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IAU
2009

Logix / NetLinx, RSLogix 5000, and Connectivity What's New and Coming

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IAU17 – What's New Logix/NetLinx/RSL5K Agenda

1. CompactLogix

2. ControlLogix

3. SoftLogix

4. NetLinx

2. RSLogix 5000

Logix 控制器平台 – 目前状态

Logix 平台的灵活性满足了一种技术解决各种应用问题的需要



CompactLogix

1769-L2x

- 小系统
- Integrated I/O
- EtherNet/IP
- 有限 I/O 扩展
- 512 Kbyte 用户内存

CompactLogix

1769-L3x

- 小型到中型系统
- 模块化平台
- 集成 EtherNet/IP 或 ControlNet
- 0.75 – 1.5 Mbyte 用户内存



ControlLogix

1756-L6x

- 大系统
- 集成运动伺服、安全和冗余
- 复杂的过程应用
- 多CPU和多种网络
- 高速
- 网络网关
- 2 – 32 Mbyte 用户内存

CompactLogix

1768-L4x

- 中型系统
- 集成运动伺服
- 多种网络 EtherNet/IP, ControlNet
- 2 – 3 Mbyte 内存

功能和灵活性

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CompactLogix

2008-2009年的新产品



CompactLogix L23 系统产品特点

新



Catalog	1769-L23E-QB1B	1769-L23-QBFC1B	1769-L23E-QBFC1B
Memory	512KB		
Built-in I/O	16 DCin, 16 DCout	16 DCin, 16 DCout 4 Analog in, 2 Analog out 4 high speed counters (250KHz)	
Built-in Communication Ports	1 - EtherNet/IP and 1 - RS-232 serial port	2 - RS-232 serial ports	1 - EtherNet/IP and 1 - RS-232 serial port
EtherNet/IP Connections	8 TCP/IP – 32 CIP	n/a	8 TCP/IP – 32 CIP
Expansion Modules	2 1769 modules (any)	2 1769 I/O modules or 1 1769 communication module	2 1769 I/O modules or 1 1769 communication module
Communication Options	EtherNet/IP, DeviceNet, 3 rd Party		
Serial Port Communications	ASCII, DF1 full/half duplex, DF1 radio modem, DH-485 and Modbus (via program)		
Simple Motion	Stepper, DeviceNet indexer, Analog or networked AC drive		
Integrated Motion	n/a		
Programming Languages	Relay ladder logic, function block diagram, structured text and SFC		
Controller Tasks	3 tasks – continuous, periodic or event		

独立、和小型控制应用的理想选择

Compact I/O 模块

NEW

- 1769-IF16V 和 1769-IF16C
- 高密度模拟量输入模板
- 单槽宽度
- 和1769-IF8类似
- 特点:
 - 5 种电压和 2 种电流输入范围
 - 多种数据格式
 - 多种滤波频率
 - 无需现场校对
 - 报警
- 2008年11月发布



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CompactLogix

2009日历年的新产品



CompactLogix L3x 增强

将发布

- CompactLogix L32E 和 L35E ATEX 认证
 - 2008年11月自我认证
 - 2009年3月第三方认证
 - 只有L32E 和 L35E 控制器认证
- CompactFlash Runtime R/W
 - 仅L32E 和L35E控制器有官方支持
 - 需要硬件变化，没有序列号变化，只有日期码变化
 - 2009年6月或7月发布
 - 和ControlLogix L6x Series B功能相同
- 1769-OF4
 - 单槽宽度
 - 电压和电流输出
 - 多种数据格式
 - 无需现场校对
 - 09年Q4发布



Compact I/O 模块 – 新AOP

将发布

- 1769-IF4FXOF2F, 1769-IG16, 1769-OG16, 1769-OB32T
 - Completed. Available from the Product Manager or soon from the My support web site.
- 1769-IF16C & 1769IF16C
 - Planned for FY09Q3 completion

包含在RSLogix 5000 V16
中，可以在 My Support site
上下载

Rockwell Automation

Welcome Fabio Malaspina! Sign Out, Manage My Profile

SEARCH

RSLOGIX 5000 ADD-ON PROFILES (Step 1 of 3)

The table below lists files, release notes, and revision compatibility for Add-On-Profiles of various products. Add-On-Profiles are I/O module profiles that can be installed separately from RSLogix 5000.

You can download these files if your software product is currently under warranty or a support contract. Just click on the link to qualify for support.

Suggestions for downloading:

We recommend you view the release notes, posted as viewable PDF files, before downloading.

Instructions for using the .zip files in the following table:

Extract the contents of the .zip file to a working folder on your computer. Run the MPSetup.exe from the working folder to install the Add-On-Profile.

EDS files:

EDS files may be required by the version of network configuration software that you are using. EDS files are not provided in the files from the table below. EDS files can be obtained from [here](#).

Related Links

- About Support Requests
- Product Support Services
- Online Support Services
- Ordering Tools and Selection Tools
- Product Manuals
- Support Connectors Registry
- Spare Parts Search
- Standard Instructor-Led Training Course Schedules

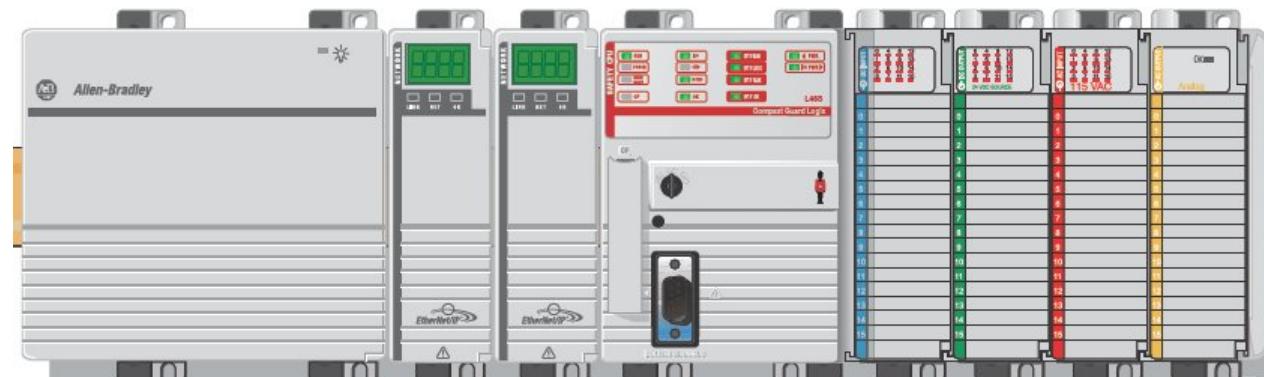
Add-On-Profiles	Release Notes	Minimum RSLogix 5000 Software Revision
174 POINT I/O4/I/C	[Link]	V15.00
174 POINT I/O Analog	[Link]	V15.00
174 POINT I/O Discrete	[Link]	V15.00
174 POINT I/O Specialty	[Link]	V15.00
175 POINT I/O12/I4	[Link]	V15.00
175 POINT I/O Analog	[Link]	V15.00
175 POINT I/O Discrete	[Link]	V15.00
175 POINT I/O Specialty	[Link]	V15.00
1769-Compact I/O Analog	[Link]	V15.00
1769-Compact I/O Boolean	[Link]	V13.04

Compatible with v13.04 and higher

Compact GuardLogix – Logix V18

将发布

- Logix中型平台上支持集成安全
 - 标准功能和L43 和 L45控制器一样
 - 完全 1oo2 安全实施，从架构上优于 Siemens
 - 内置安全协处理器 (LSP)，用户不可见
 - 无强加的限制，全语言、运动和通讯 (Siemens can't do this)
 - 安全功能和GuardLogix一样
 - 安全指令相同，安全，EtherNet Safety I/O, 等
 - 1768 L43S - 2M Standard, $\frac{1}{2}$ M Safety
 - 1768 L45S - 3M Standard, 1M Safety
- 将使用CompactBlock Guard I/O 和POINT Guard I/O on Ethernet/IP
- AFS 1QFY10



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SoftLogix 5800



- Several enhancements in v17 release
 - Improved Ethernet/IP communications and stability
 - Improved Ethernet communications to PowerFlex drives
 - Performance improvements



Future of operating systems supported for SoftLogix 5800

Windows

Today

- Windows 2000, XP, 2003 Server
- Mac OS X

Tomorrow

Windows XP, Server 2003 and the addition of Vista and 2008 Server

Microsoft

- V18 SLX5800 - Microsoft Vista supported
- **ONLY** Virtual Axis Motion support when using Vista *
- Support for EtherNet and ControlNet (PCI bus) when using Vista
- **No** support planned for the following PCI cards on Vista
 - 1784-PCIDS
 - 1784-PM02AE
 - 1784-PCM16SE



Silver Series Now
12/31/2009 No longer for sale



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ControlLogix

2008-2009的新产品

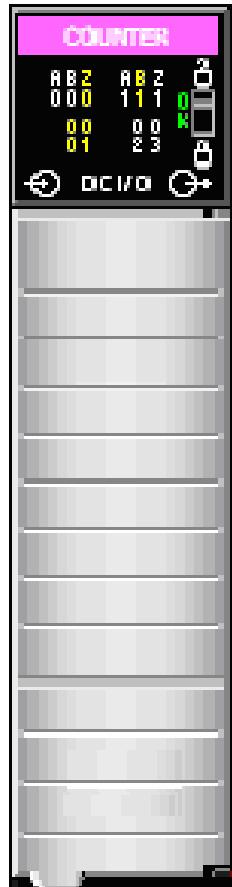


- 支持 32 MB 用户内存，用于大型应用：
 - 允余
 - 数据采集
 - 报警
- 允余系统支持 – v18.5x 3Q CY2010



NOTE:

For the -L64 and -L65 controllers there will be some increase in scan times due to the large increase in user memory. See publication 1756-RM087G-EN-E for detailed information on instruction execution times.



- 固件版本 2.1 功能增强
 - 不需要重新定义模块，随时通过输出标签中的 On/Off configuration 改变输出窗口
 - 不需要重新定义模块，随时通过输出标签中的 Preset/Rollover configuration 改变 Preset/Rollover
 - 重新组态时，不清除输入标签的 “StoredValue”
- Series B 固件版本 3.2
 - 增加频率方式计数的“累加器”
 - 额外增加两种频率方式：
 - 周期速率 Period Rate 和 连续速率 Continuous Rate



Available
Mar 09

Full SW Profile support for both enhancements in V18.
Generic Profile (w/ Custom Tag Structure) @ samplecode.rockwellautomation.com

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ControlLogix

2009日历年新产品





- CIP Sync内置的支持
 - 利用标准以太网传播的实时时钟实现高精度时间戳
 - SOE架构因为不需要 在多个机架中安装SynchLink和 GPS模块而得以简化
- 新的“x10 FIFO Mode”
 - 每个RPI提取10 个Event Timestamp (versus 1 today)
 - 高速应用的响应时间提高了10倍



为SOE/首发故障检测系统提供一流技术和竞争力

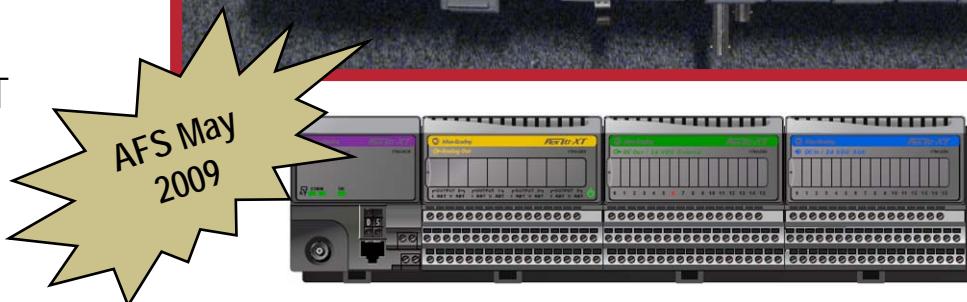
1756/1794 极端环境 (XT)

COMING

- 宽温度范围
 - 1756-XT (-25 ° C to + 70 ° C)
(-20 to 70C) for phase 1 - FLEX-XT
 - 对流冷却, 无需风扇
- 气体防护 1756-XT
 - G2 and G3 Environmental Capability
 - 1756 XT Modules Conformal Coated
 - Option for phase 1 - FLEX-XT
- 耐恶劣环境的部件
 - 高可靠性
 - 极端环境中的耐久性
 - 苛刻环境应用

1756 ControlLogix XT

- Controller (1756-L63XT)
- Redundancy Module (1756-RMXT)
- Communications (1756-CN2XT, -EN2TXT)
- Power Supply (1756-PBXT)
- Chassis (1756-A5XT, -A7LXT)
- Slot Filler (1756-N2XT)



System Components

1794 FLEX XT

- Digital (1794-IB16XT, -OB16XT, -OB8EPXT, IB10XOB6XT, -OW8XT)
- Analog (1794-IE8XT, -OE4XT, -IE4XOE2XT, -IF4IXT, -OF4IXT, -IF2XOF2IXT)
- Specialty (1794-IR8XT, -IRT8XT, -IJ2XT)
- Communications (1794-ACNR15XT)
- All terminal bases and cable accessories

替代能源(风电), 油汽, 炼化, 食品饮料, 航空

- 盘柜内安装的加热器和空调装置购买和维护都昂贵，因为过滤器必须定期检查、清洗和更换。因为造价随KW数增加，去掉这些设备可以节省很多能源。
- 盘柜空调增加体积。
- 盘柜空调在工业和舰载应用中，向周围环境散发过多的热量，需要环境控制额外的冷却开销。
- 很多公司在努力升级含CFC的空调，从总体上减少设备的能源消耗。
- 和应用相关，用XT产品可以取消盘柜安装的加热器和空调装置。



XT 减少了 HVAC 的需求和能源消耗

XT – 气体防护

1756-XT 产品具有涂层保护，避免腐蚀，防护灰尘、气体、盐和凝露，
防护潮湿，防止真菌生长。



- XT 产品在工厂做涂层处理，满足或超过
 - ANSI / ISA-S71.04-1985; Class G1,G2 and G3 Environments
 - CEI IEC 6065A-4 Class 1 and 2 Environments
 - UL 746E
 - MIL-1-46058C to ASTM-G21(Tropicalization and fungicide)

下面是可以防护的物质中常见的几种反应物质：

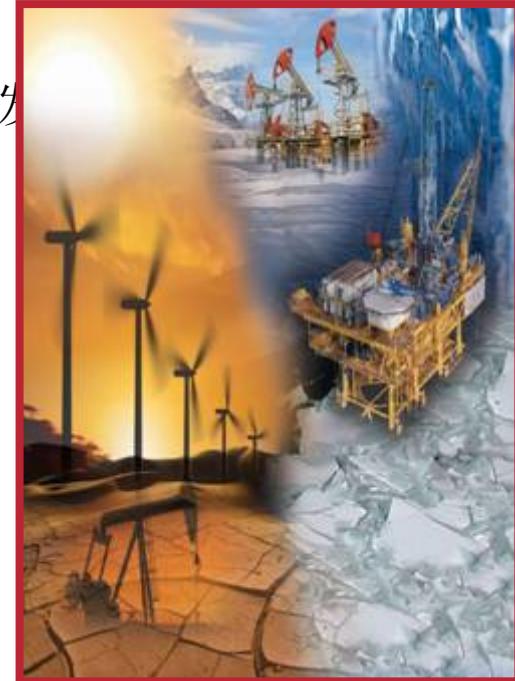
- H₂S – 硫化氢
- SO₂, SO₃ – 氧化硫
- C_nH_n – 碳氢化合物
- NO_x – 氧化氮
- Cl₂ – 干、湿氯气



XT 防止空气污染

XT 应用

- 发电
 - 扩展温度范围，防护盐雾、潮气和凝露
 - 典型应用：油气平台，泵站，风电，燃气发电机，太阳能发电场
- 水和污水
 - 防护潮气和凝露，防护处理过程中的腐蚀物质
 - 典型应用：泵站，沉淀和处理池
- 舰载应用
 - 扩展温度范围，防护盐雾、潮气和凝露
 - 典型应用：主机室，货舱，提升机，吊车
- 食品和饮料，牛奶
 - 扩展操作范围，防护淀粉和油
 - 典型应用：冷冻机，空调和烤炉
- 造纸
 - 防护潮气，凝露，漂白和其他腐蚀性化学物质
 - 典型应用：湿端处理和漂白操作
- 采矿和冶金
 - 扩展温度范围，防护潮气、凝露和空气中的颗粒
- 铁路/地铁和车载
 - 扩展温度范围，防护潮气和凝露，防止真菌生长



