Food Production System Integrator Grows Internationally with Kepware’s Protocol-Agnostic Communications

The Customer
Repete Corporation has been delivering effective automation systems and integration services for the process industries since 1965. The company has evolved along with the industry, growing from a basic machine shop to a provider of control equipment and innovative HMI solutions for process plant automation. Repete’s high-performance automation systems help manufacture millions of tons of quality products every day. The company delivers efficiency, consistency, and traceability to agri-business, food, animal nutrition, and industrial systems clients throughout the world.

Repete’s systems range from dedicated, process-specific controls to plant-wide automation systems. The company provides custom programming as well as modular, industry-specific applications for animal nutrition, pet food, food processing, and seed processing/genetics applications (among many others).

“Repete as a company was built on—and continues to succeed because of—a heavy emphasis on listening to our customers and working with them to address their constantly changing needs,” said Mike Peters, Director of Operations at Repete. “The food production process automation industry has advanced dramatically in recent years, and with these changes come new challenges that I believe we are poised to meet, and opportunities that we are excited to seize.”

The Challenge
In recent years, Repete began to focus on growing its international customer base. As a result, the company encountered an increasingly wide array of PLC environments that were not standardized on any one language or protocol. Having traditionally relied on Rockwell for its communications needs, Repete quickly became aware of the existing OPC server’s limitations in terms of supported PLC protocols. Due to Rockwell’s enormous market share in the United States (where a majority of Repete’s business had traditionally been focused), the solution was adequate for addressing its domestic customer base for many years. In moving forward, however, Repete needed a communications solution capable of interoperating with any protocol in order to support its global expansion.

Additionally, the company needed to maintain the high level of reliability and quality that
its existing customer base had come to expect. The Process Automation Industry is built on peak operational efficiency: its Achilles heel is plant downtime. For Repete’s customers, plant downtime is estimated at between a $50,000 to $200,000 loss per hour. Given these costs and other essential process components that require the facility to be up and running, it is imperative that Repete’s solutions be dependable.

“The key to Repete’s future success in the Process Automation Industry will hinge on our ability to communicate with the widest swath of equipment possible while ensuring plant uptime,” said Peters.

Organization Impact & Benefits
- Increase ability to communicate with a wider range of PLCs
- Support OPC standard and over 150 protocols
- Bolster international expansion by addressing the needs of diverse communications environments
- Significantly reduce downtime through unparalleled reliability
- Expand beyond core focus of food production into new industries
- Streamline international developer licensing

The Approach
After many years of primarily using Rockwell solutions for communication, Repete began looking for an OPC server to support the broadest range of protocols possible. Although it is typical to see one vendor dominating large segments of various industries in the United States, the picture becomes much more patch worked when looking at global markets. Repete needed the flexibility to support the various PLCs encountered in automation environments around the world. For this, the company turned to Kepware Technologies for its immense collection of device and client drivers that offer broad support of the OPC standard. Repete quickly identified KEPServerEX as the ideal replacement communications solution to support the interoperability necessary for global expansion.

“Kepware has done a stellar job building a simple, reliable, and vendor-agnostic product with an unparalleled number of drivers designed to support basically any PLC we encounter in the global market,” said Peters. Engineered to support the OPC standard and over 150 different protocols, KEPServerEX allows Repete to meet the needs of virtually any food production facility—domestic or international.
The Results

Since adding KEPServerEX into its primary system integration solution about 18 months ago, Repete has dramatically increased its ability to communicate with a wide range of PLCs and has subsequently been extremely successful in jumpstarting its international expansion. Repete is now working with customers across numerous continents and has substantially grown its international workforce. The company is building an average of six major integration systems per month. Because of the flexibility Repete now has to communicate with almost any PLC, the company has even been able to expand beyond its core focus of food production and is building in-roads into a number of new industries (such as recycling in Asia and cargo in Europe).

In order to keep up with mounting interest from organizations around the globe, Repete has grown its core group of about 20 engineers in the United States to include an additional 14 developers overseas. Kepware provides significant support to this new group of international resources by streamlining developer licensing.

Finally, thanks in large part to its integration of KEPServerEX, Repete improved its ability to limit plant downtime. “In one instance, a customer told us that his server application ran for over a year without ever shutting down,” said Peters. In the rare event of a network error, Kepware also helps to streamline troubleshooting by enabling trace logging. This functionality allows service departments to quickly isolate the anomalies and address them in a timely manner.

According to Peters, “We simply don’t hear about KEPServerEX from our customers, and that really says it all—it is just working.”

About Kepware Technologies

Kepware Technologies is a private software development company headquartered in Portland, Maine. Kepware provides a portfolio of software solutions to help businesses connect diverse automation devices and software applications. From plant floor to wellsite to windfarm, Kepware serves a wide range of customers in a variety of international vertical markets including Manufacturing, Oil & Gas, Building Automation, Power Distribution, and more. Established in 1995 and now distributed in more than 100 countries, Kepware’s software solutions help thousands of businesses improve operations and decision making.

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