Take a break from a week filled with questions, by attending a week filled with answers.

Automation Fair 2011
Chicago, Illinois
November 16 – 17, 2011
Wednesday: 8-5:30
Thursday: 8-4
af.kendallelectric.com
www.automationfair.com


Where Did My HyperTerminal Go?

So you’ve just upgraded to Windows 7 and went to use Hyper Terminal – your trusty serial debugging tool that you’ve used forever in Windows XP (2000, 98, 95...) only to find that it is no longer there. And after searching the entire hard drive on your PC, you realize it is not anywhere to be found. What are you going to do?

Don’t sweat it. All you need is to get ahold of a computer that is running Windows XP and copy the following files:

C:\Program Files\Window NT\hypertrm.exe
C:\Program Files\Window NT\htrn_iis.dll
C:\WINDOWS\system32\hypertrm.dll
C:\WINDOWS\system32\hticons.dll

C:\WINDOWS\Help\hypertrm.exe
C:\WINDOWS\Help\hypertrm.hlp

Store them in a folder on your Windows 7 Computer and now anytime you need it, simply run the hypertrm.exe file and you are off and running.

So why did Microsoft decide to leave it out of Windows 7? Your guess is as good as mine. Maybe better!

If you don’t have a Windows XP computer available, simply visit the Kendall Electric ftp site at ftp://12.192.249.152 and snag a copy. Look for the Hyper Terminal Folder under the Info folder.

Cognex DataMan Software Handy Dandy Decoder Ring

Due to some confusion in regards to Dataman software compatibility with various DataMan models, Kendall Electric has tried to compile a matrix of versions, the models they work with, communication protocols supported and specific functionality. This list should be fairly accurate, but at least this will provide some information to you as to what version of software you may need. Please contact your local KE vision specialist for any questions.
Imagine that you are the head of maintenance and your production manager has just told you that the plant is going to start a 7-day a week production schedule or your boss has told you “no overtime”. Think of the questions you may start asking yourself: How do I control down time? How do I keep up with my preventative maintenance?

The answer could be Rockwell Automation’s IBE. What is an IBE? It is an Installed Base Evaluation. Rockwell Automation will send a Field Service Tech into your facility to look at every control panel and whatever products you would like them to, even including other manufacturers’ automation equipment. The field service personnel will also look at what you are carrying in your crib.

Some questions may come to mind. Do we have the right material in our crib if a machine or line goes down? Do we have old automation equipment that is obsolete or silver series that we might not be able to get from Kendall Electric or Rockwell Automation?

Once the audit of your panels are finished you will receive a report from Rockwell Automation that will give you a better handle on what you have in stock and in your processes. This information can be used to put a plan together on upgrading your equipment or keeping the correct number of items on the shelf. This will help keep that downtime to a minimum, saving you money in the long run.

I have just completed an IBE with one of my customers and his response to the service he received was amazing. He was satisfied with the PowerPoint presentation he was given so he can show management what needs to be addressed and how quickly they need to move on things. We are also working on a plan to make sure that he has what he needs to keep the downtime at a minimum.

This program can also be linked to other programs that Rockwell Automation provides, such as Lifecycle Service Agreement, Parts Management Agreement, Repair Shield Services, and RAAMP Programs. This makes sure you have what you need, when you need it for all your automation needs. So when you need to do some planning, contact your Kendall Account Manager and ask for more details.

Upgrading your SLC-500 Hardware to Logix

Have you ever wanted to replace that “blue hose” RIO cable with Ethernet cable? Have you ever wanted to upgrade that SLC-500 with a Logix Controller without upgrading all the I/O and wiring?

Currently your options are limited, but by the end of this year or perhaps early next year a new option will be available. I’m talking about an Ethernet/IP Adapter for the SLC-500 I/O Platform (1747-AENT).

This adapter has been a long time coming, but it is about to become reality. Replacing 1746 I/O has been an obstacle for customers that have a large installed base of SLC-500s and wish to move to the Logix platform. But in continued Rockwell fashion, they support their products for years and always try to ease the pain of migration with the introduction of products such as this. In the spirit of easy migration, SLC-500 users who want to be Logix users rejoice!