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ControlLogix

2010年中



- 性能

- 新的双核RISC ASIC (ICE)
- ~300% 运动伺服性能提升
- 冗余系统更快的交叉互载
- 用新的ControlLogix通讯模块 (1756-EN2T and 1756-CN2)
实现更快速通讯
 - 利用RA最新的背板ASIC
- 更快的I/O采集

- 硬件

- 显示提供控制器信息和诊断
- **用 USB 2.0 (upload/download only) 替换9-Pin D-Shell串口**
- 实现新的能量储存设备，内存较小的控制器设备不再需要电池
- 从CompactFlash升级到更快的安全数据介质



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ControlLogix 升级方案

2Q2009



1756-RIO 模块

COMING

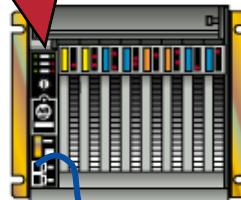
- 通讯性能和PLC-5系统相当
 - 比1756-DHRI0处理BT强
- 分阶段实施升级的理想方案
 - 可以组态成扫描器或适配器
 - 扫描器方式可以先升级PLC-5处理器
 - 适配器方式可以先升级1771 I/O机架
 - CLX机架中仍然需要处理器

1756-RIO 组态
成扫描器



RIO I/O

PLC RIO Ports
组态成扫描器



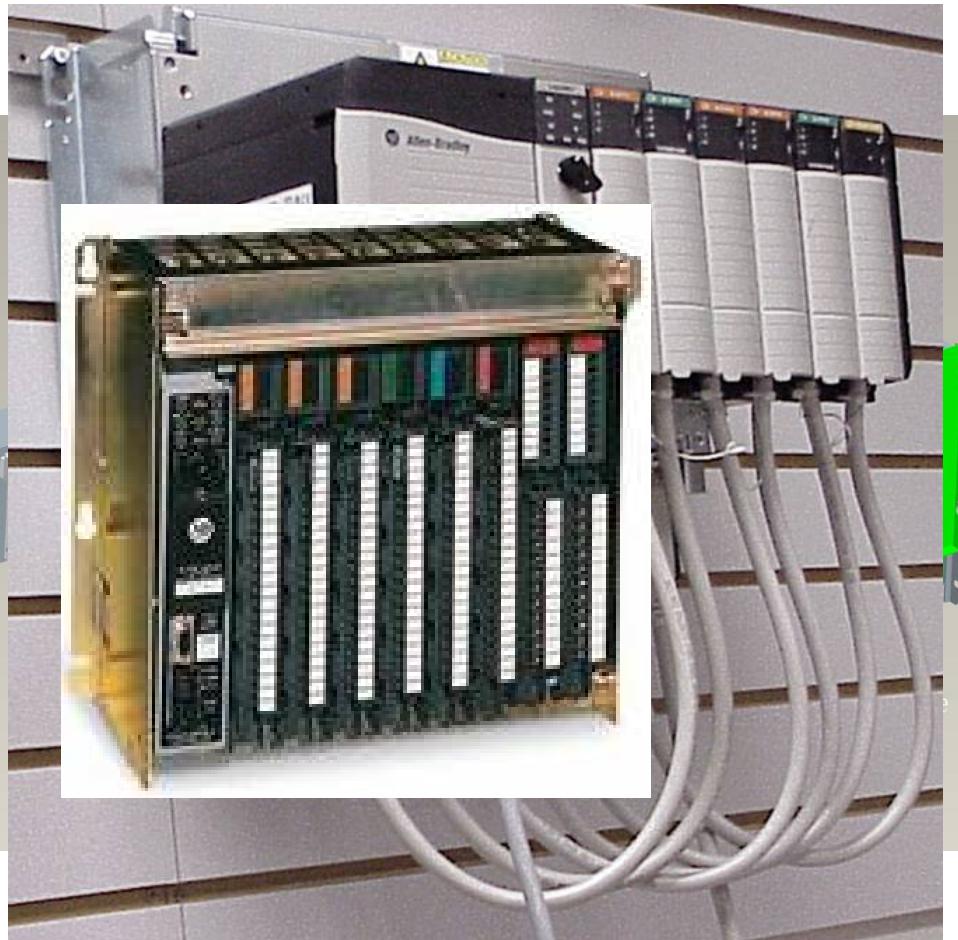
1756-RIO 组态
成适配器



1756-RIO 将在2009年4月底发布

1771到1756连线转换

COMING



Swing Arm rack utilizes the same mounting holes as the 1771 rack!

Swing Arm Adaptors:

- For the most common 1771 I/O modules
- Snap in without mounting hardware
- No need to unwire and rewire I/O points
- Predrilled cover plate for all CLX racks

AFS June 2009!

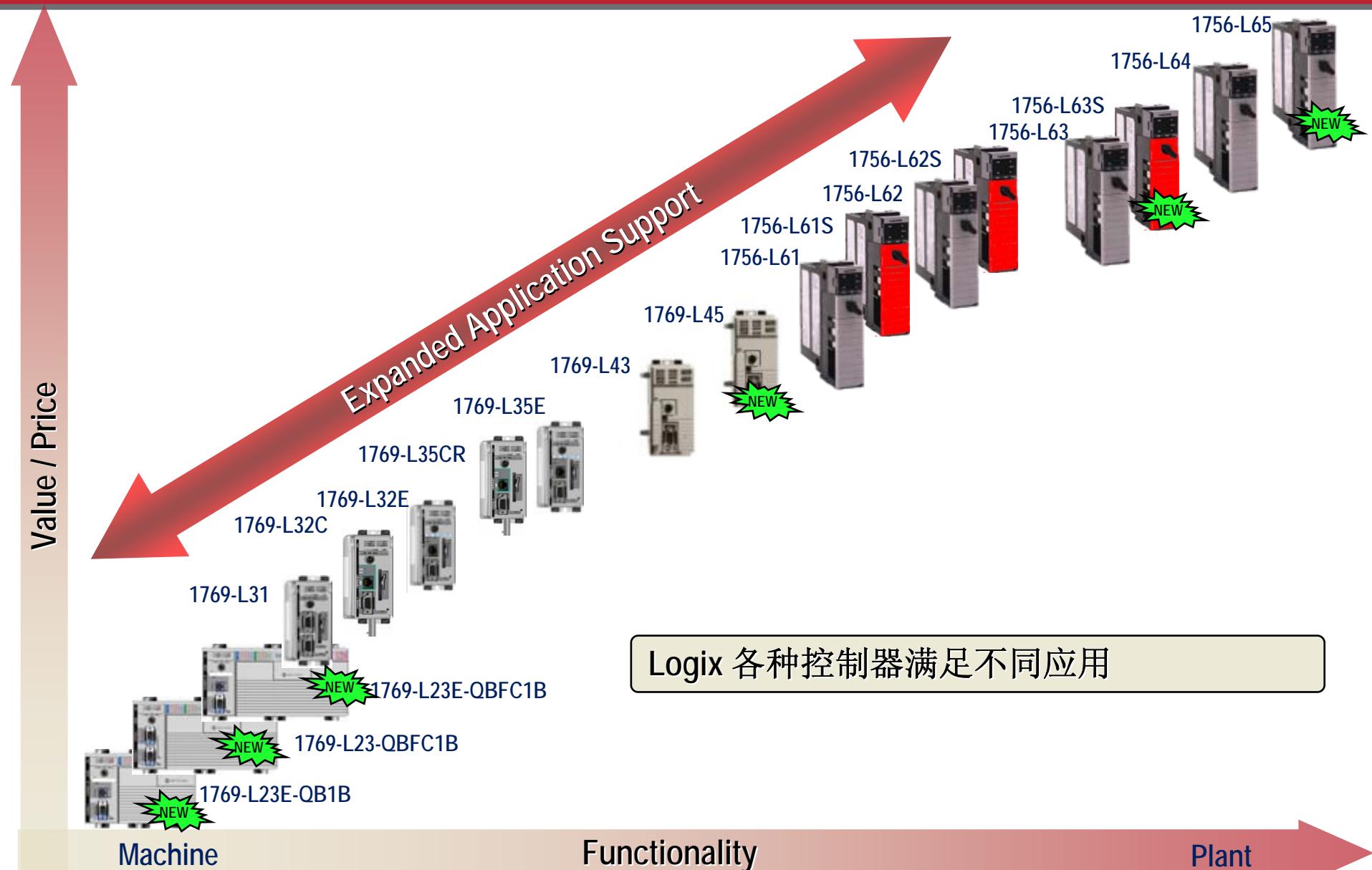
估计每个机架节省10-20 小时的人工

Sampling of 1756 & 1769 Products offered by Encompass Product Partners at IAU

- **Advanced Micro Controls**- Analog inspection modules, stepper modules, PLS modules, SSI interface and resolver interface modules
- **Helm Instruments**- Resolver Input Modules, Strain Gage Input Modules, Weigh Scale Input Modules
- **Online Development**- Appliance Transaction Modules – for Data Exchange and Peer Controllers
- **ProSoft Technology**- In-chassis Protocol Interface products for RA platforms, In-rack Flow Computers and Wireless Solutions
- **Spectrum Controls***- Specialty Input Modules and 1769 Hart Modules for Process Applications



Logix 家族



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ControlLogix
冗余系统



V16.5x 提供两种硬件配置的冗余版本

标准版

- 冗余机架对必须有1756-L6x, 1757-SRM, 支持7个通讯模板 (1756-CNB/R Series D/E, 1756-ENBT, 和 1756-EWEB) 的任意组合
- 该平台面向：
 - 扩展现有系统或订单已经确定的用户
 - 仅仅使用成熟技术的用户
 - 从现有的V11或更高的系统升级而不关停现有系统的用户；或需要现有硬件的用户
 - 使用SRM前接触器的用户
 - 使用1756-EWEB的用户
- 固件包: V16.53 Std Available Now on Extranet and Support Website

增强版

- 冗余机架对必须至少有一个1756-L6x (可以有多达两个L61/L62/L63), 1756-RM, 支持7个通讯模块 (1756-CN2/R Series B 和1756-EN2T) 的任意组合.
- 该平台面向：
 - 要使用最新硬件的新装置
 - 要使用CIP Synch做主时钟的用户
 - 在每个冗余机架中安装2个L61/L62/L63 处理器的用户
 - 需要减少切换时间的用户（快达10 ms）
 - 通过使用单槽1756-RM减少盘柜空间的用户
 - 要使用USB来连接工程师站的用户
- 固件包: V16.54 Enh Available Now on Extranet and Support Website

注：目前标准版和增强版的通讯模板是不同的，不能混用！

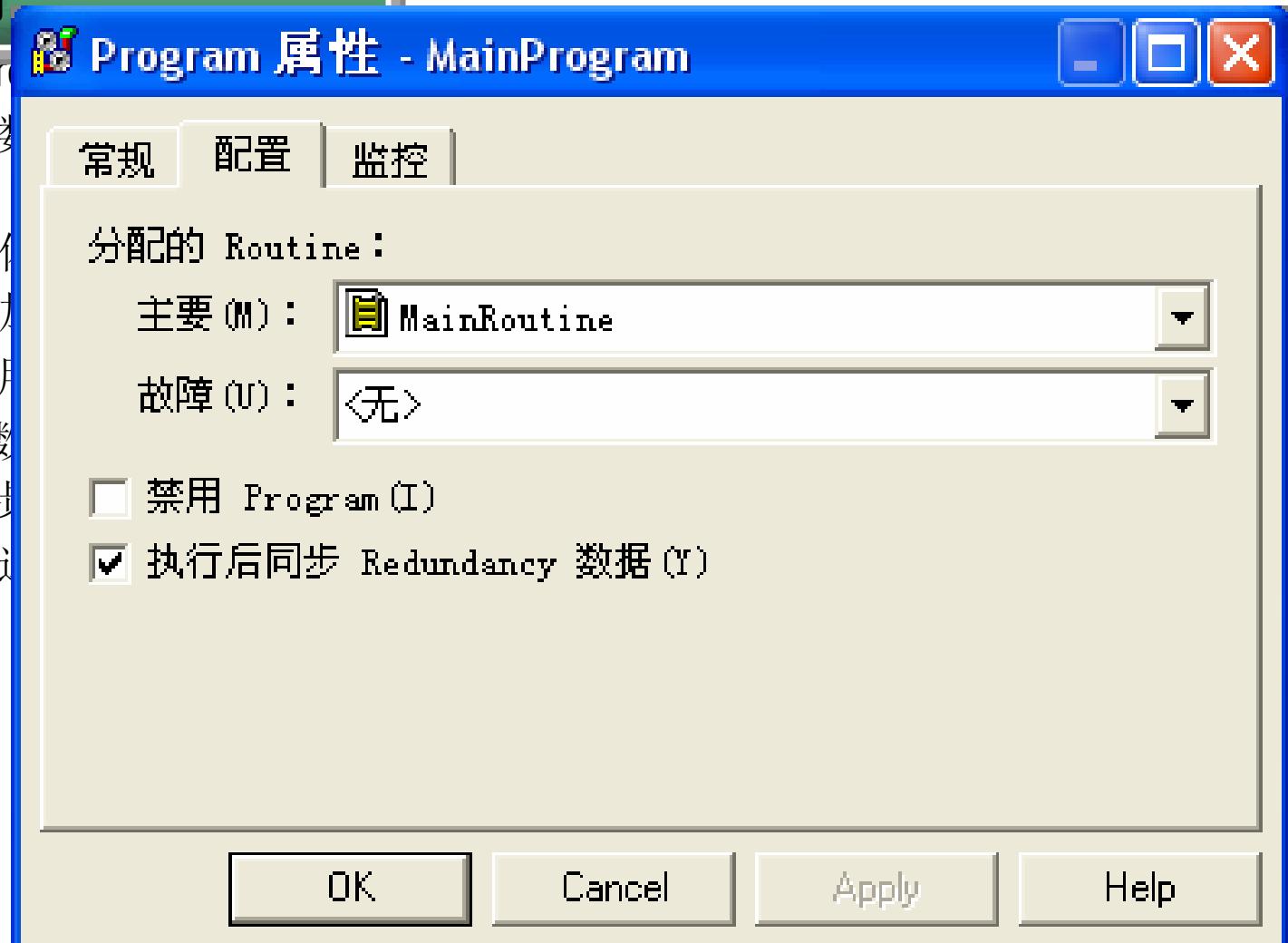
V16.5x 提供选择性同步

新产品细节

- 在以前的ControlLogix中:
 - 如果某个数据块在冗余模式下被写入多次)
 - 这使得整个系统不可用
- V16.5x 允余增加选择性同步:
 - 在很多应用中:
 - 减少数据块的写入次数
 - 当同步失败时恢复操作
 - 这可能延迟写入操作

Original
Synch at
Every Program

V16.50
Synch at
End of Task

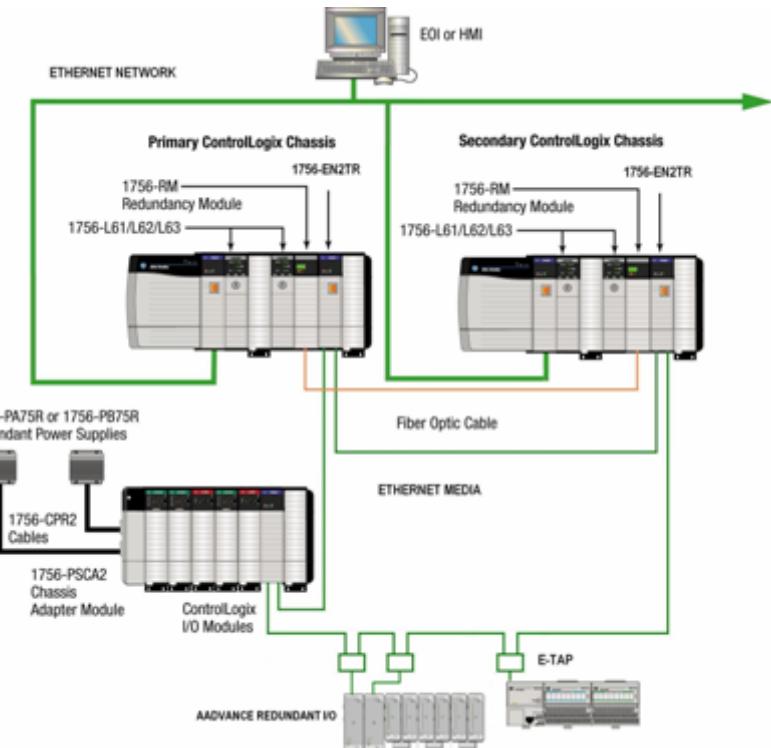


Point
□ = Program scan ■ = Sync Overhead ■■ = Form Packets and Send Changes

ControlLogix 冗余系统

COMING

- V16.60 预计 2009年6月
 - Phase Manager
 - Alarms and Events
 - RM support for Standard Platform (ENBT, CNB(R) Series D/E (Allows SRM's to be replaced by RM modules))
 - Phase Manager and Alarms and Events will be supported on the Enhanced platform only.
 - This will be the last release that supports Standard Platform modules.



