Úskalí migrace

Úvodní zamyšlení

„Kdyby to tenkrát lépe navrhli, tak dnes nemáme tolik problémů…..“

„Pokusíme se to navrhnout tak, aby budoucí rozšíření bylo bez problémů…..“

„Poddimenzovali to….“

„Už tenkrát věděli, že se ten produkt přestane v nejbližších letech vyrábět…

„Ještě že to navrhoval pan P z firmy F ten chlap snad myslel na všechno. Stačí jen přidat to a to a můžeme to provozovat dalších X let“

Úvodní zamyšlení

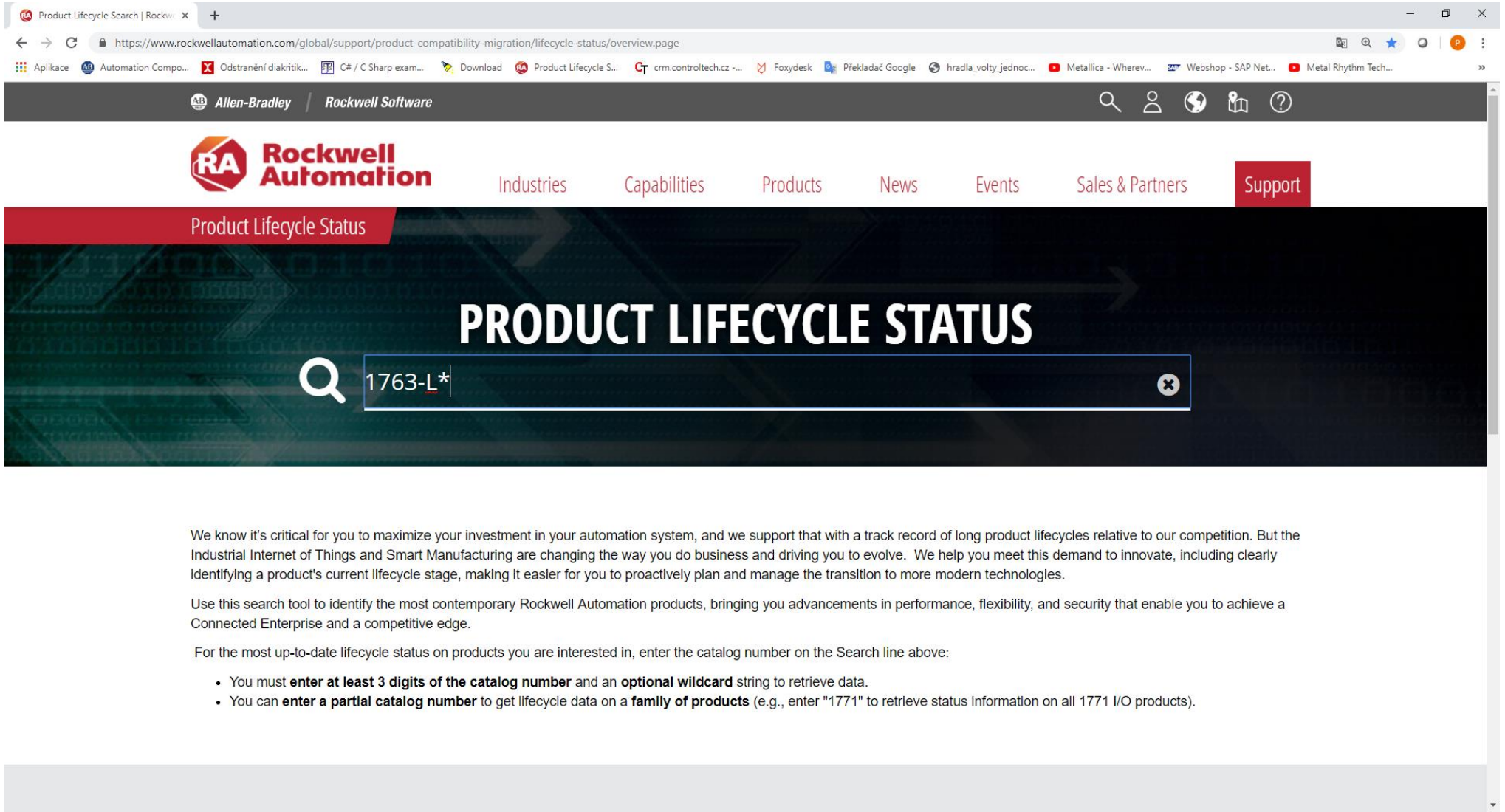
1. Současnost navazuje na minulost.

2. Budoucnost navazuje na současnost.

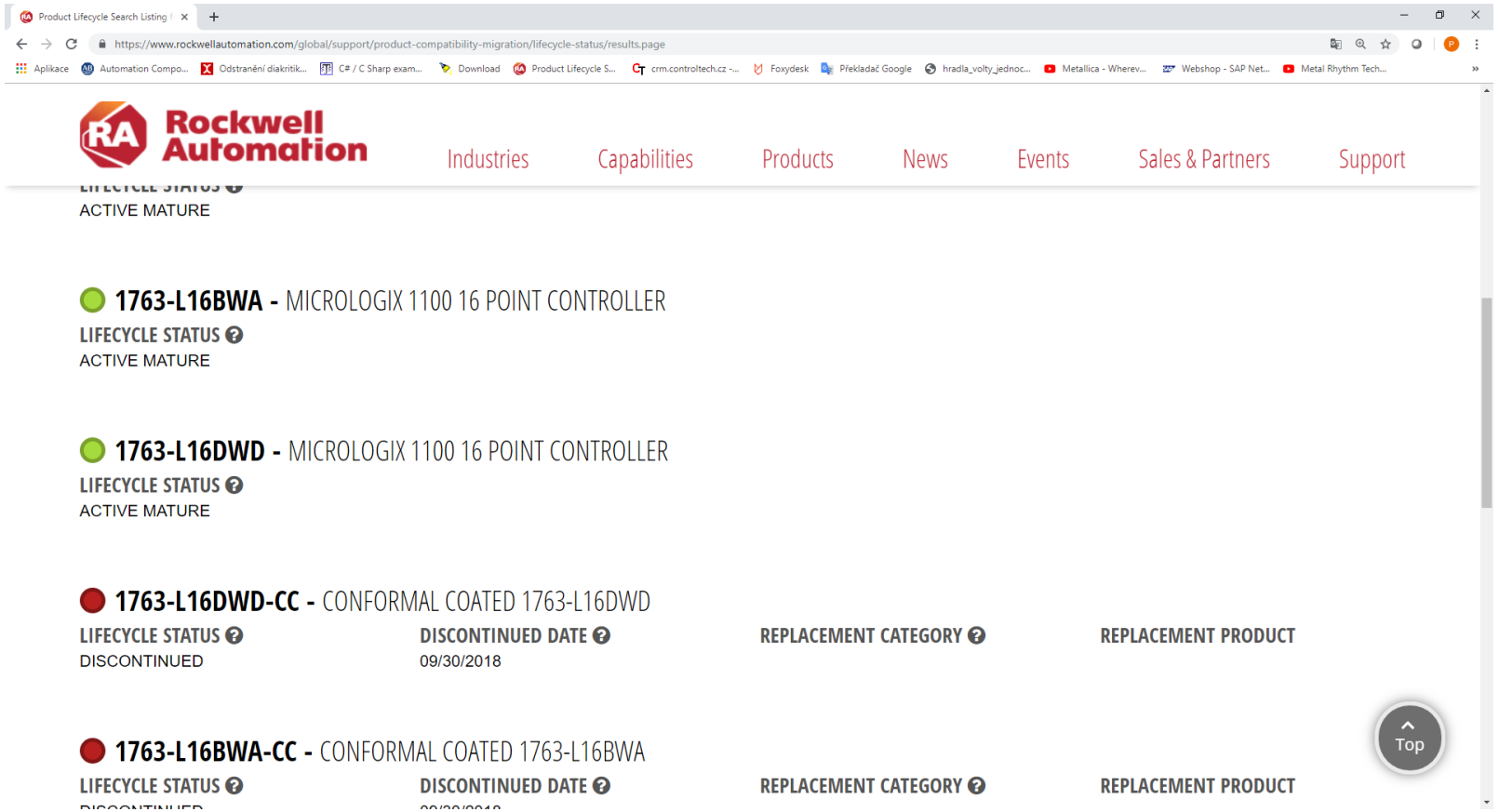
3. Řešíme problémy z minulosti.

4. Snažíme se minimalizovat problémy v budoucnosti.

Aktuálnost hardware



Aktuálnost hardware



Aktuálnost hardware

Veřejně dostupné informace pro každého.

Každý si může nezávisle zkontrolovat životní cyklus hardware, který navrhuje/instaluje/provozuje/servisuje.

Instalovaná báze(hardware) zpravidla bývá důvěrnou informací

DH485 – síť prvních MicroLogixů a SLC500

Co bylo vypátráno

1. Protokol DH485 byl dostupný na RS232 a RS485. Výjimečně stačí „přejít“ na protokol DF1

2. Obsolete produkty: 1747-AIC, 1761-NET-AIC, 1747-PIC, 1756-DH485

3. Připojení do PC : 1747-UIC DH-485/USB ACTIVE MATURE

4. KnowledgeBase
   1761-NET-AIC Replacement Options
   1011086 | Date Created: 01/11/2017 | Last Updated: 06/25/2018
   Access Level: Everyone

5. Operátorské panely s DH485 defacto pouze PanelView 800

6. MicroLogix 1100 a MicroLogix 1400, síť DH485(RS485) dostupná pomocí kabelu 1763-NC01

7. Zajímavý produkt od firmy Aparian

DH485 – Aparian router

The Aparian DH485 Router can be used to enable multiple modern Ethernet devices to communicate to legacy SLC500 (SLC503) devices via their DH485 ports. In the application example below, a remote RSLogix 500 programming station can communicate with, and program an SLC500 PLC.

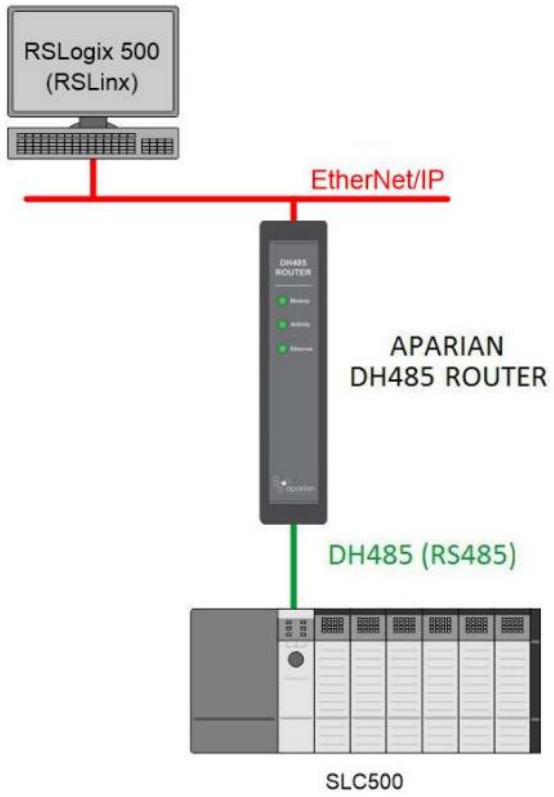


FIGURE 1 - EXAMPLE OF A TYPICAL NETWORK SETUP

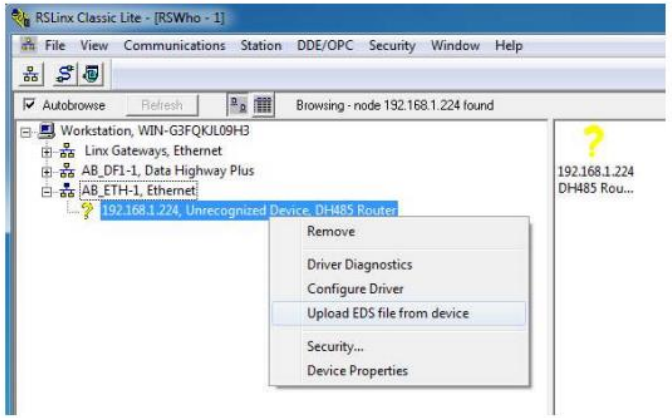


FIGURE 10 – RSLINX UPLOAD EDS FILE FROM DEVICE

The Rockwell Automation EDS Wizard will then launch. Follow the multiple steps by pressing the ***Next*** button and complete the EDS file registration.

Bližší informace
https://www.aparian.com/component/jdownloads/send/69-dh485-manuals/188-app-note-rslogix500-programming

DH485 – Aparian router

After restarting RSLinx, the DH485 Router will correctly appear in the RSWho browser. It will also show the underlying DH485 Port, which, when expanded, will show the underlying SLC500.

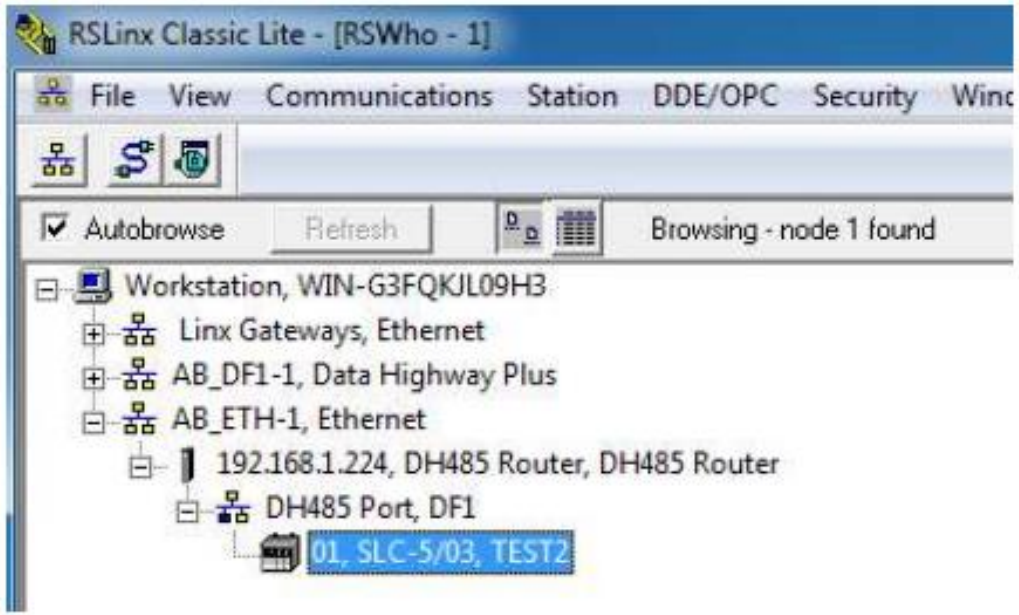
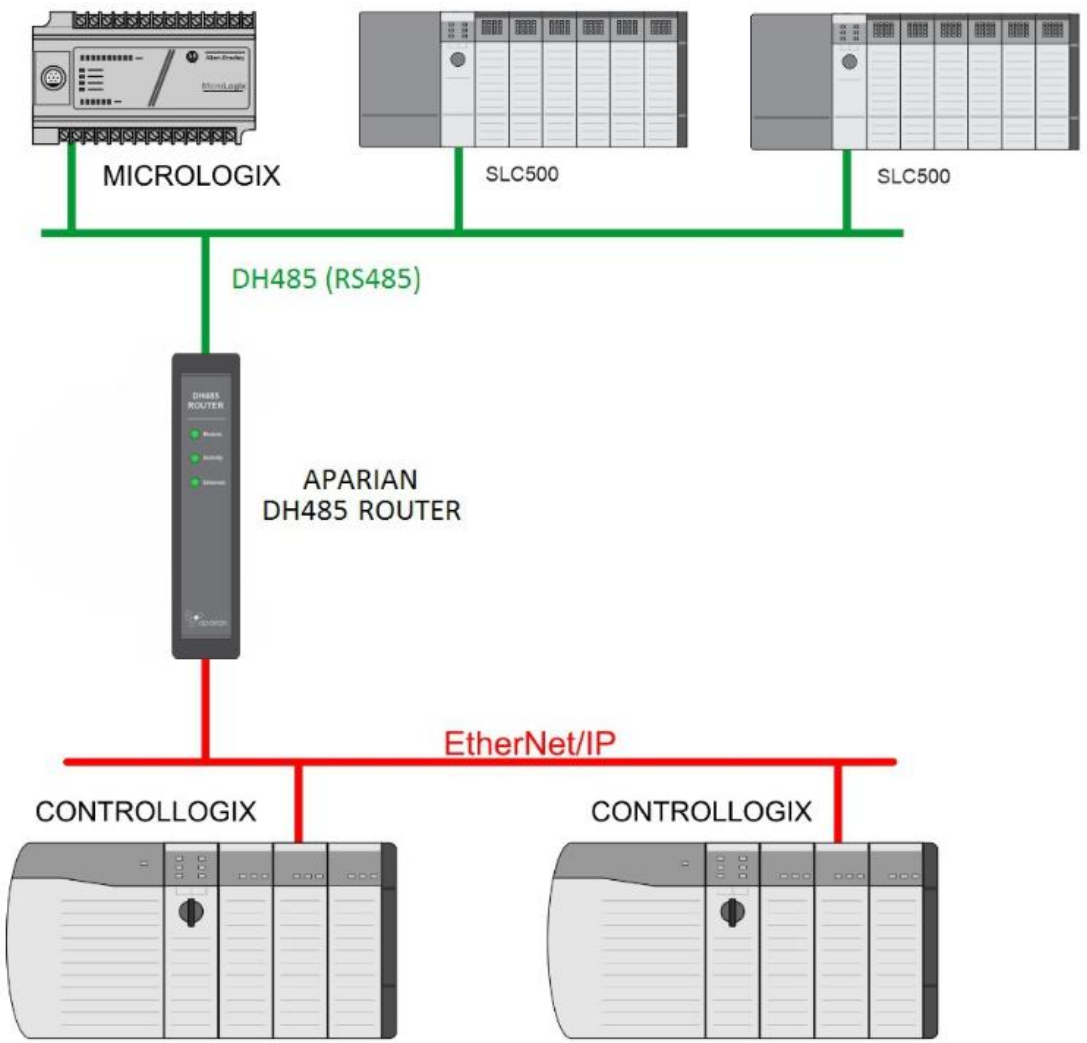


