highly user-friendly graphics editor. The logical model of the network, all data and alarm logging resides in a single or distributed relational database kept in a fully fault tolerant configuration.

The network diagram can be constructed with different layers and levels allowing the operator to zoom from a geographical map level into the detail of the network diagram removing (decluttering) unnecessary information. The operator at any level can also switch specific network layers off and on.

The operator can access network information from one single-user interface by spotting the symbol on the network diagram representing the physical network elements. Both static and dynamic connectivity information can be viewed on the diagram allowing the operator to perform route tracing and route management.

The operator can also annotate the diagram with specific symbols to indicate current operations. These symbols are linked to computer-based forms which are filled in as a historical log. The symbols and forms can be viewed anywhere on the network.

The system includes a highly-configurable alarm handler allowing for intelligent routing of alarms to operators, direct access from alarms to the affected part of the network diagram. The use of colour and flashing helps operators to grasp network problems and deal with them effectively.

The system also includes a highly-configurable trend handler which allows operators to visualize time-critical and historical data patterns to support network analysis and decision making.

The NMAC product is specifically aimed at the following industries:

- Electricity Supply
- Oil and Gas Production
- Telecommunications
- Water and Gas Distribution

**Hardware Platform:**

HP, IBM, Sun

**Price Information:**

Available upon request.

**Availability:**

Current.

**Support:**

European support by ASCADA. International support through third parties.

## Configurable Display Server (CDS)

**Company:** **BFI Betriebstechnik GmbH**
Sohnstr. 65
40237 Dusseldorf
Germany

Telephone: +49-211-6707-0
Fax: +49-211-6707-365
Contact: W. Stumpe

**Product Description:**

The Configurable Display Server (CDS) is used to control all the functions of an interactive user interface. It consists of a frame program, where application-specific modules can be tied in via a simple interface, and C-libraries for controlling the graphic user interface elements (schematics, control panels, plots).

CDS provides the application programmer with the following functions:

- Configurable pulldown menus — The structure of the menu tree is defined in a configuration file (e.g., a UNIX directory tree could be represented as a menu tree).
- Display of schematics — Schematics are displayed in the main window. They are selected by a menu function and supplied with a working point.
- Display of control panels — Using the function library 'frmLib.c', control panels can be displayed, combined into groups, and supplied with data.
- Central callback routine — All dialog events (menu functions, hot spots, push buttons) are referred to one central function, which passes control to the appropriate application modules.

**Hardware Platform:** HP

**Price Information:** Available upon request.

**Availability:** Immediate. Can be adapted to specific customer needs.

**Support:** To be defined according to customer request.

## Integration Services

**Company:**

**BFI Betriebstechnik GmbH**
Sohnstr. 65
40237 Dusseldorf
Germany

Telephone: +49-211-6707-0
Fax: +49-211-6707-365

Contact: W. Stumpe
H. Lammertz

**Product Description:**

Since its foundation in 1973, BFI Betriebstechnik GmbH (BFI/BT) has focused its activities on the automation of technical processes with special emphasis on the develoment of application-specific systems.

In the range of process automations, BFI/BT offers solutions for supervision and control of facilities, automation of laboratories, and applications in the field of 'technical logistics'. This includes systems for material tracking as well as control of storage and transport.

BFI/BT uses RTAP as a strategic system platform for developing integrated process control systems. Several application systems were realized on this basis, such as a hierarchically-structured process control system for a blast furnace plant. Currently, BFI/BT is carrying out several development projects of RTAP-based application systems for the chemical industry.

The RTAP features are supplemented by application independent BFI/BT tools in order to increase application development productivity.

**Hardware Platform:** HP

**Price Information:** Available upon request.

**Availability:** Depends upon the complexity of the project.

**Support:** To be defined according to customer requests.

## DXF to UIP Conversion Service

**Company:**

**Computerized Processes Unlimited, Inc. (CPU)**
4200 S. Interstate 10 Service Rd.
Suite 205
Metairie, Louisiana 70001

Telephone: +1-504-889-2784
Fax: +1-504-889-2799

Contact: Jim Bassich
Greg White

Website: http://www.cpu.com/

**Product Description:**

CPU provides a service to convert two-dimensional drawings generated by AutoCAD, AutoSketch, and other graphics software products to symbols and schematics used by RTAP applications. This service will accept DXF files and return UIP Archive files.

The standard service supports most standard drawing primitives, text, color line types, fill patterns, blocks, block scaling, and block displacement. In particular, the following features are supported:

- x and y scaling of blocks
- x and y displacement of blocks
- LINE, CIRCLE, ARC, TRADE, SOLID, and POLYLINE primitives
- 3DFACE implemented as a SOLID
- 3DLINE implemented as a LINE
- Most file patterns
- Color settings 0-7 (others are possible, but require matching between AutoCAD color settings and UIP's color map)
- Text with rotation, displacement, size, and some fonts
- Most line types when used with LINE, 3DLINE, and POLYLINE
- Rotation of blocks
- Primitives which have been changed by TRIM, STRETCH, EXTEND, or MIRROR

**Hardware Platform:** HP

**Pricing Information:** Call for information.

**Availability:** Immediate.

**Support:** Available upon request.

## Integration Services

**Company:**

**Computerized Processes Unlimited, Inc. (CPU)**
4200 S. Interstate 10 Service Rd.
Suite 205
Metairie, Louisiana 70001

Telephone: +1-504-889-2784
Fax: +1-504-889-2799

Contact: Jim Bassich
Marc Chevis

Website: http://www.cpu.com/

**Product Description:**

Computerized Processes Unlimited, Incorporated is an independent control systems integrator experienced in designing, implementing and maintaining control systems for oil and gas, gas production, pipelines, and other industries.

CPU is independent of any vendor's supervisory control system and maintains a staff with strong experience in many different hardware, software and SCADA systems.

CPU was the first system integrator to purchase RTAP in 1988 and has continuously developed applications, configured systems and provided consulting services related to RTAP since then.

CPU maintains a full-time staff of over 30 people, including professionals with Bachelor of Science and advanced degrees in engineering and/or computer science. Drawing on this diverse team, CPU provides technical and project management support — from writing scan tasks, developing real-time client server applications, integrating networks containing a heterogeneous mix of vendors to system design, implementation, and staging.

CPU has designed, implemented and commissioned RTAP systems ranging from small, single workstation systems to distributed database systems with as many as 14 workstations and servers, in excess of 40 programmable controllers and 10 PCs. These systems are used on oil and gas production platforms —both on and offshore— and for pipelines.

**Pricing Information:**

Call for current pricing.

**Availability:**

Immediate.

**Support:**

Available upon request.

## CPU Training Services

**Company:**

**Computerized Processes Unlimited, Inc. (CPU)**
4200 S. Interstate 10 Service Rd.
Suite 205
Metairie, Louisiana 70001

Telephone: +1-504-889-2784
Fax: +1-504-889-2799

Contact: Jim Bassich
Marc Chevis

Website: http://www.cpu.com/

**Product Description:**

Computerized Processes Unlimited, Incorporated offers training in Tcl/Tk, SCL(R), RTAP and related technologies. Courses range from one to five days in length and are taught in an interactive lecture and lab format. All courses focus on ensuring that students gain the practical knowledge necessary to effectively use the tools and technologies presented so they can create integrated solutions. Training is offered at either CPU's Metairie (New Orleans), Louisiana offices or at the client's site.

As a recognized industry leader, CPU is the provider of choice for Tcl/Tk training at Digital, Bellcore and Sun Microsystems Engineering, the developers and maintainers of Tcl/Tk.

CPU's standard courses are:

- Introduction to building graphical user interfaces Using Tcl/Tk
- Introduction to expect
- Extending Tcl via C
- SCL(R) scripting for existing RTAP users
- SCL(P) script for existing PI users
- Practical RTAP concepts and techniques

All courses can be tailored to meet attendees' needs.

For more information, visit our website.

**Pricing Information:**

Call for current pricing.

**Availability:**

Immediate.

**Support:**

Available upon request.

## SCL Family of Technologies

**Company:**

**Computerized Processes Unlimited, Inc. (CPU)**
4200 S. Interstate 10 Service Rd.
Suite 205
Metairie, Louisiana 70001

Telephone: +1-504-889-2784
Fax: +1-504-889-2799

Contact: Jim Bassich
Marc Chevis

Website: http://www.cpu.com/

**Product Description:**

CPU has more than ten years of expertise in the technologies of systems integration. They developed the SCL family of technologies — tools and technologies to improve the process and predictability of integrating disparate systems. The foundation of the technologies is the Tcl interpreter, a full function, general purpose interpreter which is widely used by the business and academic communities.

Tool Command Language (Tcl) and the extensions for building X windows applications (Tk) were developed at the University of California at Berkeley with support from CPU and others. Tcl provides a powerful interpreter core including variables, lists, mathematical functions, file system and socket support, and control structures. CPU delivers binaries of Tcl that support dynamic loading and other important features.

Together, Tcl and Tk provide the following benefits to developers and users:

- Rapid development and prototyping
- Powerful scripting language
- Excellent “glue” language
- Platform independent applications

CPU extends the versatility of Tcl and Tk by offering the following tools and extensions:

- SCL(R) — extensions for RTAP
- SCL(P) — extensions for OSI’s Plant Interface
- RTAP2PI — RTAP to PI transfer script
- SCL Trender — RTAP and PI trending tool

Other available extensions include Oracle, Sybase, and Informix. For more information visit our worldwide web site.

**Hardware Platforms:** HP, DEC, Sun

**Pricing Information:** Call for current pricing.

**Availability:** Immediate.

**Support:** Available upon request.

## SCL(P) Scripting Language Support

**Company:**

**Computerized Processes Unlimited, Inc. (CPU)**
4200 S. Interstate 10 Service Rd.
Suite 205
Metairie, Louisiana 70001

Telephone: +1-504-889-2784
Fax: +1-504-889-2799

Contact: Jim Bassich
Dan Stauder

Website: http://www.cpu.com/

**Product Description:**

SCL(P) is a library of Tcl extensions that provide in-depth support for Oil Systems Incorporated's data archiver, PI System. As a member of the SCL family of technologies, SCL(P) leverages the powerful scripting language, Tcl, and enables easy integration of RTAP through SCL(R) and other libraries from CPU.

SCL(P) makes the PI System's application programming interface, API, available as Tcl commands and is implemented on the distributed client/server model.

With SCL(P), a Tcl interpreter supports the following operations:

- Read/write access to PI System snapshot and archival databases, including statistical read functions
- Snapshot read and write by exception capability
- Access to the PI System database event queues
- Query capability to PI System point database configuration data
- Mechanism to receive notification of PI System point database configuration changes
- Database read queue server control capabilities
- Client connection management functions

OSI's PI System provides extensive interoperability with Microsoft Windows and Microsoft Office applications.

**Hardware Platforms:** HP, DEC

**Pricing Information:** Call for current pricing.

**Availability:** Immediate.

**Support:** Available upon request.

## RTAP2PI Transfer Utility

**Company:**

**Computerized Processes Unlimited, Inc. (CPU)**
4200 S. Interstate 10 Service Rd.
Suite 205
Metairie, Louisiana 70001

Telephone: +1-504-889-2784
Fax: +1-504-889-2799

Contact: Jim Bassich
Dan Stauder

Website: http://www.cpu.com/

**Product Description:**

RTAP2PI is an integration product that moves data from an RTAP database to an Oil Systems, Inc. Plant Information System (PI) database. PI is a more powerful and versatile archival solution than the RTAP Data Historian, providing more options and good PC interoperability.

RTAP2PI provides the ability to store real-time data in a PI database. Thus, the RTAP system supplies the real-time data which is transferred to the PI system long-term data storage device. RTAP2PI provides access to historical, real-time data for reporting and trend forecasting.

RTAP2PI utilizes CPU's adjunct modules to SCL, SCL(R) and SCL(P). SCL(R) provides Tcl interoperability with RTAP Application Program Interface (API) and SCL(P) provides similar functionality with the PI API.

**Hardware Platforms:** HP, DEC

**Pricing Information:** Call for current pricing.

**Availability:** Immediate.

**Support:** Available upon request.

## SCL TrendServer Multi-data Source Trending Tool

**Company:**

**Computerized Processes Unlimited, Inc. (CPU)**
4200 S. Interstate 10 Service Rd.
Suite 205
Metairie, Louisiana 70001

Telephone: +1-504-889-2784
Fax: +1-504-889-2799

Contact: Jim Bassich
Keith Bouvier

Website: http://www.cpu.com/

**Product Description:**

The SCL TrendServer is a source-independent trending system which provides greater flexibility than RtapPlotDisplay. Using a client-server approach, TrendServer sends a *trend display* to any standard X-windows display. Each trend display may be comprised of multiple *plots*, each of which may display multiple *pens*.