New 1756-RM bundle kit coming soon

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USB 编程电缆



USB 到网络的电缆

- 已发布：
 - ControlNet; 1784-U2CN
 - DeviceNet; 1784-U2DN
 - Data Highway Plus; 1784-U2DHP
 - 替换PCMCIA卡：
 - 售完即止 (1784-PCC, -PCD 和 -PCMCK)
- ControlNet 和 DeviceNet 电缆设计满足 FrontLine's Net Decoder TA 软件
 - 从Frontline购买
 - WIN TA 软件将停止



总结 – 控制器

- CompactLogix
 - 新的认证
 - Compact Flash Read/Write
- 升级机会
 - Take advantage of migration opportunities
- 用XT产品进入新的市场
 - 铁路, 替代能源, 基础设施, 车载, 船载
- 增强的冗余
 - 更高的性能, 缩减的切换时间

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NetLinx

DeviceNet –ControlNet - EtherNet/IP



Agenda

Network Overview

NetLinx Product Updates

Stratix Ethernet Switch Updates

Media Updates

Process Network Updates

What's Coming Next Year

Call to Action

网络总的业绩



3,810,000 RA nodes shipped

13% growth

12% CAGR

Updated January 2009



1,221,000 RA nodes shipped

2% growth

10% CAGR



1,671,000 RA nodes shipped

16% growth

31% CAGR

**More than 1120 Vendor
IDs have been applied for
and issued for the family of
CIP Networks.**

Agenda

Network Overview

NetLinx Product Updates

Stratix Ethernet Switch Updates

Media Updates

Process Network Updates

What's Coming Next Year

Call to Action

简化DeviceNet 推广的主要内容



RSLinx (using RSNetWorx for DeviceNet)



E1 Overload



CompactLogix

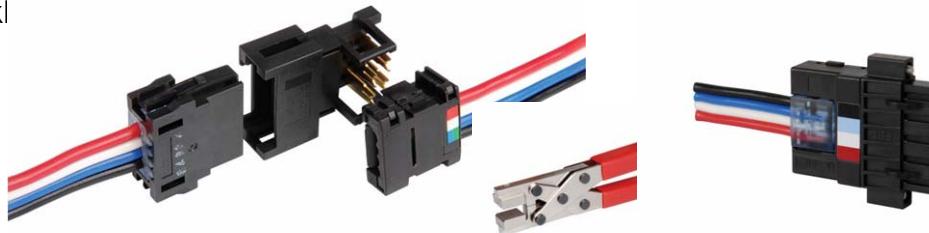
ControlLogix



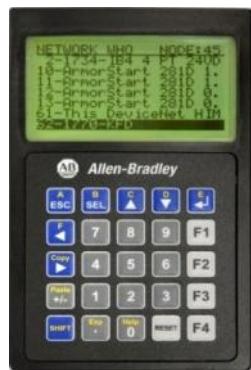
DSA100



Kwikl



800T



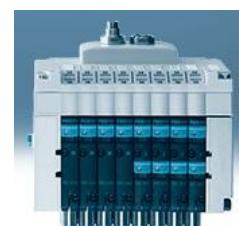
193-DNCT



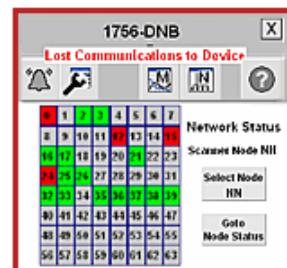
PARKER Moduflex



Powerflex 40

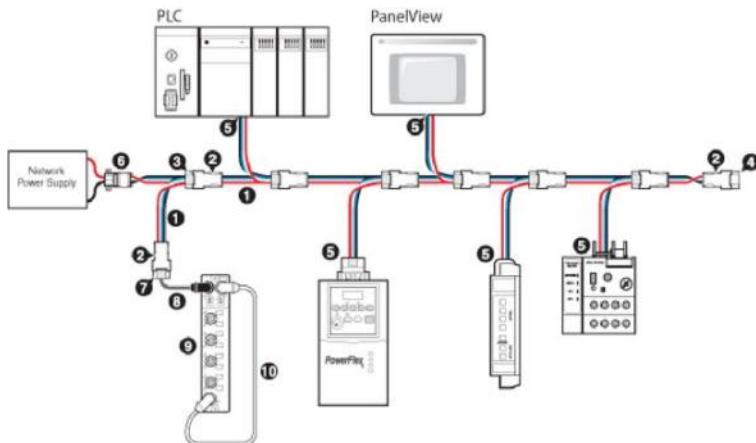


FESTO CPV



FactoryTalk View
Faceplates

KwikLink Lite 扁平介质



KwikLink Lite Connectors

Description	Assembly Rating	Catalog No.
Trunk-Line Connector, IDC	30V DC, 5A	1485-K1TG4
Drop-Line Connector, IDC	30V DC, 5A	1485-K1DI4
Terminating, Resistor, IDC	30V DC, 5A	1485-K1TR4
Terminal Block, IDC	50V DC, 5A	1485-K1TLR4
Flat to Thin Round Cable Converter, IDC	50V DC, 5A	1485-K1GK4
5-pin Open Style Connector, IDC	300V DC, 5A	1485-K1G4-Y5

- DeviceNet IP20 Flat Media and Connectors
 - ODVA Approved
 - Supports Trunk-and-drop, Daisy-chain, and Hybrid Topologies
 - Suitable for in-cabinet, light duty applications
- Insulation Displacement Technology
 - Reliable Connectivity
 - Ease of Assembly
 - Flexible Drop-Line placement
- Compatible with existing DeviceNet Media
- Less wiring mishaps and Less troubleshooting

**Significant labor savings
79% time savings (typical)**

1756-CN2(R) / B Overview



- 2.5 倍1756-CNB模块的性能提升
 - 支持Keeper 交叉加载功能
 - USB 访问模块和系统更容易
 - 地址开关简化地址设置

1756-CN2/B Keeper 交叉互载



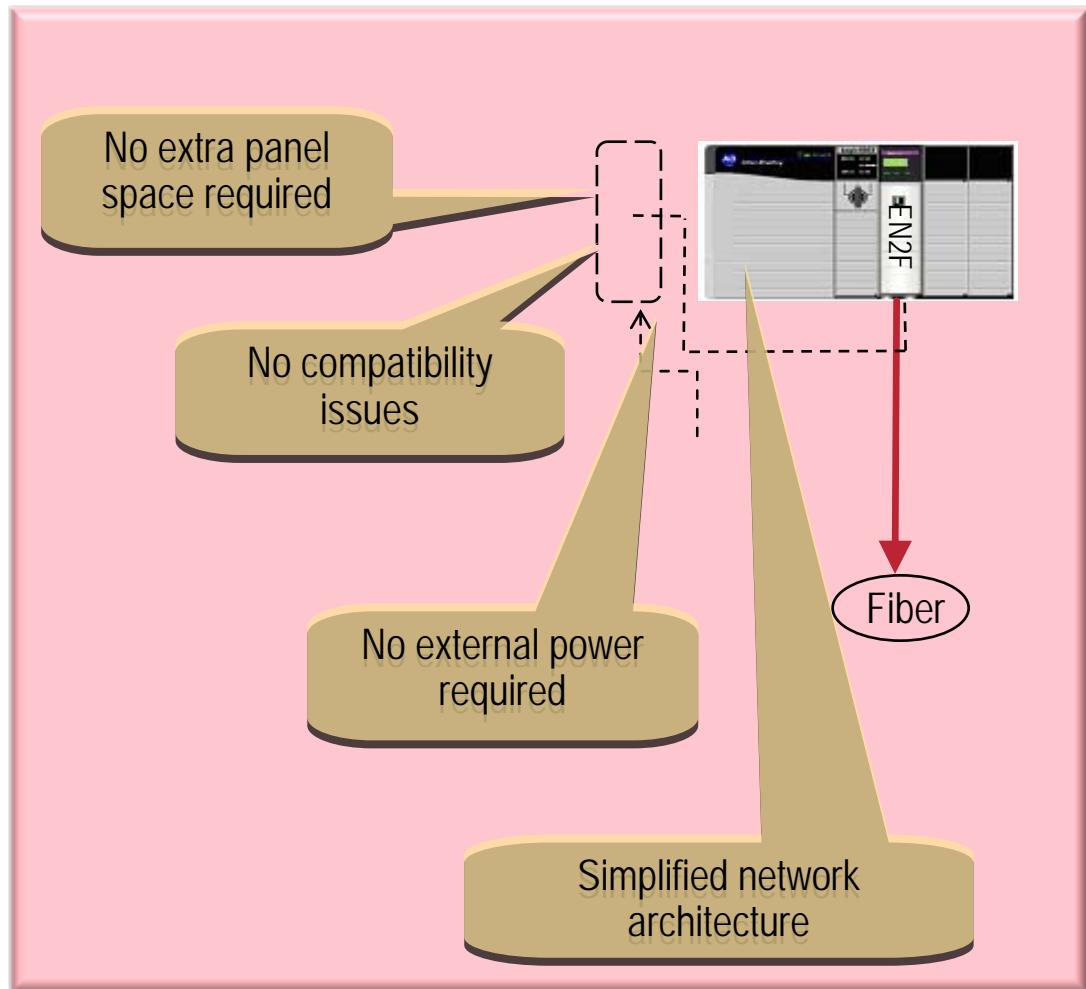
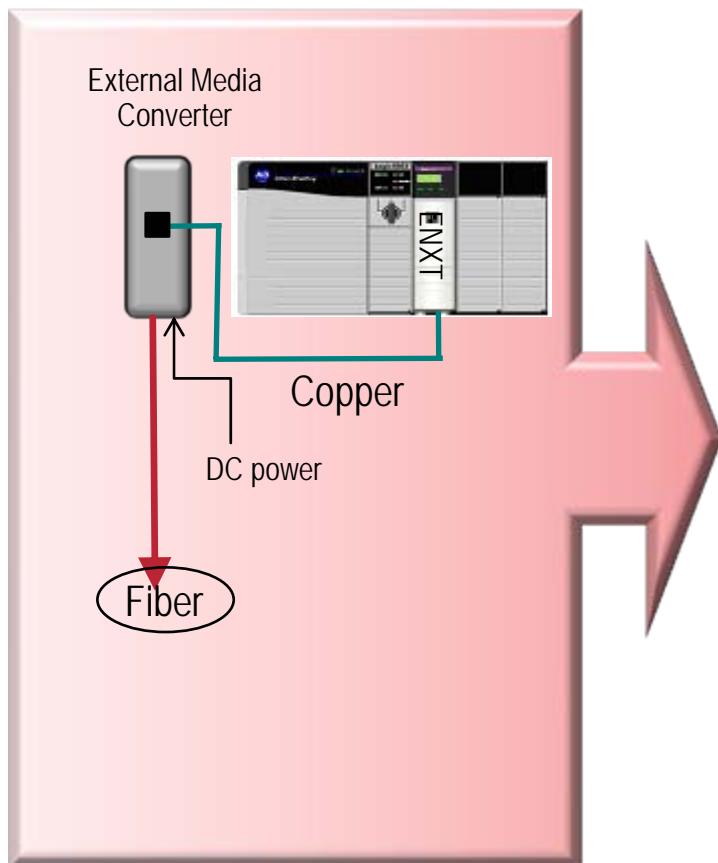
Example 3 chassis network

- Each chassis contains one 1756-CN2/B
- Network is initially configured using RSNetWorx

Scenario

- 1756-CN2/B in one of the chassis fails
- Maintenance person replaces failed module with replacement "out of the box" 1756-CN2/B
- Replacement module obtains keeper data and network information updated **without using RSNetWorx**

Key Benefits of Using the 1756-EN2F



以前CLX方案

1756-EN2F 方案

ControlLogix 通讯模块系列号变化

- 1756 通讯模块背板 ASIC 升级
 - DeviceNet 1756-DNB Series D - **Shipping Now**
 - Same performance and features as Series C
 - Series D firmware is backward compatible with series C hardware but series C firmware will not run on series D hardware
 - 1756-ENBT Series B – **Shipping Now**
 - Same performance and features as Series A
 - Series B firmware is backward compatible with series A hardware but series A firmware is not compatible with series B hardware
 - 1756-CN2/R Series B – **Shipping Aug 2009**
 - No series change required as firmware update is compatible with both hardware platforms

Agenda

Network Overview

NetLinx Product Updates

Stratix Ethernet Switch Updates

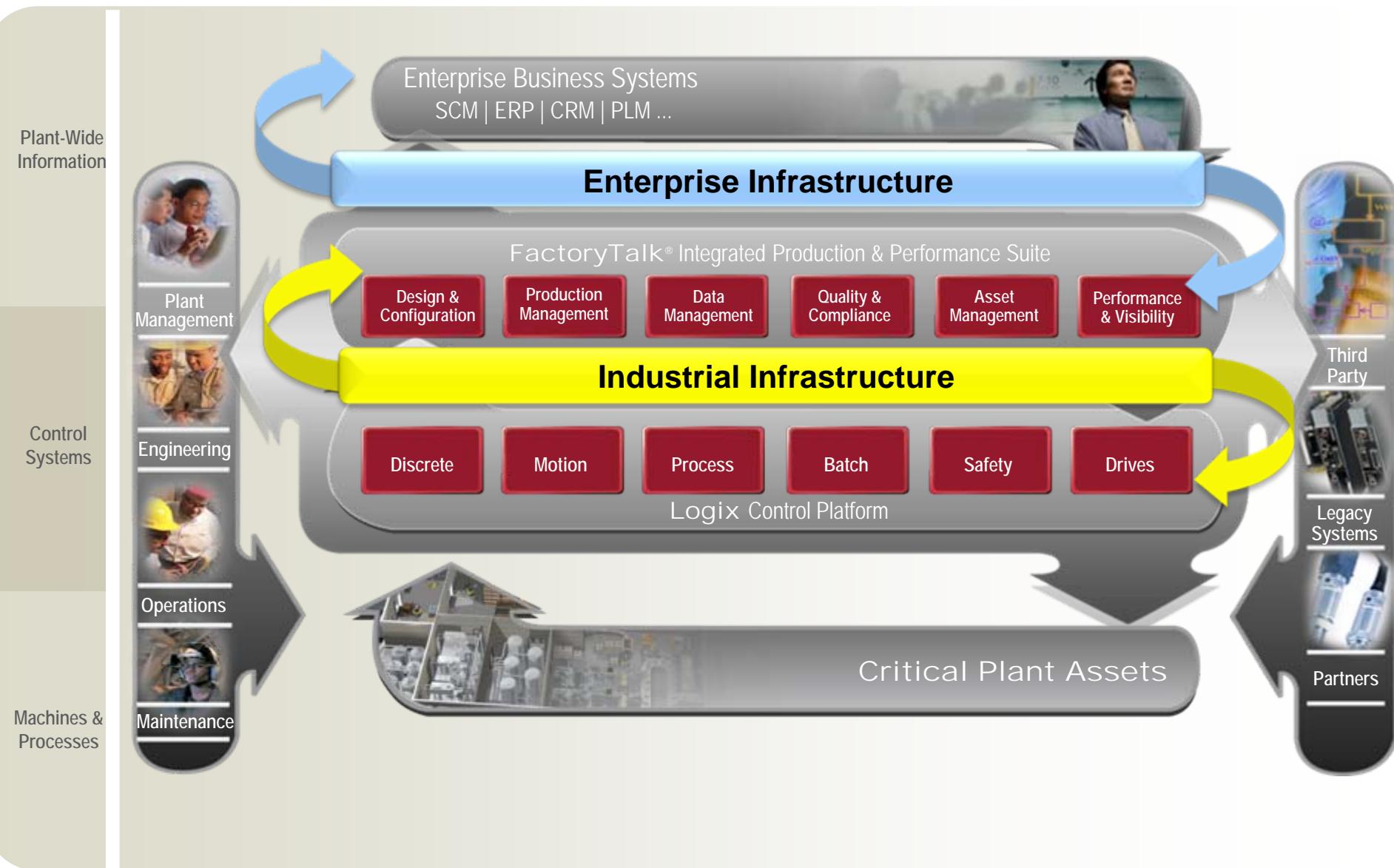
Media Updates

Process Network Updates

What's Coming Next Year

Call to Action

集成架构 融合的支撑技术



Cisco 和 Rockwell Automation 携手

通用技术

支持开放的、无修改的标准，兼具ODVA、ISA等自动化网络
的智能网络特点 ODVA, ISA

合作定义参考架构

融合的网络架构中，经过验证的
设计和实施指南和最佳实践

人员和流程优化

开发流程指南，帮助融合，提供培训，帮助IT和制造的更
好对话

共同开发产品

开发工业具有Cisco和罗克韦尔自动化优势的以太网交换机

Board members of
ODVA, active in ISA
security and wireless
committees

Available now, free
for [download](#)

