THE REYNOLDS COMPANY
ELECTRICAL SUPPLY

MID-COAST
ELECTRIC SUPPLY
An Affiliate of The Reynolds Company

Learning Series

Product Selection and Configuration Tools

June 2023

Online Technical Seminars

Register to receive a calendar invite

THE REYNOLDS COMPANY
ELECTRICAL SUPPLY

Tech Talks

Month	Description
January 25th	Grace Technologies – GraceSense
February 22nd	Industrial CyberSecurity with Claroty
March 29th	CyberSecurity with CrowdStrike
April 26th	Automation Weighing Best Practices with Mettler Toledo
May 24th	Cable Cleats for Short Circuit Protection with Panduit
June 21st	VFD Cables: Essential or Overkill presented by Southwire
https://www.reynoldsonline.com/training-and-events/techtalks	

Learning Series

Month	Description
January 12th	Automation Update
February 23rd	FactoryTalk Design Hub
March 16th	Networks and Security Update
April 20th	Micro800 Update
May 18th	Networking Topologies, Resiliency & Best Practices
June 15th	Rockwell Automation Product Selection & Configuration Tools
https://www.reynoldsonline.com/training-and-events/learning-series	

Visit our Resources page on reynoldsonline.com

Automation Fair 2023

Boston – November 6th – 9th

THE REYNOLDS COMPANY
ELECTRICAL SUPPLY

Keynotes

Energize, engage, inspire

Open to all-attendees

Mix of Rockwell leaders, partners, customers and 3rd party speakers

3 days (Tues-Thurs)

Expo

Show floor built around the customer journey

Heightened focus on new product launches, introduction of discovery theaters

Formalized tour program

2 days (Wed/Thurs)

Sessions

Industry forums, what's new and info talks, panels, customer stories and partner solutions

Introductory-level technical training and labs

Create your personalized agenda by persona, industry, topic

4 days (Mon-Thurs)

Advanced Training

(include Professional Development Hour credits)

All sessions that offer PDH certificates

Advanced-level hands-on labs and product & technology training

ROKLive, Process Solutions User Group and Automation Fair technical content

4 days (Mon-Thurs)

Visit our Resources page on reynoldsonline.com

Our Presenters

Mike Masterson
Automation Specialist
The Reynolds Company

Brian Mikeska
Automation Specialist
The Reynolds Company

David Nute
Automation Specialist
The Reynolds Company

Neal Kucinski
Automation Specialist
Mid-Coast Electric

Product Selection Toolbox (PST)

Rockwell Automation

expanding human possibility®

Product Selection Toolbox (PST)

Includes many items:

- Integrated Architecture Builder (IAB)
  - Process System Estimator (PSE)
- ProposalWorks (PW)
- CrossWorks (within PW)
- MCS Star
- Safety Automation Builder
- Current Program Updater

Located within the Rockwell Automation folder after installation

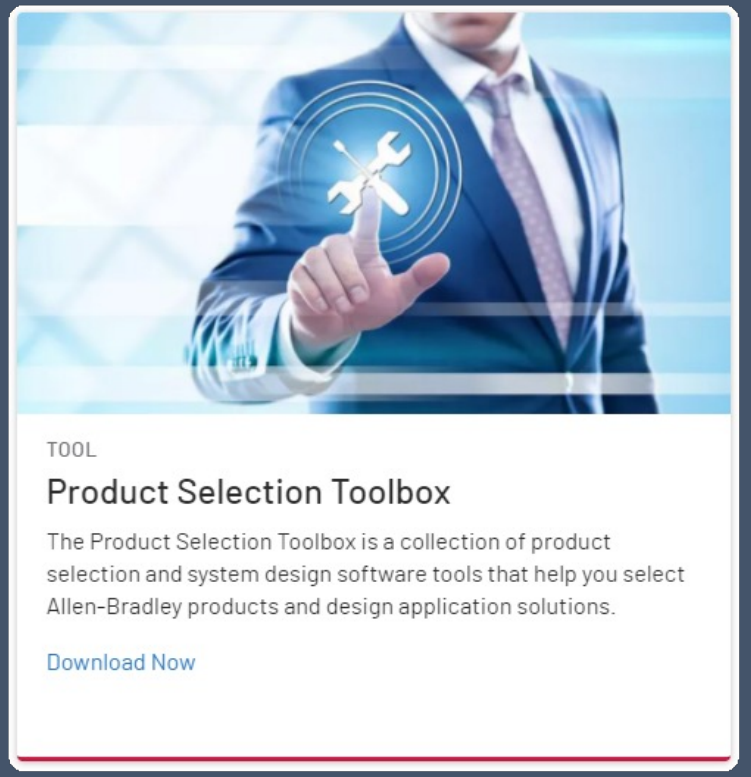
Where can I get the Product Selection Toolbox?