While the TrendServer must reside on a machine running DEC UNIX, HP-UX, or Sun Solaris, it does not require a local RTAP environment. Using SCL(R) and the provided scripts, real-time and historical data may be acquired from local or remote RTAP environments. A combination of SCL(P) and another script provides support for the PI System from Oil Systems Incorporated. Since communication between TrendServer and the data source utilizes an ASCII protocol and does not use RTAP message queues, the server and data source hardware can be from different vendors.

In addition to the usual functionality found in trend packages (e.g., zooming, printing, and control of legends and pen lines), both loose- and tight-fit plots are supported. Loose fit shifts the display to the left in jumps to minimize the movement of the plot. Tight fit continuously moves the display as new data points are displayed.

Combination trending is supported to allow a real-time trend to be backfilled with data from the RTAP data historian or the PI system server.

**Hardware Platforms:**

HP, DEC

**Pricing Information:**

Call for current pricing.

**Availability:**

Immediate.

**Support:**

Available upon request.

## SCL(R) Scripting Language Support for RTAP

**Company:**

**Computerized Processes Unlimited, Inc. (CPU)**
4200 S. Interstate 10 Service Rd.
Suite 205
Metairie, Louisiana 70001

Telephone: +1-504-889-2784
Fax: +1-504-889-2799

Contact: Jim Bassich
Charles Robert

Website: http://www.cpu.com/

**Product Description:**

SCL(R) is a library of Tcl extensions that provides in-depth support for RTAP. As a member of the SCL family of technologies, SCL(R) leverages the powerful scripting language, Tcl, and enables easy integration of other libraries from CPU and other sources. Using the SCL Shell, users may dynamically interact with RTAP systems. This feature brings the extensive power of the RTAP run-time library —normally available only to C application programmers— directly to the command line and eliminates compiling and linking of applications prior to use. To create customized procedures, users simply enter SCL commands into a file and create an SCL script.

Extended features include:

- RTAP messaging — Extensions provide access to the message facilities in the RTAP run-time library. SCL(R) provides routines to send and receive messages and bind Tcl procedures to arriving RTAP messages.
- RTAP runtime libraries — Convenient access to the RTAP libraries is a primary goal of SCL(R) which includes over 50 different SCL commands that interface to the RTAP run-time library. SCL provides support for the following RTAP systems: Database, Data Historian, Event Manager, Environment, Plot Display, Scan System, Time Keeper, and Watchdog.

**Hardware Platforms:** HP, DEC, Sun

**Pricing Information:** Call for current pricing.

**Availability:** Immediate.

**Support:** Available upon request.

## MACS

**Company:**

**Digital Applications International Limited (DAI)**
Axtell House, 24 Warwick Street
London, England
W1R 5RB

Telephone: +44-(0) 171-734 5486
Fax: +44-(0) 171-439 2077

Contact: Graham Else
John Millard

**Product Description:**

MACS is an advanced Supervisory Control and Data Acquisition (SCADA) system. By making maximum use of the RTAP features enhanced by application-specific code, it provides a state-of-the-art user interface and superb flexibility.

The package was originally developed for monitoring and control applications in the oil and gas production marketplace and is readily adaptable for use in most other areas of industry.

Major features:

- Advanced man-machine interface (MMI)
- Plant mimics with pan and zoom
- Control panel and face plate displays
- Extensive security mechanisms
- Real-time and historical trending
- Scheduled or ad hoc reporting
- Sophisticated alarm management
- Communications support for multiple protocols
- Support applications with more than 10,000 points

MACS is exceptionally flexible in both its hardware and software architecture. Where required, the realtime database can be distributed over multiple RTAP environments on separate networked processors. This allows applications to start small and grow easily with the open software architecture, allowing complete applications configuration.

Any information available on the system may be exported in the form of reports either to other systems forming part of the network, or to totally external systems via the in-built data export facility. All functions accessed through the MMI are fully supported by user-definable online help.

Together with MACS, a database maintenance facility allows the configuration of a MACS application to be maintained within a relational database. Strict configuration management is maintained with, for example, cross checks between point definitions and mimics.

MACS is supported by comprehensive documentation presented in a way that allows ready identification of the work needed to customize it to a new process or application. It is highly maintainable, as it was developed under strict quality assurance standards certified to ISO9001/TickIT.

**Hardware Supported:**

HP

**Pricing Information:**

Depends upon application (dependent upon configuration - from 25,000 pounds).

**Availability:**

Immediate.

**Support:**

DAI offers both a configuration and customization service to purchasers of the product. Onsite maintenance backed by a help desk service is available where required.

## Integration Services

**Company:**

**Digital Applications International Limited (DAI)**
Axtell House, 24 Warwick Street
London, England
W1R 5RB

Telephone: +44-(0) 171-734 5486
Fax: +44-(0) 171-439 2077

Contact: Graham Else
John Millard

**Product Description:**

DAI offers a comprehensive software and systems development service to clients. As Systems Integrators, DAI can combine RTAP with other packages or software systems. Alternatively, RTAP may be used to produce a novel solution to a specific problem. DAI provides a full project capability from initial requirements specification through system development to post installation support and training.

Projects are carried out under DAI's quality system which is certified to ISO9001/TickIT.

**Hardware Supported:**

HP, Sun

**Pricing Information:**

Price quotations are available upon request.

**Availability:**

Depending upon complexity of project.

**Support:**

Full post installation support is provided. Onsite maintenance backed by a help desk service is available where required.

## ControlVision

**Company Name:**

**DECTRA Sdn. Bhd.**
Control Systems Division
44-48 Jalan SS 21/62
Damansara Utama
47400 Petaling Jaya
Malaysia

Telephone: +60 - 3 - 719 9309
+60 - 3 - 719 9311
Fax: +60 - 3 - 718 1430

Contact: Kumar Arasu
Allan Goon

email: kumar@dectra.com.my
allan@dectra.com.my

**Subsidiary Name:**

**DECTRA (INDIA) Private Limited**
Control Systems Division
c/o C : Jessey Centre
D-16, II Floor, Lajpat Nagar - III
New Delhi - 110024
INDIA

Telephone: +91- 11 - 683 4795
Fax: +91- 11 - 682 9032

Contact: S. Bhaskaran
S. Sinha

**Product Description:**

ControlVision is an advanced software product for various applications in the oil & gas, power, manufacturing, telecommunications and water industries. Applications include SCADA for oil & gas pipelines, production platforms, plant automation, distribution automation systems and substation monitoring systems for the power industry.

DECTRA offers a variety of software modules which work with RTAP core modules to provide advanced and reliable real-time solutions for specific customer requirements. DECTRA modules include :

**Alarm Management Module (CV/AMM)** Provides an effective and easy-to-use facility for alarm notification, acknowledgment and reporting.

**Security Module (CV/SRM)** Gives ControlVision system integral password protection capabilities.

**Data Archiving Module (CV/DAM)** Adds archiving facilities to RTAP's Data Historian Module.

**Redundancy Management Module (CV/RMM)** Allows ControlVision to be used in a redundant mode with hot stand-by configuration. Functions include monitoring, change-over/failover of hosts and database synchronization facilities.

**Database Template (CV/DBT)** Defines the standard database for various industries as well as database point templates required to build the standard database.

**Database Generator (CV/DBG)** Provides an automated method for building the database based upon a database description language (DDL) and the database templates from DBT.

**Scan Task – Celeste (CV/STC)** Supports the Celeste communication protocol for communication to the ORION range of RTUs.

**Scan Task – WISP+ (CV/STW)** Supports the WISP+ communication protocol for communication to the WESTINGHOUSE SYSTEMS LTD range of RTUs.

**Product Description:**

**Scada Module (CV/SCM)** Provides standard facilities for telecontrol and a telemetered points database. The module encompasses the definition of the telemetered presentation and scan database models which provides a consistent interface link for scan tasks and application software.

**Display Server (CV/DSS)** Provides the facilities to display diagrams developed using RTAP configuration tools.

**RDBMS Server (CV/DBS)** Provides the facilities to transfer telemetered data to Oracle and Informix relational database management systems. Real-time data can be transferred in real time to these RDBMSes to perform specialized data processing and SQL functions.

**Trend Displays (CV/TDS)** Similar to the Display Server Module, this module provides the facilities to display trend data.

**Log Recording Module (CV/LRM)** Provides facilities to record events logging to a printer or file. The file can then be searched to view and reprint required events.

**Communication Monitor Module (CV/CMM)** Provides facilities to monitor communications statistics and automatic switching of scan tasks and communications equipment in the event of failures.

**Hardware Platform:** HP, IBM

**Pricing Information:** Available upon request.

**Availability:** Dependent upon customer application.

**Support:** Complete system support is available including software training, configuration and maintenance. Telephone and online support is available upon request.

## Integration Services

**Company Name:**

**DECTRA Sdn. Bhd.**
Control Systems Division
44-48 Jalan SS 21/62
Damansara Utama
47400 Petaling Jaya
Malaysia

Telephone: +60 - 3 - 719 9309
+60 - 3 - 719 9311
Fax: +60 - 3 - 718 1430

Contact: Kumar Arasu
Allan Goon

email: kumar@dectra.com.my
allan@dectra.com.my

**Subsidiary Name:**

**DECTRA (INDIA) Private Limited**
Control Systems Division
c/o C : Jessey Centre
D-16, II Floor, Lajpat Nagar - III
New Delhi - 110024
INDIA

Telephone: +91- 11 - 683 4795
Fax: +91- 11 - 682 9032

Contact: S. Bhaskaran
S. Sinha

**Product Description:**

DECTRA has significant experience in providing customer-specific solutions to various industries. As a leading systems integrator and application developer, DECTRA has a pool of talented system engineers to deliver reliable and advanced real-time systems to meet customers' requirements. This includes integrating RTAP with special applications such as oil & gas pipeline management software and distribution automation software.

As a full turnkey real-time systems supplier, DECTRA provides a comprehensive range of services from design, development, testing and commissioning to training and maintenance —onsite, online or through help desk.

DECTRA is involved in the following industries :

- Oil & Gas —SCADA for pipeline and production platforms
- Power —Distribution Automation, Substation Monitoring
- Plant Automation
- Facilities Supervision and Management
- Water and Sewage — SCADA for Treatment Plants

**Hardware Platform:**

HP, IBM

**Pricing Information:**

Depends upon project and complexity of application.

**Availability:**

Dependent upon customer application.

**Support:**

Complete system support is available including software training, configuration and maintenance. Telephone and online support is available upon request.

## AskOQL

**Company:**

**Ferranti International Computer Systems NV**
Noorderlaan 111
B-2030 Antwerp, Belgium

Telephone: +32-3540-4911
Fax: +32-3542-6328
Contact: P. van Damme

**Product Description:**

AskOQL is an easy-to-use language interpreter, enabling users to query the RTAP database using the standard SQL language. OQL stands for Open PMS Query Language and is a series of reporting and interconnectivity products on top of the Ferranti's Open PMS supervisory software RTAP.

The major benefits of the OQL products are:

- Improve productivity through enhanced report tools
- Incorporate state-of-the-art technology
- Use one database language, SQL

All OQL products transform the hierarchical structure of the RTAP database into a friendly relational database. Flexible reporting and ad hoc queries are available not only to engineers, but also to end users.

For example:

```
SELECT   pointname (), productname, stockamount, Eng_Unit
FROM     distillation:*
WHERE    type ="product_vessel";
```

This statement will return all stock amounts per product, currently measured in distillation production facilities. The statement searches for the attributes "productname", "stockamount" and "Eng_Unit" in all points, starting at the root-point "distillation" where the attribute "type" equals to "product_vessel". The output:

| pointname() | productname | stockamount | Eng_Unit |
|---|---|---|---|
| LIC3100 | Water | 1000 | L |
| LIC3110 | Water | 500 | L |
| LIC3200 | Wine | 5000 | L |

By using the UPDATE statement, global database updates are easily achieved. The following example shows a global UPDATE to translate the contents of the “type” attribute from English to French:

```
UPDATE      distillation:*
SET         type =  “reservoir_du_produit”
WHERE       type = “product_vessel”;
```

AskOQL is another way of accessing the RTAP data. Outputs can be redirected to file or printer.

**Hardware supported:**

HP, Sun, DEC Alpha

**Pricing Information:**

Price quotations are available upon request. Dependent upon number of active users.

**Availability:**

Immediate. Can be adapted to specific customer needs.

**Support:**

Supported from Antwerp and Amsterdam.

## LinkOQL

**Company:**

**Ferranti International Computer Systems NV**
Noorderlaan 111
B-2030 Antwerp, Belgium

Telephone: +32-3540-4911
Fax: +32-3542-6328
Contact: P. van Damme

**Product Description:**

LinkOQL brings client/server technology to the RTAP realtime database. OQL stands for Open PMS Query Language and is a series of reporting and interconnectivity products on top of the Ferranti's Open PMS supervisory software RTAP.

