

Case Study

Integrated Information Retrieval and Management

Background:

The client is large a pharmaceutical and related health care products company whose mission is to extend and enhance human life. In 2001, total company sales were approaching \$20 billion worldwide. Twenty-eight product lines recorded annual global sales of more than \$100 million each, including four with more than \$1 billion in annual sales. The Clients global medicines group needed to increase production and commenced construction of a 100-acre bulk manufacturing facility in January 2000.

Scope of work:

A number of new automation systems are being commissioned as part of this new development and these are being supplied by a number of different vendors As a result a number of software solutions are being implemented leading to 'islands of automation and information". While these systems meet the individual requirements of the client, the client also requires a consolidated view of all the process and utilities data. As part of this the client decided to use Power Logic's System Manager Software 3000 to provide an integrated approach to power management and wanted to use SMS 3000's graphical, trending and reporting capabilities for all electrical and non-electrical utilities in the plant. This would require the extraction of real-time data from other systems such as Emerson Process Management's DeltaV.

Process

In conjunction with our associate companies we proposed and installed a solution based on our associate's 'Opera' product running on a Microsoft Windows NTTM PC.

- Opera is used to collect and process data from the DeltaV process monitoring system using the OPC Data Access protocol. Opera's OPC Client allows data to be acquired from multiple automation systems without the need to write proprietary communications drivers.
- Opera's real-time calculation engine then performs calculations on the acquired data. User defined rate and count calculations are used to supplement the raw data.
- Opera then serves the acquired and processed data to the SMS 3000 system using a Modbus TCP/IP protocol. This provides BMS with a single view of all electrical and non-electrical utilities in the plant.

Result:

- ❑ Opera has enabled **“islands of automation/information” to be bridged**. This then leads to improved information exchange, rapid decision making, and improves process understanding, the ultimate benefit being a distinct commercial advantage.
- ❑ As a member of the OPC Foundation, we understand the importance of using open communications standards. Opera’s support for open communications standards **allows for multiple systems to be connected** using protocols such as OPC, Modbus, ODBC and DDE. At the moment some 3,500 tags of information are acquired with the potential to expand the system to acquire data from other systems such as power meters.
- ❑ Opera’s **easy to use interface is easily configurable**. The system can be expanded in the future by the client’s own team to link to additional custom tags that may be configured on SMS 3000, or any other application that may be purchased in the future.
- ❑ The easy to use interface has resulted in a very **rapid acceptance and use by the operators**.