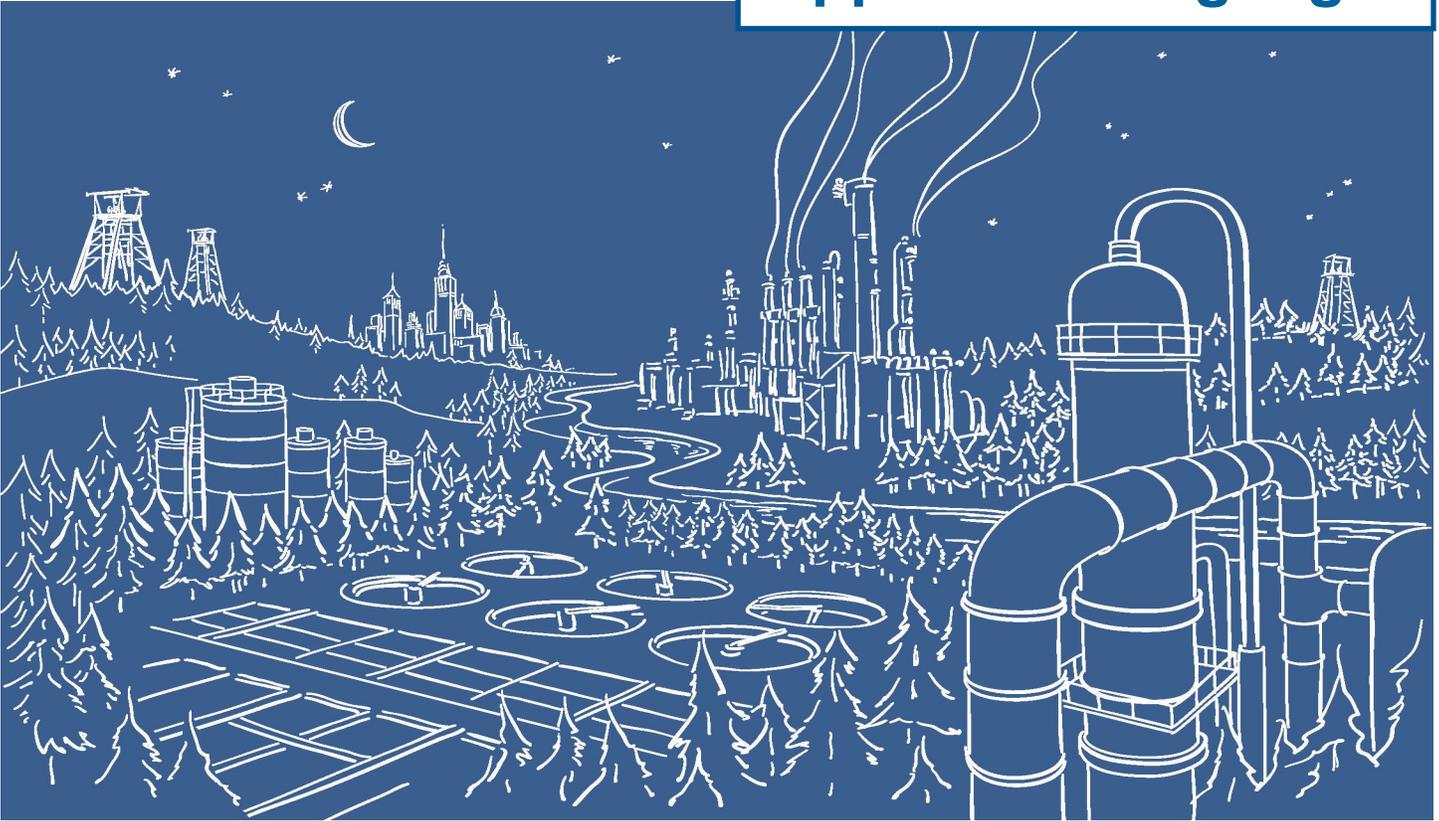


## Application Highlight



# 2500 Series® Programmable Automation Control System

## Manufacturer uses Janus Processor to implement Edge Computing Power Usage Collection System to Optimize Production Costs

The customer's production system consisted of sixteen CTI 2500-C300 PLCs that were operating the process. Attached to each PLC were several power sensors that communicate over a Profibus network, monitoring power usage of process components. The PLCs read instantaneous AC power from the sensors, storing the values in memory.

Using the built-in communications capabilities of the Janus Processor, the Janus Workbench application connects to all sixteen PLCs using the CAMP Client protocol, continuously reading power and other production data. A single User-Defined Function Block (UDFB) handles all the energy usage and production correlation calculations. The results of the calculations are made available to a Wonderware SCADA system using the CAMP Server protocol.

### Summary

In a recently completed application, a CTI customer used the communications and computational capabilities of the new Janus Processor to implement an Edge Computing application for collecting and analyzing power usage data to help optimize production costs in the plant.