The major benefits of the OQL products are:

- Improve productivity through enhanced report tools
- Incorporate state-of-the-art technology
- Use one database language, SQL

Today, many IBM (compatible) and Macintosh PCs are installed in factories. LinkOQL allows you to use your preferred PC application to access data directly from the RTAP server. Hence, LinkOQL "serverizes" RTAP.

Making a production progress report on your Microsoft Excel spreadsheet is now easy. Just type in the correct SELECT statement, execute it to fetch the data from RTAP, make a graphic with mouse point and click, print it and surprise your boss with the flashing result. All in only a few seconds!

The list of current available clients is very large and includes Microsoft Excel, Lotus 1-2-3, Apple Hyper-text, Visual Basic and Pilot Lightship. With the take-up of the ODBC Microsoft definition and LinkOQL's capability in this area, the list further extends to include all the major EIS packages.

In addition, the client/server technology allows your client applications to also access other database servers ranging from Oracle up to IBM AS/400.

LinkOQL provides powerful reporting and interconnectivity tools at a very low cost. Existing PCs or MACs do more by installing Ferranti's LinkOQL. Paperless offices are becoming a reality now!

**Note:** See the AskOQL product leaflet for more information on how the SQL language is used on top of RTAP.

**Hardware Supported:**

HP, Sun, DEC Alpha (servers)
PCs (DDE, ODBC and DLLs), MAC (clients).

**Pricing Information:**

Price quotations are available upon request. Dependent upon the number of active users.

**Availability:**

Immediate. Can be adapted to specific customer needs.

**Support:**

Supported from Antwerp and Amsterdam.

## OnLine SPC

| | | | |
|---|---|---|---|
| **Company:** | **Ferranti International Computer Systems NV**<br>Noorderlaan 111<br>B-2030 Antwerp, Belgium | Telephone:<br>Fax:<br><br>Contact: | +32-3540-4911<br>+32-3542-6328<br><br>P. van Damme |

**Product Description:** Allows operators to perform online statistical process control according to the SPC guidelines.

Further details can be obtained by calling the number above.

**Hardware Supported:** HP, IBM

**Pricing Information:** Quotation available upon request.

**Availability:** Immediate.

**Support:** Supported from Antwerp and Amsterdam.

## OraOQL

**Company:**

**Ferranti International Computer Systems NV**
Noorderlaan 111
B-2030 Antwerp, Belgium

Telephone: +32-3540-4911
Fax: +32-3542-6328
Contact: P. van Damme

**Product Description:**

OraOQL links the realtime database to the Oracle relational database. OQL stand for Open PMS Query Language and is a series of reporting and interconnectivity products on top of the Ferranti's Open PMS supervisory software RTAP.

The major benefits of the OQL products are:

- Improve productivity through enhanced report tools
- Incorporate state-of-the-art technology
- Use one database language, SQL

Many organizations are standardized on the Oracle relational database system (RDBMS); therefore, an interface is often required. Obviously, several ways of connecting RTAP to Oracle are possible, depending upon the requirements.

The difficulty in connecting a relational database to RTAP is defining the relations between the RTAP information. Typically you have to relate different RTAP attributes into one Oracle table, and this information must be transferred as one record in Oracle.

OraOQL provides such translation, by using the SQL language not only for accessing Oracle, but also for accessing the real-time RTAP database. You define the relations by using a language you already know —SQL.

So both databases —Oracle and RTAP— are now working on the sets of information (refer to Note 2), which improve dramatically the speed of data transfer and decrease the number of events defined in RTAP for the data transfer.

**Note 1:** See the AskOQL product leaflet for more information on how the SQL language is used on top of RTAP.

**Note 2:** The relational database terminology and SQL language is explained in the book *An Introduction to Database Systems* by C.J. Date, Addison-Wesley Publishing Company.

**Hardware Supported:**

HP, Sun, DEC Alpha.

**Pricing Information:**

Price quotations are available upon request. Dependent upon the number of active users.

**Availability:**

Immediate. Can be adapted to specific customer needs.

**Support:**

Supported from all Ferranti sites.

## Plotselect

**Company:** **Ferranti International Computer Systems NV**
Noorderlaan 111
B-2030 Antwerp, Belgium

Telephone: +32-3540-4911
Fax: +32-3542-6328
Contact: P. van Damme

**Product Description:** This tool allows operators to select online the information to be shown on a trend display. The tool shows the database information to the operator in a user-friendly manner. By simply pointing and clicking, the operator assembles trends. The operator then confirms the chosen selections and the system shows the selected trends.

The user interface is very flexible. At any given moment, the user can decide which values or measurements are to be shown on one or more multiple trends.

**Hardware Supported:** HP, IBM

**Pricing Information:** Quotation available upon request.

**Availability:** Immediate.

**Support:** Supported from Antwerp and Amsterdam.

## Transmitton Scantask

**Company:**

**Ferranti International Computer Systems NV**
Noorderlaan 111
B-2030 Antwerp, Belgium

Telephone: +32-3540-4911
Fax: +32-3542-6328
Contact: P. van Damme

**Product Description:**

This product serves the oil and gas, water (etc.) SCADA industries. It is a scan task for a Transmitton RTU.

Further details can be obtained by calling the above numbers.

**Hardware Supported:**

HP, Sun, DEC, IBM

**Pricing Information:**

Quotation available upon request.

**Availability:**

Immediate.

**Support:**

Supported from Antwerp and Amsterdam.

**Company:**

**Hewlett-Packard**
Professional Services Organization
Project Center CAM
Herrenberger Strasse 11--130
71034 Boeblingen
Germany

Telephone: +49-7031-14-6750
Fax: +49-7031-14-4549
Contact: Wolfgang Schmitt

**Product Descriptions:**

**3964R Protocol Scan Task**
This product family provides communication to Siemens PLCs from the RTAP database through the serial 3964R protocol.

Available are two different boards, one which enables 2-Channel, and one which enables 8-Channel communication. Also available is a driver which supports the protocol 3967R, DK3964R and PK512 (PTS5).

Interface: DF32 or DF48 (Hewlett-Packard GmbH or COMSOFT)

All HP9000 Series workstations with an EISA slot are supported. HP-UX 9.01 or higher is required.

**Siemens Sinec-L1 Scan Task**
This package consits of a Sinec-L1 board for the HP9000 Series 700 and the appropriate driver for HP-UX. It is fully compatible with all systems which support the Siemens Linec-L1 protocol.

Interface: DF32 L1 board (with protocol driver for Sinec-L1)

All HP9000 Series workstations with an EISA slot are supported. HP-UX 9.01 or higher is required.

**Siemens Sinec-AP Scan Task**
This scan task allows the RTAP database to communicate with Siemens PLCs and other devices using the Sinec-AP protocol.

Interface: Any HP9000 LAN card.

All HP9000 Series workstations are supported. HP-UX 8.0 or higher, OTS/9000 and STREAMS/9000 are required.

**Profibus Scan Task**
This package provides connectivity to Profibus Devices for the HP9000 Series 700. It consists of a Profibus board for the workstation's EISA slot and the appropriate driver for HP-UX. Two different boards are available in order to provide standard (500 kBits/s) or high-speed (1.5 Mbit/s) data transfer rates. The driver provides connection to the RTAP database.

Requires HP-UX 9.01 or higher. Also available on HP9000 Series 800.

**Hardware Supported:** HP

**Pricing Information:** Call for current pricing.

**Availability:** Please call for availability.

**Support:** Available upon request.

## Integration Services

**Company:**

**Kenonic Controls Ltd.**
7175 - 12th Street SE
Calgary, Alberta
T2H 2S6
Canada

Telephone: 403-258-6200
Fax: 403-258-6201

Contact: Glenn Johanson

email: gejohanson@kenonic.com

**Product Description:**

Kenonic Controls is North America's largest petroleum, energy, and utility automation consultancy and system integrator. From offices in the United States and Canada, Kenonic provides engineering and system integration services in North America, South America, Europe and Asia —primarily in the pipeline, oil and gas production, gas processing, refining, water utility, and electric utility industries.

Kenonic manages approximately $100 million of automation capital annually. Since 1972, Kenonic has implemented over 2,500 automation projects. Kenonic's skills encompass the entire path of industrial data flow —from field process and instrumentation to corporate computer networks.

Kenonic's areas of specialization include:

- Petroleum and utility operations and business applications
- SCADA systems
- Telecommunications: LANs, WANs, radio, microwave, satellite, telephone, fiber optics and cable
- Distributed control systems (DCS)
- Programmable controllers (PLCs)
- Advanced control and information for optimizing processes and economics
- Integration of management information systems with real-time control systems
- Instrumentation, including valves, transmitters, switches, etc.
- Measurement instrumentation, including custody transfer metering and analyzers
- Electrical power
- Control center buildings and operations management centers

Kenonic will take complete turnkey contracting responsibility, or provide basic consulting for any size automation project — from facility control panels to large modernizations. Kenonic performs feasibility and planning studies, followed by detailed design, procurement, software development, integration, training, and commissioning for modernizations and retrofits. Independent from vendors and manufacturers, Kenonic selects and integrates the most cost-effective products for the unique needs of the client.

Kenonic has implemented several large RTAP-based SCADA systems and offers RTAP expertise that encompasses integration with business systems; PLCs; Distributed Control Systems (DCS); pipeline batch tracking, leak detection, and modeling; smart field measurement instrumentation; and various types of telecommunication systems.

**Hardware Platform:**

HP, Sun, IBM, DEC

**Pricing Information:**

Kenonic can offer either lump sum turnkey SCADA and business information solutions, or provide services on a reimbursable basis.

**Support:**

Support is provided internationally from our Calgary office.

## LIWACOM/EMS Energy Management System

**Company:**

**LIWACOM Informationstechnik GmbH**
Postfach 10 24 15
D - 45024 Essen
Germany

Telephone: +49-201-23 37 84
Fax: +49-201-23 37 87

Contact: Dr. Guenter Wagner

**Product Description:**

The LIWACOM/EMS is a computer system for monitoring and controlling the peak power demands with transmitted energy supplier (e.g., electricity, gas) for the industry, such as production, chemical, metals, milling or manufacturing. The system monitors the energy and process data over a time period (with electricity, this is usually a quarter of an hour), estimates the cumulative energy consumption, plans what measures need to be taken to avoid exceeding any energy quotas (where necessary), and controls the actual process.

LIWACOM/EMS stands out due to its refined, problem-specific, highly accurate prognosis capability. The energy demand expected over the monitored period is the result of a complex prognosis capability. The energy demand expected over the monitored period is the result of a complex prognosis calculation. The final prognosis is the sum of all the prognoses for the individual consumers as well as the basic demand (can be prognosticised, but not influenced). This high accuracy offers the user essential benefits:

- The contracted maximum demand can be lowered
- The energy is used more cost effectively
- Advanced recognition of peak power overloads

The refined control strategy of LIWACOM/EMS incorporates various measures to minimize interruptions in production, resulting in the following features:

- Production intervention is carried out only when absolutely necessary
- The systems adapts to the current production conditions
- Unavoidable interruptions are distributed "sensibly".

The flexibility of LIWACOM/EMS and the RTAP platform used allow the system to be adapted for each customers requirements:

- Short realization times
- High quality product
- Software reusability
- Recognized products with ensured support
- Can be adapted and extended by the customer

**Hardware Supported:**

All RTAP platforms

**Pricing Information:**

Call or fax for information.

**Availability:**

Immediate.

**Support:**

LIWACOM is dedicated to providing high quality information systems for solving energy management problems. The wide range of services offered include feasibility studies and systems analysis; turnkey systems; training; telephone hotline; and software maintenance.

## MC/*Open*

**Company:**

**Logica BV**
Wijnhaven 69
3011 WJ Rotterdam
The Netherlands

Telephone: +31-10-4 33 08 44
Fax: +31-10-4 33 14 47

Contact: Marco Schroot

**Product Description:**

MC/*Open* provides extensive extra facilities on top of RTAP. These extra facilities combined with RTAP provide a complete and powerful SCADA product which can be quickly configured to a client's needs.

MC/*Open* runs under UNIX, utilizing widely accepted standards such as X-windows, TCP-IP and OSF-Motif, and enables operating staff to monitor and control plant operation of gas and oil product pipelines and other gas and oil related operations. The modular design of MC/*Open* enables systems to be quickly tailored and configured to a specific application by the addition or replacement of individual software modules to fulfill special requirements. This design approach enables MC/*Open* to be independent of any particular type of telemetry or other external devices. A fully configurable report generator is available, which can reference all data in the database and perform both standard and user written calculations on these data before presenting them in the report. All database points can be protected via a series of access levels assigned to it. Only those operators which have access to these points can use them. Access can be restricted to read only access, write only access, read/write access or no access.

Key features are:

- Extra Calculation Engine functions
- Event file management
- Extensive security management
- Standard processing for digitals, analogues and counters, including input and output control plus point status management
- Information servers which allow operators to access schematics/ trends/reports without accessing configuration facilities. Trend report archiving is also supported.
- Scan control management
- Group alarm generation and suppression.

