

### INTEGRATED PROCESS MANAGEMENT & CONTROL SYSTEM



Meeting the challenges of the dynamic global market requires one to have efficient, reliable and, cost-effective process management system. Synergy Systems & Solutions, an ISO 9000 company, provides you with SIRIUS as the industrial automation software solution.

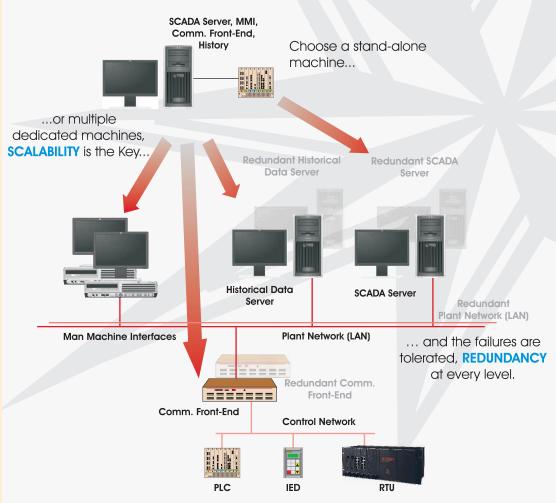
SIRIUS is an integrated process management and control system Software that can be adapted to almost any real time process. Based on Windows Technology, it is a user-friendly system that can be easily integrated with other business applications.

The system is modular in design and expandable in stages, thereby resulting in protection of customer's capital investment and extending the product life cycle.





Transmission





### **INTEGRATED DEVELOPMENT ENVIRONMENT**

### From an abstract idea to a concretely engineered system, easy configuration tools make it possible...

- Integrated Development Environment
- Unique Device Wizard for system configuration
- Configuration divided into pre-defined aspects for 'Walkthrough' configuration
- Data Entry guided by help and selection lists
- Direct database import from Excel, OPC Server
- Context Sensitive Help
- Comprehensive Error Checking, display and lookup
- Import/Export of Configuration from other projects
- Automatic Generation of Project Documentation
- Browser to view, insert objects into other objects
- Unique device specific addressing mechanism
- Cross-reference manager
- Integrated graphics editor
- Single click backup and restore options
- Single Point of configuration download to all nodes

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### MAN MACHINE INTERFACE

### View the process from your own view-point...

- Vector Graphics-based display
- Unparalleled graphics quality with high resolution
- Multiple windows support
- Multiple VDU support
- Functional keyboard support
- User configurable symbol, video libraries
- Event triggered and periodic graphics update
- Unlimited zoom without loss in clarity
- Real-time Animation
- Unlimited process graphics
- Configurable Dynamic keys for easy & fast navigation
- "Always on Top" picture for display of important data
- Tag Searching in run-time
- Historical view of process data
- Multiple Clutter/Declutter levels
- Comprehensive security features

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### **ALARMS & EVENTS**

### Be notified of critical alarms, wherever you are...

- Central processing of alarms
- Acknowledge alarms over the network
- Acknowledge alarms by group, priority, station etc.
- Variable data in alarm messages
- Online configuration of alarms
- Acknowledge alarms from alarm list or from the object
- Acknowledge all alarms on a point with a click
- Hooter triggered in field and on individual MMI
- Alarm/Events via e<sub>7</sub>mail, fax and phone
- Acknowledge alarms over the phone





### **APPLICATION LOGICS**

### Thanks to the powerful programming tool, your application can be tailor-made...

- High-Level programming language
- Comprehensive set of functions (IEC 61131 functions supported)
- Support for user-defined libraries
- Real-time Database Access in form of objects.
- Simultaneous Execution of multiple tasks
- Ideal for interlocks, calculations, application logics
- Online debugger
- Easy-to-use editor

### **SMART OBJECTS**

### Virtual counterparts of Physical Objects (with intelligence)...

- Get your application ready in quick time using these easyto-use objects
- Customize object behavior by writing custom logics
- Introduce "smartness" into your applications through Smart Objects
- Built-in objects for objects of everyday use
- Create and modify objects

### **TRENDS**

### Monitor the performance...

- Real-time & Historical Trends
- High time-resolution (<1 sec) in Real-time Trends
- Up to 8 pens/curves per trend
- Unlimited simultaneous trend displays
- On-demand Trending
- Zoom on X(time) or Y Axis
- Option to view Single Curve
- Grid, Precise Reading

### | Statistics | Security | Securit



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### **REPORTS**

### Your online management information system reporting tool...

- Reporting through Crystal Reports, Microsoft Excel
- Web-based Reporting
- Automatic report printing based on timer/event
- Export to a variety of the formats for easy information exchange



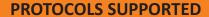
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Railway Traction

### **HISTORY**

### Offline Analysis and MIS requirements are fulfilled by the Historical Data Server ...

- Cyclic, or on-change logging
- Triggered on timer, event or user-action
- Logging of Alarm/Events
- Custom/Application Specific logging
- Configurable capacity per log
- Microsoft SQL Server-based RDBMS database
- ADO, OLE DB, ODBC, SQL Access for custom applications
- Automatic disk-backup



Protocol	Master/ Client	Slave/ Server
MODBUS RTU/TCP	•	•
MODBUS Plus	•	
IEC 870-5-101	•	•
IEC 870-5-103	•	
IEC 870-5-104	•	•
IEC 61850-8-1	•	
DNP 3.0 Serial (Level 3)	•	•
DNP 3.0 TCP (Level 3)	•	•
RP-570	•	
Proteus 2000	•	
Sinaut ST1	•	
EQUINODE	•	
SPORT	•	
Alstom Courier	•	
SPA Bus	•	
LON Bus	•	
PD Bus	•	
WorldFIP Sycoway	•	
Bitbus	•	
Indactic 33	•	
Indactic 625	•	
SEL ASCII	•	
3964 R	•	
IEC 1107	•	
GE-Fanuc SNP	•	
Allen-Bradley DF1	•	
SNMP	•	
OPC DA	•	



### THIRD PARTY INTERFACES

Through third-party interfaces, the choice of connectivity crosses all limits...

- OPC client
- DDE (Server/Client)
- NETDDE
- ODBC
- OLEDB
- SQL

### **TIME SYNCHRONIZATION**

- Master Clock / GPS Receiver:
  - Absolute time (NMEA 0183, SNTP, Custom)
  - Minute/second pulse
- Synchronization Method:
  - Absolute time adjustment
  - Clock frequency adjustment to arrest drift
- Devices Synchronized:
  - SCADA Servers
  - Communication Front Ends
  - RTUs
  - MMI Clients
  - HDS

### **SUPPORT**

With the following support services at your disposal, SIRIUS is your ideal business partner...

- Comprehensive training programs
- Technical Support right from concept to project commissioning
- Remote Debugging
- Software development for customized solutions
- Technical Support Help Line over telephone, fax, e-mail





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