FIGURE 12 – BROWSING SLC500 VIA DH485 ROUTER

Bližší informace
https://www.aparian.com/component/jdownloads/send/69-dh485-manuals/188-app-note-rslogix500-programming

DH485 – Aparian router

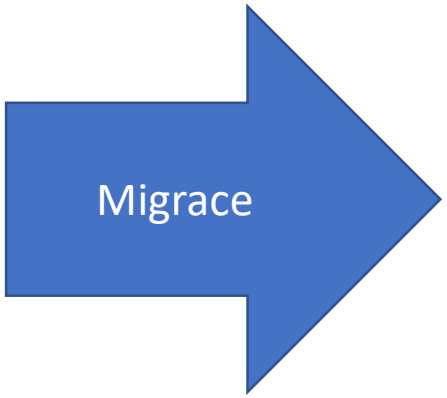


Bližší informace
https://www.aparian.com/component/jdownloads/send/69-dh485-manuals/188-app-note-rslogix500-programming

Micrologix 1000 / MicroLogix 1100 / MicroLogix 1200

Obsolete
MicroLogix 1000

Active Mature
MicroLogix 1100
MicroLogix 1200



MicroLogix 1400
Kód zůstává stejný
Stejné I/O moduly jako
MLX1100 a MLX 1200

Micro 800 / nemá DH485

Přepsat ve stylu Micro800 tedy
Použití i jiných jazyků

Konverzní nástroj ladder

Micrologix 1500

Obsolete jsou jen procesory 1764-Lx. Compact I/O 1769 jsou stále aktivní.

MicroLogix 1500

Migrace

CompacLogix 5370 - 1769-Lx ; absence DH485
stejné I/O moduly ; nejméně „drátování“

CompactLogix 5380(Gigabit) - 5069-Lx ; absence DH485
další migrace nejméně za 20let

Micro 800 Konverzní nástroj ; absence DH485
Vývojový nástroj zdarma ; velmi velký tlak na cenu

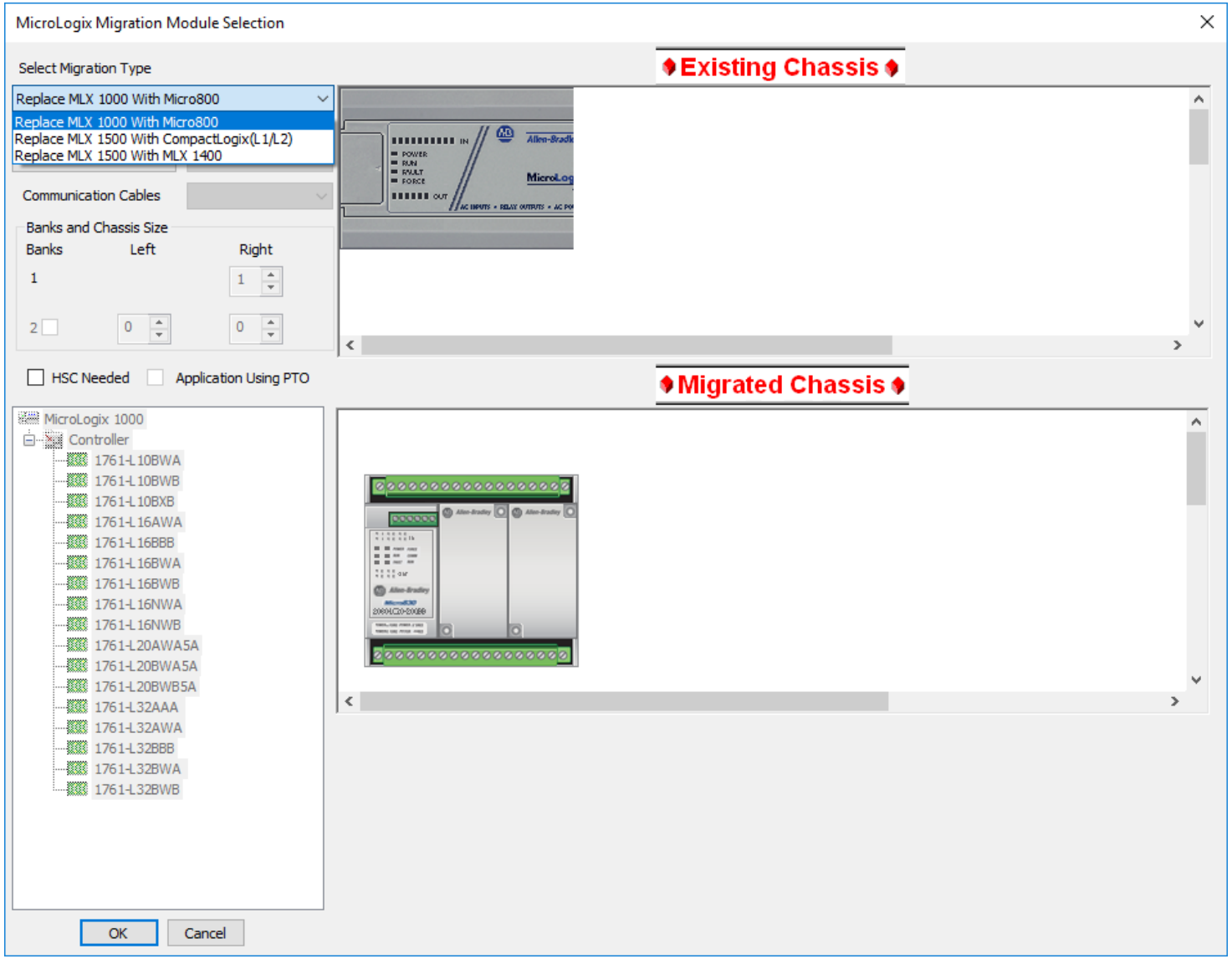
MicroLogix 1400 nemá speciální karty, kód zůstává stejný
podpora DH485

Micrologix Migration Wizard

Kdo mi pomůže s výběrem nového hardware MicroLogix 1000 a MLX1500 ?

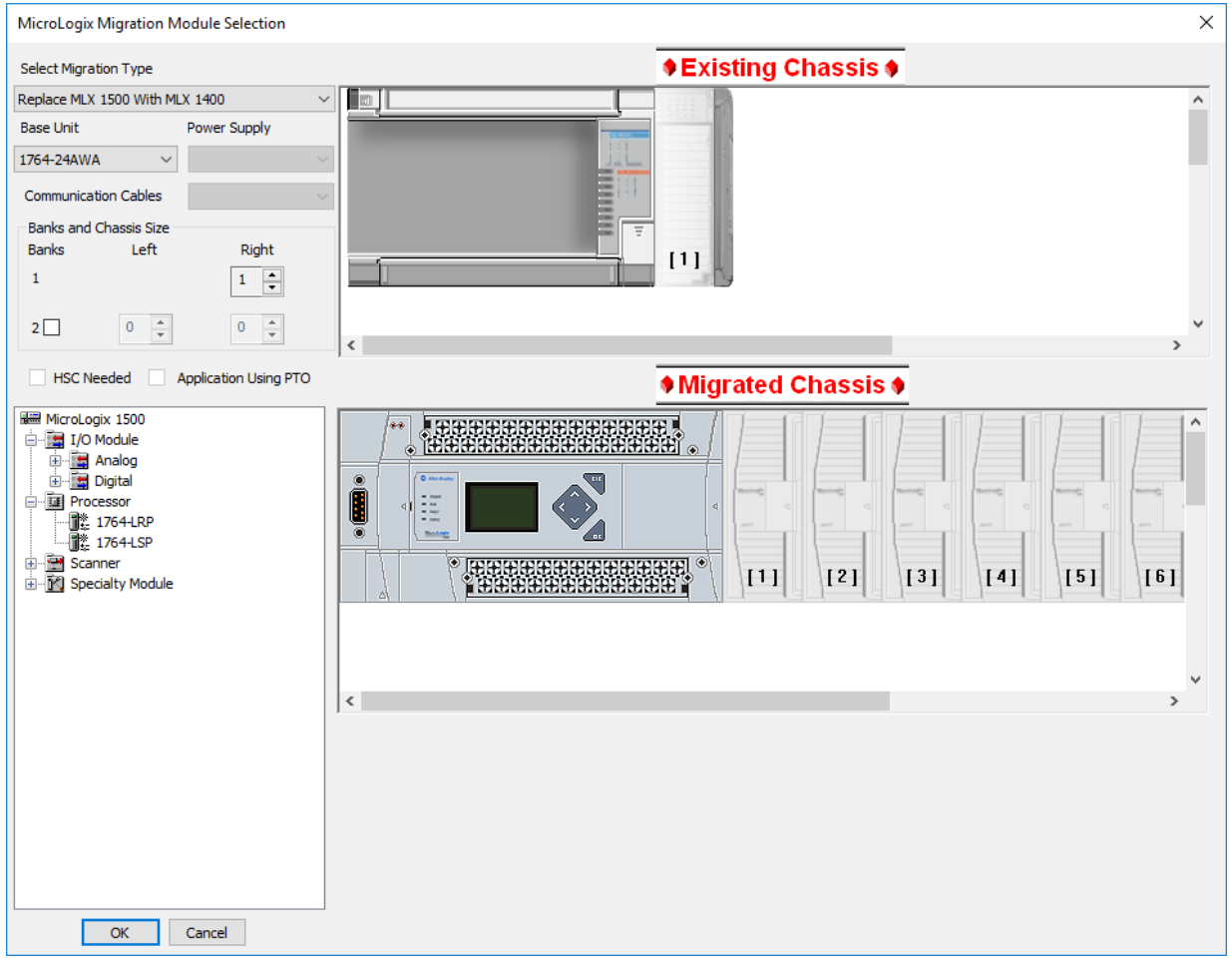
Micrologix Migration Wizard

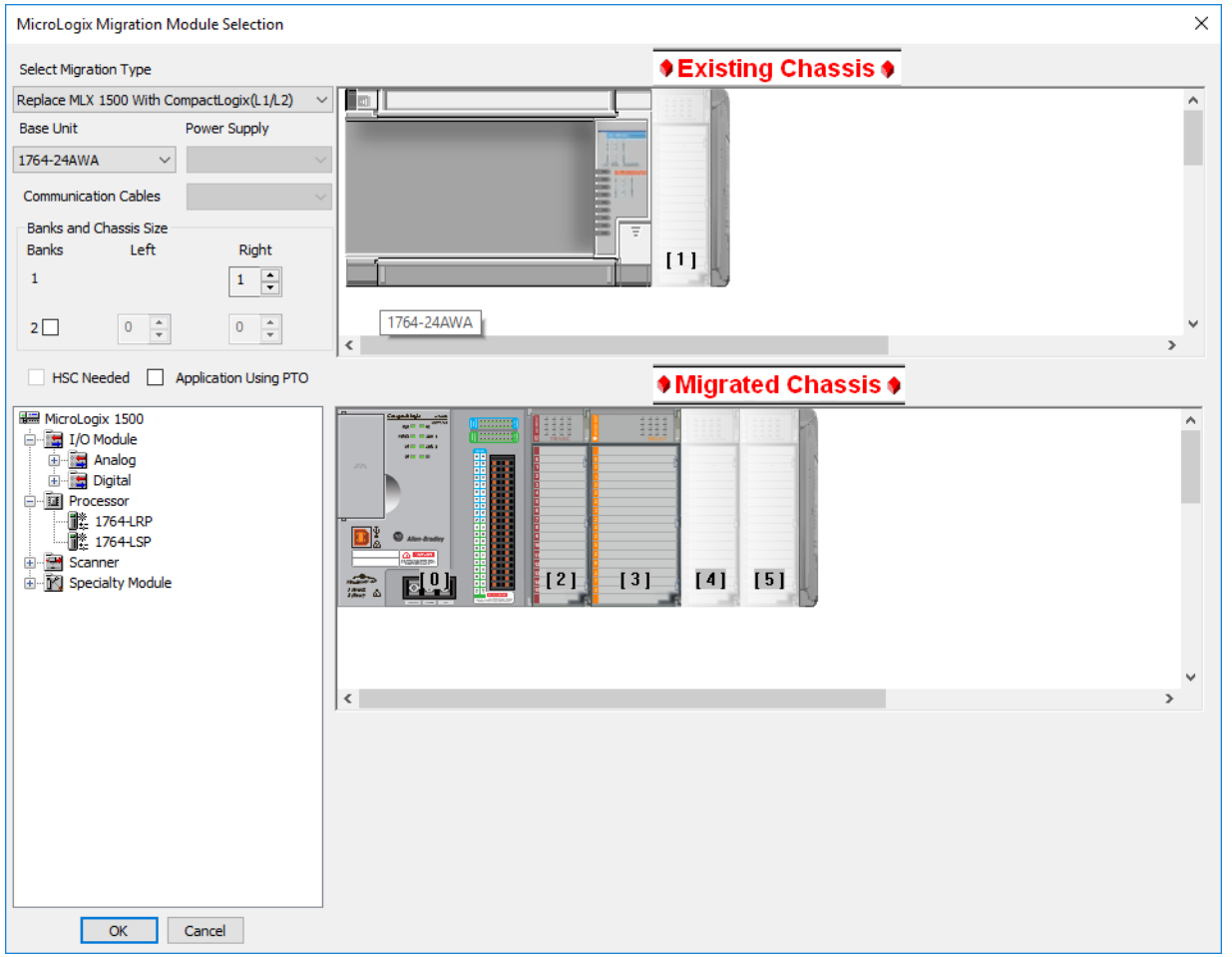
Integrated Architecture Builder – konverzní nástroj zdarma