Plan now to attend Rockwell’s Automation Fair in November to get more information and get a glimpse of this product and many other new products from Rockwell that make using their products more cost effective and easier. Or contact your Kendall Electric Account Manager.
Sylvania has discovered many ways to reduce your wattage consumption and continue to give you optimum light outputs where most needed. In the past 4-5 years Sylvania has discovered what LED lighting can provide. Sylvania has worked side by side with our residential, commercial and industrial customers, providing them the most cost effective and quality LED products, along with the technical support that backs up their studies.

Just recently I discovered that one of our local Health Care Facilities had been struggling with their parking structure. They had a number of 175 watt metal halide fixtures that were costing them a great deal of problems. Each time there was a power outage they would lose a number of fixtures once the power had been restored. This would result in hourly labor costs, lamp and ballast replacement cost, along with dealing with safety issues.

Sylvania had recently come out with their D11 Area Light LED Retrofit Kit. Which is an alternative to high intensity discharge (HID) lamps. This was the perfect solution to the problems they were experiencing with the HID lamps. With the D11 only consuming 40 watts of power, and a 50,000 hour plus life span, we were able to accomplish a great deal of cost savings as you will see in the comparison chart below.

This resulted in a 4.2-year payback to the customer, with the Sylvania D11 life span of 5.7 years this resulted in a Net savings of over $187,000.

The environmental impact from the proposed system is also greatly reduced. In an analysis performed by Sylvania, over the life of the product, assuming coal electrical generation, the total kWh saved are 2,378,000. 3,650,230 pounds of CO2 are saved, along with a reduction in other poisonous gases. Installing the proposed system would be equivalent to taking 20.6 cars off of the road for 10 years.

To learn more about how Kendall Electric and Sylvania can help you lower your utility bill using LEDs and other lighting products, please contact your Kendall Electric Account Manager.

Hubbell’s Circuit-Lock Motor Disconnect Switch

Hubbell Wiring Systems announces a new improved CIRCUIT-LOCK Motor Disconnect Switch designed to enable safe, reliable switch operation when used with Variable Frequency Drives (VFDs) found in today’s manufacturing environments. Additionally, this product helps prevent downtime from out-of-sequence equipment shutdowns. VFDs used in many manufacturing and industrial environments control the speed, torque, direction, and horsepower of motors. The HBLDS3VFD integrates a verified break-before-break auxiliary contact that interfaces directly with VFDs. When a motor disconnect is turned off in a low frequency state, disconnect contacts can po-

continued on next page...
Potentially be damaged. This can cause potential risk of injury to workers and equipment malfunctions, resulting in costly downtime and repairs. Through extensive testing, Hubbell found that the use of an early break auxiliary contact safely disconnects the power by signaling the VFD that the motor disconnect is being turned off. The VFD then executes a coast-to-stop, preventing damage to the disconnect switch and VFD output device. When the CIRCUIT-LOCK handle is turned to the 15-degree position, a signal is immediately sent back to the VFD before the switch can be fully opened. This signal takes the VFD out of a potentially damaging low-frequency state. In evaluating other manufacturers' early break contacts, not all had the same level of performance.

To educate customers about the importance of enabling safe, reliable switch operation when using VFDs, Hubbell has launched an educational product video. Available on the Hubbell website at www.hubbell-wiring.com/video.aspx, the video provides detailed information about VFDs, NEC disconnect switch requirements, and how the new CIRCUIT-LOCK Motor Disconnect Switch effectively prevents any damaging low-frequency current from reaching the switch.

The new Hubbell CIRCUIT-LOCK Motor Disconnect Switch, part number HBLDS3VFD, includes a break-before-break auxiliary contact that is pre-installed in the device. The auxiliary contact device, part number HBLAC2, can also be purchased separately and easily installed by the customer on existing CIRCUIT-LOCK Motor Disconnect Switches and Mechanical Interlocks.

For more information about the new improved CIRCUIT-LOCK Motor Disconnect Switch for VFDs, contact your local Kendall Electric Account Manager.
Celebrate the 20th Anniversary of Automation Fair!

Join us in Chicago as we celebrate the 20th Anniversary of Automation Fair. A great opportunity to explore a wide variety of smart, safe, sustainable manufacturing solutions geared towards improving your business profitability.