A significant feature of MC/*Open* is high availability. MC/*Open* currently supports two techniques for redundancy:

- RSS allows online, standby and remote configurations, where data is regularly copied to the standby and switch over to the standby occurs if the online fails. Remote nodes use the database of whichever machine is online.
- Shadowing uses disk shadowing technology to maintain up-to-date copies of data. Switch over allows the standby machine to pick up from the latest data saved.

**Hardware Supported:** HP

**Pricing Information:** Quotation available upon request.

**Availability:** Project dependent.

**Support:** Project dependent.

## MC/*Open* Pipeline Management


**Company:** **Logica BV**
Wijnhaven 69
3011 WJ Rotterdam
The Netherlands

Telephone: +31-10-4 33 08 44
Fax: +31-10-4 33 14 47
Contact: Marco Schroot


**Product Description:** In addition to the facilities provided by Logica's MC/*Open*, MC/*Open* Pipeline Management includes a number of facilities which are dedicated to pipeline management operations. These facilities should not be considered as products, but as standard building blocks which offer generic functionality yet are completely extensible according to client- specific requirements. They include:

- Ethylene density and line pack calculations
- Pressure profiles
- Batch tracking
- Leak detection by flow difference
- Leak detection by negative pressure wave
- Pressure statistics
- Mass flow balance
- Economy alarms
- Cost tracking

**Hardware Supported:** HP

**Pricing Information:** Quotation available upon request.

**Availability:** Project dependent.

**Support:** Project dependent.

## MC/*Open* Scan Tasks


**Company:** **Logica BV**
Wijnhaven 69
3011 WJ Rotterdam
The Netherlands

Telephone: +31-10-4 33 08 44
Fax: +31-10-4 33 14 47
Contact: Marco Schroot


**Product Description:** As well as the standard RTAP scan tasks, the following are also available from Logica:

- Logica Micro Medina
- Honeywell TDC3000
- Foxboro API-DBM
- AEG SEAB-1F

**Hardware Supported:** HP

**Pricing Information:** Quotation available upon request.

**Availability:** Project dependent.

**Support:** Project dependent.

## APACS Process Supervisor

**Company:**

**Moore Products Co.**
Sumneytown Pike
Spring House, PA 19477
USA

Telephone: +1-215-646-7400 x 2403
Fax: +1-215-283-6358

Contact: Steve Young

**Product Description:**

APACS Process Supervisor (APS) is an operator interface within the APACS process control system. The APACS system automates production of products such as chemicals, pharmaceuticals, paper, oil and gas, and energy. The award-winning APACS controller controls production and APS provides a powerful yet intuitive window into plant operations.

In addition to standard RTAP features, APS includes many unique features that reduce the time required to configure and maintain the control system.

These features include:

- Automatic generation of APS's point database and faceplates from the APACS controller's configuration, which eliminates duplicate data entry
- Support of online configuration changes, which simplifies troubleshooting and provides instant feedback on changes

APS is the only operator interface to offer complete, robust integration with industry-leading software. APS offers connectivity to SAP's PP-PI interface through HP's Enterprise Link product, and includes Oil System's PI Historian as an embedded module. APS can also include Wonderware's Direktor batch management software as a fully-integrated module.

**Hardware Supported:**

DEC Alpha AXP and HP PA-RISC workstations

**Pricing Information:**

Available upon request.

**Availability:**

Delivery depends upon project requirements.

**Support:**

International product support, including configuration, installation, and training services.

## NETWORKS Integrated Network Management System

**Company:**

**NORTEL Network Services Management (NSM)**
140 - 13551 Commerce Parkway
Richmond, BC
V6V 2L1 CANADA

Telephone: +1-604-244-4228
Fax: +1-604-276-9152

Contact: Cam Bums

**Product Description:**

NETWORKS is a UNIX®-based, integrated network manager with an open systems architecture. It integrates a variety of operational support systems and network elements in a multivendor environment. Integration gives users an efficient, single point of contact for monitoring and controlling their public-switched, private or cellular telecommunications network.

With NETWORKS, service providers gain a comprehensive set of features and capabilities that can be focused on their operation issues. Included are advanced tools that let operators gather and analyze information quickly, and pinpoint network trouble spots to expedite the repair process. The quick resolution of problems is aided by user-definable graphics, analytical software and management reports that enhance staffing, equipment and facility deployment.

The benefits of the NETWORKS system include a strong, positive impact on the operating company's ability to improve service provisioning, reliability and customer satisfaction, as well as deliver cost reductions and operating efficiencies.

The NETWORKS software architecture consists of a base module of functions and capabilities and a cluster of powerful feature groups from which specific network management solutions are provided.

NETWORKS feature groups include:

- Performance Management
- Fault Management
- Configuration Management
- Security Management

NETWORKS management solutions include:

- Traffic Network Management
- Switch Management
- CCS7 Surveillance
- Configuration Management
- Security Management

The NORTEL Network Services Management (NSM) Division, formerly Prism Systems Inc., was formed in 1990 to create powerful, innovative network and services management solutions that would allow customers to fully realize the potential of their telecommunication networks. The Division, one of BC's largest software developers, employs over 450 people. NSM has offices in Richmond, BC, Missisauga, Ontario, and London, England plus a team of sales people around the world.

**Hardware Supported:**

HP

**Pricing Information:**

Based upon size and extent of application. Determined on an individual quote basis.

**Availability:**

Call for information.

**Support:**

24-hour, 7 days per week support via electronic media.

## Central Energy Management and Control System

**Company:**

**POWER Engineers, Inc.**
3940 Glenbrook Drive
Hailey, Idaho 83333
United States

Telephone: +1-208-788-3456
Fax: +1-208-788-2082

Contact: Bob Samway
Greg Clark

**Product Description:**

The RTAP-based Central Energy Management and Control System (CEMACS) integrates HVAC, lighting, utility and electrical systems throughout a manufacturing campus.

Its primary functions are:

- Collecting real-time energy data
- Displaying energy data in tabular and graphic formats
- Indicating and logging the occurrence of unusual conditions
- Managing curtailment and demand limiting measures
- Archiving energy data for historical reporting and analysis

**Electrical**. Power monitors are used to measure electrical parameters. All primary data is collected and can be trended. PMplus (see next entry) provides power analysis.

**HVAC**. Equipment status, zone temperatures and alarms are monitored.

**Utility**. Flow rates, along with hourly, daily, weekly, monthly and yearly flow totals are reported and graphed.

**Lighting**. Lighting control panel states are depicted graphically.

**Energy Control**. Electrical curtailment and demand limiting control strategies are supported.

**Energy Reporting**. Energy data is archived to a relational database. A Microsoft Access reporting system is available for energy use analysis and reporting.

**Data Acquisition**. A flexible communication architecture enables CEMACS to collect data via PLCs, RTUs or directly from intelligent instruments.

**Hardware Platform:**

HP 9000 Series 700 and DEC Alpha.

**Pricing Information:**

System based.

**Availability:**

Able to support most project schedules, including fast track.

**Support:**

Remote and onsite support tailored to customer need. Comprehensive maintenance for all software components in a system.

**Company:**

**POWER Engineers, Inc.**
3940 Glenbrook Drive
Hailey, Idaho 83333
United States

Telephone: +1-208-788-3456
Fax: +1-208-788-2082

Contact: Bob Samway
Greg Clark

**Product Description:**

POWER Engineers is a multi-disciplinary engineering company which serves both the public and private sectors.

POWER's industrial services include the design and implementation of control systems for:

- Facilities Energy Management and Control
- Electric Generation and Distribution
- Electric Substation Automation
- Oil/Gas Production and Transportation
- Paper Manufacturing
- Water/Wastewater Treatment and Water Distribution

**Non-proprietary Systems**
An HP Channel Partner, IBM Business Partner, DEC VAR and Allen-Bradley Integrator, POWER has broad expertise in the development of non-proprietary control systems. POWER also has experience in traditional SCADA and process control systems.

**RTAP-based EMCS**
POWER offers an RTAP-based Facilities Energy Management and Control System which integrates HVAC, lighting, mechanical and electrical systems. See the previous entry for more information.

**SCADA-GIS**
POWER's Geographic Information Systems group can extend the reach of SCADA beyond operations.

**Services**
POWER's services encompass design, specification, development, integration, training and support. Turnkey solutions are also offered.

**Hardware Platform:**

HP 9000 Series 700 and DEC Alpha.

**Pricing Information:**

Project based.

**Availability:**

Able to support most project schedules, including fast track.

**Support:**

Remote and onsite support tailored to customer need. Comprehensive maintenance for all software components in a system.

## PMplus

**Company:**

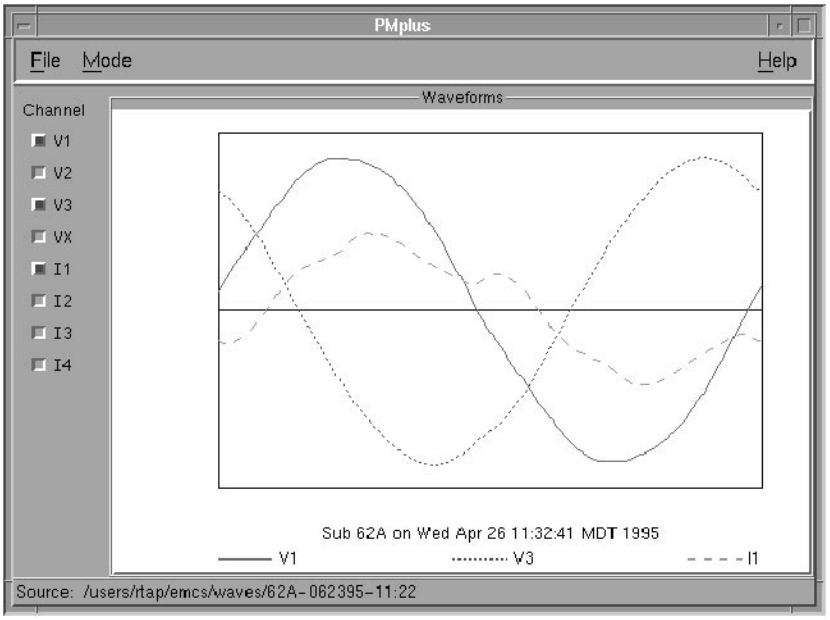
**POWER Engineers, Inc.**
3940 Glenbrook Drive
Hailey, Idaho 83333
United States

Telephone: +1-208-788-3456
Fax: +1-208-788-2082

Contact: Bob Samway
Greg Clark

**Product Description:**

PMplus is a utility used for studying substation voltage and current waveforms. Features include waveform capture, plotting and harmonic analysis. It also prints and plots, as well as saves, retrieves, and deletes waveform data.




**Platforms Supported:**

HP 9000 Series 700 and DEC Alpha.

**Pricing Information:**

$2000

**Availability:**

Immediate.

**Support:**

Remote and onsite.

## Enterprise Link Systems Integrator


**Company:** **Rust International Inc.**
Rust Automated Systems Div.
100 Corporate Parkway
Birmingham, AL 35242
USA

Telephone: +1-205-995-7291
+1-800-433-3465
Fax: +1-205-995-7683

Contact: Bob Gellings

email: RUST-ASD!bgellings@rusteng.attmail.com


**Product Description:**

Rust Automated Systems Division is an integral part of the Enterprise Link solution, participating with HP in the development of the Enterprise Link since July 1994. The company has experience with a wide range of system solutions as well as expertise in implementing systems in all industries. Rust has also brought systems integration skills to the Enterprise Link.

Rust integrates HP's Enterprise Link and SAP's PP-PI module and has developed a "plant—focused" SAP R/3 implementation capability by concentrating on the PP-PI module of SAP. And as an experienced integrator, the company has the hardware and software solutions to meet challenges at any facility with full integration of legacy systems, where required.

Rust became a part of this solutions team due to extensive RTAP integration experience. As an authorized systems integrator, Rust works with HP and SAP to close the gap between business information processing and process control, contributing practical experience to help make it happen.

**Hardware Supported:** All platforms.

**Pricing Information:** Project specific.

**Availability:** Delivery dependent upon project requirements.

**Support:** International customized support plans based upon customer needs.

**Company:**

**Scomagg Ltd.**
Utilities
PSTI Technology Centre
Offshore Technology Park
Exploration Drive
Aberdeen
AB23 8GX
Scotland

Telephone: +44 - (0)1224 - 707700
Fax: +44 - (0)1224 - 707017
Contact: Boyd Ross

**Address 2:**

**Scomagg House**
Crosshill Street
Motherwell
ML1 1RU
Scotland

Telephone: +44 - (0)1698 - 266199
Fax: +44 - (0)1698 - 253672
Contact: Karen Watson

**Product Description:**

Scomagg is a leading Systems Integrator/Software House specializing in business critical control, supervisory and management information systems based on RTAP.