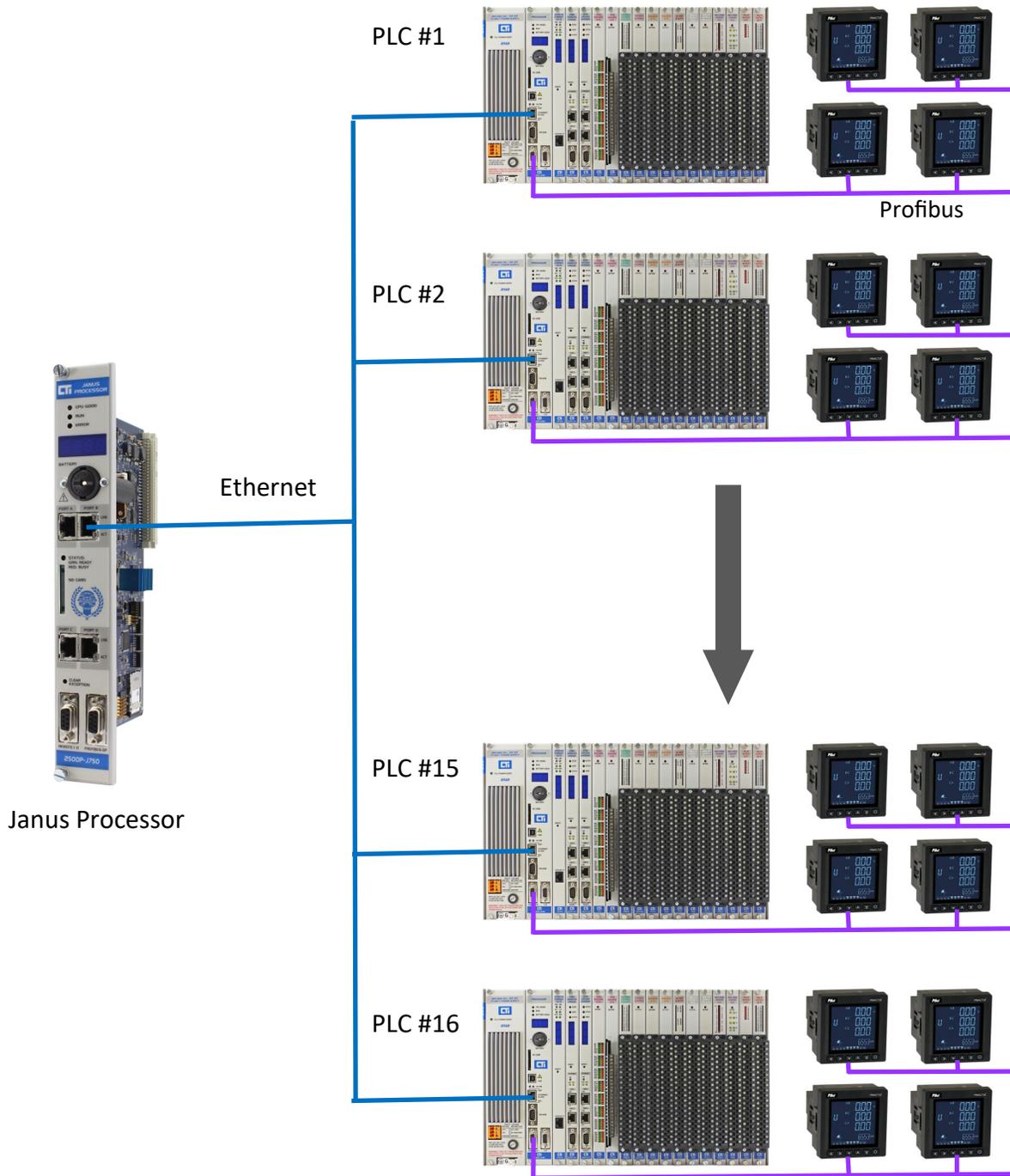
At its basic level, Edge Computing brings computation and data storage closer to the devices where it's being gathered, rather than relying on a central location that can be thousands of miles away.

The Customer liked Workbench and Janus because they were able to integrate all the "data operations" code into a UDFB, which was then simply replicated with additional instances to communicate with all the PLCs.

They also liked the ease of configuring communications to all the PLCs and to Wonderware within the Janus Workbench project.



On completion of the project, the customer remarked “The CTI Workbench programming solution is the easiest PLC programming software to learn. It is very intuitive and user friendly. I had a large project to monitor and report Power usage data for over 100 pieces of plant equipment. With Workbench, That task was made much easier with the use of UDFBs and subprograms. Great job CTI!”



Copyright© 2020 Control Technology Inc.  
 All Rights Reserved — 03SEP2020  
 Trademarks not belonging to CTI are property of their respective companies



**Control Technology Inc.**  
 5734 Middlebrook Pike, Knoxville, TN 3792  
 Phone: +1.865.584.0440 Fax: +1.865.584.5720  
 www.controltechnology.com

**ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.**