Remote Automation Solutions
OpenEnterprise SCADA Software

Features

- Bi-directional integration of DeltaV™ DCS and OpenEnterprise
- Leading-edge SCADA and HMI solution
- Complete compatibility with Emerson RTUs and flow computers
- Real-time relational object-oriented database
- Included historian with backfill capability
- Powerful reporting and trending tools
- Alarm and event manager with paging and email support
- Multiple thin client options for corporate and operational users
- WebView™ supports third-party thin client applications
- OPC and OPCHDA access to the database
- Wide range of third party communications and full OPC 2.05 data access support
- Fault-tolerant and distributed servers over WAN or LAN
- New ROC™ history viewer and editor
- Support for ROC request prioritization
- Manually-triggered requests
- Extended report by exception
- Ability to export to OSI PI historian

New in Version 2.83

Remote Automation Solutions Open Enterprise 2.83 is the latest release of Emerson Process Management’s flagship SCADA software package. This release introduces compatibility with the latest Microsoft products, including Windows Server 2008 and Windows 7. We have also maintained support for Windows XP, Server 2003, and Office 2003 to provide you with the greatest flexibility when selecting a SCADA platform to integrate with the rest of your IT infrastructure.

New Features

- **Export to PI** - History collected from ROC, FloBoss™ or ControlWave™ RTUs can now be exported directly to an OSIsoft™ PI historian.
- **OPC Alarm and Event Server** - Supports the export of RTU alarms to the DeltaV Plantwide Event Historian (PEH).
- **DeltaV RTU Configuration Tool** - Includes easy-to-use configuration tool that auto-generates the DeltaV FHX file for transferring SCADA tags into a DeltaV Virtual Controller.
- Programming-free configuration of the DeltaV OPC Mirror for bi-directional data transfer between OpenEnterprise and DeltaV.
- An alarm conditions precedence value is now available in the Alarm Summary and Event History.
- The OPC Data Access RDI now supports the collection of VT_ARRAY data types.
- Reporting package now supports Microsoft Excel 2010.
DeltaV RTU Connect Functionality

- Provides real-time bi-directional pass through between Emerson’s RTUs and DeltaV DCS system
- Provides real-time bi-directional pass through between Emerson’s RTUs and DeltaV DCS system
- Records historical RTU logged data to the OSIsoft PI historian
- Records RTU alarm and event data to the DeltaV PEH historian
- Automatically backfills RTU alarms and history in case of RTU communication loss

For more information, please refer to the release notes.

Overview

Emerson Process Management has long been recognized as the leading supplier of RTUs, distributed process controllers, flow computers, and transmitters. The OpenEnterprise SCADA Suite completes the package to provide a turn-key SCADA solution from field equipment to supervisory control and management, reporting, and enterprise-wide data distribution. OpenEnterprise collects and archives data over almost any communications medium using a wide variety of protocols. Both polled and exception-based collections are supported for flexible and efficient data gathering even on low bandwidth, poor quality, or high latency networks – an area where many competing products simply fail to deliver.

There are no tag licensing requirements or size restrictions on the real-time or included historical databases, the only limit to the size of your system being available hardware resources. New field devices, data points, collection schedules, and historical archives can be added and removed on a live system without affecting the ongoing data collection and access to other data. Data can be collected and supplied from a single server or multiple servers distributed across a WAN.

The ability to support multiple servers in a distributed environment makes OpenEnterprise ideal for the medium to large-sized gas distribution, gas transmission, or gas production systems – where there are multiple control rooms and remote locations to monitor and control. With OpenEnterprise, it is possible to install servers and workstations at each individual plant, allowing for local operations. However, each site can also be monitored and controlled from all other locations, with no additional RTU communications or configuration required. This also allows for large central control rooms to manage multiple remote locations centrally.

Operators can access the data (via a secure login) through workstations on the same LAN, across the WAN via remote dial-in, VPN, or through web pages served to standard web browsers. Standard workstation functionality is available within Internet Explorer.

Workstation graphics are developed with a simple ‘drag-and-drop’ tool that displays data for hundreds of field devices without modification. OpenEnterprise incorporates newly-constructed Workstation pages immediately, without the need for compilation or third party applications, and without any interruption to data collection or distribution.

The reporting system supports the generation of Excel, PDF, HTTP, RTF, CSV, and XML formatted reports, and they can be published to printers, email, ftp, and web servers – making them accessible to the entire enterprise.

OpenEnterprise is the tool that links projects, operations, accounts, and management. It truly makes SCADA a part of the business process.