Scomagg offers complete turnkey capabilities including:

- Consultancy, feasibility studies
- Project management
- System/detailed design
- Hardware and software
- Integration, test
- Installation, commissioning
- Training
- Comprehensive support

With considerable expertise in all applications relating to the oil, gas and power generation industries, Scomagg provides innovative, cost-effective solutions and well-engineered, reliable systems. All work is undertaken in accordance with a quality regime to ISO 9001 and ISO 9000-3.

**Hardware platforms:**

HP, Digital

**Pricing information:**

Projects are performed on either a fixed price or time-and-materials basis. Scomagg is committed to offering quality solutions at competitive prices.

**Availability:**

Time per project varies according to the nature and scope of work.

**Support:**

Scomagg performs projects worldwide. Complete training is provided and online support options are also available.

## G2-RTAP Bridge

**Company:**

**Siemens AG**
Industrial and System Group
Technical Services
ANL A45 TK
PO Box 3240
91050 Erlangen
Germany

Telephone: +49-9131-7-42239
Fax: +49-9131-7-42477
Contact: Rene Kwol

email: rene.kwol@erlm.siemens.de

**Siemens AG**
Industrial and System Group
Systems and Software House
ANL TD SSH 4
Franz-Geuer-Strasse 10
50823 Koeln
Germany

Telephone: +49-221-576-2723
Fax: +49-221-576-2877
Contact: Klaus Herfurth

email: 100144.1221@compuserve.com

**Product Description:**

Siemens has implemented advanced control solutions based on Gensym's G2 software for leaders in the automotive, cement, chemical, metals, petroleum, and pulp and paper industries.

The G2 knowledge-based software tool is mainly used for the automation of complicated control tasks. Due to the G2-RTAP Bridge, it is possible to exchange data in a simple way between these two systems. The communication is based upon the Client-Server model and uses the TCP/IP protocol.

The complete GSI-RTAP configuration and parameter assignment is embedded in the G2 user interface. Therefore, it is not necessary for the operator to acquire any additional knowledge. The only requirement for the application is that data type, variable names and attribute type coincide with the configured labels of the RTAP components.

The functional scope of the GSI-RTAP interface is management of interface variables, read and write properties of variables, and the establishment and releasing of connections.

**Hardware Supported:** HP

**Pricing Information:** DM 9.800,—

**Availability:** Immediate.

**Support:** Consulting, integration, installation, hotline.

## PROVISOR Production Scheduler

**Company:**

**Siemens Nixdorf**
Informationssysteme AG
GE Proze-industrie
Competence Center
Brinkmann
Schwannstrasse 10
40476 Duesseldorf
Germany

Telephone: +49-211-474-2155
Fax: +49-211-474-2185
Contact: Harald Volker

**Siemens AG**
Industrial and Buildings
Systems Groups
Systems and Software House
ANL TD SSH 4
Franz-Geuer-Strasse 10
50823 Koeln
Germany

Telephone: +49-221-576-2723
Fax: +49-221-576-2877
Contact: Klaus Herfurth

email: 100144.1221@compuserve.com

**Product Description:**

PROVISOR is a production scheduling package conceived for the process industry. PROVISOR enables the user to plan resources (raw materials, plants, people) and schedule the production processes. PROVISOR meets the specific needs and constraints of industry and clients during planning. It connects the enterprise-management level with the process-control floor.

Features:

- Client-server architecture
- Database-oriented
- Graphic screens (e.g., GANT charts)
- UNIX-based

The software can easily be tuned to the customer's specifications by using tools and algorithms.

The RTAP Database is the primary solution for connecting the PROVISOR scheduler to the process environment.

**Hardware Supported:**

HP, IBM, DEC, SNI

**Pricing Information:**

Pricing is based upon size and extent of application. Quotations are provided based upon analysis of requirements.

**Availability:**

Dependent upon complexity of the project.

**Support:**

SNI/Siemens offers a complete range of services to help customers develop, deploy and maintain their software systems, including user training, application consulting, interface development and telephone support.

## TELEPERM M CS275-Scantask/Plus

**Company:**


**Siemens AG**
Process Automation, Test and Measurement Systems
AUT V 381
Siemensallee 84
76181 Karlsruhe
Germany

Telephone: +49-721-595-2761
Fax: +49-721-595-6390
Contact: Guido Neuss

**Siemens AG**
Industrial and Buildings Systems Groups
Systems and Software House
ANL TD SSH 4
Franz-Geuer-Strasse10
50823 Koeln
Germany

Telephone: +49-221-576-2723
Fax: +49-221-576-2877
Contact: Klaus Herfurth

email: 100144.1221@compuserve.com


**Product Description:**

The Siemens, TELEPERM M distributed process control system (DCS) consists of functionally different components which are optimised for the various demands encountered in process automation:

- AS automation systems
- OS operation and monitoring systems
- CS 275 bus system

The CS 275 bus system is responsible for communication between all TELEPERM M components and to components of other systems. Siemens provides the CS275-Scantask/Plus for the communication of the RTAP database with the TELEPERM M DCSs via the CS 275-bus system. The part of the software specific to the CS 275-bus system is a real-time compatible STREAMS module according to the UNIX standard System V.4. The following coupling partners are supported:

- AS230 and AS230K automation systems
- AS235, AS235K and AS235H automation systems
- AS220 and AS220H automation systems for telegram types“AKS” and “MKS”
- SIMATIC S5-155U programmable controllers with CPU 948

For high performance communications, the workstation is connected to the CS275-bus system via the local bus interface N-AT.

The CS 275-Scantask supports the following coupling functions:

- Reception of analog and binary values (AKS, BKS and MKS telegrams)
- Reading of parameters from an AS automation system and writing of parameters into an automation system

The CS 275-Scantask Plus supports the following additional functions:

- Reception of BST telegrams (status of functions)
- Reception of alphanumeric text messages (KLT SYS, KLT BED and KLT MEL telegrams)

## TELEPERM M CS275-Scantask/Plus (cont'd)

**Hardware Supported:** HP 9000 Series 700. An EISA-Slot must be available for the N-AT interface card.

**Pricing Information:** CS 275-Scantask: DM 29.500,—
CS 275 Scantask Plus: DM 36.500,—

**Availability:** Immediate.

**Support:** Siemens AG, ANL TD SSH 4, Koeln.

## Integration Services

**Company:**

**Siemens AG**
Industrial and Buildings
Systems Groups
Systems and Software House
ANL TD SSH 4
Franz-Geuer-Strasse10
50823 Koeln
Germany

Telephone: +49-221-576-2723
Fax: +49-221-576-2877

Contact: Klaus Herfurth

email: 100144.1221@compuserve.com

**Product Description:**

Siemens offers the full service of a system integrator —from field actuator to PLC and DCS systems to RTAP-based SCADA systems to host-based applications such as SAP R/3. With a strong background in complete plant automation, Siemens offers all types of service concerning plant automation.

With a long relationship using HP Workstations and RTAP, Siemens is experienced in the design and implementation of control systems for the chemical industry, the glass manufacturing industry, for water/ waste water treatment and in scan task design.

Our staff of 200 in Koeln and in similarly-structured subsidiaries worldwide nearing 20,000 people can offer you all types of support — from turnkey systems to specific RTAP applications, and specialized solutions such as linking to a specific type of PLC system.

**Hardware Supported:**

We have experience with several different UNIX variants from HP and SNI, as well as the integration of heterogeneous networks with MS DOS and Windows-based systems.

**Pricing Information:**

Pricing is based upon size and extent of application. Quotations are provided based upon analysis of requirements.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance worldwide, and full post-installation support.

**Company:**

**Sinformat S.r.l.**
Via Le Merilli 303
20099 Sesto San Giovanni MI
Italy

Telephone: +39-02-2622 0111
Fax: +39-02-2622 1062

Contact: P. Cederle

**Product Descriptions:**

**Yokogawa Hybrid Recorder**
Yokogawa Hybrid Recorder Scan Task provides device-dependent routines to allow integration of Yokogawa Hybrid Recorder in RTAP.

**Siemens PLC SIMATIC S5**
Siemens Simatic Scan Task provides routines to allow communication between RTAP environment and Siemens PLC through asynchronous cards CP524/525 with protocol 3964R FETCH and SEND telegrams (<128 data bytes) on Data Words are supported.

**Waugh Microblender 2200A**
Scan Task device dependent routines to allow integration of WAUGH Microblender 2200A in RTAP.

**Eurotron P900 PID**
Scan Task to RS-232C interfacing between RTAP and Eurotron P900 controllers.

**Mettler Balance**
Mettler Scan Task provides device dependent routines to allow integration of every type of Mettler Balance equipped with RS-232C interface in RTAP.

**Hardware Supported:** HP

**Pricing Information:** Call for information.

**Availability:** Call for information.

**Support:** Call for information.

## Integration Services

**Company:**

**Sinformat S.r.l.**
Via Le Merilli 303
20099 Sesto San Giovanni MI
Italy

Telephone: +39-02-2622 0111
Fax: +39-02-2622 1062
Contact: P. Cederle

**Product Description:**

SINFORMAT is an engineering company that designs and develops "information systems" for production, utilities and technological plants.

SINFORMAT offers solutions within Open System Philosophies that make engineering methodologies an outstanding system for developing products with characteristics such as reliability, flexibility, ease-of-use, opening and integrability.

Only in this way can we develop tailored systems per customer needs, while keeping in mind the full integration of the company and staying in line with market standards.

To reach these targets in monitoring and controlling fields, we use HP RTAP especially for its flexibility and adaptability.

SINFORMAT designs the total system from project conception to the definition of all the components (hardware and software) and sees it through to implementation. Sinformat also supports the system through integration with other systems.

SINFORMAT has acquired specific experience in the following fields:

- Planning and integration systems
- Data acquisition and production line control
- Monitoring
- Planning and control plants
- Systems for environmental telesurvey and telecontrol
- Laboratory management automation

Market applications include petrochemical, chemical, oil and gas, pharmaceutical, cosmetics, mass production, manufacturing automotive, train electrical production and telecommunication.

**Hardware Supported:**

HP

**Pricing Information:**

Pricing dependent upon the complexity of each project and can be rated daily or on a quotation basis.

**Availability:**

Dependent upon the complexity of the project.

**Support:**

Based on complexity of the project and in accordance with the customer's needs.

## CIC XAR2/4 Communication Intelligent Controller

**Company:**

**Sistemas Electricos de Potencia Automatizacion y Control, SA De CV (SEPAC)**
Fundidores #2, Fracc. Ind. Xhala
Cuautitlan Izcalli,
Estado de Mexico
54840, Mexico

Telephone: +1-525-872-4888
Fax: +1-525-872-4065

Contact: Guillermo Villegas

**Product Description:**

The CIC XAR2/4 can be used in any application requiring SCADA properties such as electrical utilities, gas, pipelines and any industry requiring remote-controlled systems.

Many companies today have a large installed base of remote terminal units controlled by a dispatch center. In many cases, replacing the SCADA system involves high cost and long-term replacement. The CIC XAR2/4 is an intelligent front-end processor that handles all communications and functions independently, freeing the main processor from this demanding load.

The CIC XAR2/4 has a specialized real-time database that constantly scans by its ports, refreshing its database. When something changes, it informs the processor that is running RTAP of the change through LAN messages, significantly reducing the traffic of real-time information at the lowest levels. It simultaneously handles up to 32 ports —even ports with different protocols.

Some users who need an upgrade for their dispatch center also need to communicate with several RTUs of different protocols. Our experience lets us offer channels that handle protocols such as DNP 3.0, Harris 5000, Telegyr from Landis & Gyr, and Conitel 2020 from Leeds & Northrup. Our professional team of software developers continually releases new protocols, and also develops specific protocols in very short order.

If you need equipment to connect your RTAP system to SCADA worlds, we can provide it quickly, without having to develop communications drivers that demand more computing power of your equipment. We also manufacture remote terminal units.

**Hardware Supported:**

Any system supporting Arcnet or Ethernet.

**Pricing Information:**

Available upon request, project specific.

**Availability:**

Dependent upon project requirements.

**Support:**

International product support includes configuration, installation and training services in English, Spanish or French.

**Company:**

**SYSECA**
ZI Nord - BP 11
283 rue de la Miniere
78543 Buc Cedex
France

Contact: See the support section below for local contacts within the SYSECA group of companies.

**Product description:**

SYSECA has adopted Hewlett-Packard's RTAP as the key component in their portfolio. The SYSECA-RTAP Supervisor provides the supervisory node(s) in distributed monitoring and control applications. These systems typically provide for both locally distributed and wide area control systems encountered in power generation, transmission and distribution; oil and gas production and pipelines; transportation (trains, trams and buses); water treatment and distribution; and process and manufacturing industries.

SYSECA's added value is experience gained through the application of RTAP to all these industries and the reusability of much of the software developed for a large customer base.