Micrologix 1500

Integrated Architecture Builder – konverzní nástroj zdarma

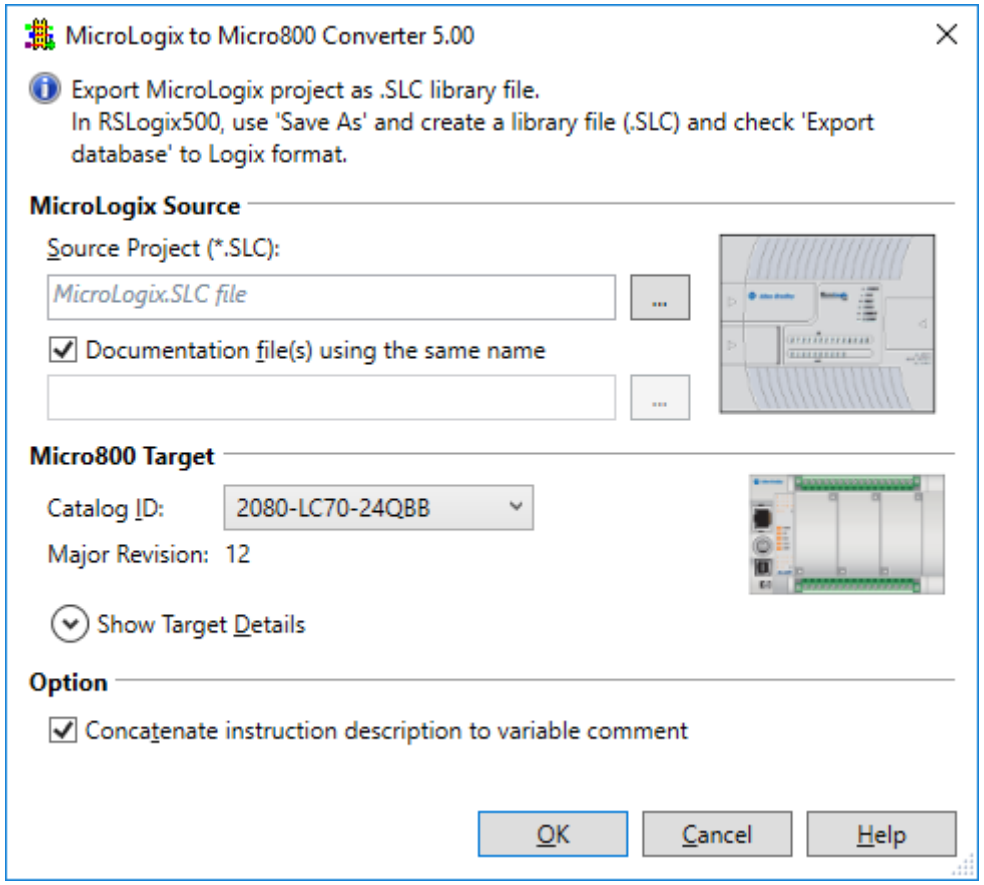




Micrologix to Micro800 Converter

A co aplikační program ?

Micrologix to Micro800 Converter

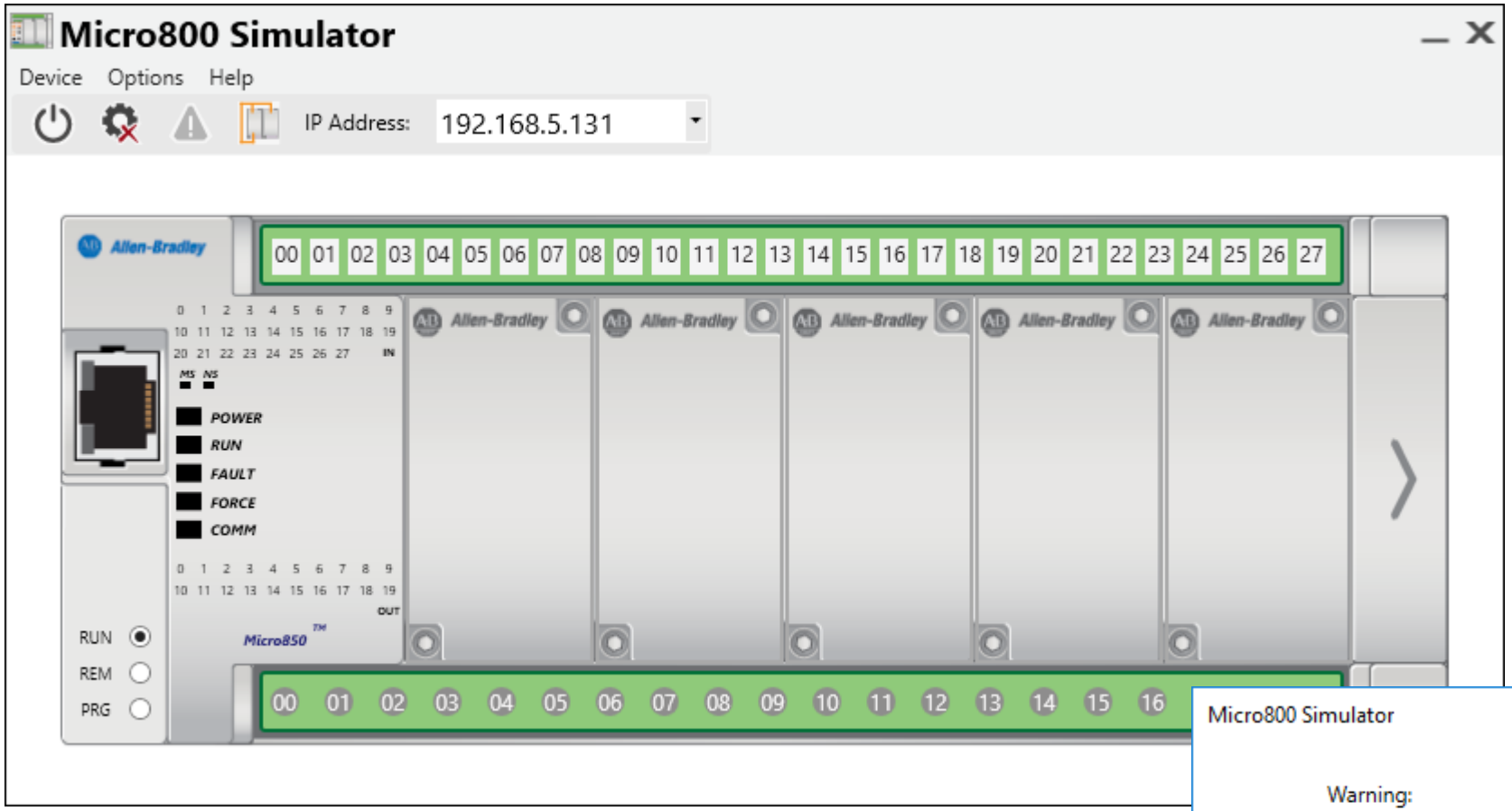


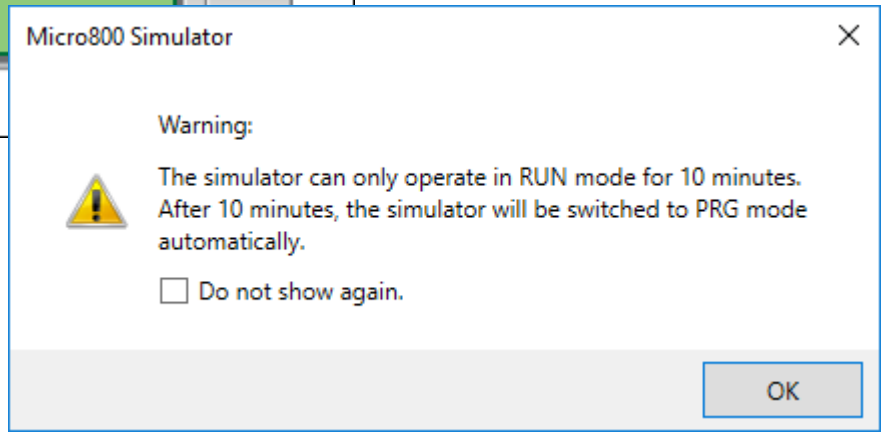
Konverzní nástroj zdarma

Micrologix to Micro800 Converter

Šla by ta konvertovaná aplikace nějak zdarma nezávazně otestovat ?

Micrologix to Micro800 Converter





Connected Components Workbench Standard Edition v. 12

Volba hardware – svět není ideální

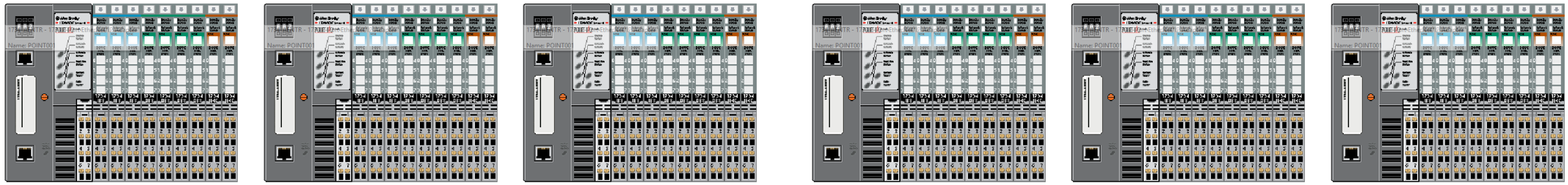
Doporučujeme vytvořit si tabulku

Pro	Proti
Xxx	Rrrrr
Xxx	hhh
Fsdfsdfsd	sdghdgd
Cvxcvxvxc	Dghghdgh
Má DH485	**Musí se to předrátovat**

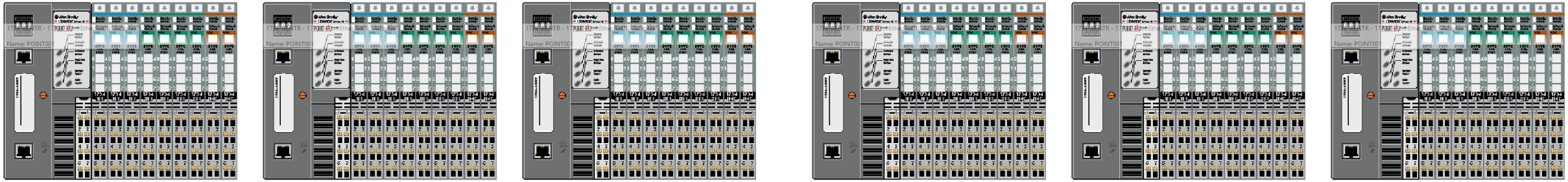
Volba hardware – přerušení

Stávající/původní aplikace

Volba hardware – přerušení

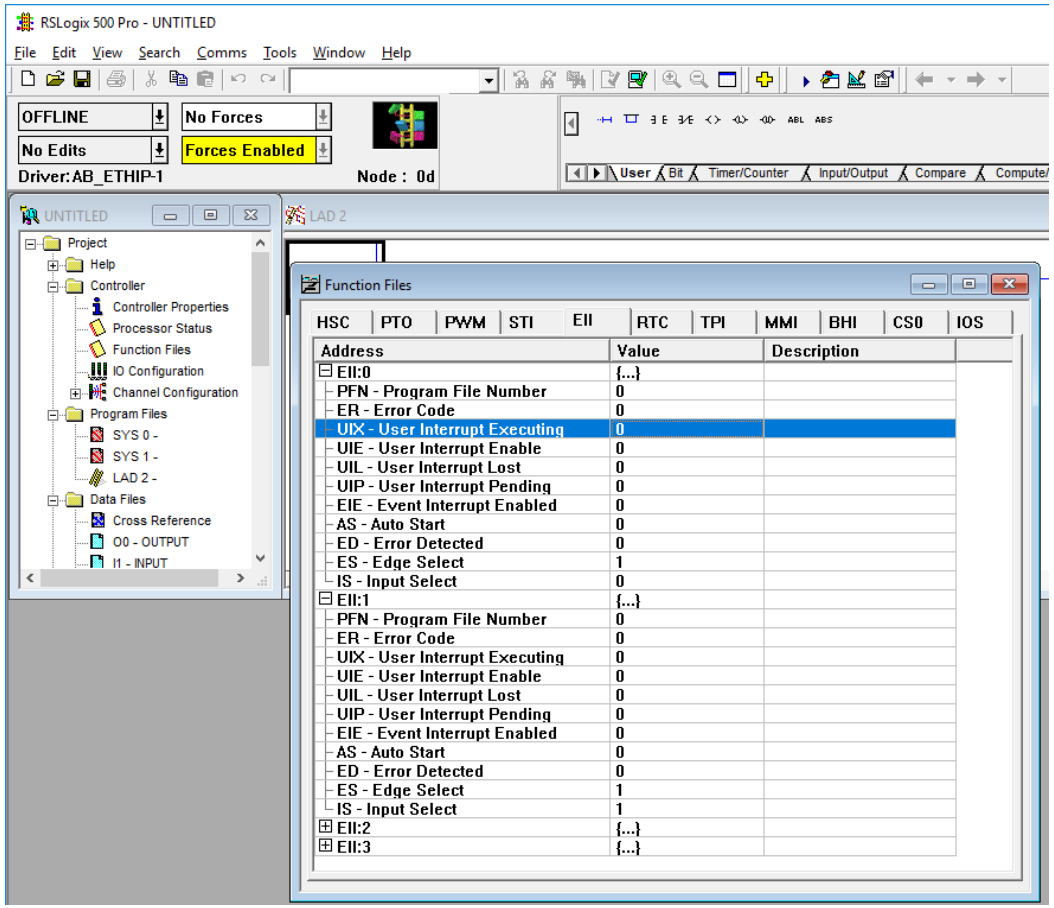


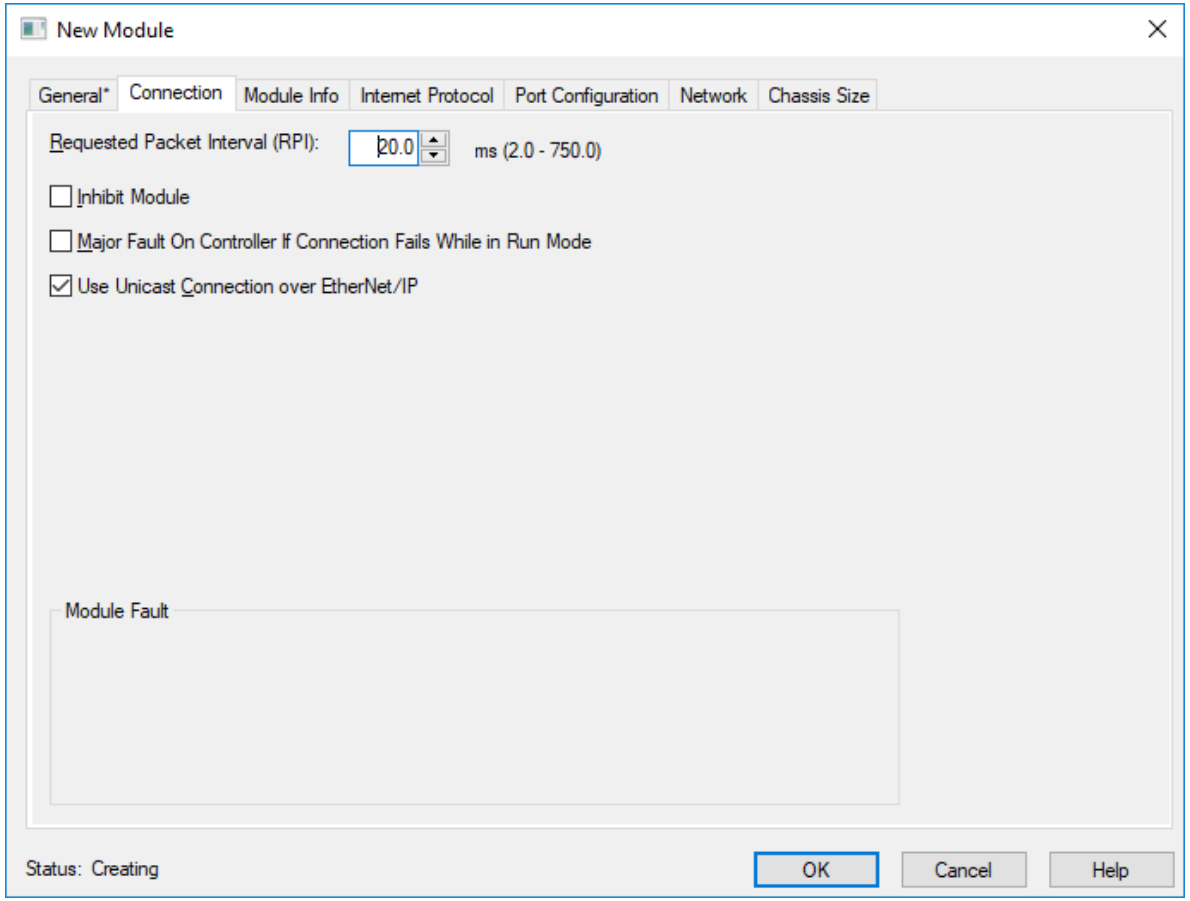
V čem je problém, že to takto nemůže být ?