Automation Fair is a must-attend event. It is the largest single exposition of automation hardware, software, services and support in North America. For two instruction-packed days, you’ll gain valuable insight from your choice of in-depth technical sessions, workshops, hands-on labs and specialized industry forums. Automation Fair is the premier event to learn about automation and information architectures, safety, process, and services and solutions. As our economy continues to rebound we can help you prepare for the growth with new technologies and solutions. We’ll show you ways to capitalize on your automation investments and address your sustainability objectives. For detailed class descriptions and an up-to-date list of exhibitors, go to www.automationfair.com.

Pre-Show Events

Process Solutions User Group (PSUG), Nov 14 & 15
Kick off the event by attending the Rockwell Automation Process Solutions User Group (PSUG) meeting November 14 and 15, 2011. Come to share ideas, experiences and knowledge. User experience provides Rockwell Automation with direct industry input on products and solution delivery.

The participation fee for the two-day event is US $449 per person. This fee covers all sessions, meals, refreshments and the Monday night networking event and party. On-site registration will be available. An optional one-day registration, good for either day, is available for US $275.

Safety Automation Forum – Nov 14 & 15
This annual event offers professionals the opportunity to join industry speakers and experts to learn about safety’s continued importance within manufacturing, its affect on the top and bottom line and how changing standards can best be leveraged. Safety Automation Forum focuses on best practices and education for the next generation manufacturer. $399 USD – Full Conference Program

Industry Forums give you the opportunity to hear experienced industry representatives share what they’ve learned from applying Rockwell Automation technology to optimize operations, improve productivity, increase throughput and meet quality levels and regulatory restrictions. You’ll be able to ask questions and discuss real-world problems with experienced professionals.

- Automotive, Energy Management, Food & Beverage, Global Machine Builder, Metals & Mining, Oil & Gas, Water/Wastewater

Technical Sessions, Hands-On Labs and Workshops
This is your chance to meet with the solution experts, work with new products to begin developing ideas your next generation automation systems.

- 63 Technical Sessions, 16 Hands-On Labs, 16 Workshops to choose from

Meet with Rockwell Automation & our Automation partners on the Show Floor
The Automation Fair® event is the best place to examine all the Rockwell Automation and complementary technologies and services in one place! The show provides you with a convenient and enjoyable way to talk to suppliers and peers, see product demonstrations and learn how these solutions can help improve your operations.

- 107+ Partner Companies, Machine Builders, and Solution providers
How to Best Handle Product Obsolescence Risk
by Dan Sherburn - GMS Director, Kendall Electric - Grand Rapids

Our base of manufacturing equipment is aging and the obsolescence risk is growing. Obsolescence risk is not having the right part on hand when you need it. Nearly ¾ of the plants in the U.S. are more than 25 years old. The installed base of legacy automation systems reaching the end of their useful life is equivalent to $65B. A recent ARC Advisory Group survey identified 68% of process automation users were running equipment well beyond the manufacturer’s obsolescence date. Did you know the following product families are no longer produced?
- 1336 (Plus II, Impact, etc.)
- 1395 DC
- 1397 DC
- 1398 Ultra 100/200
- Panelview Standard and “E”
- 160 A.C. VFDs

What is “Silver Series”?
Rockwell Automation classifies products as to where they are in their respective product life cycles—Active, Silver, and Discontinued/Inactive products:
- Active: Current product being mass produced and supported
- Silver Series: Still being produced, but an inactive date has been announced. After that date, the products will no longer be offered for sale through normal channels.
- Obsolete: Products no longer being manufactured or offered for sale

Some products, after the Silver Series date may be available for sale through the “Custom Classics” program. As long as material is available, Rockwell will manufacture these products on a made to order basis. Products that are in the Silver Series can be identified by going to the website: http://www.ab.com/silver/

How to Manage the Obsolescence Risk
Kendall Electric, via Rockwell Automation, can offer solutions to mitigating the risk of obsolescence by offering the following services:
- Risk Identification
- Risk Mitigation
- Risk Elimination

Risk Identification
The Installed Base Evaluation with Life Cycle Evaluation is a site delivered inventory assessment. A Rockwell specialist will collect data as it relates to automation equipment being used on the plant floor. The study will compare this data to any available spares on hand. Utilizing a MTBF (mean time between failures) algorithm, Rockwell can make an accurate determination of what and how many spares should be on hand to support the production equipment. In addition, the product identified will be color coded as to where that product stands within its product life cycle. The red-yellow-green code will quickly indicate what products are current (green), silver series (yellow), and those that are obsolete (red). The real value in this type of report is that it serves as the foundation for developing a migration/support plan.