The SYSECA portfolio of software products provides a number of layered enhancements to RTAP which can be used alone or in combination. SYSECA is committed to the maintenance of this software to the latest release of RTAP and related software. The RTAP extensions are available to (and have been implemented by) third party integrators as well as by SYSECA. Enhancements include:

- High availability systems
- Database generation tools which provide a single point of configuration for both RTAP and related plant databases
- User interface enhancements for DCS and SCADA applications
- SQL interpreter for RTAP database
- Extensive library of scan tasks for RTUs, DCS controllers and plant I/O

**Hardware Platform:**

HP, Sun, DEC

**Pricing Information:**

Quotation available upon request.

**Availability:**

Immediate.

**Support:**

SYSECA provides extensive support including training, software maintenance and consultancy.

International support is provided through the SYSECA and Thomsom CSF group of companies:

SYSECA SA, France
Tel: 331 4148 0000
Contact: J. L. Larraud

SYSECA Inc., USA
Tel: 1 310 301 9040
Contact: K. Pourzanjani

Ferranti SYSECA Ltd., UK
Tel: 161 936 1001
Contact: D.A. James

Kyat-SYSECA, Spain
Tel: 341 556 9252
Contact: S. Bigard

SYSECA GmbH, Germany
Tel: 49 61 34 293 312
Contact: W. Eberlei

Thompson Software Asia Ptc., Singapore
Tel: 65 479 6522
Contact: F. Fontanier

## Supervisor

**Company:**

**SYSECA**
ZI Nord - BP 11
283 rue de la Miniere
78543 Buc Cedex
France

Contact: See the support section below for local contacts within the SYSECA group of companies.

**Product description:**

The Supervisor is a number of layered enhancements to RTAP for use in SCADA and distributed control applications. The enhancements can be used alone or in combination. SYSECA is committed to the maintenance of this software to the latest releases of RTAP and related software, which makes it suitable for implementation by other integrators.

The SYSECA portfolio of software products provides a number of layered enhancements to RTAP which include:

- High availability systems — normally implemented as dual redundant, fast changeover systems, but are also available in quasi-parallel mode with standby processing locked to that of the online.
- Database generation tools which enable single point of configuration for both RTAP and related plant databases. A relational database contains configuration details of the RTAP database and all related databases. This approach avoids the necessity of tying the structure of the RTAP database to that of any associated system such as DCS controllers.
- A sophisticated alarms and events management, annunciation and presentation package.
- User enhancements for DCS and SCADA applications, particularly:
  - user security management system
  - data archival and retrieval
  - faceplates for DCS applications automatically generated from RTAP database reflecting plant rather that control structure
  - user desktop tools
- Extensive library of scan tasks for RTUs (e.g., MARK3 / MARK4 RTUs), DCS controllers (e.g., APACS) plant I/O (e.g., Mitsubishi) and related third party applications (e.g., OIS and G2)
- SQL tools (described separately)

**Hardware Platform:**

HP, Sun, DEC

**Pricing Information:**

Quotation available upon request.

**Availability:**

Immediate.

**Support:**

International support is provided through the SYSECA and Thomsom CSF group of companies listed on page 49.

## SYSECA OQL

**Company:**

**SYSECA**
ZI Nord - BP 11
283 rue de la Miniere
78543 Buc Cedex
France

Contact: See the support section below for local contacts within the SYSECA group of companies.

**Product description:**

OQL is the acronym for SYSECA Open Query Language. OQL is an easy-to-use language interpreter which enables users to query the RTAP database using the standard SQL language. OQL includes a series of reporting, interconnectivity and database query tools products layered on RTAP.

The major benefits of OQL products are:

- Improved end user productivity tools through enhanced report generation tools
- Scripting language based upon standard SQL
- Easy RTAP database manipulation and management
- Easy integration with relational databases
- Enable SQL queries of RTAP databases from PC applications such as Excel, Lotus 1-2-3, Visual Basic, etc.

The OQL products transform the RTAP hierarchical structure into a friendly relational database. Flexible reporting and ad hoc queries are available not only to engineers, but also to end users. The SQL UPDATE syntax is supported and enables RTAP database amendments to be performed subject to the usual user security allowance.

The particular OQL products are:

- **AskOQL**, the online ad hoc query builder, allows output to be redirected to printers or files.
- **LinkOQL** brings client/server technology to the RTAP real-time database. LinkOQL enables IBM PCs or Macintosh PCs to access RTAP directly using SQL queries. Typical applications are Excel, Lotus 1-2-3, Visual Basic or any DDE/ODBC-aware client.
- **ReportOQL** brings state-of-the-art graphic and text reporting capabilities to RTAP. Report OQL integrates the Informix Hypertext spreadsheet/report generation tools with OQL.
- **OraOQL** enables RTAP databases to be integrated with the Oracle relational database. It provides the translation from the hierarchical RTAP attributes onto the Oracle tables. This bidirectional transfer is defined using SQL.

**Hardware Platform:**

HP, Sun, DEC

**Pricing Information:**

Quotation available upon request.

**Availability:**

Immediate.

**Support:**

International support is provided through the SYSECA and Thomsom CSF group of companies listed on page 49.

## Network Information Management Systems (NIMS)

**Company:**

**SYSECA**
ZI Nord - BP 11
283 rue de la Miniere
78543 Buc Cedex
France

Contact: See the support section below for local contacts within the SYSECA group of companies.

**Product description:**

NIMS provides a complement to the traditional RTAP UIP by providing a GIS-type user interface as well as the integration capability of the usual RTAP panel and hotspot functionality. In addition to displaying data from RTAP databases, it may also be integrated to provide a seamless user interface.

The network topology can be represented by either a logical or geographic representation, or a combination of the two. The user can then pan and zoom around the network using a number of navigational tools and view levels of data appropriate to the picture displayed.

The network topology can be defined using the NIMS graphical editor or imported from one of the common CAD packages and subsequently amended using the NIMS editor.

Industry-specific operation and modeling applications are normal features of practical NIMS implementations. The NIMS product is a designed specifically for the management of networks operated by the following industries:

- Electricity transmission and distribution
- Oil and gas pipeline networks
- Water
- Telecommunications

**Hardware Platform:**

HP, Sun, DEC

**Pricing Information:**

Quotation available upon request.

**Availability:**

Time between receipt of order and system delivery depends upon the level of configuration and customization required.

**Support:**

International support is provided through the SYSECA and Thomsom CSF group of companies listed on page 49.

## Integration Services

**Company**:

**Systems Interface Inc.**
22125 17th Avenue SE
Suite 111
Bothell, WA 98021
USA

Telephone: +1-206-481-1225
Fax: +1-206-481-2115

Contact: Larry Johnson

email: sii@halcyon.com

**Product Description:**

Since 1984, Systems Interface Inc. has furnished industrial control systems for industrial manufacturing and consumer product companies throughout North America. During the last 11 years, the company has grown at approximately 20% per year and the capabilities have grown substantially.

Today, Systems Interface Inc. is proud to offer the following services:

- Electrical Engineering Consulting
- Process Instrumentation
- Project Management
- Bar Code Warehousing Systems
- Computer-aided Design
- Programming
- Field Service
- Construction Management
- SCADA System Services
- Industrial Control Panel Manufacturing in UL- and ETL-certified shop

These services have been performed in many different industries including food & beverage, mining & metals, maritime, forest products, pulp & paper, petrochemical, nuclear waste processing, and water and wastewater treatment.

Systems Interface Inc. has implemented SCADA systems as large as seven HP-RTAP workstations connected to two HP-9000 servers, twelve PCs, twenty-nine PLCs and sixteen bar code scanners for a Department of Energy nuclear waste processing facility.

**Pricing Information**:

Available upon request.

**Availability**:

Immediate.

**Support:**

Telephone consultation, field support, installation, onsite maintenance and commissioning are all available as required. Customized support is available as well.

## SUCCES User Interface

**Company:**

**TEC Ingenierie**
1 avenue Albert Einstein
BP 106
78 191 TRAPPES Cedex
France

Telephone: +33 1 30 66 27 62
Fax: +33 1 30 66 27 90

Contact: Frederic Bobot
Philippe Lagache

**Product Description:**

Since the dialog between an operator and his machine is an important part of computer integrated manufacturing, SUCCES User Interface runs on fully-configurable control stations designed to accept all of the user's know-how and control experience —in a user friendly manner.

SUCCES User Interface is fully compatible with Hewlett-Packard's RTAP.

Standard display tools are integrated in this user interface module as well as the following added functionalities:

- Multi-screens configurable control stations
- Interface level users access security
- Online operators changes (re-login)
- Integration of alarm displays into standard panels
- Integration of plots into standard symbols and schematics
- Control of the efficiency of commands

Different types of events are configurable for use in control panels widgets, graphic primitives and symbols (object creation, value changes in the database, mouse or keyboard actions ...). Actions are triggered by those events and can be conditional and iterative. Configuration of events and subsequent actions is done with the standard RTAP configuration tools.

**Hardware Supported:**

HP 9000

**Pricing Information:**

Call for current pricing.

**Availability:**

Immediate.

**Support:**

Complete system and application support is available.

## RTAP to RTAP Scan Task


**Company:** **TEC Ingenierie**
1 avenue Albert Einstein
BP 106
78 191 TRAPPES Cedex
France

Telephone: +33 1 30 66 27 62
Fax: +33 1 30 66 27 90

Contact: Frederic Bobot
Philippe Lagache


**Product Description:** The RTAP to RTAP Scan Task allows a local RTAP database to communicate with a remote RTAP database as if it were a standard PLC.

As with standard scan tasks, users can configure up to 32 poll cycles and read from the remote database using any combination of those cycles. The scan input table contains the list of input values which can be scalars and full or subsets of vectors or tables. The quality of remote values is managed and transmitted to the local database. Values can also be sent from the local database to the remote database on event.

**Hardware Supported:** HP 9000; other platforms available upon request.

**Pricing Information:** Call for current pricing.

**Availability:** Immediate.

**Support:** Complete system and application support is available.

## SUCCES Building Blocks

**Company:** **TEC Ingenierie**
1 avenue Albert Einstein
BP 106
78 191 TRAPPES Cedex
France

Telephone: +33 1 30 66 27 62
Fax: +33 1 30 66 27 90

Contact: Frederic Bobot
Philippe Lagache

**Product Description:** TEC Ingenierie provides sets of building blocks for different types of applications, allowing users to easily assemble those blocks into a complete application.

Each building block is composed of five parts:

- Database point
- Related general symbol
- Related detailed symbol
- Related control panel
- Related simulation program

Users simply select template points to build the database structure, then combine symbols and panels to build the user interface.

Two main building block modules are planned at this time:

- Process control building blocks — valves, pumps, engines, tanks, transducers, regulators, conveyors ...
- Utilities control building blocks — electricity control, water control, energy counters, circuit breakers

**Hardware Supported:** HP 9000; other platforms available upon request.

**Pricing Information:** Call for current pricing.

**Availability:** Immediate.

**Support:** Complete system and application support is available.

## SUCCESS Radio Messages

**Company:**

**TEC Ingenierie**
1 avenue Albert Einstein
BP 106
78 191 TRAPPES Cedex
France

Telephone: +33 1 30 66 27 62
Fax: +33 1 30 66 27 90

Contact: Frederic Bobot
Philippe Lagache

**Product Description:**

Based upon the European ERMES radio communication system, the SUCCES Radio Messages allow users to send text format messages to a mobile pager through an ERMES-compatible message server.

The software establishes a connection with ERMES-compatible message servers through a standard telephone modem. The system then dials the server's telephone number, establishes the communication, and sends the message of up to 9000 characters. Once the message is sent, the telephone line is released.

Three types of messages are supported:

- User-defined
- Text file
- Named pipe

When using a named pipe, the system establishes the telephone connection when receiving the first message. Incoming messages are transmitted directly when the communication link is established. The system hangs up the line automatically after a configurable timeout (without any incoming message) and waits for the next message before re-establishing the telephone line.

Sending standard RTAP alarm system messages to a named pipe connected to the radio messages module allows users to have permanent information about problems in the process.

**Hardware Supported:**

HP 9000; other platforms available upon request. Any Hayes-compatible modem.

**Pricing Information:**

Call for current pricing.

**Availability:**

Immediate.

**Support:**

Complete system and application support is available.

## SUCCES Process Simulation

**Company:**

**TEC Ingenierie**
1 avenue Albert Einstein
BP 106
78 191 TRAPPES Cedex
France

Telephone: +33 1 30 66 27 62
Fax: +33 1 30 66 27 90

Contact: Frederic Bobot
Philippe Lagache

**Product Description:**

The SUCCES Process Simulation Module is an object-oriented structure that allows users to simulate classwide the behavior of equipment into an RTAP database.

Users simply develop pieces of C++ software to be integrated into the Process Simulation Module to simulate equipment. All the database access configuration and polling is done by the Process Simulation Module.

At run time, the Process Simulation Module reads the database hierarchy. Once the appropriate software is developed, the system will execute this software for each database point of this particular class for each RTAP-defined point class.