Volba hardware – přerušení

Pozor na aplikace s přerušením od vstupu





Operátorské panely – konverze aplikace

PanelView Component

PanelView 800

PanelView Standard

PanelView 5510 a PanelView 5310

PanelView Plus a PanelView Plus Compact

PanelView Plus 6 a PanelView Plus 6 Compact

PanelView Plus 7 Performance a PanelView Plus 7 Standard

Automatická konverze mezi „větvemi“ operátorských panelů v současné době neexistuje.
Plánuje se vytvořit konverzní nástroj z PanelView Plus 7 na PanelView 5000.

Operátorské panely – konverze aplikace

PanelView Standard

PanelView 800
Zdarma vývojový software
a celé to přepsat
Seriová linka RS232/485 DH485 Ethernet
Nízká cena hardware

PanelView Plus 7 Standard nebo Performance
Placený software vývojový software
Konverze aplikace
Komunikace Ethernet, Chybí sériová linka
Vyšší cena hardware

Zákazník potřebuje/chce sériovou linku atd…

Operátorské panely – konverzní manuály

Migration Guide

Allen-Bradley

Legacy PanelView to PanelView Plus 6 Catalog Number Conversions

About This Publication

Montážní rozměry a porovnání ?

Migration Guide

Allen-Bradley

PanelView Plus 6 Terminals to PanelView Plus 7 Terminals Catalog Number Conversions

About This Publication

This publication provides information for converting PanelView™ Plus 6 terminals to these new generation terminals:

- PanelView Plus 7 Standard terminals
- PanelView Plus 7 Performance terminals

Migration Guide

Allen-Bradley

Legacy PanelView Terminals to PanelView Plus 7 Terminals Catalog Number Conversions

About This Publication

Operátorské panely – konverzní manuály

PanelView Standard 300 and 300 Micro Terminals Primary Replacement Options

PanelView Standard Terminals						PanelView Plus 7 Terminals – Primary Replacement Options					
Model	Cat. No.	Panel Cutout Dimensions Height mm (in.)	Panel Cutout Dimensions Width mm (in.)	Display Resolution	Comm.	Cat. No.	Panel Cutout Dimensions Height mm (in.)	Panel Cutout Dimensions Width mm (in.)	Display Resolution	Comm.	Adapter Plate Cat. No.	Notes
300	2711-K3A5L1K	197 (7.76)	140 (5.53)	128 x 64	RS-232 (DF1)	2711P-T4W21D8S	92 (3.62)	117 (4.61)	480 x 272	One Ethernet port	N/A	PanelView Plus 7 Standard 4-in. terminal benefits: Higher resolution Application limits: • Max. screen count: 25 • Max. alarm messages: 200 • Max. number of controllers: 1 Communication = Ethernet (dual Ethernet ports are available). Operator input = only touch. Power input = only DC. Conformal coat = No.
	2711-K3A10L1				DH-485							
	2711-K3A17L1				RS-232 (D-485)							
	2711-K3A2L1				RS-232 (D-485)							
	2711-K3A5L1				DeviceNet and RS-232							
300 Micro	2711-M3A18L1	133 (5.23)	111 (4.38)		RS-232 (DF1)							
	2711-M3A19L1											

PanelView Standard 300 and 300 Micro Terminals Secondary Replacement Options

PanelView Standard Terminals						PanelView Plus 7 Terminals – Secondary Replacement Options					
Model	Cat. No.	Panel Cutout Dimensions Height mm (in.)	Panel Cutout Dimensions Width mm (in.)	Display Resolution	Comm.	Cat. No.	Panel Cutout Dimensions Height mm (in.)	Panel Cutout Dimensions Width mm (in.)	Display Resolution	Comm.	Adapter Plate Cat. No.	Notes
300	2711-K3A5L1K	197 (7.76)	140 (5.53)	128 x 64	RS-232 (DF1)	2711P-B7C22D9P	142 (5.59)	237 (9.33)	640 x 480	Dual Ethernet ports	N/A	PanelView Plus 7 Performance 6.5-in. terminal benefits: • Higher resolution • DLR Communication = Ethernet. Operator input = keypad and touch. Power input = only DC. Conformal coat = No.
	2711-K3A10L1				DH-485							
	2711-K3A17L1				RS-232 (D-485)							
	2711-K3A2L1				RS-232 (D-485)							
	2711-K3A5L1				DeviceNet and RS-232							
300	2711-M3A18L1	133	111		RS-232							

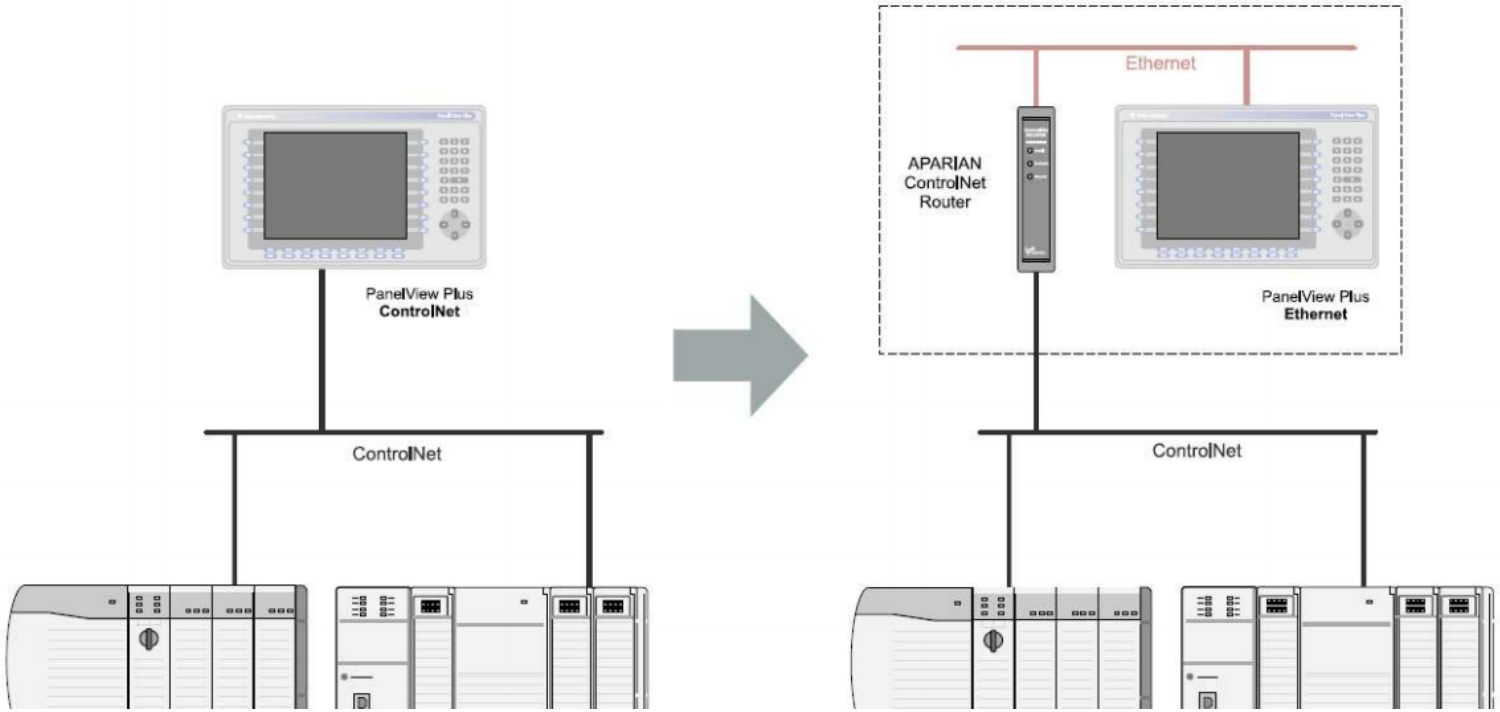
Pokud je to nutné naleznete zde i kat. číslo přizpůsobovacího rámečku

tzv. „Adapter Plate“

Operátorské panely – komunikace

Co třeba ControlNet ?

EtherNet/IP or Ethernet PCCC (CSP) allowing the user to connect new PanelView Plus devices (with no ControlNet interface) to existing ControlNet networks. The support for Ethernet PCCC (CSP) allows the module to emulate a PLC5 providing a legacy interface for PanelViews and other devices over scheduled ControlNet (as shown below).



DH+ a Remote I/O

Co bylo vypátráno

1. Dodávají se již jen defacto moduly 1756-DHRIO, 1747-SN a procesory 1747-L54x. Vše ostatní je obsolete.

2. 1784-U2DH USB-to-Data Highway Plus Cable - řešení pro počítače

3. 1784-PKTX - DATA HIGHWAY PLUS PC CARD LIFECYCLE STATUS ACTIVE MATURE

   1784-PKTX compatibility with Windows 10
   1053255 | Date Created: 07/05/2017 | Last Updated: 03/01/2019
   Access Level: Everyone Email this page Print Subscribe to Updates
   Question
   Is 1784-PKTX Communication Card compatible with Windows 10?

   Answer
   Yes, 1784-PKTX Communication Card is compatible with Windows 10.

   Install the latest version of RSLinx Classic to get the most updated windows drivers for the 1784-PKTX card.

4. Zajímavý produkt AN-X2-AB-DHRIO od firmy Prosoftu

DH+ a Remote I/O

Jak nahradit adaptéry 1747-ASB a 1794-ASB ?

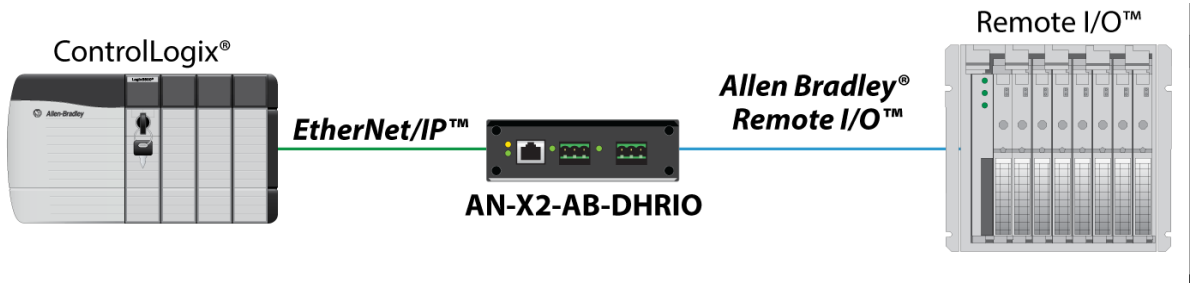
Přechodem na Ethernet/IP 1747-AENTR a 1794-AENTR

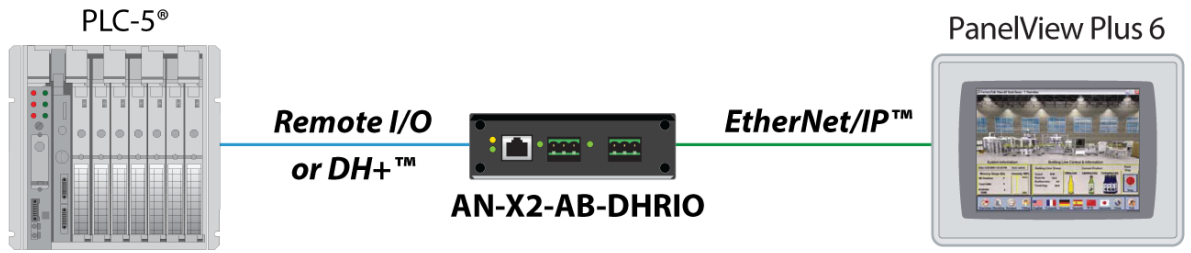
Na co si dát pozor ?.

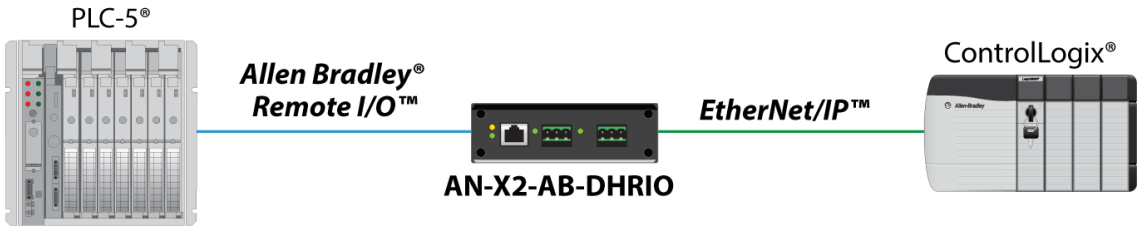
1. Délka kabeláže. Remote I/O mohlo být až 3km dlouhé

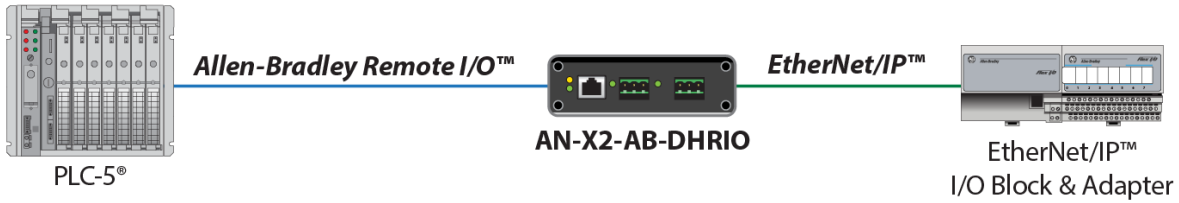
2. Procesory SLC500 s Ethernet 1747-L55x nemohou připojovat I/O po Ethernetu.

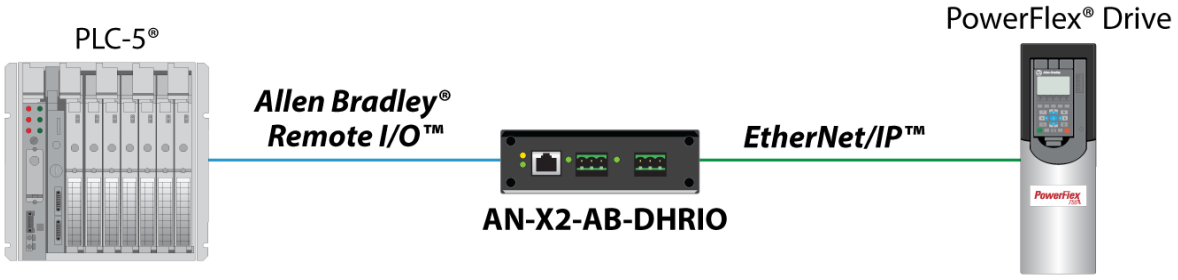
AN-X2-AB-DHRIO

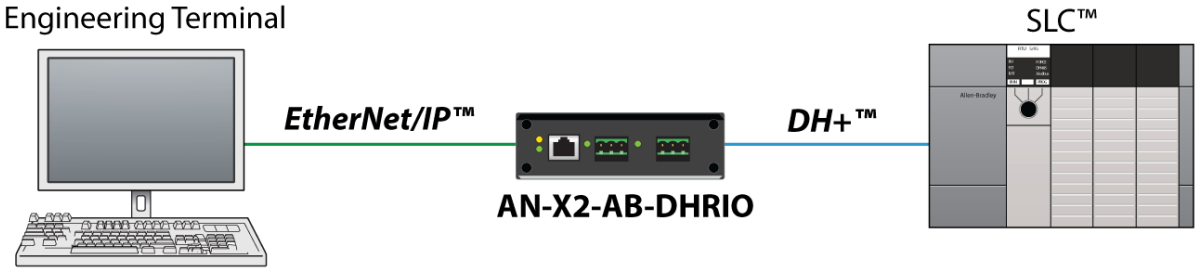












SLC500 Migrace do CompactLogixu

Existuje detailní průvodce migrací z SLC500 do CompactLogixu ?