Educational seminars,
white papers and events

Stratix 8000™
switches

Stratix 家族定位



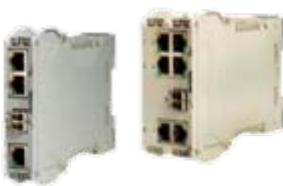
非管理型

端口组态:

- 4, 5, 7, & 8 端口
- 光纤 & 铜缆

特点:

- 无需组态



Stratix 2000

小型、独立网络的应用

固定管理型

- 端口组态:
 - 4 铜口, 8 铜口+1光口
- 特点:
 - RSLogix 5000 profile, tags & faceplates
 - VLANs, QoS, IGMP, Port mirroring, MAC ID 端口安全 & DHCP IP 地址按端口分配



Stratix 6000

监视和控制分布式设备



Stratix 8000

模块化管理型

- 端口组态:
 - 6 到 26 口
 - 6 & 10 口基本单元
 - 8 口铜 & 光纤扩展选择
- 特点:
 - Cisco Technology: IOS, CLI, CNA
 - Automation Smartports
 - RSLogix 5000 profile, tags & faceplates
 - VLANs, QoS, SNMP, IGMP, Port mirroring, MAC ID port security , DHCP IP address assignment per port, & REP (fast ring protocol)
 - CompactFlash - nonvolatile config. storage



f

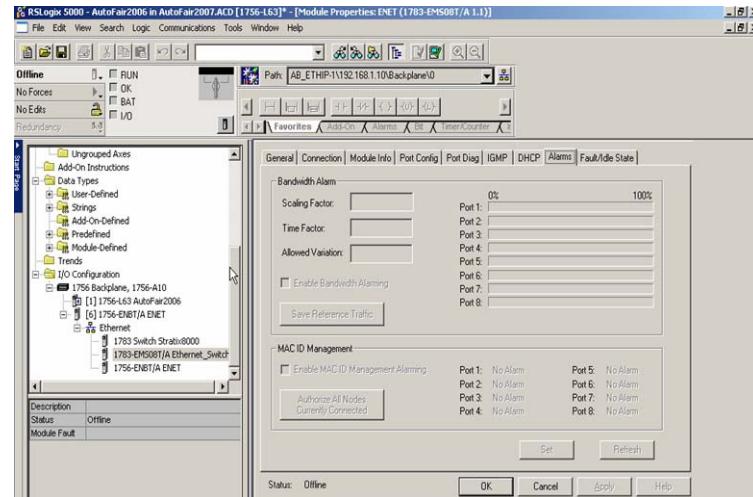
工厂车间层和企业集成

独特的工业以太网交换机系列 -
从工厂车间到企业级应用

Stratix 6000 管理型交换机

- 固定端口管理型交换机

- 4口，8口可选SFP(小型可插拔)用于光纤上行链路
 - 集成的控制系统功能
 - CIP通讯，用于：
 - 诊断(标签)
 - 配置(RSLogix 5000)
 - 安全
 - DHCP, 可为自动化终端设备分配IP地址
 - 非授权用户鉴别
 - 带报警的通信量监控
 - FactoryTalk View 面板



完全融入集成架构

Stratix 6000 特点

简化的组态 和设置

- 缺省 IP 地址，设置快捷
- 使用内置的网页设置
- AOP 组态是RSLogix 5000项目的一部分

诊断和监视

- 内置网页提供实时诊断信息
- RSLogix 5000 预定义标签HMI 开发更容易
 - 流量监视和报警
- FT View的控制面板

安全

- 端口控制 – 用Logix打开和关闭端口
- MAC ID 设备认证
- 交换机访问用户名和密码认证

维护

- 参数设置保存在Logix项目中，在交换机更换后（IP地址必须在下载前设置）参数自动下载
- 每个口的DHCP确保连接设备在更换后的地址分配是正确的

Stratix 8000 – What's New

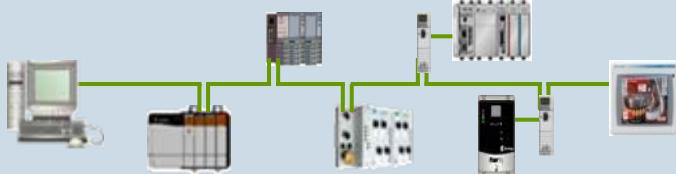
- Release 2
 - 1588 支持
 - 支持CIP motion 和 Sync 应用
 - 处理透明和边界时钟
 - 每口DHCP
 - 为连接的设备分配一致的IP地址
 - 更换设备快速方便
 - Firmware从support网址下载
 - 需要新的AOP – 从support网址下载



内置交换机技术

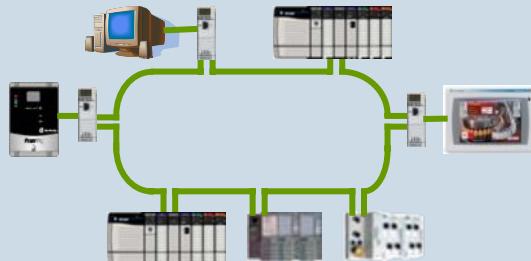
- 支持EtherNet/IP线性和环网拓扑
- 网络流量按优先级保证关键数据及时传送
- 开放标准 (ODVA) 使得第三方供应商开发兼容产品

线性Linear



- 线性以太网段极大拓展应用长度
- 不必把每个设备连接回中心交换机

设备级环Device-Level Ring

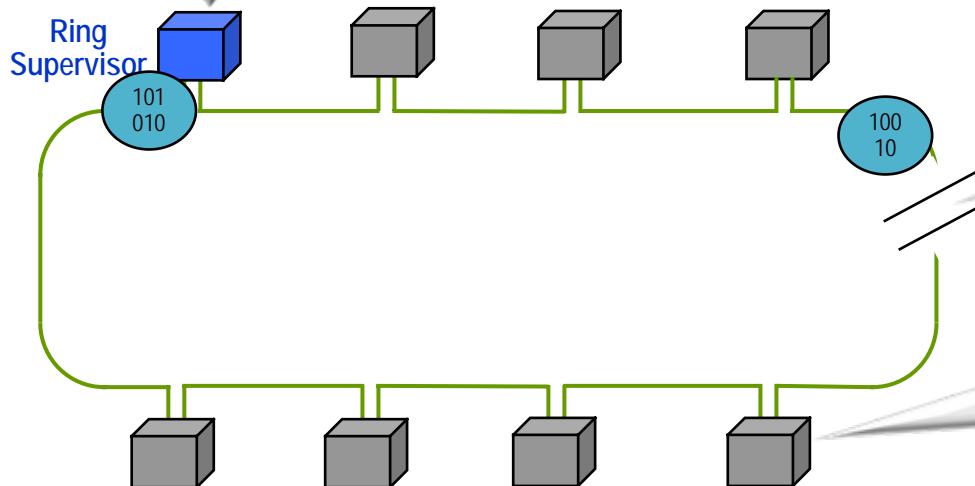


- 单故障容错网络
- 实施设备级环不需额外的硬件

设备级环 (DLR) 如何工作?

- 每个环必须有指定的 “ring supervisor”。Ring Supervisor 的功能是管理流量和保持诊断信息。
- 在单个环中可以有多个 “ring supervisors”，但只有一个 是激活的监督。
- 1783-ETAP 和 1756-EN2TR 都有监督能力

- 当网线断开时，环的监督 “路由” 流量保证网络的连续操作。网络恢复时间在多达50个节点的网络中小于 1 ms。
- 监督也知道断点的确切位置，使得用户能够快速维护。



发布计划

- Rockwell 内置交换机分以下阶段发布

- 2009年4月

- Point I/O Adapter (1734-AENTR)
- ArmorBlock I/O (1732E)
- ArmorPoint I/O Adapter (1738-AENTR)
- ODVA specification published



- 2009年6月

- ControlLogix EtherNet/IP module* (1756-EN2TR)
- Stratix 4000 EtherNet/IP Tap* (1783-ETAP)
 - ETAP enables single-port Ethernet devices to join linear or ring topology



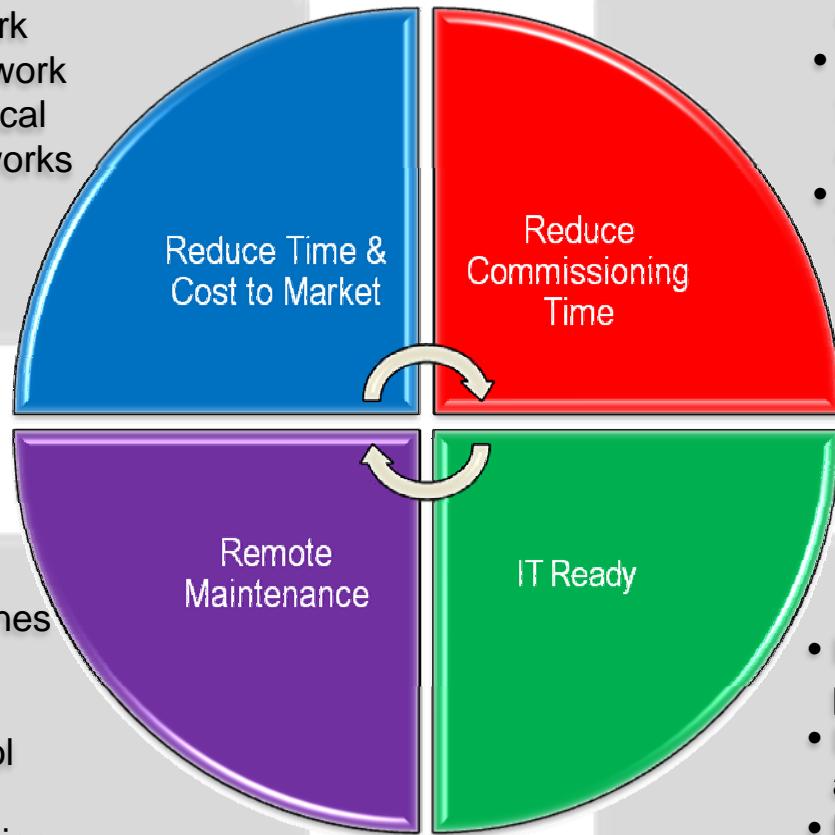
- 未来

- Motion products
- Drive products
- Safety products

**Ring supervisor products – need at least one to establish device-level ring*

Leveraging Network Convergence

- Collapses multiple network solution down to one network
- VirtualLans allow for logical isolation of machine networks
- Simplify integration of machine system



- Secure access to machines from anywhere
- Monitor & Maintain the machines from the control room, tool room, maintenance or any location on the enterprise

- Reduce build time with less components
- Easy to install network technology reduces wiring & cable errors
- Active bus helps to reduce test & validation times

- IT is more involved with production systems
- IT has policies and procedures around security
- Machines need to integrate with networks under IT

Agenda

Network Overview

NetLinx Product Updates

Stratix Ethernet Switch Updates

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Process Network Updates

What's Coming Next Year

Call to Action

Rockwell Automation 电缆

- 商用和工业级的Ethernet 电缆
 - Maintaining network reliability, high performance
- 非屏蔽以太网电缆
 - Specially designed unshielded cables to be used in noise environments.
 - Construction of the conductors in a twisted pair formation allow for high performance, balance, and noise immunity.
 - Installation is simplified by not having to ground any shield
- 种类众多
- 柔性的、经过 10 million 次测试
- 面向工业以太网特殊设计并满足工业规范
 - ODVA Ethernet/IP Media specification



~1/3 的网络问题是电缆及布线问题

产品概述 – 以太网介质

- M12 Connectivity - D Code
 - Micro M12 Male Patchcords & Cordsets – Straight and Right Angle
 - 2-pair High Flex TPE
- RJ45 Connectivity
 - RJ45 Male Patchcords & Cordsets
 - 4-pair High Flex TPE
 - 4-pair Riser PVC
 - 4-pair Plenum
 - 2-pair High Flex TPE
 - Crossover - 4-pair Riser PVC
- M12 to RJ45 Connectivity
 - Micro M12 Male to RJ45 Patchcords –
 - 2-pair High Flex TPE
- Ethernet Cable Spools
 - High Flex TPE, Riser, Plenum Cable
- Field Attachable Components
 - M12 IDC Connector
 - RJ45 IDC Connector - NEW!
 - 3 Step Solution
 - RJ45 Crimp Connector with rugged Boot
 - Crimp Tool Kit
 - Crimper, cable stripper/cutter, conductor separator
 - M12 to RJ45 Bulkhead Connector



RJ45 Variant 1 Products – IP67 Connectivity

RJ45 - IP67 Connectors and Patchcords

- IP67 RJ45 Patchcords
 - Plastic Male to Male Variant 1 Patchcords
 - Metal Male to Male Variant 1 Patchcords
- IP67 RJ45 Field Attachable Connectors – ThermoPlastic
 - Male Housing with Crimp Insert
 - Female Receptacle Outlet
 - Female to Female RJ45 Coupler
- IP67 RJ45 Field Attachable Connectors – Die-Cast Zinc Metal
 - Male Housing with Insulation Displacement Insert (IDC)
 - Female Receptacle Outlet
 - Female to Female RJ45 Coupler



Coming Soon - Q309

- Shielded EtherNet Cable
 - With Micro Male M12 Connectors
 - With RJ45 Connectors
- Fiber Optics