The Process Simulation Software allows users to simulate and test the whole activity of an RTAP environment before integrating it onsite.

**Hardware Supported:**

HP 9000; other platforms available upon request.

**Pricing Information:**

Call for current pricing.

**Availability:**

Immediate.

**Support:**

Complete system and application support is available.

## Integration Services

**Company:**

**TEC Ingenierie**
1 avenue Albert Einstein
BP 106
78 191 TRAPPES Cedex
France

Telephone +33 1 30 66 27 62
Fax: +33 1 30 66 27 90

Contact: Frederic Bobot
Philippe Lagache

**Product Description:**

Integrating RTAP with other software, building network environments and building complete applications including PLC programming is one of our missions.

Our specialists have built a strong methodology to complete projects in the best conditions of maintenance and *evolutivity*.

TEC analyzes client needs through appraisal, feasibility studies, advancing solutions, investment costs, operating costs and profitability assessment. TEC then offers the services needed to ensure project execution with regard to quality standards and budget.

After years of using and integrating RTAP on numerous projects, TEC Ingenierie's expertise in RTAP is now available in various forms:

- French-speaking training sessions
- Onsite training sessions
- Help on RTAP projects' startup
- Staff detachment
- Hotline
- Telemaintenance through telephone modems

**Hardware Supported:**

All.

**Pricing Information:**

Call for current pricing.

**Availability:**

Immediate.

**Support:**

Complete system and application support is available.

## ASCII Terminal Display

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

Several ASCII terminal display packages are available. These include a Current Alarms Display, Historical Alarms Display and a Database Point Display.

Each product is available independently and for a number of different types of terminals. The Database Point Display is useful for displaying and debugging databases from a dial-up line.

tesserNet can provide custom terminal displays at cost-effective prices. These displays include pull down menus, checkboxes, and in some cases, can “autoconfigure” as points are added to the database.

**Hardware Supported:**

HP 9000 Series 700/800

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

**Marketing Agents:**

Companies located in Europe, the former USSR, the Middle East and the Far East should direct their inquiries to:

Logica BV
Wijnhaven 69, Postbus 22067
3003 DB Rotterdam
The Netherlands

Telephone: +31-10-4 33 08 44
Fax: +31-10-4 33 14 47
Contact: Ged Roberts
Aryan Mohlmann

## C++ Interface

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The C++ Interface provides a layer on top of RTAP that allows the programmer to easily use C++ with RTAP. The interface is separated into five objects: an RTAP object, database object, timekeeper object, event manager object, and scan system object.

This interface can substantially reduce the amount of code required to program with RTAP. The database object, for example, reduces a scalar read/write to four lines of code with error checking.

**Hardware Supported:**

HP 9000 Series 700/800.

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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Aryan Mohlmann

## RTU Error Statistics

**Company:**

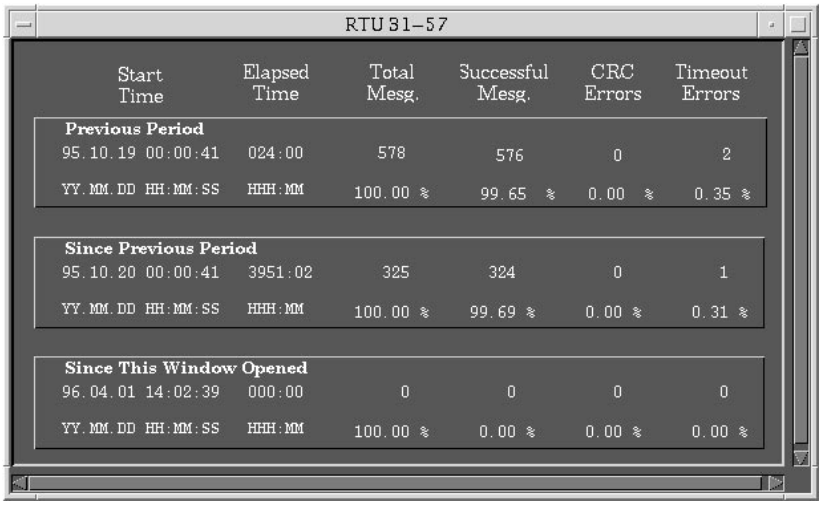
**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The RTU Error Statistics Module provides a user display, report and statistics gathering for any RTAP driver that supports the device statistics vector. The module can be configured to gather total attempts and any other three error conditions (typically CRC, Time-out, and Total Fails). It supports multiple RTU types and autoconfigures as RTUs and communication ports are added and deleted with no loss of data. The module can handle up to 7 different periods of recorded data. The periods can vary in length.

The user can display 10 RTUs simultaneously in separate windows. The following diagram shows the user display window.




**Hardware Supported:**

HP 9000 Series 700/800.

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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Contact: Ged Roberts
Aryan Mohlmann

## Leak Detection

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The Leak Detection Module provides a volumetric leak detection. It consists of a configurator and a manager. The module supports the definition of any number of pipeline segments with individual meter definitions for each segment. The module calculates the leak detection over any number of intervals (for example, 1 minute, 10 minutes, etc.)

The current calculation uses the total input less the total output during the period to calculate for any leaks. The package can be extended to support more complicated leak detection algorithms by changing the CE function.

**Hardware Supported:**

HP 9000 Series 700/800

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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Aryan Mohlmann

## Main Menu Bar

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The Main Menu Bar Module provides a pull-down interface for use in an RTAP environment. The menu bar supports up to 12 menus and 25 items in each menu. The menu bar provides login capability and execution ability based on the RTAP security groups defined for the database. The security mechanism provides the ability to define which items are executable by any particular user. It also requires that a user be logged in to run RTAP processes, thereby allowing programs to detect the appropriate user.

The Main Menu Bar Module provides a configurator to configure menu items and set the security of each menu item.

**Hardware Supported:**

HP 9000 Series 700/800

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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Aryan Mohlmann

## RTU Scan System Controller

**Company:**

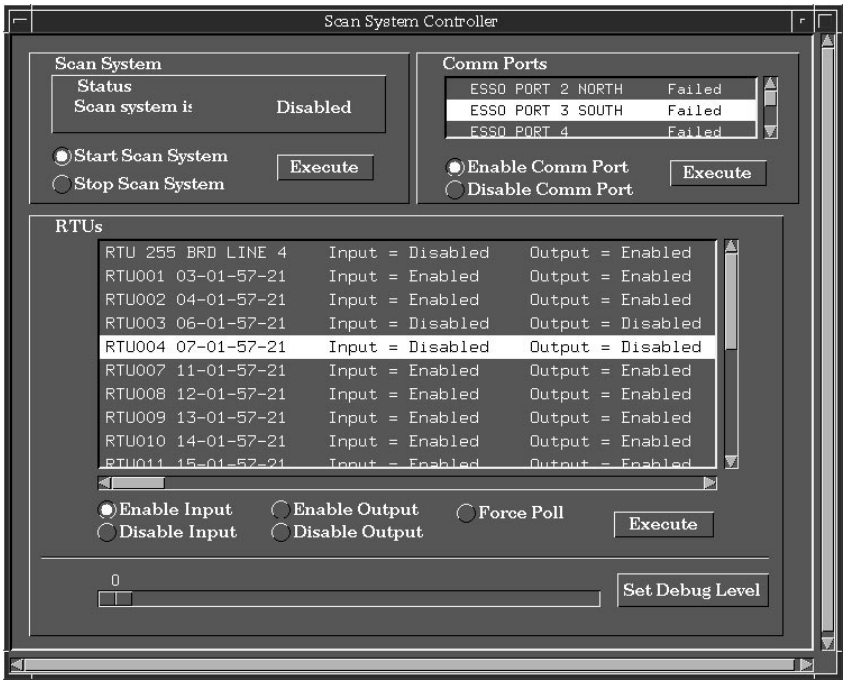
**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261

Contact: Gary Biagioni

**Product Description:**

The RTU Scan System Controller provides a user display interface that can control any RTAP RTU driver. The module allows the user to enable or disable the scan system, enable or disable individual communication ports and control RTU polling. The user can enable or disable the input or output of an RTU or force a poll of an RTU. The following diagram shows the user interface.




**Hardware Supported:**

HP 9000 Series 700/800

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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Contact: Ged Roberts
Aryan Mohlmann

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261

Contact: Gary Biagioni

**Product Descriptions:**

**Bailey Network 90 Scan Task**
The Bailey Network 90 Scan Task provides the ability to poll a Bailey Controls Computer Interface Unit (CIU) for data. This is provided as a standard RTAP RTU scan task.

The driver establishes the point index list in the CIU upon initialization. Points may be left connected or disconnected between each scan, thereby allowing control of the Network 90 communications load.

**DDE Scan Task**
The Dynamic Data Exchange (DDE) Scan Task provides a bidirectional link between RTAP and a DDE Application. The DDE Application may be in a remote node on another type of processor, typically MS Windows.

Data can be moved in either direction at timed intervals. It supports all standard DDE messages. Loads on the real-time system can be controlled through configuration.

**DMS-2 Scan Task**
The DMS-2 Scan Task provides a link to data from DMS-2 power monitors. Data can be retrieved at timed intervals. It supports all data values returned from the DMS-2 power monitor.

**DNP Scan Task**
The DNP Scan Task provides the ability to poll a device that supports the DNP 3.0 protocol. This is provided as a standard RTAP RTU scan task.

The following set of objects are supported:

- Binary input, all variations
- Binary input change, all variations
- Binary output status, all variations
- Control relay output block, variation 01
- Pattern control block, variation 02
- Pattern mask, variation 03
- Binary counters, all variations
- Frozen counters, all variations
- Counter change events, all variations
- Frozen counter change events, all variations
- Analog input, all variations
- Frozen analog input, all variations
- Analog change event, all variations
- Frozen analog event, all variations
- Analog output status, all variations
- Analog output, all variations
- Time and date, variation 01
- Time and date with interval, variation 02
- Time and date — common time of occurrence, all variations
- Time delay, all variations

**Product Descriptions:**

### Fisher Provox CHIP Scan Task

The Fisher Provox Chip Scan Task provides the ability to interface RTAP to a Provox Distributed Control System (DCS). The interface is provided as a standard RTAP RTU scan task that is used in conjunction with a CHIP database and Network Interface Unit (NIU).

The scan task provides the ability to move data between the DCS and RTAP or RTAP and the DCS. Typical applications have used an RTAP system as a front end SCADA system which provides remote data on the DCS consoles for operator viewing and control. In addition, the RTAP system has been used to provide high level services such as data conversion or leak detection that could not be easily provided on the DCS system.

### Landis and Gyr (Telegyr) Scan Task

The Landis and Gyr Scan Task provides the ability to poll a device that supports the Telegyr protocol developed by Landis and Gyr. This is provided as a standard RTAP RTU scan task. The scan task supports:

- All reporting functions
- All change reporting functions
- Grouping of analogs for configuration
- Grouping of analogs for polling
- SOE log reporting
- All output functions
- RTU configuration
- RTU restart
- Analog deadbands
- Firmware poll
- Table read/write

### Modbus Master (Enhanced) Scan Task

The enhanced Modbus Master Scan Task implements the Modbus master protocol. This is provided as a standard RTAP RTU scan task.

The protocol has been enhanced to provide data movement of floating point and 32-bit integers in the standard protocol function codes. In addition, with the use of special registers, a PRBX mode can be supported.

### Modbus Plus Scan Task

The enhanced Modbus Plus Master Scan Task implements the Modbus Plus protocol. It supports full network communication paths. This is provided as a standard RTAP RTU scan task.

The protocol has been enhanced to provide data movement of floating point and 32-bit integers in the standard protocol function codes. In addition, with the use of special registers, a PRBX mode can be supported.

The use of this scan task requires the installation of an SA/85 card from Modicon in an EISA slot in the host computer.

**Product Descriptions:**

**Modbus Slave (Enhanced) Scan Task**
The Modbus Slave Scan Task implements the Modbus slave protocol. The protocol has been enhanced to provided data movement of floating point and 32-bit integers in the standard protocol function codes. Several PLCs can be simulated in one RTAP system.

Typical applications have been in system replacements in which a master device exists and polls for information from the RTAP system or in using an RTAP system to act as a data concentrator.

**Oracle Interface**
The Oracle Interface provides a bidirectional link between RTAP and an Oracle database. The Oracle database may be resident on the RTAP database server or may be in a remote node on another type of processor.

Several types of cross references can be made with each cross reference being used on multiple points in the RTAP database. Each cross reference is applicable to a particular table in the Oracle database. This allows the setup of a cross reference for each point typed in an RTAP database to a point table in the Oracle database.

Data can be moved in either direction at timed intervals.

**ROC-300 (Fisher RTU) Scan Task**
The ROC-300 scan task implements the protocol required to communicate with a Fisher controls ROC RTU. This is provided as a standard RTAP RTU scan task.