Risk Mitigation
A Life Cycle Service Agreement is service contract designed to minimize the risk of running with obsolete Automation equipment until you have time to migrate to more current technology. Some examples of the Life Cycle Service Agreements include:
- Reserved Repair (or exchange when available). Insures parts (or exchange stock) will be available to repair a component on a Service Agreement
- Remote Support for Discontinued Product (Legacy

Plant Baseline: Lifecycle Analysis

<table>
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<tr>
<th>Location</th>
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<th>Current Products</th>
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<td>330 98%</td>
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<td>222 95%</td>
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<td>238</td>
<td>12 5%</td>
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<td>8 3%</td>
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Totals: 1452 68 9% 1384 95% 8 1% 60 4%

continued on next page...
Tech Connect
- On Site Services for Discontinued Product (Preventive Maintenance)
- Annual IBE Refresh
- Up to 5-year agreement options
- PMA (parts management agreement) includes new technology onsite as a “spare” or replacement for the older technology

Risk Elimination
Rockwell can over a number of conversion services and tools to help convert from the older, obsolete technologies. These can range from complete, turnkey conversions to software utilities to assist self migration programs.

Automation Fair
These and other programs will be discussed in detail at the 2011 Automation Fair November 16th and 17th in Chicago. Plan to attend Technical Session T37 “Maintenance—a proactive approach to Life Cycle management and product obsolescence”.

For further information on how to best handle product obsolescence risk, please contact your Kendall Electric Account Manager.

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**Kinetix 350 E-net**

*by Tique Crespo - Automation Specialist, Kendall Electric - Lansing*

At Automation Fair (AF2011) in Chicago, Rockwell Automation will be launching several exciting new products that are important to most Kendall customers. One of these existing new products will be the Kinetix 350 EtherNet/IP Servo drive. I don’t want to ruin the surprise at AF2011 but by the same token I don’t want you folks to miss out either so I’ll spill a few of the beans and hopefully spark some interest.

The Kinetix 350 (or K350) looks very similar to the Kinetix 300 (K300) in appearance but its operation is based on the servo drive with fully integrated Motion Control. The K350 will be configured, tuned, and controlled through a Logix processor program much like a Kinetix 6000 drive on SERCOS. This means that the K350 will be able to take advantage of the 32 motion instructions allowing the programmer to do motion from within their ladder logic. In RSLogix 5000 you can add this drive to the I/O tree under the Ethernet card as if were an I/O card or distributed I/O. Give the drive a name and an IP address and that’s it. All the tags for the drive are automatically created for you.

The ability to control a servo over EtherNet/IP requires the processor to talk to the servo in real-time. You can’t tell a servo to move at a certain time and then wait while the communications get the message to the drive, it has to happen now. The power of CIP Sync and CIP Motion communications back and forth are synchronized to both the Logix processor and the servo processor. Each packet of information will carry a time stamp as it travels over the Ethernet/IP standard connection CAT 5e/6 UTP or STP media. This is big! This means Servo drives on Ethernet can coexist with other Ethernet products allowing them to be seen and controlled on one network.

The K350 power structure is based on an individual branch circuit for each drive. Input voltages will range from 120vac to 480vac and the power range will be 400 watts to 3 kilowatts. The small compact design will allow for smaller panel space requirements and with the Ethernet connection it will allow you to mount the servos in multiple panels if you like. The K350 will have embedded Safe Torque off features providing a SIL 2 PLd rating.

When you team up a K350 with the new Logix processors, also being introduced at AF2011 this year, you’ll have a scalable system for complex servo motion in an inexpensive, easily integratable and compact design. Please join us this year in Chicago…Check it out at AF2011!
If you are going to Automation Fair in Chicago this year, make sure you check out Booth 343 to see what’s coming to Network Architecture.

Powered by Cisco Technology, the Stratix 8000 can now boast of Static VLAN Routing capability. The 1783 Stratix 8000™ Modular Managed Base Switches include the following options:
• Available in a 6-port or 10-port version
• Includes two 1G ports
• SFP slot supports 100 Mbps and 1 G fiber optic transceivers
• Each base switch supports up to two expansion modules
• Provides switch configurations of up to 26 ports

The Stratix 8000 is the choice of both IT professionals and Automations Engineers, as it can be configured by either the Command Line Interface (CLI) or RSLogix 5000™ Add-On Profile for premier integration into the Rockwell Automation Integrated Architecture.