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ControlLogix HART I/O 模块

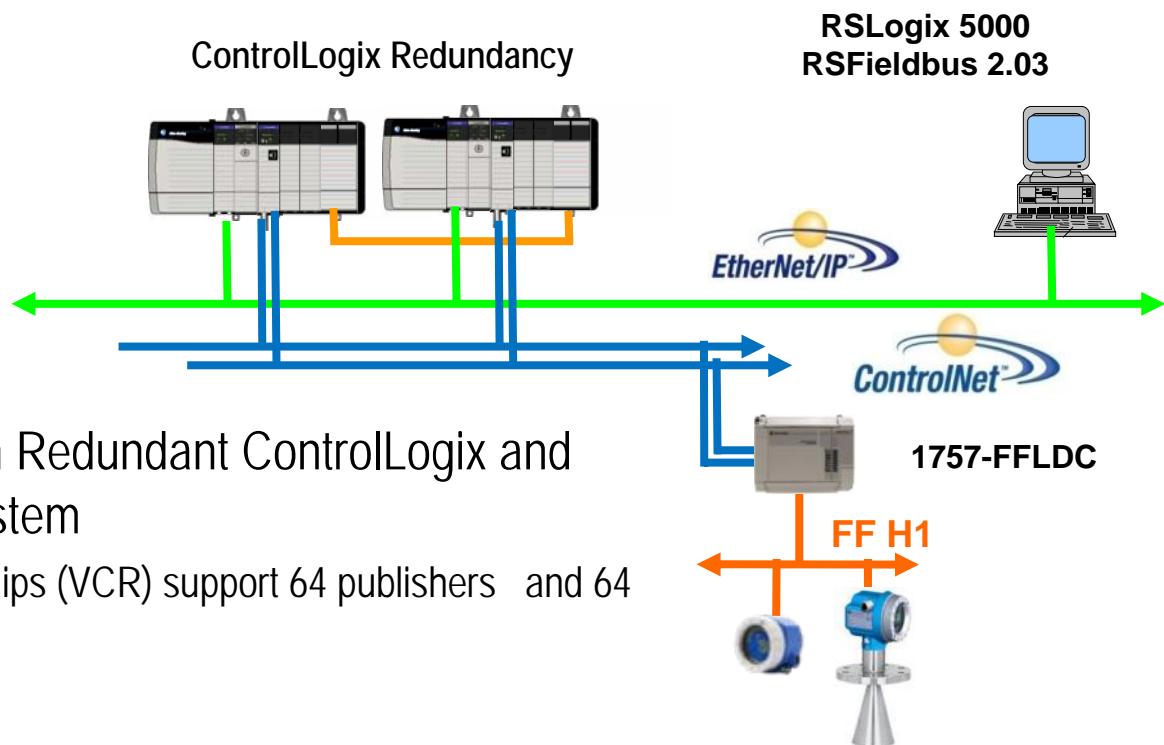
- ControlLogix HART I/O 模块增强
 - 1756-IF8H - 8 channel differential analog
 - 1756-OF8H - 8 channel analog output
 - SIL2 认证
 - 船级社认证



现在取得了安全和船级社认证

1757-FFLDC

Foundation Fieldbus Linking Device for ControlNet

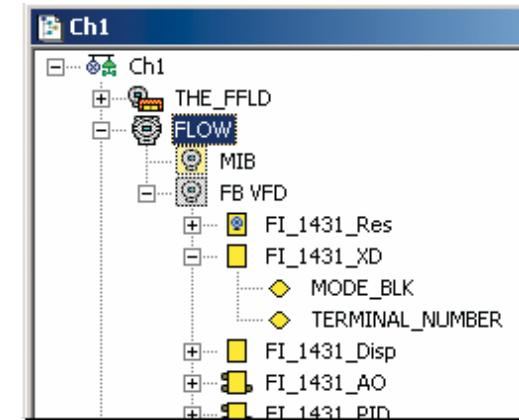


- Provides FF device support with Redundant ControlLogix and redundant ControlNet media system
 - Virtual Communication Relationships (VCR) support 64 publishers and 64 subscribers per H1 segment
 - Uses RSFieldbus 2.03 software
- Supports FDT/DTM-capable asset management software
- Supports Rosemount 375 hand-held communicator

冗余过程应用更多的选择

RSFieldbus 2.03 – 增强

- All activity logs can be enabled, disabled, or deleted
- Function Block execution sequence within a device can now be changed by changing order in Fieldbus tree view
- Downloads now verify device characteristics' Class, Rev, DD Rev, Tag, and Address
- Verify function block inputs and outputs have the same data type
- Persistent Workspace
 - Project windows arranged automatically. After a project is saved and closed, the project windows will open in the same arrangement when the project is opened again.
- Live List shows more device data
 - Assign Tag, Configure Device Class
 - Set H1 Address can be set in Live List if not configured in project



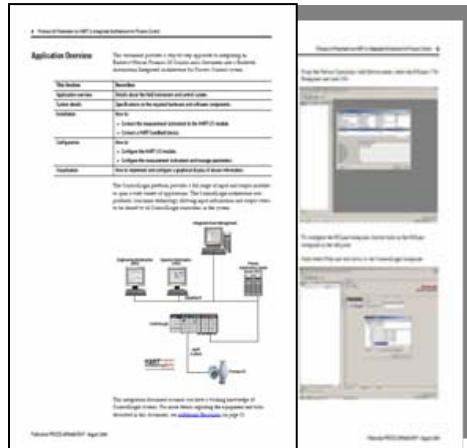
Significant improvements in End User experience

For more information: Reference pub #1757-TD004-A-EN-P3

Rockwell Automation 和 Endress+Hauser HART仪表的优势集成

Pre-engineered application code ...

- Documents for setup and operation
- Instrument Interface Function Blocks
- Operator Workstation Faceplates



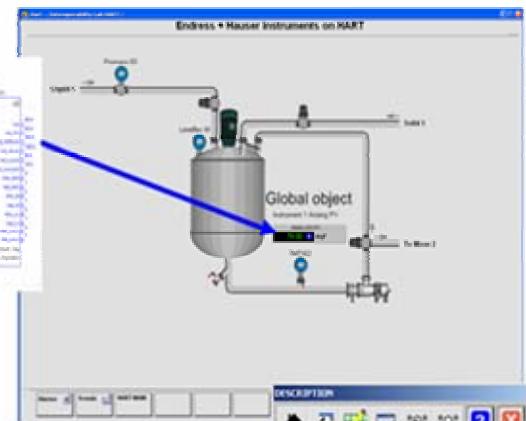
Instrument Function Block

Add-on Instructions in
a function block
routine



Instrument Display & Faceplates

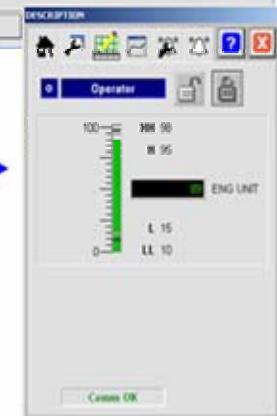
FTView SE Display



Instrument 1 Analog PV

ANALOG PV
80.00 0 degF

Click on global
object



Agenda

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What's Coming Next Year

Call to Action

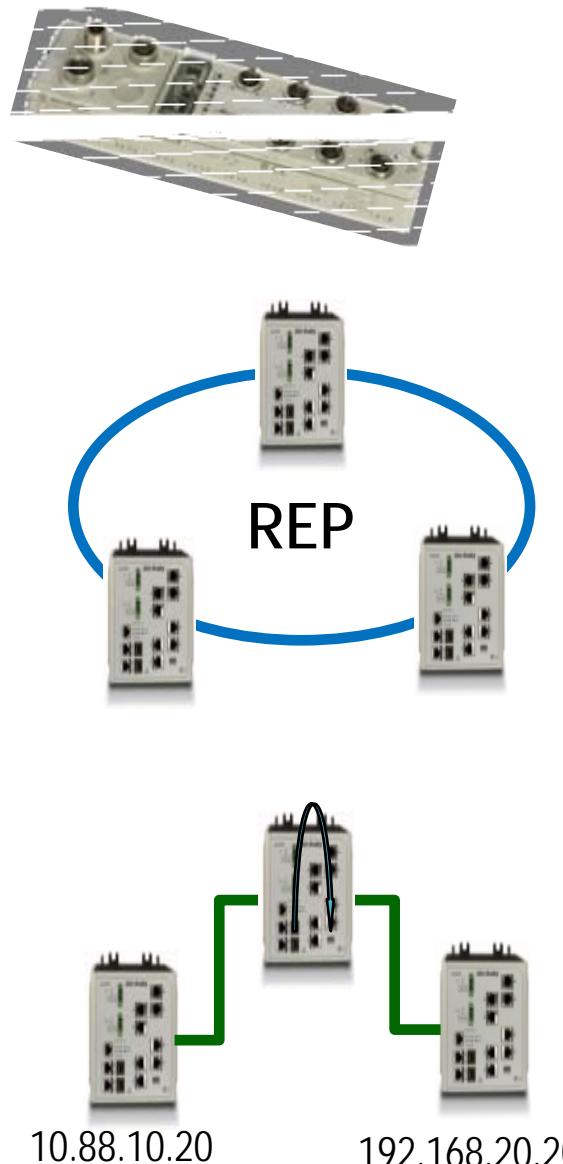
Networks – What's Coming Soon

- 1768-ENBT (CompactLogix L4x), New firmware **March 2009**
 - Supports 2x connections on CompactLogix
 - 128 TCP/ 64 IP connections
- 1769-SDN Enhancement - New firmware **April 2009**
 - Support AutoScan feature
 - Configure scanner via 193-DNCT
- 1757-FFLD, New firmware **March 2009**
 - Increase VCR support from 16 publisher / 16 subscriber to 64 / 64 per H1
- 1757-FFLDC, New firmware **July 2009**
 - Support Unscheduled ControlNet



Stratix – What's Coming Soon

- Stratix 2000 addition, Q3CY09
 - On-Machine (IP67) 8-port unmanaged switch
 - Auto negotiation and auto crossing
 - M12 connectors
- Stratix 8000
 - Release 3, Q3CY09
 - Major feature - REP (Resilient Ethernet Protocol)- fast ring protocol
 - REP is a network protocol between Stratix 8000 and selective Cisco switches
 - Supports ring, ring segments and nested ring segments
 - Provides single break resiliency
 - Goal - less than 70ms reconnection time with Fiber interface (in test)— will not drop an I/O connection
 - Release 4, Q4CY09
 - Layer 3 switch – supports routing between Subnets and VLANs
 - New HW catalog item



Rockwell and Cisco – What's Coming Soon

- Reference Architectures - Design and Implementation Guides – (DIGs)
 - DIG 2.0 - Baseline with Stratix 8000 and IE 3000, Remote access – **May 2009**
 - DIG 2.1 - Cisco Resilient Ethernet Protocol (REP) and ODVA Device Level Ring (DLR) - Linear and Ring – **July 2009**
 - DIG 2.2 - CIP Sync / PTP and CIP Safety – **July 2009**
 - DIG 3.0 – CIP Motion – **December 2009**
- Education Series – white papers
 - Securing Manufacturing Computing and Controller Assets – **March 2009**
 - Secure, Remote Access – **April 2009**
 - Production Software within manufacturing reference architectures – **April 2009**
 - Collaboration on recommendations for design and deployment of Wireless EtherNet/IP Networks in manufacturing – **April 2009**
 - OEM Network Solutions – **June 2009**
 - Network Resiliency for Control Systems – **June 2009**
 - Recommendations for Deploying CIP Motion Solutions – **October 2009**



Market leader in industrial automation



Market leader in internetworking

Commercial Literature Coming Soon

- Stratix 6000 Product Profile – **Released**
 - Single page profile
 - Available in electronic format only
- Stratix Reference Chart – **Released**
 - Product comparison quick reference
 - Available in electronic format
- Simply DeviceNet Campaign – **April 2009**
 - Commercial plan
- Network On Tour Update – **April 2009**
 - Inclusion of new Stratix 8000 REP ring demo unit
 - Focus on EtherNet/IP and Reference Architectures
 - Presentation and Instructor lead demonstrations
- NetLinx Selection Guide Update - **May 2009**
 - Updates to Communication modules
 - Include Stratix products
- Stratix Family Product Profile – **TBD**
 - Overview of Stratix family of products
 - Available in electronic format only

The image displays two separate documents from Rockwell Automation:

Stratix 6000™ Managed Ethernet Switch

This document is titled "Stratix 6000™ Managed Ethernet Switch" and includes the Allen-Bradley logo. It features two physical hardware units on the right side. The left side contains descriptive text about the switch's features, such as its ability to handle multiple VLANs and support various protocols. A screenshot of a configuration software interface is shown on the right.

Stratix Switch Reference Chart

This chart is titled "Stratix Switch Reference Chart" and includes the Rockwell Automation logo. It is a grid-based comparison chart for different Stratix models. The columns represent model types: Managed, Industrial PoE, Industrial PoE+Switch, and Standard. The rows list specific models like Stratix 6000, Stratix 8000, and Stratix 9000. The chart uses color coding to indicate features like PoE+, Gigabit, and Layer 3 switching.

Agenda

Network Overview

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Stratix Ethernet Switch Updates

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What's Coming Next Year

Call to Action

Call to Action

- **Networks**

- New application space with increased performance and capacity of the new ControlNet module
- Promote DeviceNet into new applications space with the new media and configuration tools
 - Look for conversion opportunities: in-cabinet AS-Interface replacement
- Solve new applications that require long cable runs or cable-routing through a noisy environment with the new EtherNet Fiber model

- **Process**

- 1757-FFLDC for redundant CLX projects or projects that require redundant ControlNet media
- Look for users with installed base of 1788-CN2FFs (Over 1000 units installed world wide). Introduce them to 1757-FFLDC capabilities

- **Ethernet Switches**

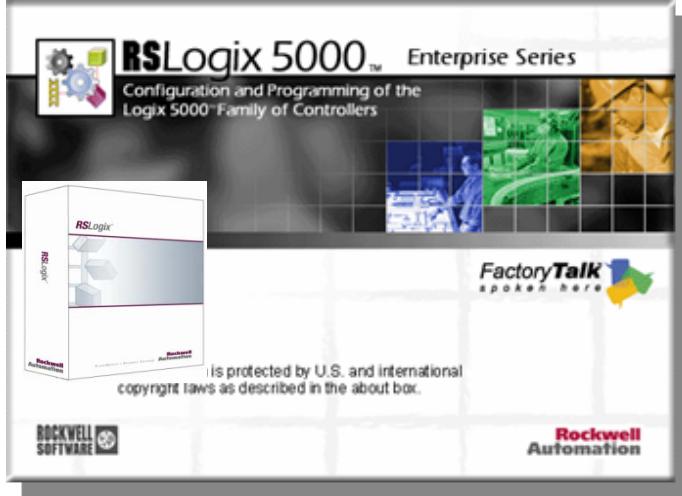
- New opportunities in Ethernet switch market with introduction of Stratix 6000
 - Ideal for smaller applications with integration into IA
- Expand topology applications with embedded switch technology and products
 - Linear and ring additions

RSLogix 5000

What's New and Coming

Software Release Status Update

	Available on:	
	My Support Site	General Release (DVDs)
RSLogix 5000 V16.03 English	Now	Now
RSLogix 5000 V16.03 Localized (PFIGS + CJK)	Now	Now
RSLogix 5000 V17.00 English	Now	Now
RSLogix 5000 V17.01 English	Now	April, 2009
RSLogix 5000 V17.01 Localized (PFIGS + CJK)	April 2009	May 2009
RSLogix 5000 V18.00 English	December 2009	January 2010



RSLogix™ 5000

Release 18.00

PRELIMINARY

INFORMATION

This presentation reflects the features that are planned for this release.
Changes will occur!