The scan task has been implemented such that a debug output is available. The debug output shows the protocol output and input bytes and can be turned off and on for individual RTUs.

**Scan Task Mux**
The Scan Task Mux is a software multiplexer that allows multiple scan tasks to communicate out the same physical communication port. Each scan task talks through a slave side of a pseudo-terminal device pair. The scan task mux receives requests and sends responses through the master side of a pseudo-terminal device.

**TRW Scan Task**
The TRW Scan Task provides the ability to poll a device that supports the TRW S-70 protocol. This is provided as a standard RTAP RTU scan task.

The S-70 protocol is implemented as an asynchronous protocol due to hardware requirements of the HP computers. A conversion device to the synchronous protocol is available.

**Hardware Supported:** HP 9000 Series 700/800

**Pricing Information:** Call for information.

**Availability:** Immediate.

**Support:** Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

**Marketing Agents:** Companies located in Europe, the former USSR, the Middle East and the Far East should direct their inquiries to:

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Wijnhaven 69, Postbus 22067
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Fax: +31-10-4 33 14 47

Contact: Ged Roberts
Aryan Mohlmann

## Database Builder

**Company:**

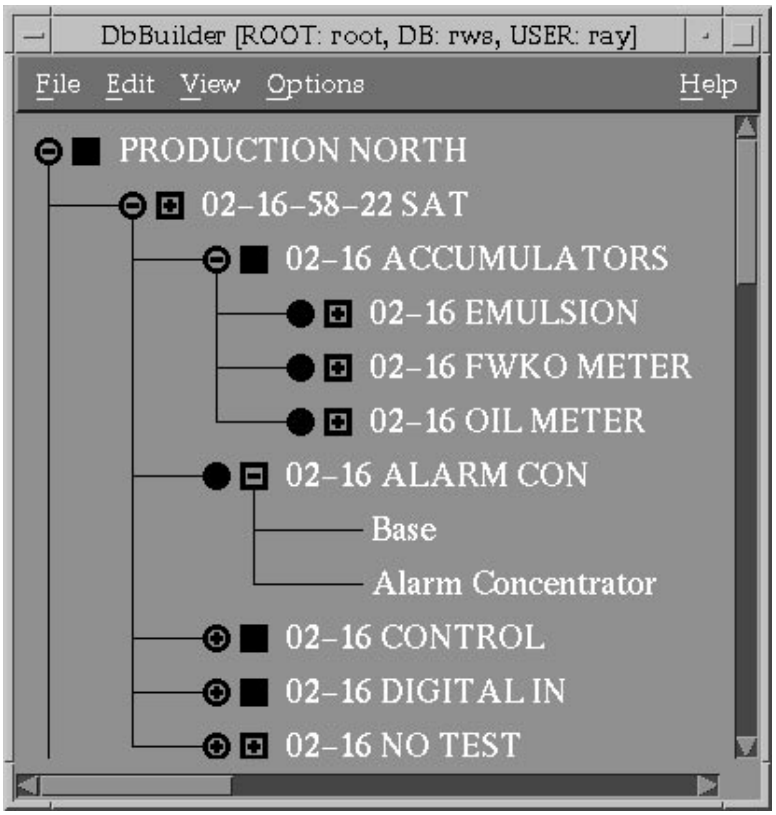
**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261

Contact: Gary Biagioni

**Product Description:**

The Database Builder supports graphical creation, display and dynamic reconfiguration of the database structure and contents. It is based on the OSF/Motif graphical standard and permits point types to be configured to meet the needs of an application.




The Database Builder can add, delete, copy, and move points in the RTAP database when the system is operational. The copy function will copy alarm information as well as the point information. When used in conjunction with tesserNet's rtsh, global editing of database trees is easily accomplished. For example, all occurrences on xxx in a description can be changed to yyy by writing a simple script, or a more complicated script would allow the copying of a set of aliases from one tree into another tree changing xxx to yyy.

The Database Builder replaces point configuration files with an easier-to-manage set of configuration files. These configuration files allow the specification of editing widgets on a per-attribute basis for scalar/vector attributes or on a field basis for table attributes. Editing widgets can be viewed only and includes scan input/output selection, radio buttons, check boxes, function definitions and function selection. The configuration files allow the organization of attributes into groups. Each group can be used in several point types, thereby reducing the work involved in developing a system. For point types that are unknown to the builder, a default widget allows the editing of any element in the RTAP database.

The Database Builder provides special functionality in the scan configuration database tree. For example:

- Addition of new drivers is as simple as picking a new communication port type
- Addition of new scan devices is as simple as picking a new scan device type
- Records can be inserted in the middle of a scan input table

The Database Builder provides a complete configuration tool for building databases. In some cases, it eliminates the need to develop custom user interfaces.

**Hardware Supported:** HP 9000 Series 700/800

**Pricing Information:** Call for information.

**Availability:** Immediate.

**Support:** Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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| | | |
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| Wijnhaven 69, Postbus 22067 | Fax: | +31-10-4 33 14 47 |
| 3003 DB Rotterdam | | |
| The Netherlands | Contact: | Ged Roberts |
| | | Aryan Mohlmann |

## Database Point Creator

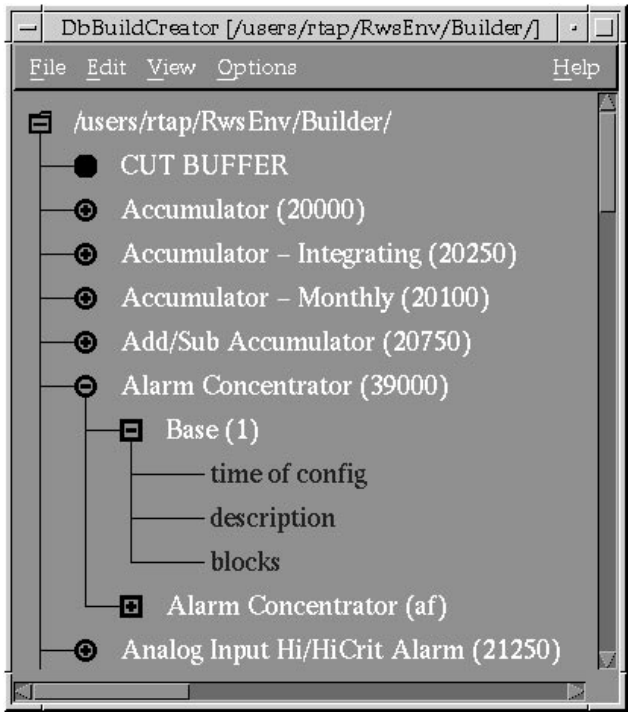
**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The Database Point Creator supports graphical creation, display and reconfiguration of the Database Builder configuration files. It is based on the OSF/Motif graphical standard and permits new point types to be built to meet the needs of an application. This utility is typically used by system integrators to provide and maintain point types for a particular system.




The Database Point Creator provides a complete configuration tool for building point types used by the Database Builder. It provides an interface that allows creation of new point types, editing of existing point types, and changing of attribute widgets.

**Hardware Supported:**

HP 9000 Series 700/800

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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Aryan Mohlmann

## RTAP Shell (rtsh)

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The RTAP shell (rtsh) is an interactive RTAP shell that is based on the public domain ksh version 4.3 (converted to HP-UX). Special RTAP commands have been added to access the database and the scan system. These commands can be used interactively or in an rtsh script.

The rtsh supports all of the database and scan system programmatic calls only in a scripting language. For example, the following script would read value from the RTAP database point *RTU 01* attribute *failure threshold*:

```
readDb name="RTU 01.failure threshold"
```

When rtsh is used in conjunction with the Database Builder, points in a tree can be selectively matched and an rtsh script can operate on each selected point. This scripting ability allows powerful editing such as cloning database trees and automatically editing the point alias and descriptions.

**Hardware Supported:**

HP 9000 Series 700/800

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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## Sequence of Events Recorder

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The sequence of events recorder consists of a user interface, SOE history recorder and RTU interface. The user interface provides multiple views of the event data including: an alarm summary, current configuration, and history buffer. The user can easily configure point descriptions, chatter filtering, and enabling of recording. A local display and dial in access can be provided. Historical files are easily transferred to other systems for analysis.

The sequence of events recorder is an add-on product to RTAP. Combining RTAP with tesserNet's SOE recording software provides the customer with a fully configurable, real-time data acquisition system based on the Motif graphical standard.

tesserNet's reputation for superior customer service has been earned through on-time delivery and an unwavering commitment to understanding and fulfilling customer needs.

**Hardware Supported:**

HP 9000 Series 700/800

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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Aryan Mohlmann

## Integration Services

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500, 736 6th Avenue SW
Calgary, Alberta
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Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

tesserNet Systems Inc. provides Supervisory Control and Data Acquisition system integration. For over a decade, tesserNet has been working with customers by providing services from RTU development to turnkey host data acquisition and control systems.

These services have included:

- Turnkey systems supply
- Integration: staging, testing configuration
- Training of operations and development staff
- Systems support
- Project management
- Custom application design and development

The services have been provided in areas, such as oil and gas production, automated well testing, pipeline control, tank farm control, and electrical substation monitoring.

Combining the HP RTAP product with tesserNet's SCADA system software provides the customer with a fully configurable real-time data acquisition system based on the Motif graphical standard.

tesserNet's reputation for superior customer service has been earned through on-time delivery and an unwavering commitment to understanding and fulfilling customer needs.

**Pricing Information:**

Depends on system.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

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Aryan Mohlmann

## RTAP Historical Archiver

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The Historical Archiver converts RTAP historian tables into Comma Separated (CSV) files with the following format:

YY-MM-DD_<hist table>.csv

where:
YY = year (e.g., 94)
MM = month (e.g., 07)
DD = day of month (e.g., 01)
<hist table> = historian table's alias with spaces converted to '_'

The data is saved as follows to the file:

"<time 1>", item 1,item1 quality,item2,item2 quality,...
"<time 2>", item 1,item1 quality,item2,item2 quality,...

where:

<time 1> = time of sample
item 1 = value of item one
item 1 quality = quality of item 1
<time 2> = time of sample
item 2 = value of item two
item 2 quality = quality of item 2

The number of items is dependent upon how many items have been configured for the history table.

These archived historical files can then be viewed through the RTAP trending subsystem using an rtsh script.

**Hardware Supported:**

HP 9000 Series 700/800

**Pricing Information:**

Call for information.

**Availability:**

Immediate.

**Support:**

Telephone consultation support, onsite maintenance, and version updating on annual contract or per diem rate basis are available. Support can be customized as needed.

Companies located in Europe, the former USSR, the Middle East and the Far East should direct their inquiries to:

Logica BV
Wijnhaven 69, Postbus 22067
3003 DB Rotterdam
The Netherlands

Telephone: +31-10-4 33 08 44
Fax: +31-10-4 33 14 47
Contact: Ged Roberts
Aryan Mohlmann

## Alarm Archiver

**Company:**

**tesserNet Systems Inc.**
500, 736 6th Avenue SW
Calgary, Alberta
Canada T2P 3T7

Telephone: +1-403-237-6835
Fax: +1-403-237-0261
Contact: Gary Biagioni

**Product Description:**

The Alarm Archiver runs daily, archiving alarms of the previous day from the alarm log. Users can display these historical alarms in a graphical window very similar to the current RTAP alarm summary display.

Once the alarms for the selected date are displayed, users can select particular alarms of interest to print or save into a file. Only the alarm message is saved.

Once the alarms for the selected date are displayed, they can be filtered based upon the following conditions:

- Time — sets specific start and end times for alarms
- Acked — displays only acknowledged alarms
- Not acked — displays only non-acknowledged alarms
- Point name — applies a regular expression against the point name for the alarms to be displayed
- Alarm class name — applies a regular expression against the alarm class for those alarms to be displayed
- Alarm severity — sets alarm severity and criteria of the alarms to be displayed
- Alarm type — sets type of alarm to be displayed
- Alarm message — applies a regular expression against the alarm message for the alarms to be displayed

**Hardware Supported:**

HP 9000 Series 700/800

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**Availability:**

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**Marketing Agents:**

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Test and Measurement Organization
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1-800-452-4844

**Europe:**
Hewlett-Packard GmbH
Herrenbergerstr. 130
71034 Boeblingen
Germany
Tel: +49(0)7031 14 2430
Fax: +49(0)7031 14 7023

Attn: Nam Nguyen

**Japan:**
Hewlett-Packard Japan Ltd.
Measurement Assistance Center
9-1, Takakura-cho, Hachioji-shi,
Tokyo 192, Japan
(81) 426 48 3860

**Latin America:**
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Latin American Region Headquarters
5200 Blue Lagoon Drive
9th Floor
Miami, Florida 33126
USA
(305) 267 4245/4220

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Blackburn, Victoria 3130
Australia
131 347 Ext. 2902

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Hewlett-Packard Asia Pacific Ltd
17-21/F Shell Tower,
Times Square,
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Hong Kong
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