SLC500 Migrace do CompactLogixu

Migration Guide

Allen-Bradley

SLC/MicroLogix 1500 to CompactLogix Migration Guide

Performance Expectations

The data provided here was gathered by using real world testing and is provided as a guide to help you determine your expected results. The system consisted of a 1769-L36ERM module and a rack of 1746 I/O modules of different sizes and types. No two systems are alike and your system may be different than shown here. Use this data to help manage your performance expectations.

- Testing goal was to keep both the 1769-L36ERM % CPU and the 1747-AENTR % CPU under approximately 70%.
- Each user I/O module configuration is unique in terms of number and types of modules within the chassis. Test results vary based on exact chassis configuration.
- The data was gathered with all modules contained in a single 1746 chassis.
- RPIs of the various modules within the chassis do not need to be equal. You can adjust individual module RPIs to meet your application needs. The RPIs used in these tests were to extremely tax the system. Using RPIs of 2 and 4 mS is not considered typical.

Table 4 - Performance - For Reference Only

Modules in chassis, tested to max size chassis 13 slots **1 - 1747-AENTR module** **12 - I/O modules**	**1 - 1746-IB16** **1 - 1746-OB16** **(best case throughput)**	**1 - 1746-BAS** **2 - 1746-NT4** **2 - 1746-IB16** **2 - 1746-OB16**	**1 - 1746-BAS** **2 - 1746-NT4** **5 - 1746-IB16** **4 - 1746-OB16**
All modules configured for same RPI	2 ms	2 ms	4 ms
Total number of INPUT bytes transferred across backplane	12	212	244
Total number of OUTPUT bytes transferred across backplane	4	184	192
L36ERM % Ethernet CPU, I/O Comms Utilization (Actual)	20%	71.5%	60.8%
1747-AENTR % CPU	23%	68%	66%
1747-AENTR backplane scan time Max/Avg	2 ms/2 ms	5 ms/5 ms	5 ms/5 ms
Typical discrete throughput with minimal Logix program scan (less than 1 ms)	7…11 ms	11…19 ms	12…19 ms
Typical discrete throughput with 15 ms Logix program scan	7…39 ms	12…47 ms	12…50 ms
Typical discrete throughput with 30 ms Logix program scan	9…70 ms	12…76 ms	11…85 ms

While the Logix controller might not scan the I/O in the 1747-AENTR chassis

SLC500 Migrace do CompactLogixu

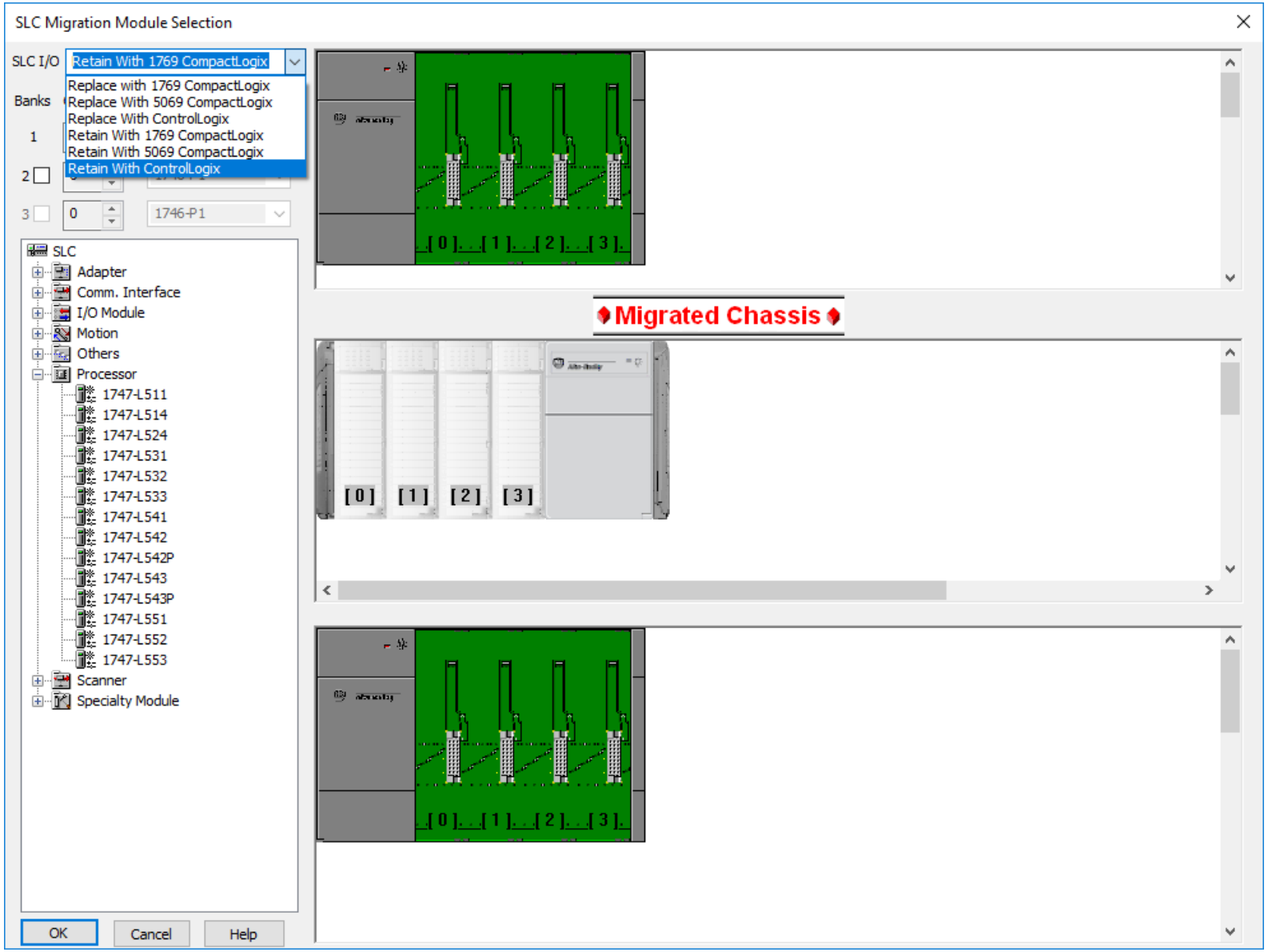
Co když budu muset udělat vícero variant ?

Zjistím okamžitě i cenu jednotlivých variant ?

SLC500 Migrace do CompactLogixu

Co když budu muset udělat vícero variant ?

Zjistím okamžitě i cenu jednotlivých variant ?



SLC500 Migrace do CompactLogixu

Přeci jenom to bylo více o hardware.
Existuje i průvode jak migrovat/konvertovat aplikaci ?

SLC500 Migrace do CompactLogixu

Podrobný manuál jak konvertovat aplikaci a na co bychom neměli zapomenout.

Reference Manual

Allen-Bradley

Converting PLC-5 or SLC 500 Logic to Logix-Based Logic

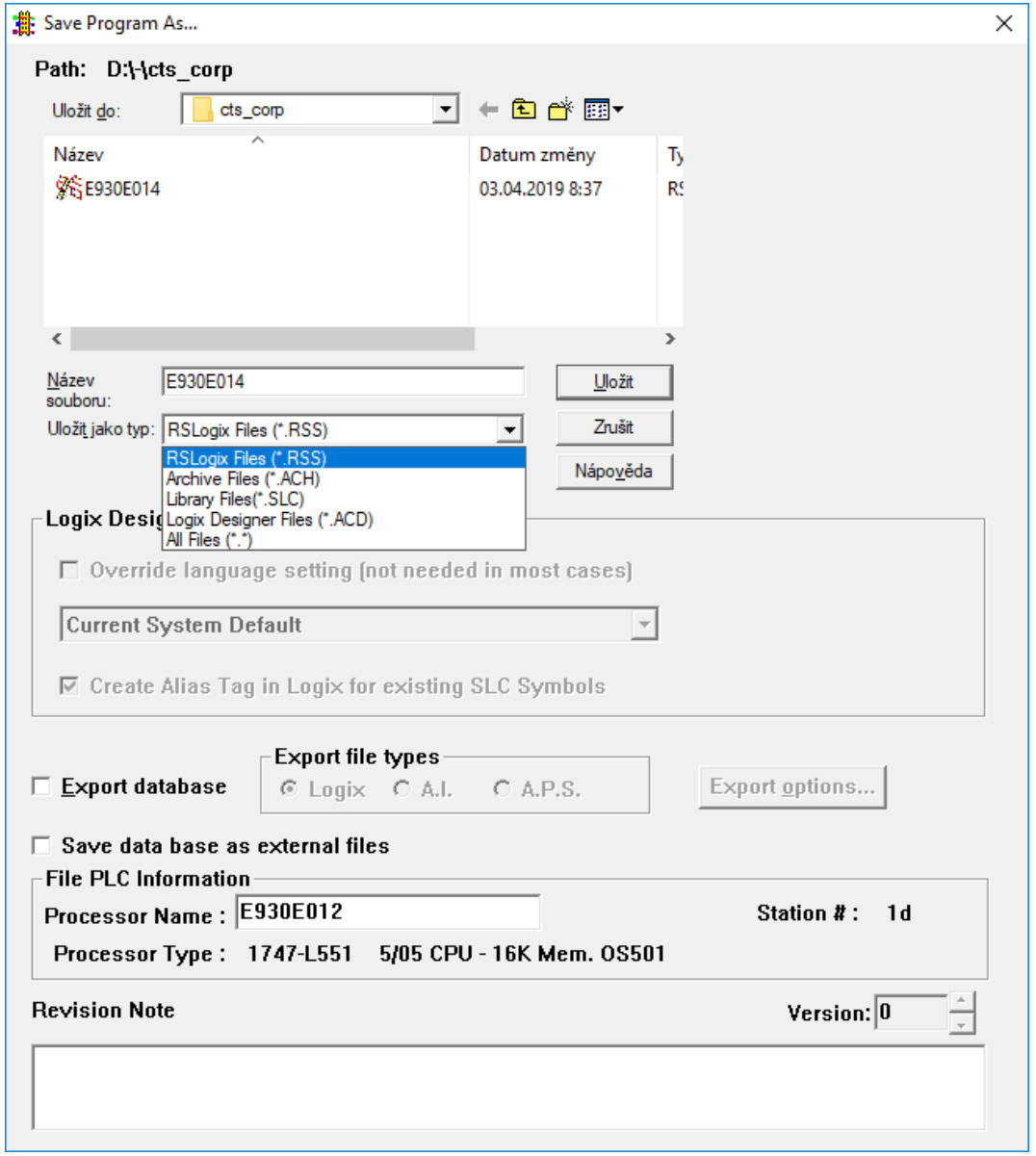
1756 ControlLogix, 1756 GuardLogix, 1769 CompactLogix,
1769 Compact GuardLogix, 1789 SoftLogix, 5069 CompactLogix,
5069 Compact GuardLogix, Studio 5000 Logix Emulate

SLC500 Migrace do CompactLogixu

Nešlo by to ještě pohodlněji ?

SLC500 Migrace do CompactLogixu

Poslední verze RSLogix500
Má volbu Save Program As jako Logix Designer



Migrace do CompactLogixu

Mimochodem jak udělám migraci z CompactLogixu 1768-L4x který měl 2 Ethernet karty (2 IP adresy) ?

Migrace do CompactLogixu

Recommended Migration

SOLUTION 1: Migrate to Full CompactLogix™ 5380 Controller and Compact 5000™ I/O System

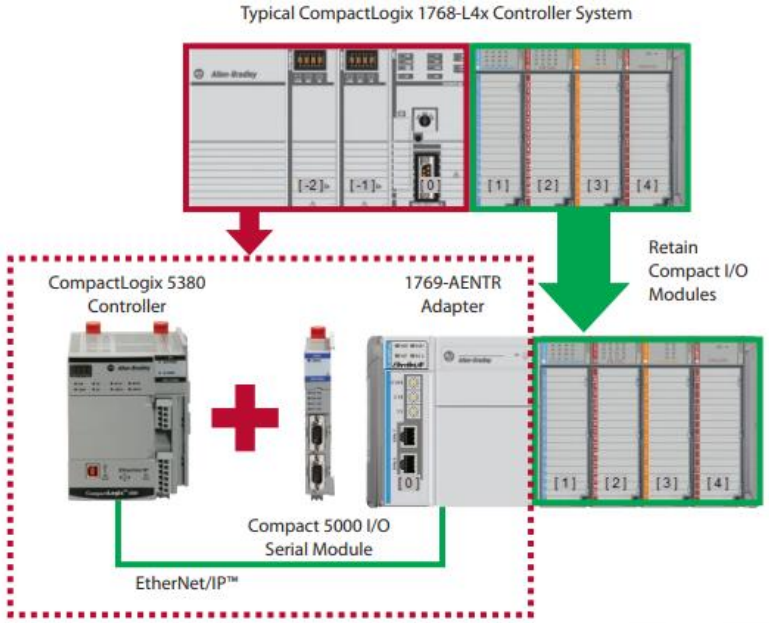
The option to migrate to a CompactLogix 5380 Controller System architecture is cost-effective with the availability of serial communications and dual configurable IP address functionality.

Typical CompactLogix 1768-L4x Controller System

CompactLogix 5380 Controller and Compact 5000 I/O System

SOLUTION 2: Migrate to CompactLogix 5380 Controller and Compact 5000 I/O System, and Retain Existing Compact I/O™ Modules

The option to retain your existing Compact I/O™ Modules as a remote rack reduces installation time, cost and risk. In addition, the new CompactLogix 5380 Controller System hardware will fit in most existing panels, thus reducing engineering time.



Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx

CompactLogix 5069-Lx je dokonalý. Opravdu neexistuje něco na co bych si měl dát pozor ?

Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx

Zapojení modulů se může proměnit v nepochopení - nedorozumění - noční můru .

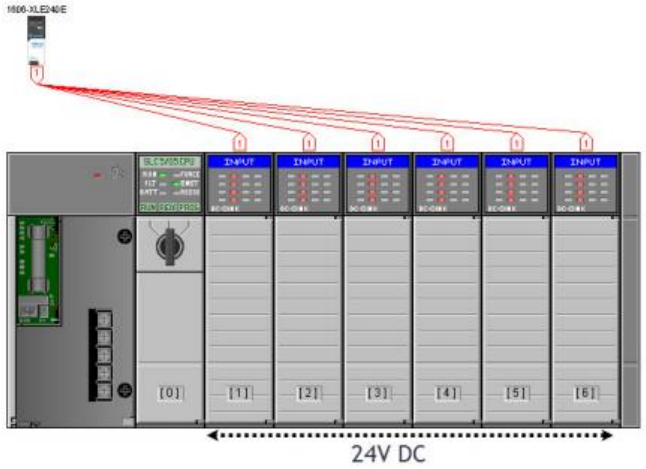
Proč Sensor/Actuator (SA) bus ??? Proč Local Actuator ???