Logix V18 Extensions

- Software Extensions
 - [EtherNet/IP based CIP Motion](#)
 - [Unicast I/O](#)
 - [DF1 Radio Modem Broadcast support](#)
- Programming Languages Enhancements
 - [High Integrity AOIs](#)
 - [AOIs within Safety Task](#)
 - [Add-on Instruction Extensions](#)
 - [SFC Maintain Active Step with Online Edit](#)
- Reporting Enhancements
 - [Table of Contents report](#)
 - [Module properties report](#)
 - [Components report](#)
- Usability Extensions
 - [Alphabetical Sorting of Tags' Members](#)
 - [Tag Members Expand/Collapse All](#)
 - [Persistent Quick Watch Lists](#)
 - [Tag Wildcard Filtering](#)
 - [Auto hide tool windows](#)
 - [Produce/Consume Tag RPI limits check](#)
- Security Enhancements
 - [Data access control](#)
 - [Digitally signed firmware kits \(1756-L7x\)](#)
 - [ControlFlash integration w/FT Security](#)
- Miscellaneous
 - [HTML On-Line support](#)
 - [ControlFlash V8.0 Enhancements](#)

Logix V18 Extensions Continued

- New Network and I/O Module Profiles (*)
 - 1756-HSC Major Revision 2
 - 1756-SOE Major Revision 2
 - 1769-IG16
 - 1769-OG16
 - 1769-OB32T
 - 1769-IF4FX0F2F
 - 1794-ACN15/D & 1794-ACN15R/D
 - 1756-DNB
 - Add "NetworkWarning" bit to the Module Status Register for 1756-DNB
- Controller Support (*)
 - [ControlLogix L7x](#)
 - [Compact GuardLogix](#)
 - [Compact I/O Individual RPI Configuration](#)
- Other
 - [Windows Server 2008 and Windows 2000 Operating System Support](#)
 - [RSLogix 5000 Lite Edition Changes](#)
- RSI Integration
 - [ControlFlash V8.0 – FT AssetCentre Auditing Logging](#)
 - [ControlFlash V8.0 – FT Security Integration](#)

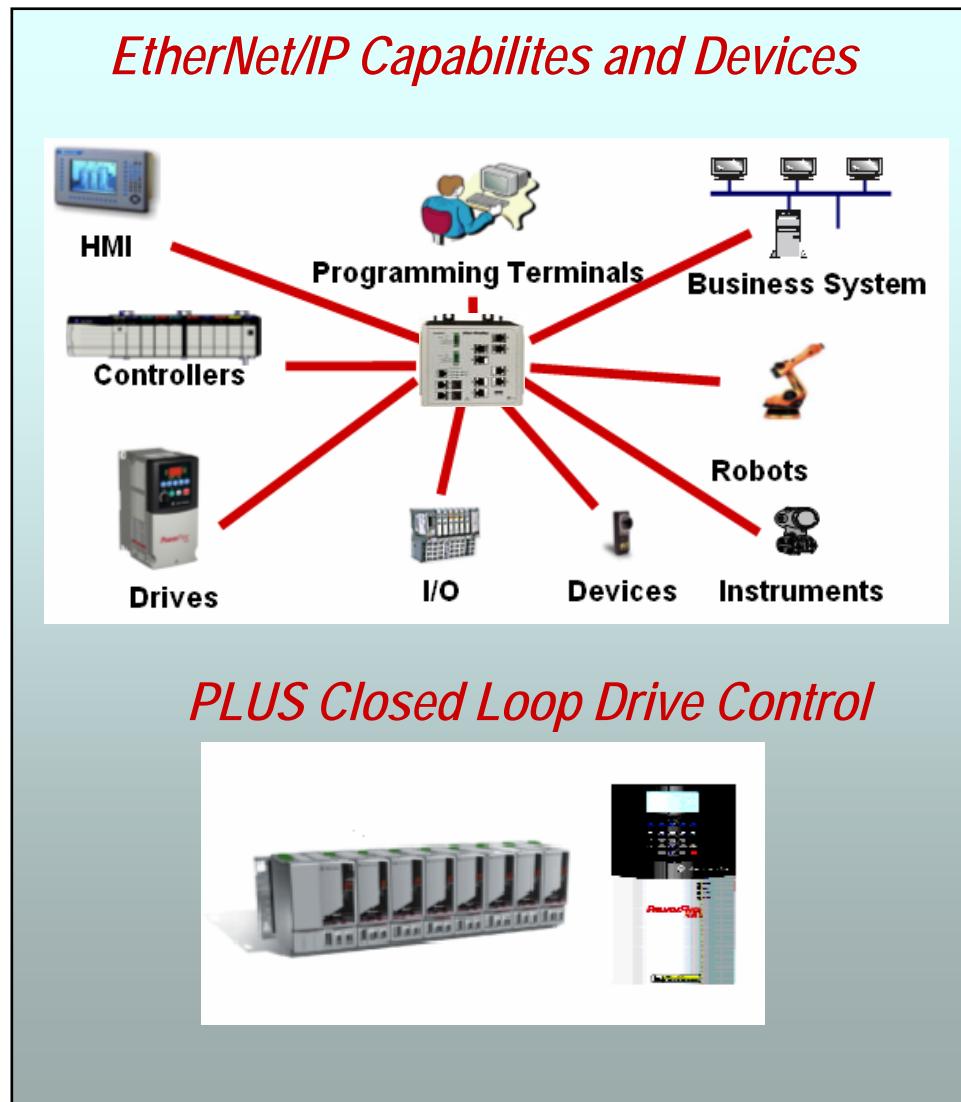
(*) Check for hardware availability

6/2/2009

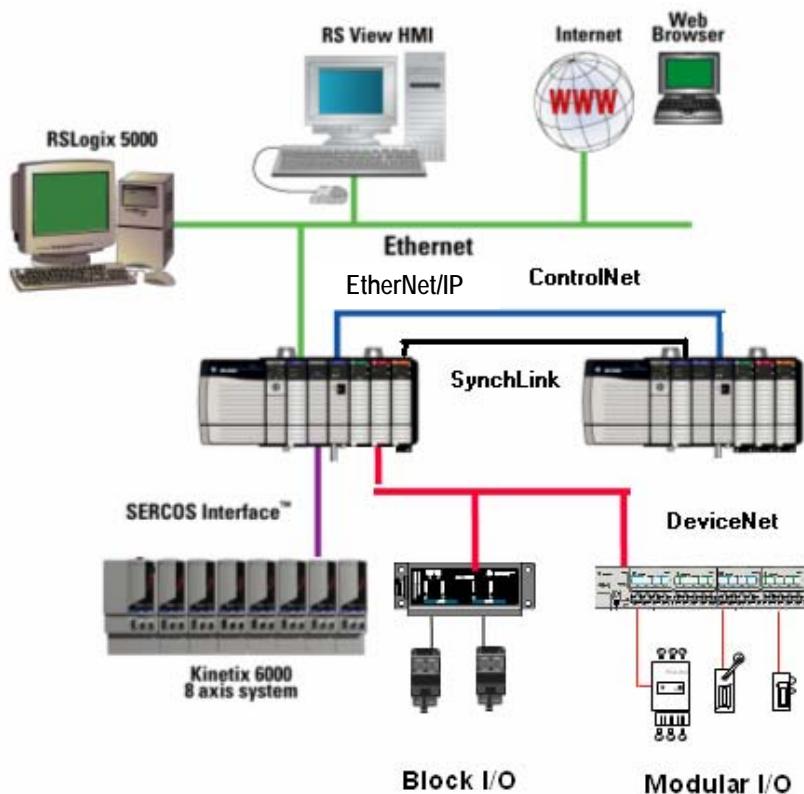
(Confidential – For Internal Use Only) Copyright © 2008 Rockwell Automation Inc. All rights reserved.

EtherNet/IP 支持 CIP Motion

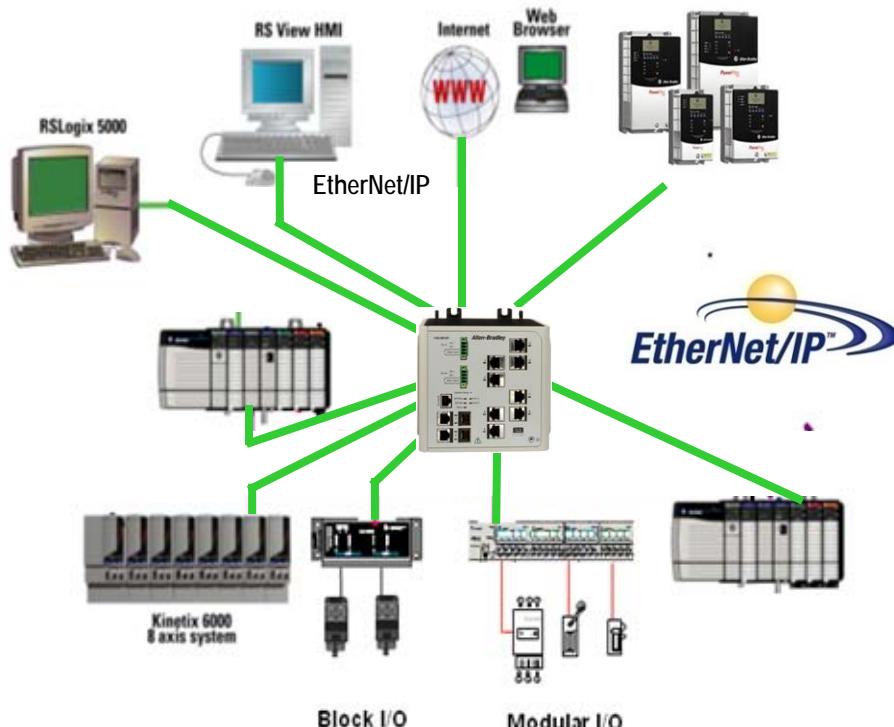
- EtherNet/IP 上支持集成运动控制
 - 提供 Logix SERCOS 的所有功能，并有更多功能
 - Kinetix 6K 和 PowerFlex 755 drive
- 在单一网络之上，集成 I/O, drives, EOI, 和其他 EtherNet/IP 设备
- 标准 EtherNet
 - Compatible with commercially available Ethernet tools
 - Standard switches and components



扁平网络结构



- 更低的系统造价
- 更高的系统性能
- 更简化的集成
- 未来无忧



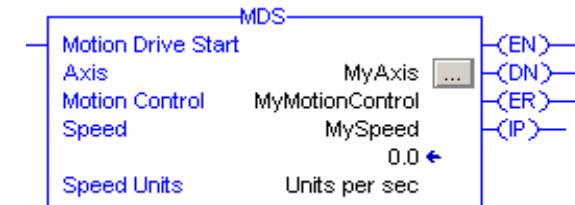
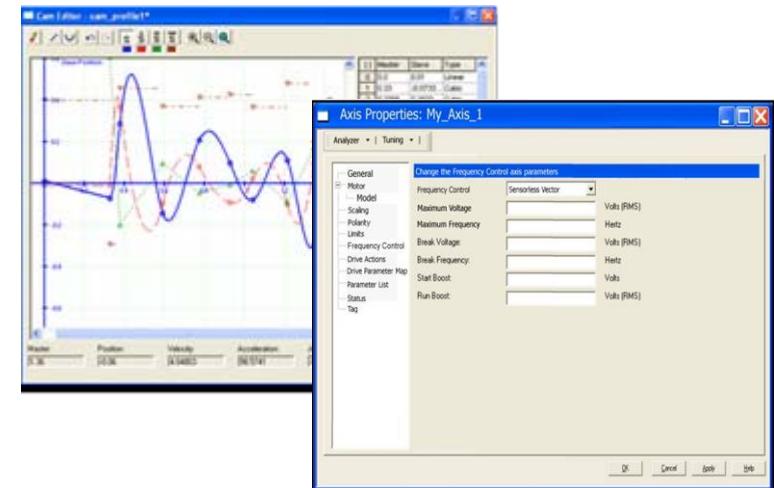
ENxT 运动支持

- 订货号：1756-EN2T = 8 drives, 1756-EN3T = 255 drives
 - 仅位置方式的驱动算限制
 - Unlimited velocity, torque, and VHZ configured drives
 - L6X/L7x controller drive limit of 128 drives
 - Drives can be coordinated across multiple 1756-ENxT modules
 - Controllers can share one or more 1756-ENxT modules
 - Supported EtherNet/IP CIP Motion drives
 - Kinetix K6K E drives
 - PowerFlex 755 drives
 - Supports any EtherNet/IP device
- 易于使用
 - Easy accessible USB device port for quick connection to the module and chassis backplane
 - Thumbwheel switches for quick IP address configuration



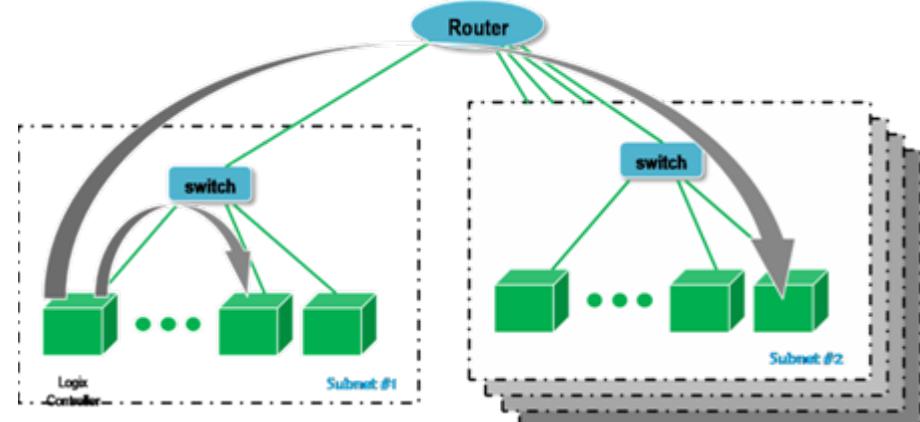
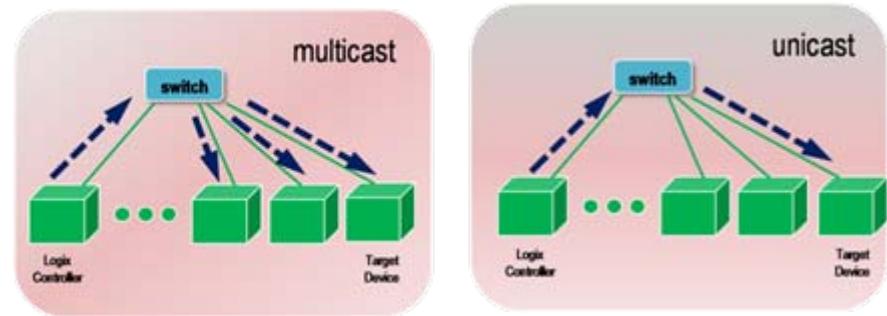
PowerFlex 755 支持 CIP Motion

- 全集成伺服支持
 - Configuration dialogs
 - Motion instruction set
 - Command and status tag attributes
- 和 Kinetix完全互换
 - Application program and HMI can be developed independent of PowerFlex or Kinetix drive use/mix
- VHZ/矢量 速度控制和矢量位置控制
- MDS 指令用于速度控制，启动迅速
- 功率范围宽
 - .5-700Hp @ 400/480V
 - 10-350Hp @ 575V



EtherNet/IP Unicast（单播） I/O

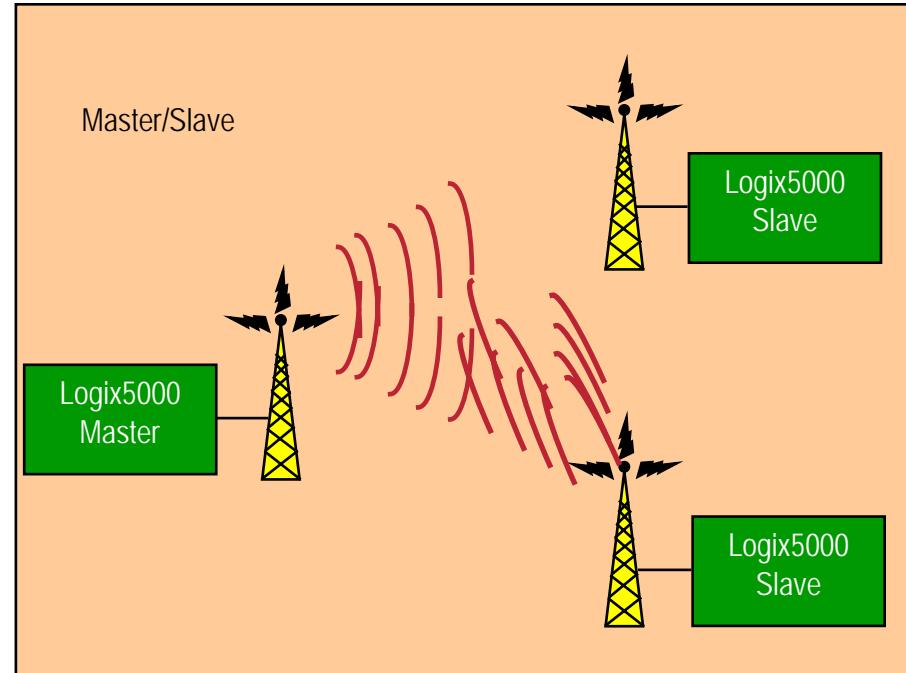
- Logix控制器通过单播和 EtherNet/IP 上的其他设备通讯
 - 所有数据，包括 I/O*, 标准和安全的 producer/consumer 标签
- EtherNet/IP producer/consumer 标签单播可以跨不同网段
 - 如工厂内不同车间的互锁
- 减少 EtherNet/IP 组播通讯



* Hardware support may vary

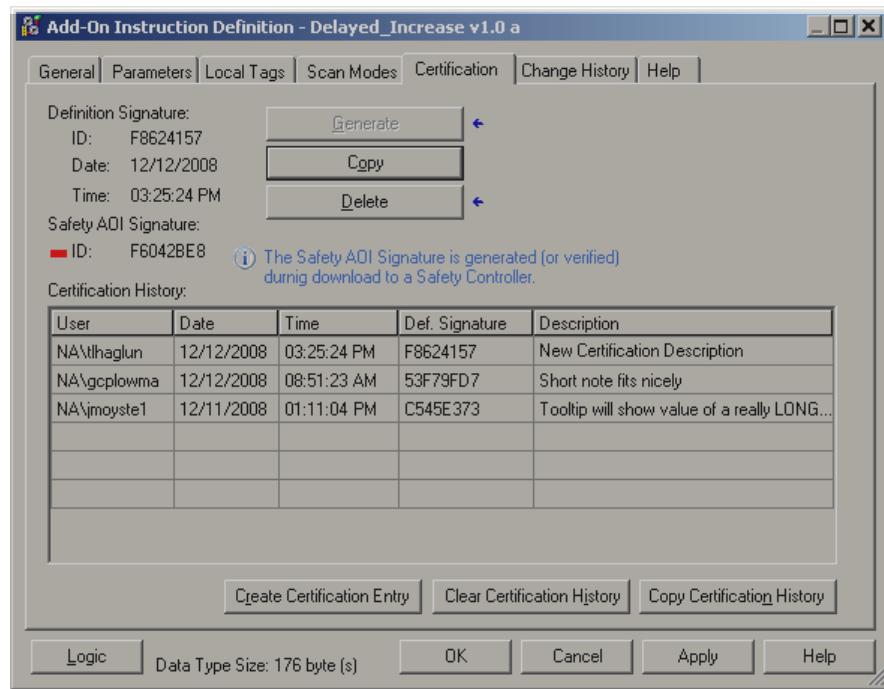
DF1 无线调制解调器协议 – 广播支持

- Extends DF1 radio modem protocol functionality added in v16 to support broadcast
 - Allows master (or a slave) to broadcast messages to the other stations in one shot, for example to synch all slaves to a common clock, or turn on irrigation at all pumping stations
 - Previously, master (or slave) had to send individual messages to each station
- Simplifies application code
- Reduces power consumption by reducing the number of transmissions
 - Important when stations are powered via solar panels/batteries
- Protocol is targeted for SCADA applications that require remote monitoring
 - Water, Wastewater, Oil pipelines, etc.