Contact your Sales Representative or email OpenEnterprise@EmersonProcess.com for more information.
Remote Automation Solutions
OpenEnterprisse v2.83 is the latest release of Emerson’s leading-edge SCADA and process control package. It is designed for the customer who requires more than a basic Human Machine Interface (HMI). OpenEnterprise provides unrivalled flexibility and connectivity, and is the tool that links plant, operations and management. It truly makes SCADA a part of the business process.

Alarms and Events
- Support for remote or server-generated alarms
- Distribute alarm system across servers
- Comprehensive alarm filtering options
- Historical event viewer
- Export alarm summary to Microsoft Excel / Microsoft Word
- Alarm summaries accessible via ODBC
- Logs all critical user activity (signal changes, alarm, login, etc.)
- Alarms printers; configurable to print all or filtered alarms
- Send to email, pager, cell / smart phone
- Acknowledge from cell / smart phone
- Alarm escalation included

Architecture
- Support for Microsoft Windows 7, XP, Windows Server 2008
- Client / server based
- Fault-tolerant configurations

Data Access
- ANSI SQL and ActiveSQL
- ODBC / JDBC / OLEDB
- DDE
- OPC / OPCDA
- OPC Alarm and Event Server
- OSIsoft PI Historian Connectivity
  - Ability to directly export historical data collected from an RTU to a PI historian

Data Collection (cont’d)
- Native Allen Bradley / RSLINX
- OPC data access
  - Modbus
  - DNP3
  - FOUNDATION™ fieldbus
  - Echelon

Database
- Object-oriented
- Relational interface
- Event driven
- Memory resident
- User-definable schema
- Optional CL scripting
- Triggers external applications (including Microsoft VB)
- No tag or I / O licensing restrictions

Historical
- Pollled or exception logging
- Any objects may be logged
- Auto-archiving
- Automatically retains archives on-line
- Built-in compression algorithms
- Support for non-standard collection periods
- Historical DB backfill after communications loss
- Historical editing for ROC products

Integration with DeltaV DCS System
- Bi-directional real-time data transfer between OpenEnterprise and DeltaV
- Back-fills historical and alarm data from RTU directly into DeltaV’s Plantwide Historian
- Timestamp preservation of stored RTU data into DeltaV
- Enables sending commands from DeltaV down to the RTU
This document is intended to provide a high level overview of the features provided within the product. If you need more information, please refer to the product documentation located on our website (www.EmersonProcess.com/Remote) or contact us at OpenEnterprise@EmersonProcess.com.

### Trending (cont’d)
- Trend templates allow operations staff to quickly create and save their own trends
- Trend overlay allows for comparison of older and current data for the same pen
- Performance mode increases performance on wireless networks

### Webview Thin Client
- Support for third party web tools within operator WS
- Improved security: built-in web browser limits users to pre-configured web sites and does not require access to Internet Explorer
- Access controlled by OpenEnterprise security
- Use for GIS, CMMS, and other intranet applications

### WEBTOOLKIT
- Set of .NET controls for building web pages
- Ideal tool for building corporate portals and diagnostic tools
- Full AJAX support
- Web-based visualization of all OpenEnterprise data
- Includes real-time and historical trending and reporting
- Integrate data into Google Maps
- Support for Microsoft Visual Web Developer (Free Edition) and Visual Studio

### Mimic displays
- OPC compliant
- Animate color, size, location, rotation, value, flash, hide, and disable
- Extensive object library
- Dynamic gradient fills
- Imports BMP, JPEG, GIF, DXF
- Support for third party clip art
- Display and object aliasing, global editing of all objects across all displays
- Global text edit / replace across all displays
- User-configurable tool tips
- User-configurable menus
- Built-in Microsoft VBA
- ActiveX Container (embeds other controls)
- ActiveX control (embedded in other applications)
- Zoom, pan, and declutter supported
- Development tools included with all runtime licenses
- All WS features supported in Internet Explorer Thin Client

### Network Support
- TCP / IP throughout
- Ethernet
- Internet
- Radio and satellite
- GSM / CDMA / GPRS
- No DCOM required

### Reporting
- Text-based and graphical reports
- Supports PDF, XLS, HTTP, XML
- Publish via email, web servers, and print
- Supports OpenEnterprise real-time, historical, alarm, and diagnostic data
- Reports can include data from third-party databases, including SQL Server and Oracle
- Manually select and publish any report for a particular date / time

### Security
- User group-based security
- Control access to all database objects
- Control access to configuration functions
- Areas of responsibility
- Support for SQL Grant and Revoke

### Trending
- Real-time update of historical trends
- Mix real-time and historical data on single trend
- No limits on pens per trend
- Data quality and alarm limits
- Gradient shading and image background
- Microsoft Excel, JPEG, and BMP export
- Drag-and-drop trending from display mimics
- Right click on an alarm or SQL Query for quick trending