Industrial Data
The Latest News in Industrial Automation

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BizWareDirect offers affordable, easy-to-use data-management software solutions that increase efficiency in automated facilities. BizWareDirect's software applications make data more useful and more accessible throughout all organizational systems, from the plant floor to the front office.

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Contact Us!

BizWareDirect
2450 Atlanta Highway
Suite 1202
Cumming, GA 30040

Phone: (770) 886-5878

Fax: (770) 886-1390

E-mail:
sales@bizwaredirect.com

Visit us on the Web!

www.bizwaredirect.com

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News from BizWareDirect

BizWareDirect Offers Discounted DataWorx Upgrades

BizWareDirect invites all DataWorx™ data-logging software users to enjoy more for less by taking advantage of an exclusive upgrade offer. For a limited time only, customers who upgrade from DataWorx Standard to DataWorx *Professional* will receive all of the benefits of direct PLC-database interactivity at a 10 percent discount.

DataWorx *Professional* allows users to easily connect PLCs and other industrial devices to a database, giving them direct read and write capabilities. Industrial devices can conduct database operations, so records are kept accurate and up-to-date. Using the DataWorx Monitor, anyone on the network can open logged files into a database program from their desktop. This enables more informed purchasing decisions, preventative maintenance procedures, and ease in regulatory reporting. DataWorx *Professional's* simple, easy-to-use database utility increases quality, consistency and efficiency in facilities that would benefit from using a recipe-oriented system to run the floor.

During this limited-time promotional period, BizWareDirect is also offering a 10 percent discount to customers who are already using DataWorx *Professional* and would like to increase the number of devices supported by their software. To receive the special promotional pricing on either of the DataWorx *Professional* upgrade offers, order online at www.bizwaredirect.com, or call the direct sales team at (770) 886-5878. Reference promotional code **5020** at the time of checkout.

In the Headlines

Industrial Trends Support Proactive, Integrated Business Model

Companies of all sizes from all industries are being pushed to increase the connectivity of their systems in an effort to plan more effectively, operate more efficiently and evaluate more thoroughly. Departmental managers are being asked to gather more information, and to make that information more useful to themselves and others. Some of the recently reported trends in automation technology show a step in the right direction, toward a more proactive and integrated approach to operations:

Paperless Recording: Paperless data-recording systems preserve the integrity of records and allow files to be transferred throughout the enterprise with the click of a mouse. Many paperless recorders turn out charts and graphs that look just like those produced by traditional recorders. Display options that allow multiple data files to be plotted on one chart and let users define their own timeframes make charts more useful to those in and outside the plant.

Real-Time Monitoring and Alarming: Time and money is wasted when day-to-day operations are strictly reactionary. Real-time data display and alarming capabilities have allowed for a more efficient, proactive approach to the management of industrial resources. This approach has bridged systems by increasing the level of confidence that those outside the plant walls have placed in their manufacturing counterparts.

Web-Based Interfaces: As industrial data finds its way into corporate planning and advanced process management, the simplicity of design and ease of use associated with web-based applications has made them a very popular solution for centralizing information quickly and easily. Most web-based data management applications make it possible for key decision-makers to access data throughout the plant floor and administrative offices, as well as from the road. The autonomy and convenience associated with web-based systems saves time and money, and makes the jobs of those on and off the plant floor much easier.

By Tonya R. York, Marketing Communications Specialist, BizWareDirect, October 2005.

The Race to Track

A flurry of headline issues in the last few years has made traceability an issue of immediacy to many regulatory agencies and large retailers. As a result, it has become of high concern to many manufacturers. Traceability is the ability to track a product and its raw components meticulously throughout the entire length of their history. It involves securing information and putting it to use, but not only in times of hazard or crisis. A good product tracing system can also be used to optimize processes, enhance products, make advancements in continuous improvement, and manage costs and inventory.

Effective product tracing requires accurate, detailed input at every step in the supply chain. This begins with all incoming shipments. Each supplier's lot number should be recorded as raw materials are received. As each ingredient or piece of material goes to production, its lot number should be recorded and linked to a product formula or recipe. All known production data should be entered ahead of time. Once production begins, the manufacturer should enter a local lot number. This number will represent the specific run and might include such information as run date, expiration or "use by" date, plant of origination, job number, thermal history, etc. Post-production data such as finished product characteristics, storage information and shipment details should also be linked to each product. The key to effective tracing is to keep information flowing evenly with the product, tracking every movement and component along the way. The entire supply chain must be transparent so a product's history can be retrieved at any given moment.

Tech Tip

A Bit on Bytes

Most of you have probably heard of bits and bytes if you have been working with computers for any length of time. However, you might not know exactly what these two terms mean. Bits and bytes refer to digital information as it is understood by your computer. We humans are comfortable using a decimal or base10 system, likely because we have 10 fingers to count on. Computers, on the other hand, use a binary or base2 system for processing information. They understand digital information by assigning it either an "on" (1) or "off" (0) value. One binary digit is commonly referred to as a bit, and there are eight bits in a byte. For example, "1" represents a bit of information, and "1001 1100" would be one byte.

Bytes are typically used when speaking of storage capacity. Here are some commonly used prefixes:
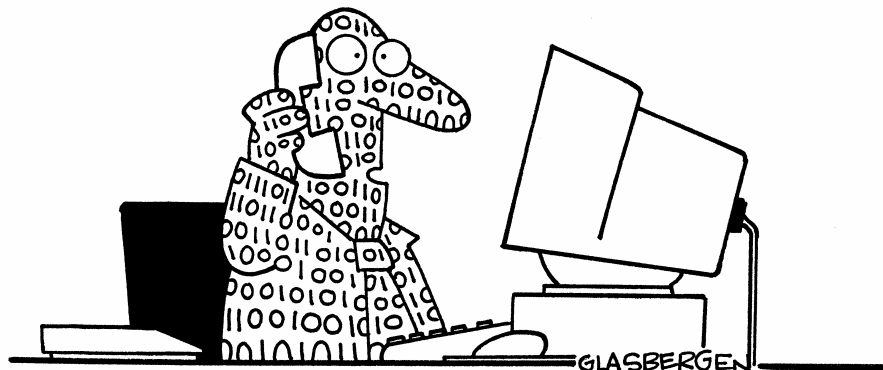
- Kilo = 2^{10} (1 thousand bytes)
- Mega = 2^{20} (1 million bytes)
- Giga = 2^{30} (1 billion bytes)

A binary number can be converted easily to a decimal number. Just follow this example:

Binary $1011 = 2^3*(1) + 2^2*(0) + 2^1*(1) + 2^0*(1) = 8 + 0 + 2 + 1 = 11$ *Decimal*

On the Lighter Side ...

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"No, I don't remember which button I pushed."