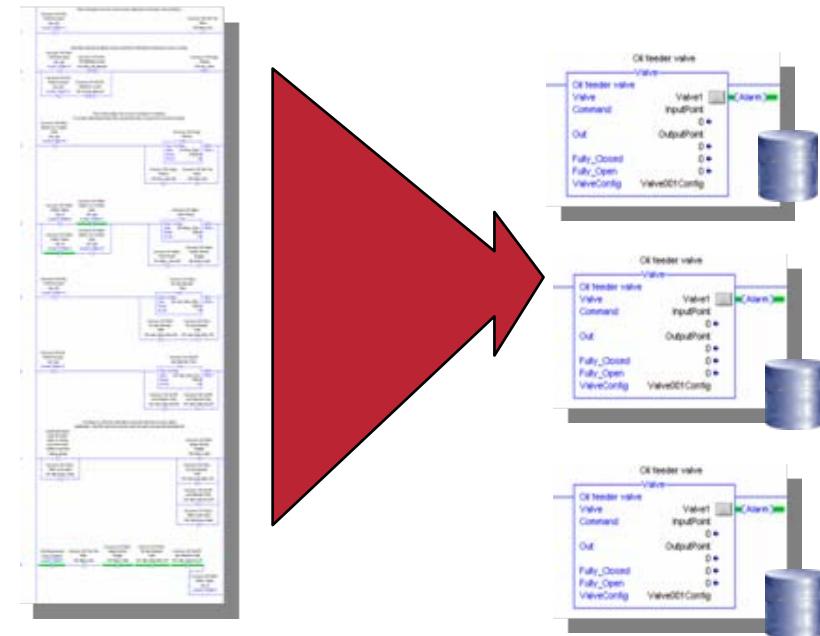
标准和安全控制器的Add-on Instruction高可信性

- 高可信的AOI生成AOI定义签名
 - Signature allows you to know whether the AOI definition has been modified
 - Any definition changes will result in a new signature
 - Signature generation is user initiated
- 签名可访问
- 可以用于审计
- 用高可信AOI:
 - Address the needs of regulated industries for auditing purposes
 - Life Sciences, Food and Beverage, and others
 - Maintain consistency and revision control in libraries
- 可在Logix 项目之间复制



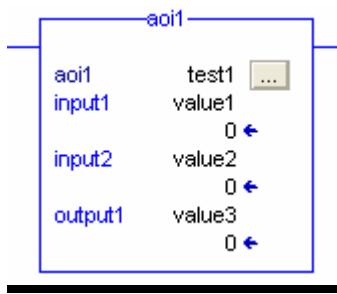
AOI和安全任务中高可信的AOI

- 在 Safety 任务中使用AOI
 - Internal behavior/rules follow existing Safety Task Rules
 - Only safety instructions are allowed
 - Only safety tags can be used (referenced)
- High Integrity AOIs allow for SIL 3 Integrity
 - TÜV recognized and approved implementation
 - Any developed safety AOI's can be certified to SIL 3
 - TÜV would need to approve/accept the instruction functionality
 - Safety AOI's are part of the safety task signature.
 - Safety signature provides security over safety AOI's within a project
- Transportable between GuardLogix projects
 - SIL integrity is maintained

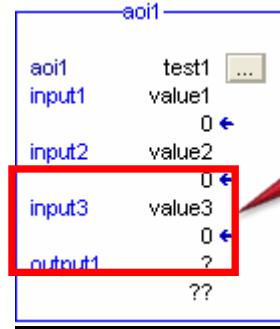


AOI 参数自动对齐

- Currently, users need to manually realign AOI parameters and their operands after editing the AOI definition to add, delete, rename, or reorder a parameter or change the parameter's usage type

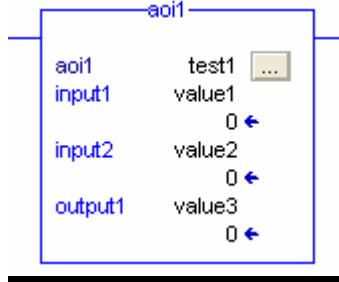


After adding input3, value3 operand needs to be aligned with output1

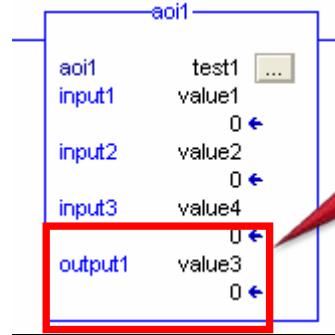


Customer needs to manually align value3 tag with output1 parameter

- With V18, we will eliminate the need for manual alignment by users
 - Newly added or modified parameters will be automatically aligned with operands



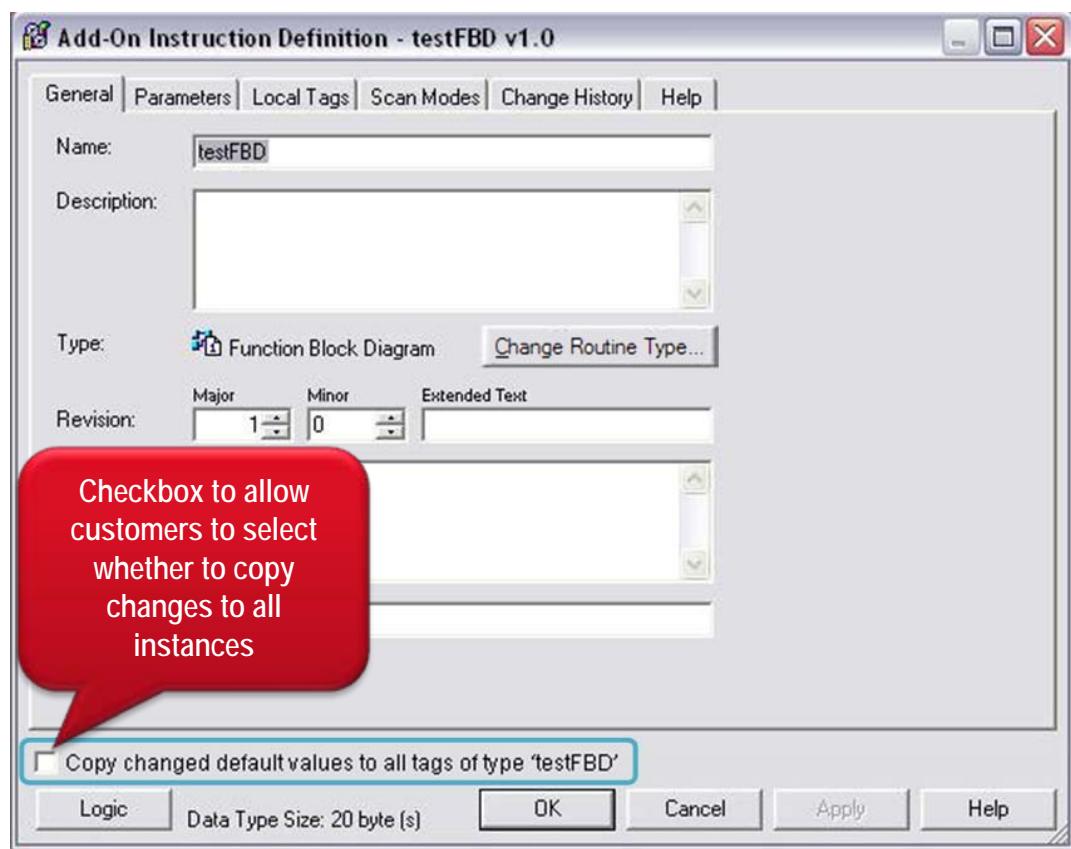
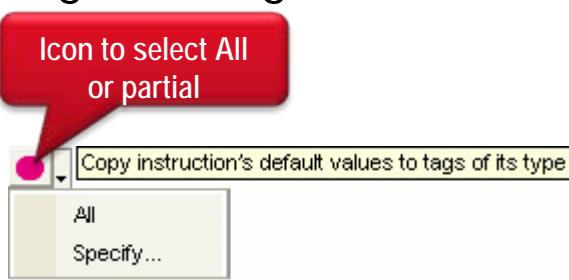
After adding input3, the software will automatically align parameters and operands



Software automatically aligns value3 tag with output1 parameter

AOI 默认值传递

- Allow customers to select whether to apply all/select default values changes made to an AOI definition to all AOI instances in the project
- Selection can also be done in:
 - Context menu (Controller Organizer only)
 - Data Monitor
 - Logic Editor
 - Watch Pane
- Simplifies deployment of changes and reduces programming errors



简化AOI输出引脚和数据的访问能力

- 本地标签别名
 - In this way, the local tag can be easily monitored/modified outside of the AOI
- 减少编程时间和复杂度

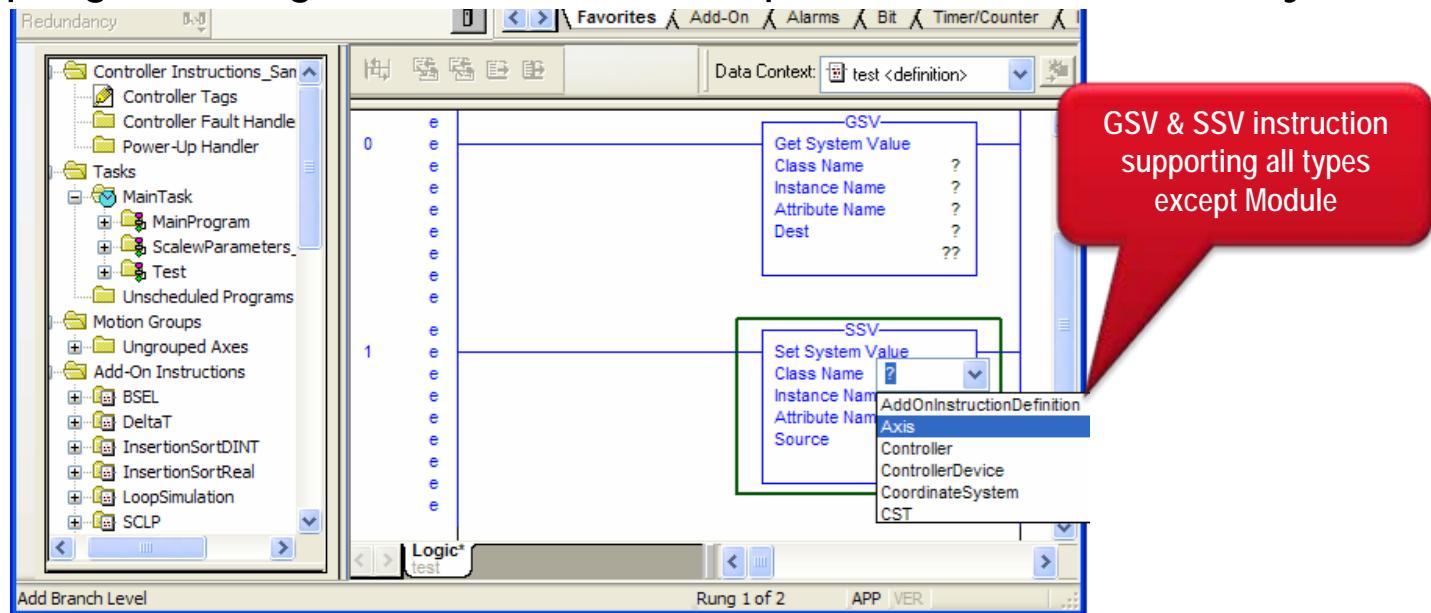
The screenshot shows two windows from Rockwell Automation software:

- New Add-On Instruction Parameter or Local Tag**: A dialog box where a new tag "alias_input" is being created. The "Alias For" field is set to "local_tag".
- Add-On Instruction Parameters and Local Tags - AOI_1**: A tag browser window showing a list of local tags. A red callout points to the "Alias For" column in the table header, labeled "New 'Alias For' Column". Another red callout points to the list of tags, labeled "Tag browser with local tags".