Proč 5069-FPD ???

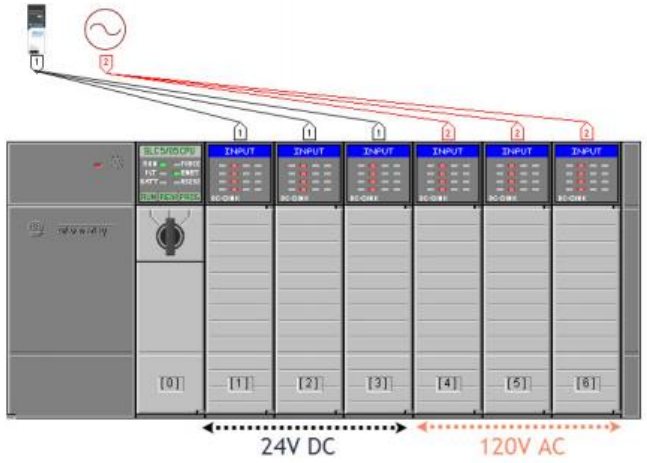
Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx

Sensor/Actuator Power for SLC 500

The SLC 500 power system does not have a common Sensor/Actuator (SA) bus and requires all modules to have a power supply connection.



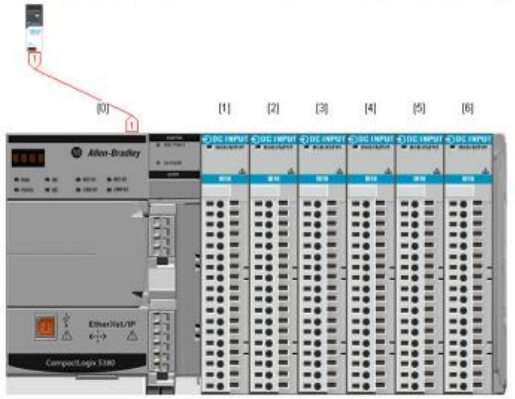
The SLC 500 I/O power system if sensors/actuators have a common operating voltage



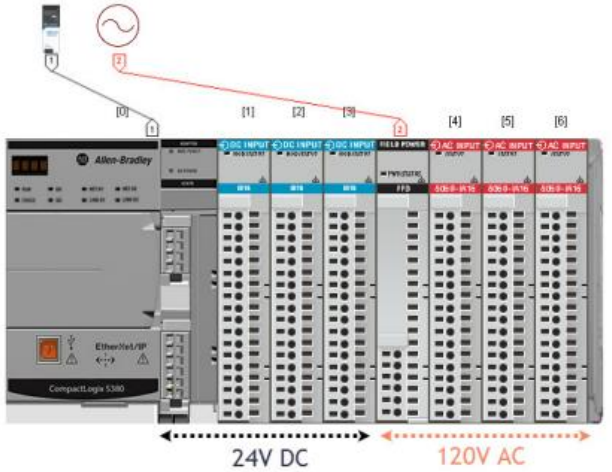
The SLC 500 I/O power system if sensors/actuators have different operating voltages.

Sensor/Actuator Power for CompactLogix 5380

The CompactLogix 5380 I/O power system has a common Sensor/Actuator (SA) bus where a single power source can be shared among all attaching I/O modules using the backplane. This helps reduce wiring effort and is convenient if all I/O devices operate at the same voltage. If the sensor/actuator has two different operating voltages (see following figures), the SA Power bus can be separated with a Field Potential Distributor Module, such as the 5069-FPD.



The CompactLogix 5380 I/O power system if sensors/actuators have a common operating voltage.



The CompactLogix 5380 I/O power system if sensors/actuators have different operating voltages.

Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx

Opravdu se všechny moduly zapojují stejným způsobem a už mě nic nepřekvapí ?

Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx

Wiring Diagram

The following is an example wiring diagram for the 5069-OA16 digital output module.

Channel Connections

The diagram shows devices that are connected to channels 0, 4, 8, and 12. You are not restricted to using only those channels.

You can connect devices to any channel or combination of channels as needed.

SA Power

Connections to an external power supply that provides SA Power via the SA Power RTB on one of the following:

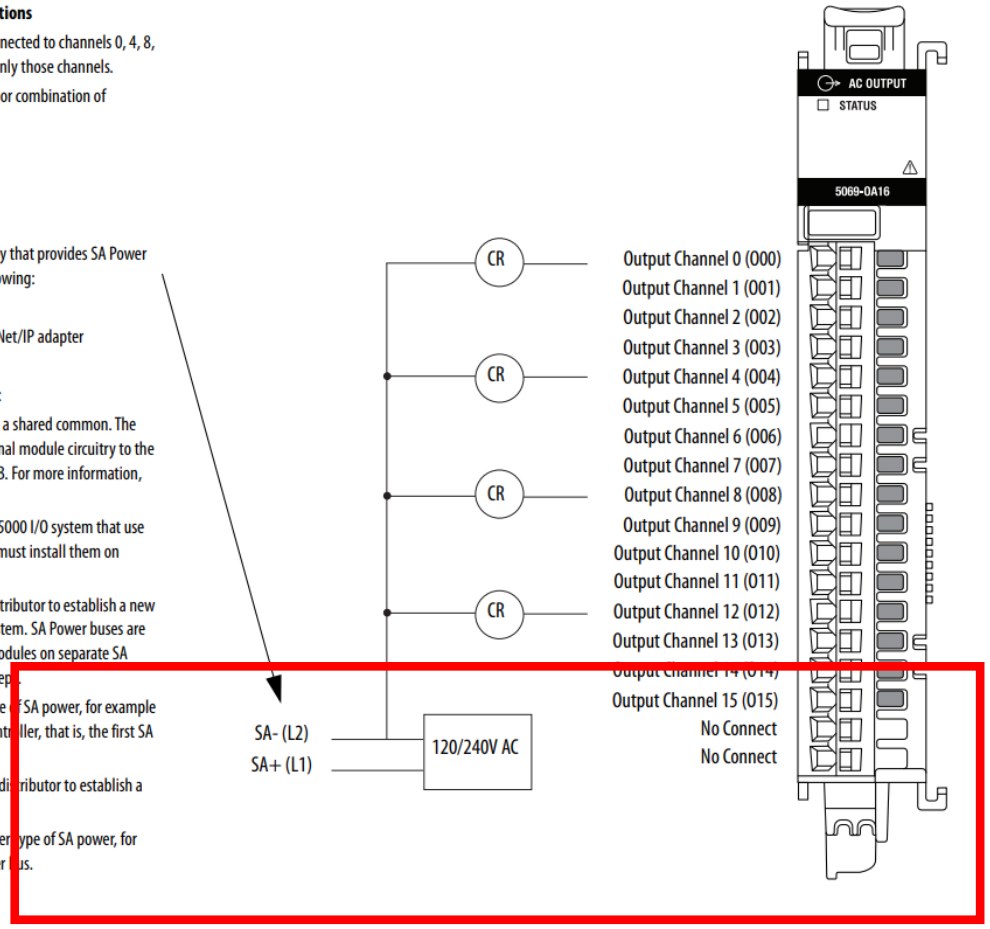
- CompactLogix 5380 controller
- 5069-AENTR or 5069-AEN2TR EtherNet/IP adapter
- 5069-FPD field potential distributor

IMPORTANT: Remember the following:

- The 5069-OA16 module outputs use a shared common. The outputs have a return through internal module circuitry to the SA (–) terminal on the SA Power RTB. For more information, see page 6.
- If you install modules in a Compact 5000 I/O system that use AC SA power and DC SA power, you must install them on separate SA Power buses.

You use the 5069-FPD field potential distributor to establish a new SA Power bus in a Compact 5000 I/O system. SA Power buses are isolated from each other. To keep the modules on separate SA Power buses, complete the following step

1. Install the modules that use one type f SA power, for example AC, to the right of the adapter or cont ller, that is, the first SA Power bus.
2. Install the 5069-FPD field potential di ributor to establish a second SA Power bus.
3. Install the modules that use the other ype of SA power, for example DC, on the second SA Power us.



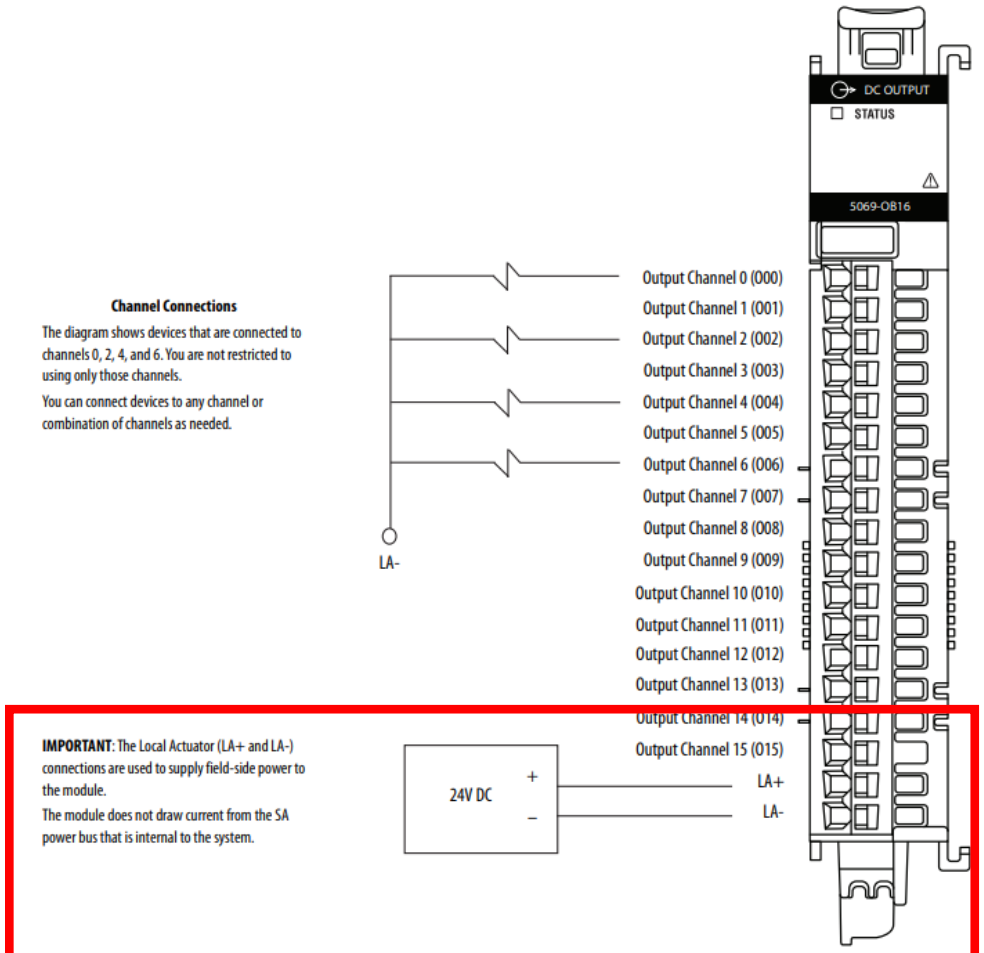
Wiring Diagram

The following is an example wiring diagram.The example applies to the 5069-OB16, 5069-OB16F, and 5069-OB16K digital output modules.

Channel Connections

The diagram shows devices that are connected to channels 0, 2, 4, and 6. You are not restricted to using only those channels.

You can connect devices to any channel or combination of channels as needed.

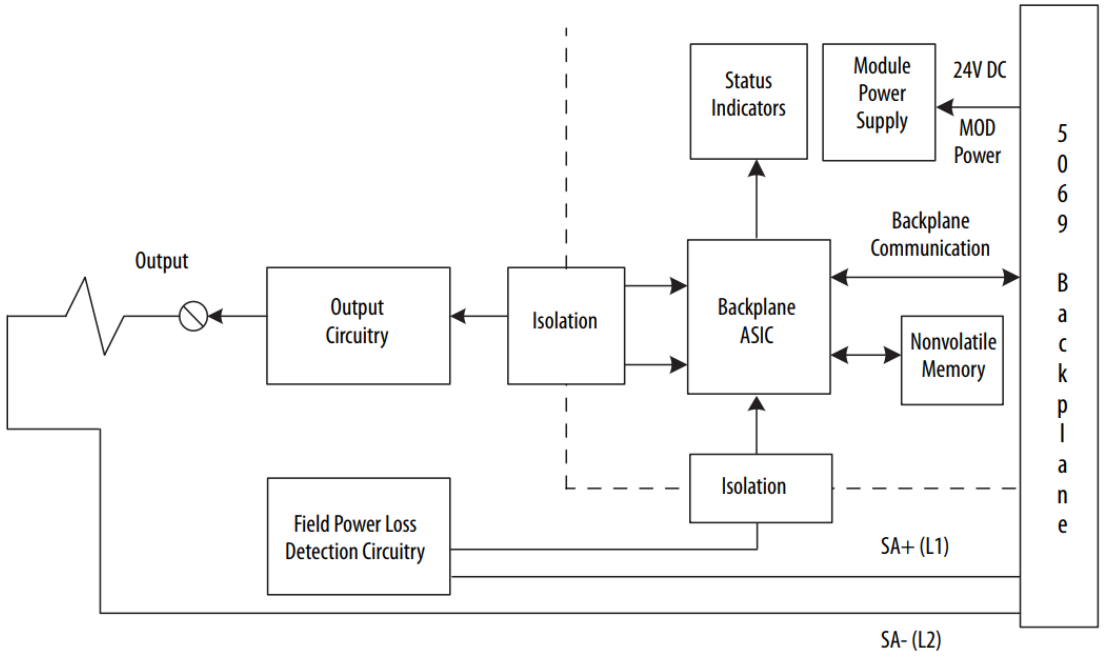


IMPORTANT: The Local Actuator (LA+ and LA-) connections are used to supply field-side power to the module.

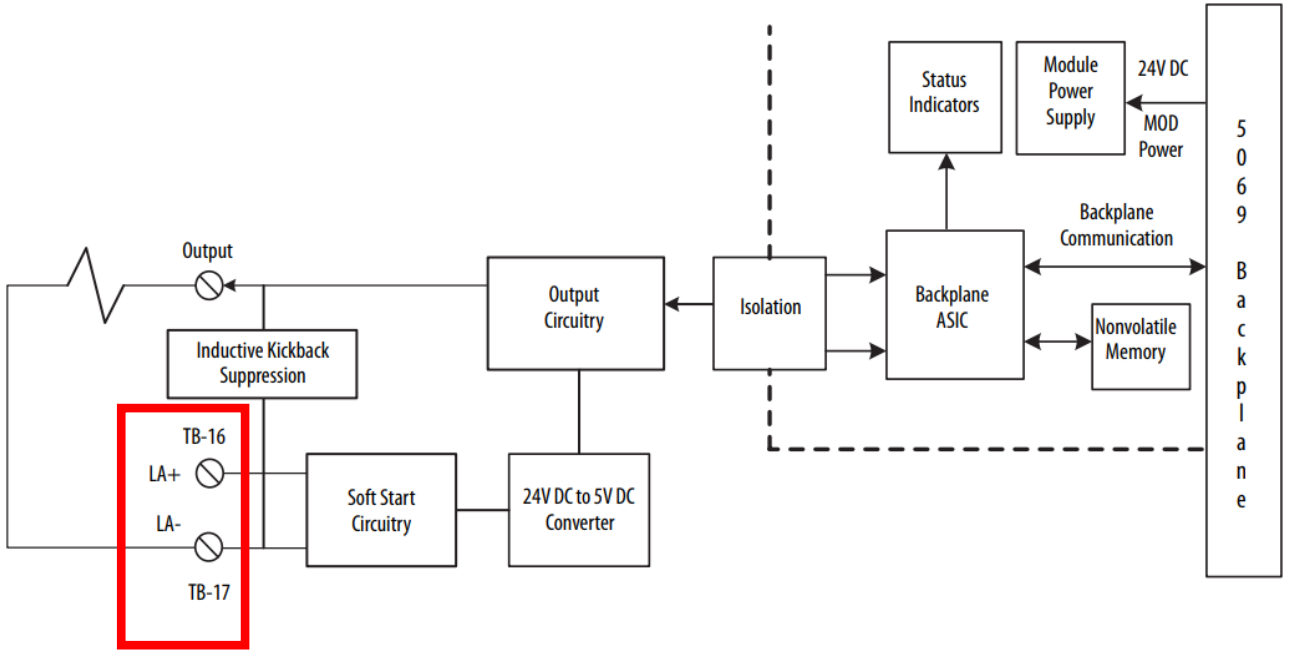
The module does not draw current from the SA power bus that is internal to the system.

Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx

5069-OA16 Functional Block Diagram



5069-OB16 and 5069-OB16F Functional Block Diagram



No jo je tam rozdíl…

Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx

5069 I/O Modules that require Sensor/Actuator (SA) Power

751748 | Date Created: 12/14/2015 | Last Updated: 03/26/2019
Access Level: Everyone

Question
Do all 5069 I/O modules require Sensor/Actuator (SA) Power to function?
Which 5069 I/O modules require Sensor/Actuator (SA) Power to function?

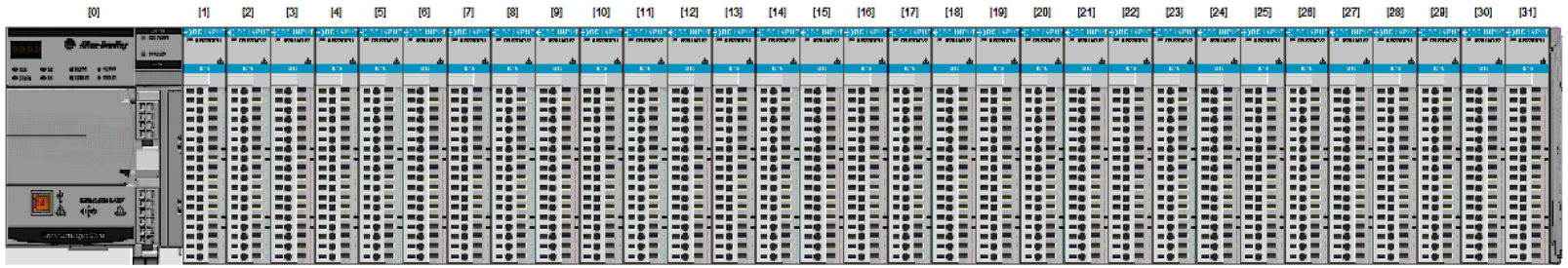
	5069 Module	SA Power Type (AC/DC)	Termination connection options	SA Power Consumed(AC/DC)
Digital IO Modules				
AC Input				
	IA16	AC	N	AC
DC Input				
	IB16	DC	N	DC
	IB16F	DC	N	DC
	IB16F-3W	DC	Y	DC
AC Output				
	OA16	AC	N	AC
DC Output				
	OB8	DC	Y-Local Only	N/A
	OB16	DC	Y-Local Only	N/A
	OB16F	DC	Y-Local Only	N/A
	OB16K	DC	Y-Local Only	N/A
	OBV8S	DC	Y-Local Only	N/A
	OBV8SK	DC	Y-Local Only	N/A
Relay Output				
	OW4I	DC	N	N/A
	OW16	DC	N	DC
	OX4I	DC	N	N/A
Analog I/O Modules				
Analog Input				
	IY4	DC	N	DC
	IF8	DC	N	DC
Analog Output				
	OF4	DC	N	DC
	OF8	DC	N	DC
Specialty Modules				
High Speed Counter (HSC)	HSC2xOB4	DC	N	DC
Serial	SERIAL	DC	N	N/A
Ethernet				

Souhrnná tabulka....

Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx

Ještě se něčím CompactLogix 5069-Lx liší od CompactLogixů řady 1769-Lx ?

Migrace do CompactLogixu 5380/CompactLogix Gigabit 5069-Lx



Několik bank vs. jedna velká. Pozor na šířku.
Modul 5069-FDP sice nezabírá adresní prostor,
ale zabírá fyzický prostor

Absence 32 bodových modulů.

ControlNet

Co bylo vypátráno

1. Cituji : „1768-CNB LIFECYCLE STATUS END OF LIFE DISCONTINUED DATE 01/31/2020“
2. Od 1. února 2020 bude ControlNet scanner dostupný již jen v řídicím systému ControlLogix
3. 1784-PCIC je již obsolete
4. 1784-U2CN připojení do sítě ControlNet přes USB.
5. Point I/O 1734-ACNR je plně „aktivní“ produkt
6. FLEX I/O 1794-ACN15 a 1794-ACNR15 jsou plně aktivní produkty
7. 1786-RG6F - CONTROLNET COAX 1000 FT HIGH FLEX CABLE LIFECYCLE STATUS DISCONTINUED
8. V nabídce je pouze 1786-RG6 300m návin

ControlNet

1734-ACNR -> 1734-AENTR
1794-ACNR15 -> 1794-AENTR

Migrace je „relativně“ snadná
Budoucnost patří Ethernet/IP

32bit vs. 64bit

Operační systémy jsou stále častěji 64 bitové

A co aplikce ?

32bit vs. 64bit

OPC

64bitové aplikace nemohou komunikovat s RSLINX Classic Single Node / OEM

Použijte RSLinx Classic Gateway nebo FactoryTalk Linx Gateway

Nemůže tam dát kat. čísla ?

32bit vs. 64bit

FactoryTalk Link Gateway

FactoryTalk® Linx Gateway Product	OPC Tag Quantity	FactoryTalk® Directory Scope / FactoryTalk® Linx Quantity	FactoryTalk® Linx Data Bridge*
Basic 9355-LNXGWBASENE	DA 1,000 UA 1,000	Local / Single	Not Available
Standard 9355-LNXGWSTDENM	DA 5,000 UA 5,000	Local / Single	Not Available
Distributed 9355-LNXGWDSTENM	DA 32,000 UA 32,000	Local or Networked / Multiple Distributed & Redundant	Not Available
Professional 9355-LNXGWPROENM	No Fixed Tag Limit	Local or Networked / Multiple Distributed & Redundant	Included

*An additional software service that will be delivered with the FactoryTalk® Linx Gateway generally targeted for applications with a small to moderate amount of data; once configured it subscribes to data from one source and when the data arrives it forwards the data to another location in the system. This tool is particularly useful to enable control product that are unable to communicate via OPC to obtain and deliver data to an external OPC UA Servers.

RSLinx® Classic

Catalog Number	Description	Selection
9355-WABGWENE	RSLinx Classic Gateway	Gateway - If the application has multiple devices (controllers) and the OPC application is running on a different PC than RSLinx® Classic (or the same as RSLinx® Classic on a 32 or 64 bit version of Windows)
9355-WABOEMENE	RSLinx Classic OEM	OEM - If the application has multiple devices (controllers) and the OPC application is running on the same Windows 32 bit PC as RSLinx® Classic
9355-WABSNENE	RSLinx Classic Single Node	Single Node - If the application only has a single device (controller) and the OPC application is running on the same Windows 32 bit PC as RSLinx® Classic

Katalogová čísla a porovnání na jednom místě.

ControlLogix

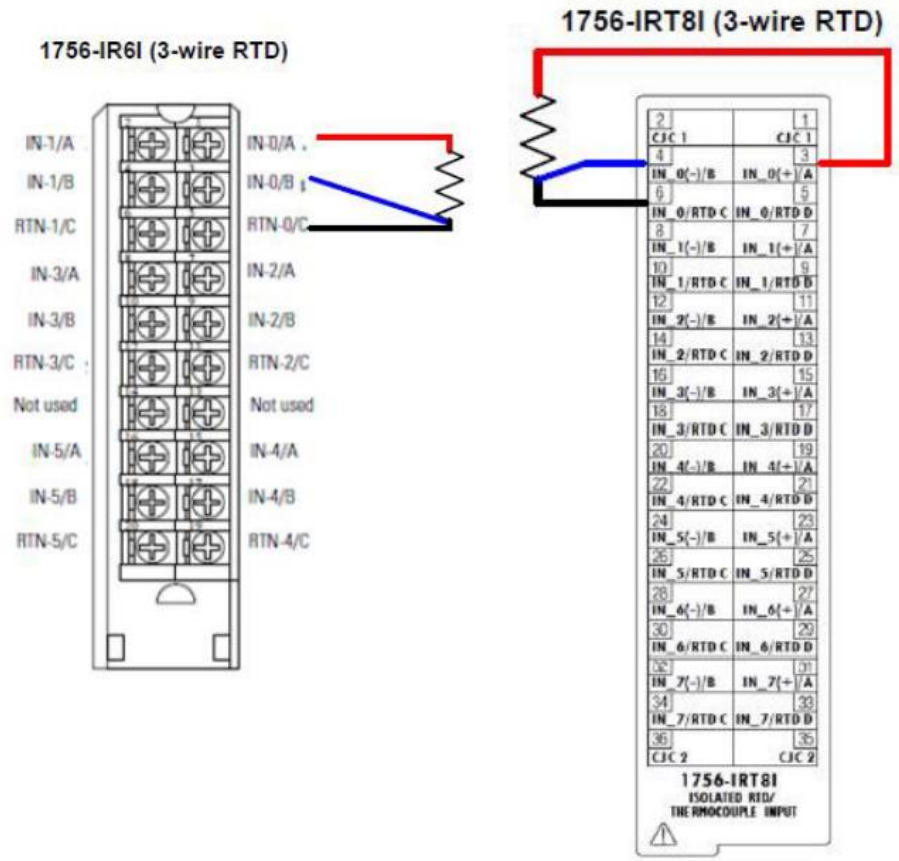
Předpokládám že v ControlLogixu se nic nemění nebo se pletu ?

ControlLogix

Prodej skončil v roce 2017.
Vlastní migrace je výborně a detailně popsána v tomto manuálu.

ControlLogix

1756-IR6I to 1756-IRT8I 3-Wire RTD



Autoři mysleli opravdu na všechno.

ControlLogix

Systémový redundantní modul 1757-SRM se přestal prodávat v roce 2010.
Náhrada tohoto speciálního a velmi důležitého modulu bude pro Rockwell neřešitelný problém nebo se pletu ?

1757-SRM, 1756-RM ControlLogix Redundancy Module Replacement Guideline

454547 | Date Created: 08/26/2011 | Last Updated: 01/11/2018
Access Level: Everyone

Question

•The 1757-SRM redundancy module not available any longer, what is the replacement?
•The 1756-RM redundancy module not available any longer, what is the replacement?
•Can 1757-SRM redundancy module be replaced with 1756-RM2 in the standard redundancy?
•Can 1757-SRM migration to 1756-RM2 on power without affecting the production?

ControlLogix

Release Notes

Allen-Bradley

ControlLogix Standard Redundancy Firmware, Revision 16.057_kit1

Redundancy Module Catalog Numbers

1756-RM2, 1756-RM2XT, 1756-RM, 1757-SRM

Controller Catalog Numbers

1756-L61, 1756-L62, 1756-L63, 1756-L64

Communication Module Catalog Numbers

1756-CNB/D, 1756-CNB/E, 1756-CNBR/D, 1756-CNBR/E, 1756-ENBT, 1756-EWEB

Tento manuál má cenu zlata, protože řeší jak prodloužit životnost redundantní aplikace o další roky.

Nový modul 1756-RM2 spolupracuje se starými procesory 1756-L6x

ControlLogix L7 vs. L8

Reference Manual

Original Instructions

Allen-Bradley

Replacement Guidelines: Logix 5000 Controllers

ControlLogix 5570 to ControlLogix 5580

GuardLogix 5570 to GuardLogix 5580

CompactLogix 5370 to CompactLogix 5380

Compact GuardLogix 5370 to Compact GuardLogix 5380

ControlLogix L7 vs. L8

Math-related Instructions

This section describes the changes in math-related instructions, and apply to the following:

- TRN Instruction Changes
- Improved Math Instruction Accuracy
- SQR/SQRT Adjustment
- X Mod 0
- AND, NOT, OR, and XOR Support for REAL
- Floating Point Literals
- XPY Instruction
- 0.0 div 0.0

Language	Affected
Ladder Logic (RLL)	Yes
Structured Text (ST)	Yes
Function Blocks (FBD)	No
Sequential Function Chart (SFC)	Yes(1)

(1) Only affects embedded Structured Text.

IMPORTANT Manually determine the impact to your application and correct accordingly.

TRN Instruction Changes

Previously, if a large real number was truncated, overflow of the internal math that the instructions performs was possible. As a result, the instruction returned a zero. Some large reals that failed and returned a zero when truncated now return a value.

In RLL, S:V is set properly when the value that is truncated is too large to be stored in the destination. With this implementation, the truncation of real values to real destinations is more likely to complete without errors.

5580/5380 Controllers	5570/5370 Controllers
TRN Truncate Source Real1 2.14748365e+012 Dest Real2 2.14748365e+012	TRN Truncate Source Real1 2.14748365e+012 Dest Real2 0

Mitigation

Modify any existing code that relied on obtaining a zero result instead of range-checking the input value.

Nejdetailnější popis v čem se liší starší procesory od procesorů s vestavěným „gigabitovým portem“.

Stratix 6000

Ethernet/IP se extrémně daří. Existuje však nějaký produkt jehož výroba skončila ?

Stratix 6000

Stratix 6000

Stratix 2500

Stratix 5700

Náhrada/migrace je formalitou
Nové řešení je tzv. „Cisco“

Windows 7

https://support.microsoft.com/cs-cz/help/4057281/windows-7-support-will-end-on-january-14-2020

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Podpora pro Windows | Stahování | Komunita | Kontaktujte nás

14. ledna 2020 skončí podpora systému Windows 7

Platí pro: Windows 7

Životní cyklus podpory Windows 7

Při vydání systému Windows 7 22. října 2009 se společnost Microsoft zavázala u Windows 7 poskytovat podporu produktu po dobu 10 let. Po uplynutí tohoto desetiletého období přestane společnost Microsoft systém Windows 7 podporovat, abychom se mohli zaměřit na podporu novějších technologií a skvělých nových prostředí. Konkrétní datum konce podpory u systému Windows 7 bude 14. leden 2020. Poté už u tohoto produktu nebude dostupná technická podpora a aktualizace softwaru ze služby Windows Update, které pomáhají chránit váš počítač. Společnost Microsoft velmi doporučuje, abyste před lednem 2020 přešli na systém Windows 10 a předešli tak situaci, kdy budete potřebovat využít některé služby nebo možnosti podpory, které už nebudou k dispozici.

Zobrazit vše

- Co znamená konec podpory pro mě?
- Co mám dělat?
- Můžu upgradovat svůj stávající počítač na systém Windows 10?
- Jak můžu upgradovat na Windows 10 zdarma?
- Co se stane, když budu dál používat Windows 7?
- Bude po 14. lednu 2020 stále možné systém Windows 7 aktivovat?
- Bude v systému Windows 7 nadále podporována aplikace Internet Explorer?
- Co když mám systém Windows 7 Enterprise?
- A co systém Windows 7 Embedded?

Windows 7 vs RSView 32

Má to vůbec nějaké řešení ?