With Static VLAN routing, you can create a secure segmented network. Designing a segmented network provides benefits such as ease of maintenance, simplified security management, improved performance, and scalability.

Coming soon to a network near you, the Stratix 7000 is an entry level switch supporting 6 to 20 ports, with up to 4 fiber connections. It includes a built in option for network address translation (NAT). Among other things, NAT would allow you to integrate your common machine design with duplicate IP addresses and combine them into a larger network. It is also powered by Cisco technology, so again you can configure it with the Command Line Interface, or the Integrated Architecture tools you already use.

If you can’t make it to Automation Fair, be sure to speak to your local Kendall Electric Account Manager for more details on the Stratix 8000.
Integrated, intelligent, and intuitive best describes the latest IntelliCENTER Technology offering for CENTERLINE Motor Control Centers from Allen-Bradley. IntelliCENTER Technology combines intelligent motor controls, embedded systems, and pre-configured software to help you enhance performance by getting an inside look at your motor control center application.

In addition to DeviceNet, CENTERLINE MCCs are now available with EtherNet/IP as one of its factory-validated and tested embedded systems. The EtherNet/IP helps to enhance integration, reduces your MCC setup time, increases the network speed, and allows you to quickly monitor, troubleshoot, and diagnose your MCC from anywhere on your network.

With the addition of EtherNet/IP, CENTERLINE MCCs provide an even more robust motor control capability that allows easier access to real-time data using a network that communicates with your entire enterprise. You can:
- Reduce the time you need to setup your Motor Control Center
- Increase your access to information without having to open an MCC door
- Enhance integration with your facility’s corporate IT network
- Quickly monitor, troubleshoot, and diagnose your MCC…from anywhere

The EtherNet/IP embedded system in the EtherNet/IP IntelliCENTER uses an exclusive 600V Ethernet cable specifically for use in demanding high-voltage industrial environments. This Allen-Bradley 600V cable is UL-Listed for power limited cable tray applications and meets and exceeds your communication needs. The new 600V cable is used in conjunction with the Allen-Bradley Stratix 6000 industrial EtherNet switch, which is specifically designed to perform in high noise industrial environments.

All of the above technology is combined and programmed with IntelliCENTER software, an intuitive software package customized for your MCC. Your EtherNet/IP IntelliCENTER MCC will be configured, programmed, and tested at the factory using IntelliCENTER software to ensure everything is working properly before shipment. This configuration assurance at the factory before shipment to your facility reduces installation time at your facility and the IntelliCENTER software allows for ease of use and troubleshooting during the life of your MCC.

Ask your Kendall Electric account manager for further information on the new Allen-Bradley EtherNet/IP CENTERLINE Motor Control Centers.
### Allen-Bradley® Training Schedule

Because of the complexity of the industrial control that is currently being installed in factory automation, the need for a thorough understanding and knowledge of the equipment is imperative to keep your company productive and profitable. Training from Allen-Bradley can reduce downtime because employees trained on equipment can solve problems faster. It also maximizes utilization of equipment because personnel knowledgeable about all performance capabilities of the equipment will use those capabilities to the best advantage and potential. Additionally, Allen-Bradley’s training increases worker participation towards your company’s goals and objectives. Many productive suggestions for solving ongoing problems and for increasing productivity come from workers who fully understand control equipment.

![Table of Training Courses](image-url)

To enroll in any of these classes, contact your local Kendall Electric, or register online at [www.kendallelectric.com](http://www.kendallelectric.com).

Ask your Account Manager about the advantages of purchasing vouchers for training classes.

All classes are held at Allen-Bradley facilities.
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**KEN D A L L E C T R I C I N C O R P O R A T E D L O C A T I O N S**

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<th>Tuscaloosa, AL 35405</th>
<th>Warsaw, IN 46580</th>
<th>Wyoming, MI 49509</th>
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<td>1323 Whigham Pl.</td>
<td>1095 Fisher Ave.</td>
<td>1100 58th St. SW</td>
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<td>205-759-5716</td>
<td>574-267-8168</td>
<td>616-406-1555</td>
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<td>800-263-8393</td>
<td>1-800-421-5214</td>
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Call the Kendall Electric location nearest you for all of your electrical needs.