Name	Usage	Data Type	Alias For	Style
AOI_StrParam1	Local	AOI_StrParam		
bTest	Local	BOOL		Decimal
EnableIn	Input	BOOL		Decimal
EnableOut	Output	BOOL		
iTest	Local	DINT		
I1	Local	DINT		
+ myAOI_3	Local	AOI_3		
+ myStructInst	Local	MyStructure		
p_bTest	Input	BOOL		Decimal
+ p_iTest	Input	DINT		Decimal
+ p_iTestInOut	In/Out	DINT		Decimal
+ p_iTestOutput	Output	DINT		Decimal
+ p_sTest	In/Out	STRING		

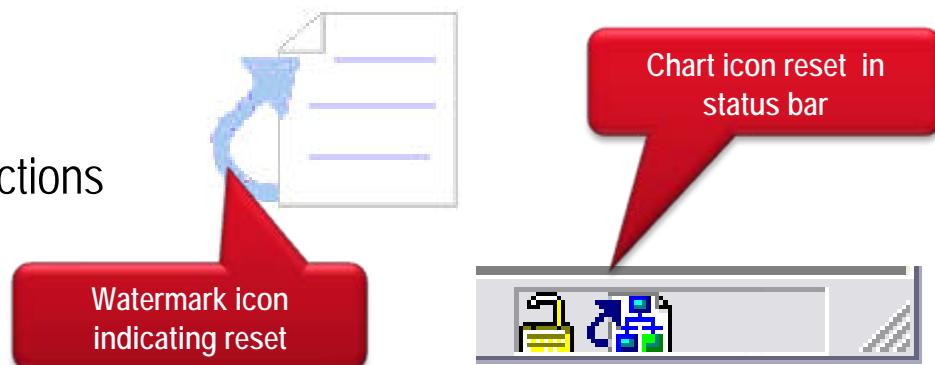
在AOI中传递Axis, 以便在GSV/SSV中使用

- Allow customers to be able to access Axis, CoordinateSystem, MotionGroup, Message and other class types via GSV and SSV instructions within an AOI
 - Class type Module is not supported
 - GSV and SSV is supported in ladder diagram and Structured text programming languages only
- Reduces programming time and allows improved code modularity



在线编辑时，SFC 维持活动Step

- Today, any online edit to an SFC chart causes the chart execution to be reset to the initial Step, which may not be the desired outcome
- With v18, the following on-line operations will no longer cause the SFC chart to be re-set to the initial step:
 - Physically move Steps, Actions, Transitions, etc. around the sheet without changing the wiring
 - Modify Structured Text Presets and Limits (Step & Action)
 - Modify Structured Text in Action Body and Transition Condition
 - Add/Delete/Modify Text and Description Boxes
 - Modify Indicator Tags
- The following editing operations will obviously still cause a chart reset:
 - Add/Delete/Modify Transitions
 - Add/Delete/Modify Actions
 - Add/Delete Wires
 - Add/Delete/Modify SBR and RET Instructions
 - Add/Delete/Modify Steps
 - Change which is the initial Step



标签成员字母序列排序能力

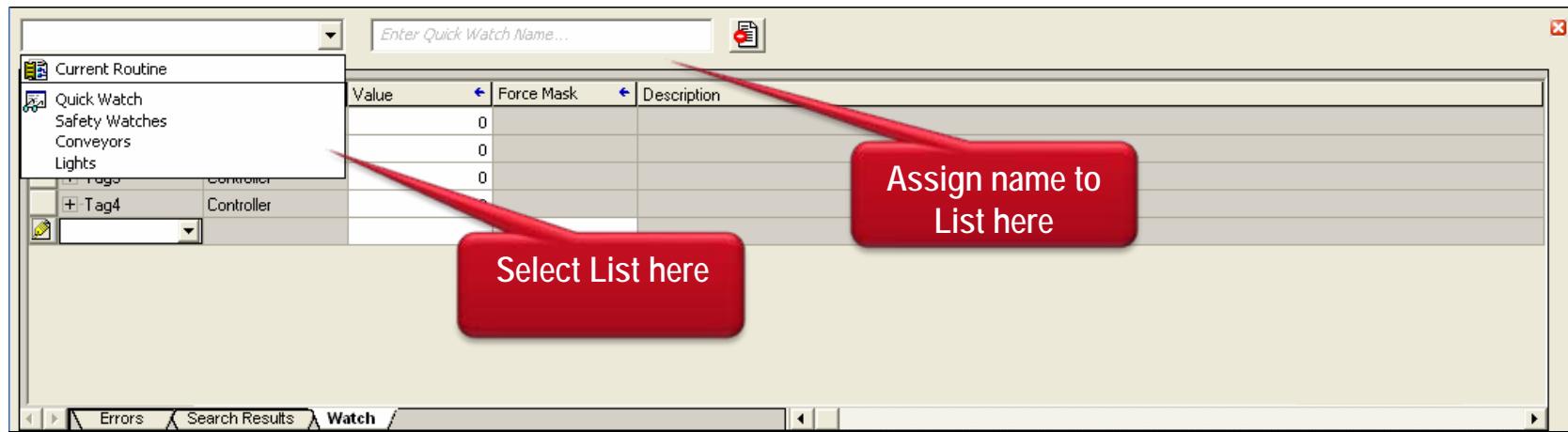
- Enhanced tag editor to allow customers to sort tag members alphabetically
- Applies to:
 - Tag Editor
 - Data Monitor
 - Tag Browser
 - Watch pane
 - Instruction properties parameters Tab
- Customers can sort tag members by memory layout or alphabetically
- Makes looking for tags simpler, thus reducing development and debugging time



Name	Value	Force Mask	Style	Data Type	Sort by memory layout or alphabetically
- A_Tag	(...)	(...)		a	
+ A_Tag.ama	0		Decimal	DINT	
+ A_Tag.amb	0		Decimal	DINT	
+ A_Tag.amy	0		Decimal	INT	
+ A_Tag.amz	..	(...)		STRING	
- L_Tag	(...)	(...)		b	
+ L_Tag.bma	0		Decimal	DINT	
+ L_Tag.bmb	0		Decimal	DINT	
+ L_Tag.bmy	0		Decimal	INT	
+ L_Tag.bmz	0		Decimal	INT	
+ Z_Tag	(...)	(...)		COORDINATE_SYS...	

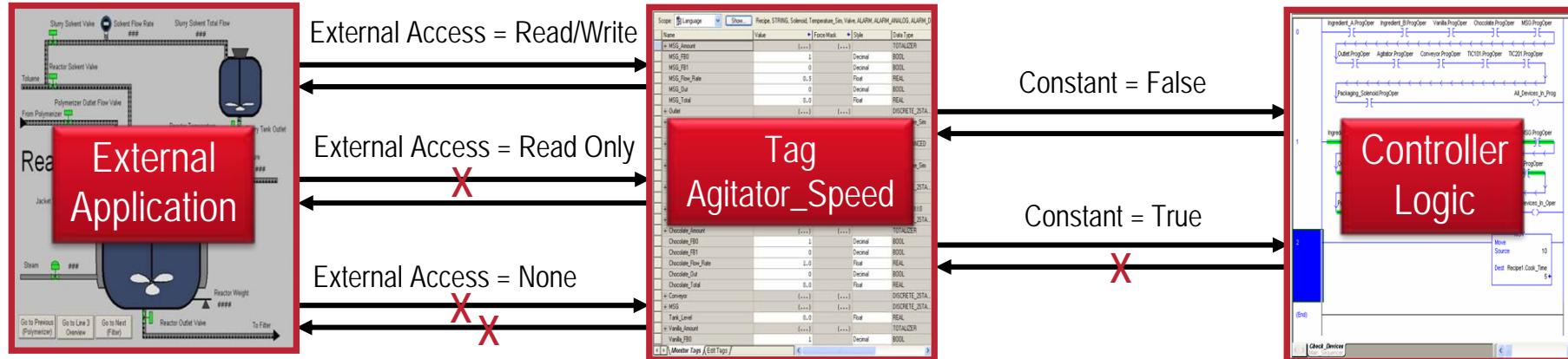
Persistent Quick Watch Lists

- Allows customers to create named tag groups (Quick Watch Lists)
 - Tags can be added via drag-and-drop from routine(s), from tag editor/monitor or manually selected via tag browser
- Lists can be easily selected for debugging purposes during integration or operation and are persistent within the RSLogix 5000 project
- Improves ease-of-use and simplifies maintenance by allowing customers to monitor group tags at-a-glance



数据访问控制

- Two new tag attributes define how a tag can be accessed at run-time
- **External Access** attribute defines how an external application, such as an HMI, historian, or OPC data server, can access a tag
 - Possible values are:
 - Read/Write: External applications can both read and modify the tag's value
 - Read Only: External applications can read the tag's value, but not modify it
 - None: External applications can neither read or write the tag's value
- **Constant** attribute defines how controller logic can access a tag
 - Tags with this attribute set can not be changed programmatically



数据访问控制 – 优势

- Allows users to protect data from being accidentally or intentionally written causing potential harm to machinery, processes or products
 - Important for regulated industries
- Simplifies and speeds-up HMI creation by reducing the number of tags that are visible while browsing the controller from the HMI development environment



ControlFlash V8.0 增强

- Integration into FactoryTalk Security
 - Establish full control of user credentials and privileges for flashing devices : Flash / No Flash privileges
 - Applies to all users who's credentials and privileges are established in the security authority
- Kit Manager
 - Easy view of available firmware kits BEFORE flashing the device
 - Ability to import and export kits for more flexibility and creation of custom kits
 - Allow hooks to outside applications to manage kits ... aka allow Symantec or other IT interface to push/pull kits as needed.
- Integration into FT AssetCentre Auditing Logging
 - Actions will be identified and logged into FT AssetCentre; actions include:
 - Launch of ControlFlash
 - Exit of ControlFlash
 - Flash started

Windows Server 2008 和 Windows 2000 支持

- With release v18, we will add support for Windows Server 2008
 - V18 will be the last RSLogix 5000 release that will be tested against Windows Server 2003 operating system

Windows Version	Microsoft Windows NT Workstation	Windows 2000	Microsoft Windows xp	Windows Vista	Microsoft Windows Server 2003	Windows Server 2008
Versions Tested	V1.0 thru V13	≥ V7.0 thru v17	≥ V10	≥ V17	≥ V16	≥ V18
Support Type	Single Revision	1 Pre V10 & Multiple ≥ V10	1 Pre V10 & Multiple ≥ V10	Multiple ≥ V17	Multiple ≥ V16 thru v18	Multiple ≥ V18

- Also, RSLogix 5000 releases v18 and higher will not be supported with Windows 2000
 - Microsoft mainstream support on Windows 2000 was retired in June 05
 - Microsoft has stated they will not support the latest .NET 3.x code on Windows 2000
 - .NET 3.x use is pervasive in our FactoryTalk platform

The screenshot shows the Microsoft Support Lifecycle page. The 'Mainstream Support Retired' column for Windows 2000 Professional Edition is highlighted with a red box. The table data is as follows:

Products Released	General Availability Date	Mainstream Support Retired	Extended Support Retired	Service Pack Retired	Notes
Windows 2000 Professional Edition	3/31/2000	6/30/2005	7/13/2010		

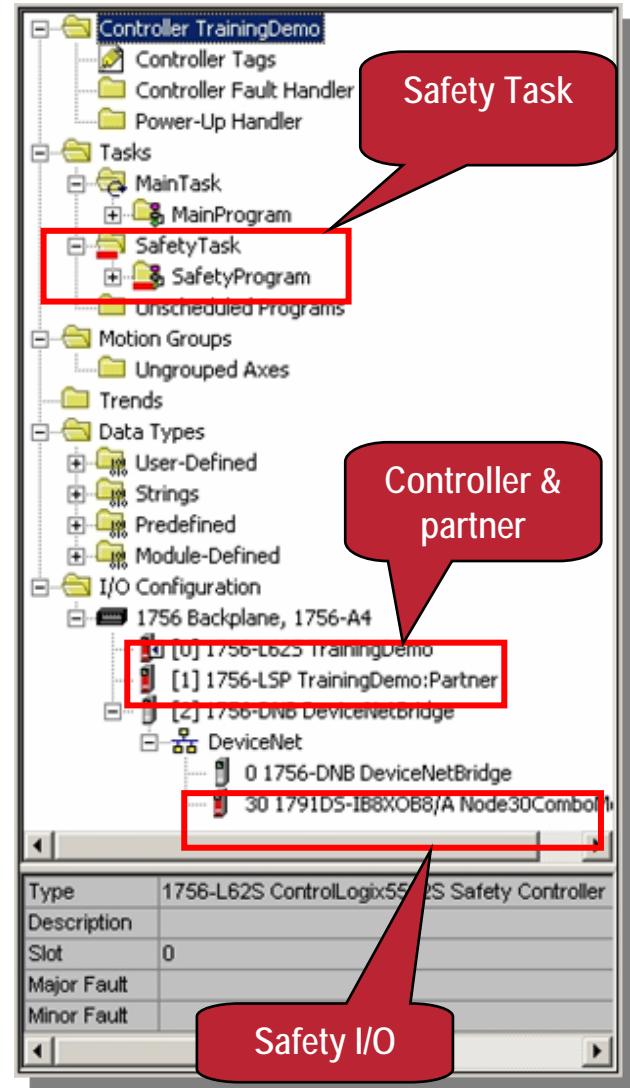
Compact I/O 独立的 RPI 组态

- Up to v17, you could only set one Requested Packet Interval (RPI) for all CompactLogix I/O modules when using 1769-L3x and L2x controllers
 - Individual RPIs can be set when using the 1768-L4x controller
- With V18, users will be able to set individual RPI for each Compact I/O module
 - It is expected that users will be able to set RPI as fast as 1msec
- Allows customers to better utilize system resources



RSLogix 5000 Lite Edition Changes

- With release v18, RSLogix 5000 Lite will include support for the Safety Compact GuardLogix editor
- Safety task editing can be added separately to RSLogix 5000 Mini by purchasing 9324-RDGLXE



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Connectivity Update

FactoryTalk Gateway

RSLinx Enterprise

RSLinx Classic



Connectivity Priorities and Positioning

- Simplifying Connectivity - Software to Hardware
 - Driver and Network Device configuration
 - Browsing for devices
 - Browsing for data in devices
- Premier Data Service for Rockwell Automation clients
 - Reliable connections – disconnect /reconnect
 - High performance throughput - tags / second
- Unsurpassed Data Service for 3rd Party and Custom clients
 - Options to eliminate DCOM
 - Multi-Client support w/Diagnostics
- Price / Options to fit customer's needs
 - ControlLogix Applications – FactoryTalk Gateway/RSLinx Enterprise
 - Cost sensitive OEM Applications - single computer – RSLinx Classic
 - *Always recommend the use of FactoryTalk Gateway / RSLinx Enterprise*

What's New in CPR 9 SR2

- Operating Systems support for Windows Vista Business, Windows XP Professional Service Pack 3, and Windows Server 2008
- RSLinx Enterprise v5.20
 - Uses fewer (2) CIP connections for connection limited Compact Logix controllers and connection limited Network Bridge modules
 - Tag browsing for MicroLogix 1400 and PowerMonitor 1000 and 3000 devices
 - Updated driver support and installation
- FactoryTalk Gateway v3.02 and RSLinx Classic v2.55
 - Support LINT (64-bit integer) data type (not supported on Windows 2000)
 - Improved data type management, conversion and block reads/writes
- RSLinx Classic v2.55
 - Device Properties available without EDS file (Big Yellow Question Mark)
 - Updated driver support and installation
- Last release that will support Windows 2000 Operating Systems

What's New in CPR 9 SR2

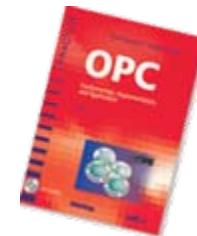
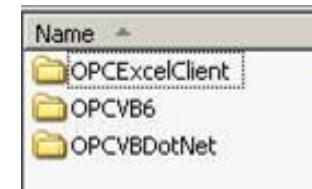
- Shared 1784-PKTX(D) Driver on Vista and Windows 2008 Server
 - RSLinx Enterprise uses the first channel by default
 - RSLinx Classic must be configured to use the second channel
- Driver Installation Improvement
 - When installing RSLinx Enterprise OR RSLinx Classic, if the following drivers are detected, the driver software will be installed:
 - 1784-PCID(S), 1784-PCIC(S), 1784-PKTX(D), 1784-PKTCS
 - Driver/OS Compatibility Matrix, refer to Rockwell Knowledgebase Answer ID [58963](#).
- Device Definitions
 - RSLinx Enterprise v5.20 includes new device classes and identities, refer to release notes for details
 - RSLinx Classic v2.55 includes 211 new and 153 updated EDS files. Refer to Rockwell Knowledgebase Answer ID [58981](#).

What's coming in CPR 9 SR3

- Start of the “Linx Evolution”
 - Combines the “best of both” Classic and Enterprise
 - Delivers greatly improved usability and performance
 - Begins in RSLogix 5000 v18 and FactoryTalk View v6.0
- RSLogix 5000 v18 deliverables
 - Provides the browsing capabilities for Device Discovery
 - Increases communication performance through the use of Large CIP Packets available on in the 1756-EN2T EtherNet Bridge Module
- FactoryTalk View v5.2 deliverables
 - Extend new Data Access attributes in RSLogix 5000 tags to ...
 - FactoryTalk View ME / PanelView Plus
 - FactoryTalk View SE
 - FactoryTalk Gateway v3.03
 - RSLinx Classic v2.56
 - Removal of all RSLinx Enterprise FactoryTalk Activation references

FAQ for Custom Client Options

- Where can I get RSLinx Classic C SDK?
 - It is no longer sold or supported
 - Existing customers can continue to develop using their RSLinx C SDK
 - Runtime applications must have licensed for RSLinx Classic OEM or Gateway
- What types of OPC clients do you support?
 - Any OPC DA v2.05a compliant client interfaces
 - Automation Client (.NET, VB)
 - Custom Client (C / C++)
- Where do I find sample code for clients?
 - Sample are shipped on install CDs
 - Soon available on the Sample Code website
- Where do I get support for custom clients?
 - Industry Standards websites,
 - OPC Foundation www.opcfoundation.org
 - OPC Connect <http://www.opcconnect.com>
 - Upcoming Knowledgebase articles on OPC “Custom Client Best Practices”
 - Industry reference books, OPC Fundamentals, by Lange and Iwanitz,
- How do you test your APIs?
 - Using the OPC Foundation Compliance Test Tools against our OPC DA Servers



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