Compare Selections

https://compatibility.rockwellautomation.com/Pages/MultiProductCompareSelections.aspx?crumb=113&toggleState=&versions=50002

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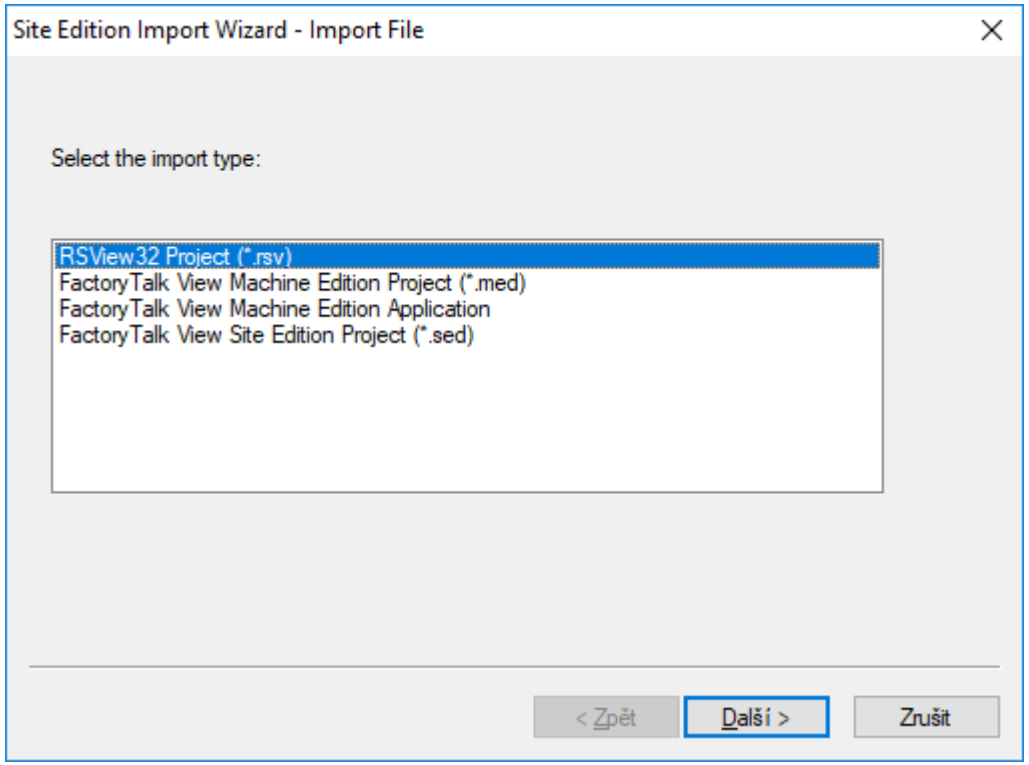
SELECTIONS | DOWNLOADS

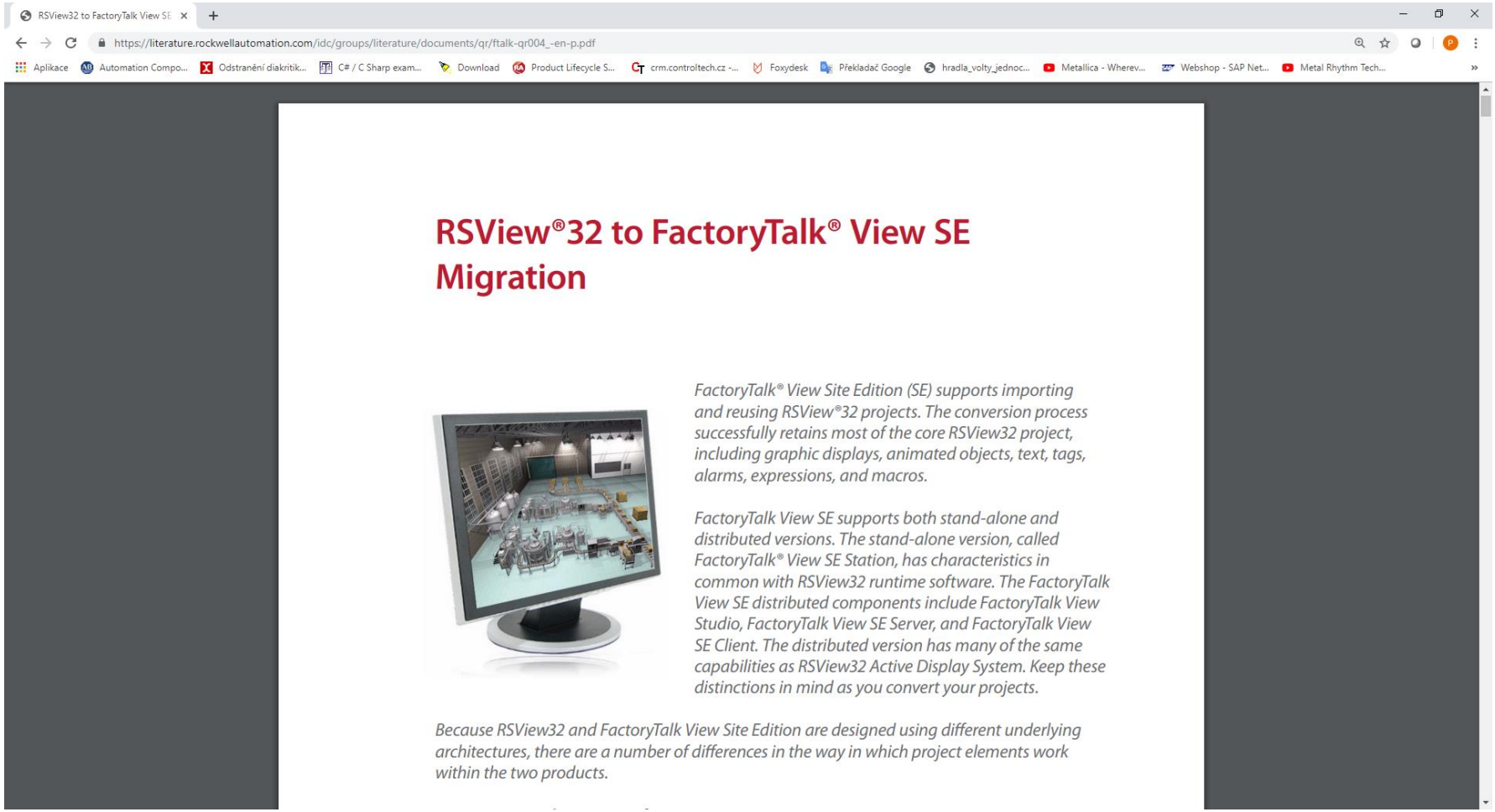
	RSView32
Version	7.60.00
Downloads	
Information	
Other Products - Compatibility	
Rockwell Services	
Operating Systems	RSView32 7.60.00
General	
Windows 10	
Windows 10 Professional, 32-bit, Version 1607	✗
Windows 10 Enterprise, 32-bit, Version 1607	✗
Windows 2003	
Windows 2003 R2	
Windows 2008	
Windows 2008 R2	
Windows 2012	
Windows 2012 R2	
Windows 7	
Windows 7 Enterprise SP1 64-bit	✗
Windows 7 Enterprise SP1 32-bit	✗
Windows 7 Professional SP1 (64-bit)	✗
Windows 7 Professional SP1 (32-bit)	✓
Windows 7 Professional (64-bit)	✗
Windows 7 Professional (32-bit)	✓
Windows 7 Home Premium (64-bit)	✗

Windows 7 vs RSView 32

FactoryTalk View SE import aplikace z RSView 32

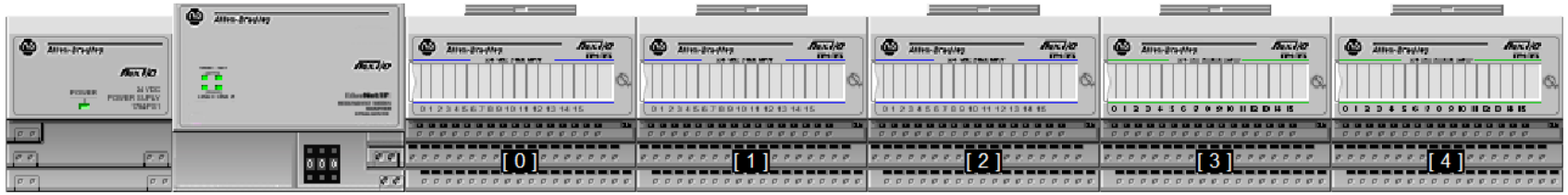


Windows 7 vs RSView 32



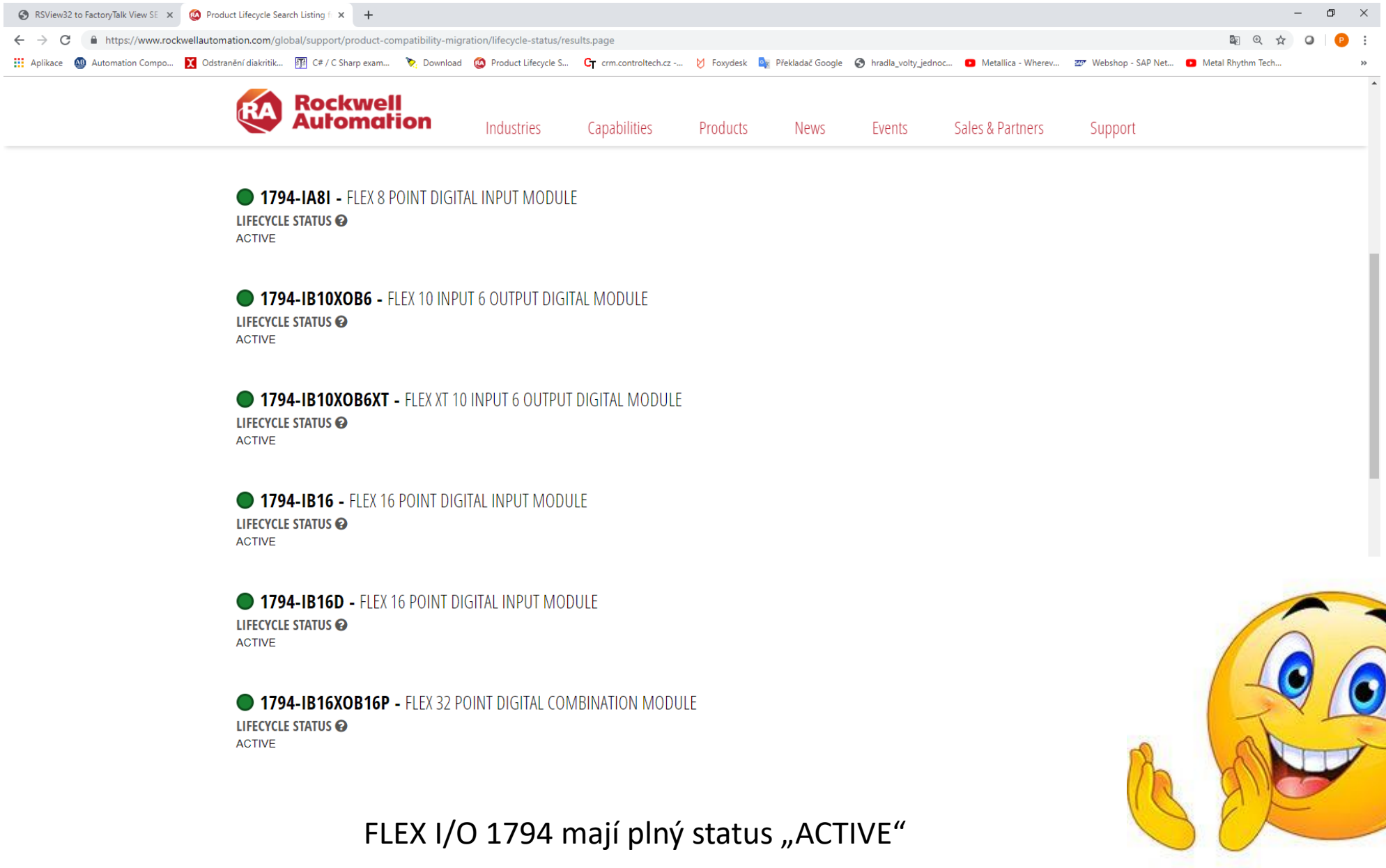
Výborný dokument, který vás upozorní na co si dát pozor.

FLEX 1794 migrace do FLEX 5000



Mám migrovat do FLEX 5000 ?

FLEX 1794 migrace do FLEX 5000



FLEX I/O 1794 mají plný status „ACTIVE“

FLEX 1794 migrace do FLEX 5000

RSView32 to FactoryTalk View SE | FLEX 5000 I/O Modules

https://ab.rockwellautomation.com/IO/In-Cabinet-Modular/FLEX-5000-IO-Modules#overview

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FLEX 5000 I/O Modules

Our FLEX 5000™ I/O modules are a rugged and flexible distributed I/O solution, which allows you to choose your I/O to meet your operational needs. FLEX 5000 I/O enhances communication with 1 Gb EtherNet/IP™ connectivity, which offers higher speed and increased bandwidth. To provide flexibility in your network architecture, these modules includes 2 copper or 2 fiber ports (SFP) and support for DLR, Star, Linear, and PRP topologies.

Watch the Video

Overview | Product Selection | Specifications | Documentation | Resources

Features

- Offers true integrated safety with discrete fail-safe I/O modules, TÜV certified up to SIL 3/PLe/Cat. 4
- Enhances communication with 1 Gb EtherNet/IP connectivity through copper or fiber, with SFP adapters
- Supports a wide range of network topologies: DLR, Star, Linear and PRP
- Supports flexible installation with horizontal or vertical mounting
- Allows users to replace modules while system is in operation with easy snap-on installation via Removal and Insertion Under Power (RIUP)
- Offers flexible and modular capability to support up to 32-channel digital and 8-channel analog input/output
- Operates in -40…70 °C (-40...158 °F) temperatures and in hazardous areas in Class I, Division 2, Zone 2, Groups A, B, C, D
- Allows for use in extreme environments with XT version up to G3 with conformal coating
- Functions as remote I/O modules with ControlLogix® 5580, CompactLogix™ 5380 and CompactLogix 5480 controllers
- Includes configuration with Studio 5000 Logix Designer® application

DISTRIBUTED I/O, IN-CABINET MODULAR

1715 Redundant I/O Modules
1719 Ex I/O Modules
1734 POINT I/O
1794 FLEX I/O Modules
FLEX 5000 I/O Modules

HOW TO BUY

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Find Your Local Distributor ›
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Top

FLEX 1794 migrace do FLEX 5000

Vzdálené vstupy a výstupy řady 5069 a 5094 komunikují jen s procesory s gigabitovým portem 5069-Lx a 1756-L8x.

DeviceNet

Řekl bych, že úplně zapomněl na DeviceNet.

DeviceNet

Co bylo vypátráno

1. Situace je zcela odlišná od situace se sítí ControlNet
2. Scannery pro sít DeviceNet jsou dostupné pro všechny řídicí systémy, kromě MicroLogixů
3. Všechny položky s kat. číslem 1485 jsou plně aktivní – kabely, odbočky, redukce atd.
4. 1784-U2DN - DEVICENET TO PC USB INTERFACE CABLE LIFECYCLE STATUS ACTIVE
5. Pouze adaptér 1769-ADN je obsolete.

DeviceNet

2080-DNET20 - MICRO800 DEVICENET SCANNER PLUG-IN LIFECYCLE STATUS

1747-SDN - SLC DEVICENET SCANNER MODULE LIFECYCLE STATUS ACTIVE MATURE

1769-SDN - COMPACTLOGIX DEVICENET SCANNER MODULE LIFECYCLE STATUS ACTIVE

1756-DNB - CONTROLLOGIX DEVICENET COMMS MODULE LIFECYCLE STATUS ACTIVE

1734-ADN - POINT I/O DEVICENET NETWORK ADAPTOR LIFECYCLE STATUS ACTIVE

1794-ADN - FLEX DEVICENET ADAPTER LIFECYCLE STATUS ACTIVE

1738-ADxx - ARMORPOINT DEVICENET NETWORK ADAPTOR LIFECYCLE STATUS ACTIVE

1769-ADN - COMPACTLOGIX DEVICENET ADAPTOR MODULE LIFECYCLE STATUS DISCONTINUED 10/21/2016

DeviceNet

1769-ADN

⇩

1769-AENTR

Migrace je velmi snadná. Všechny prodávané CompactLogixy mají komunikaci Ethernet.

Závěr

„Ještě že to navrhoval pan P z firmy F ten chlap snad myslel na všechno. Stačí jen přidat to a to a můžeme to provozovat dalších X let“

Proč to opakuje ???

Závěr

Myslete na budoucnost..