Option 1

- Click http://raiseinstall.rockwellautomation.com/pst-lite.html to start the download immediately.

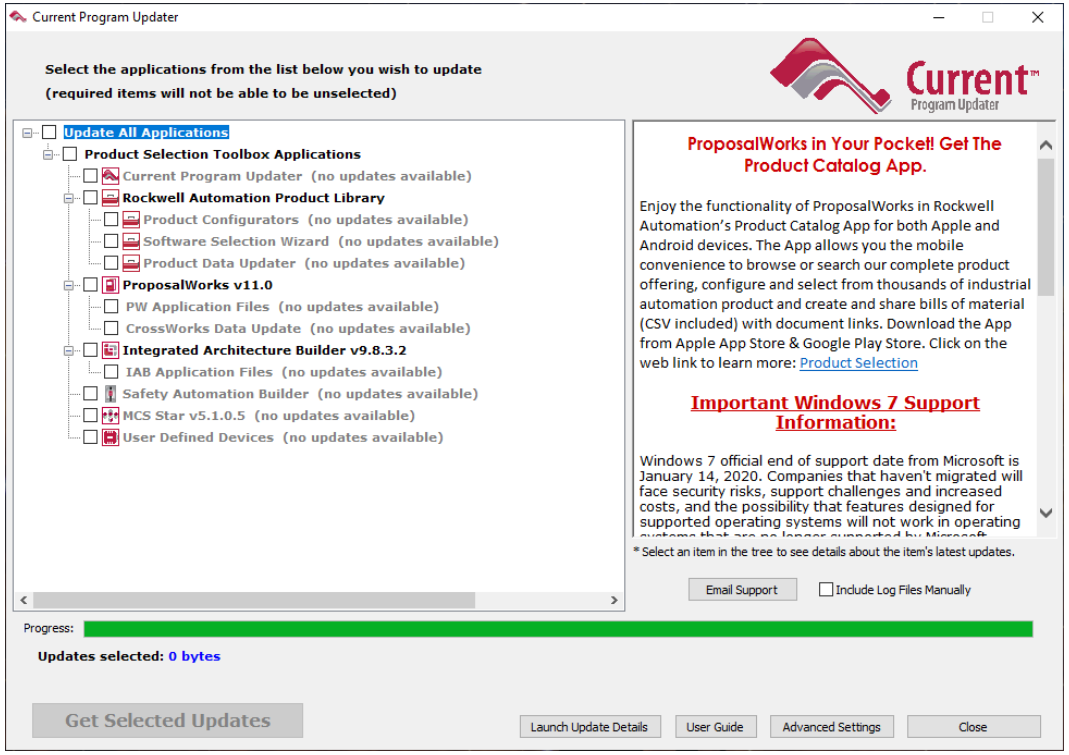
Option 2

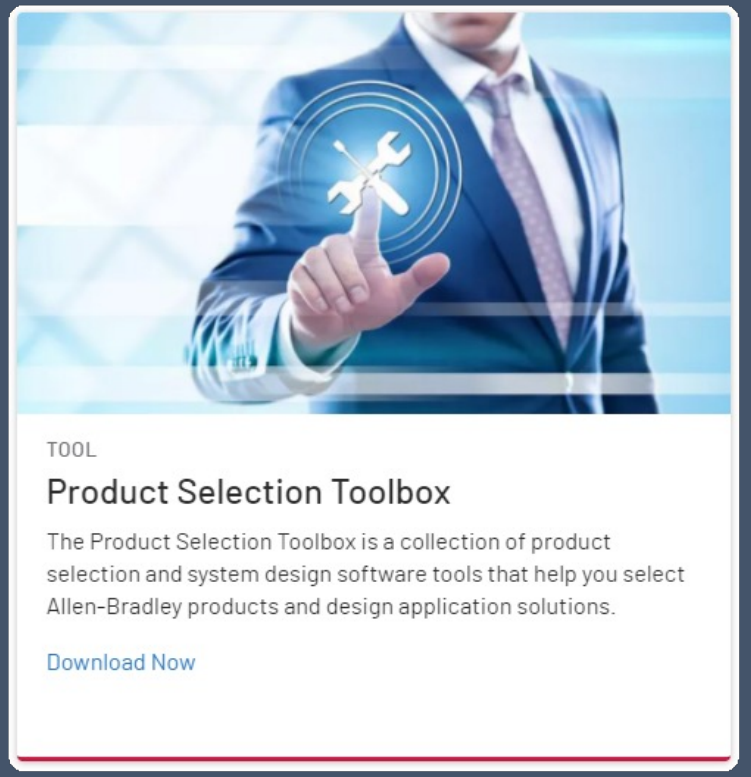
- Start at https://www.rockwellautomation.com/en-us/support/product/product-selection-configuration/control-systems-configuration-tools.html
- Scroll down to **Integrated Architecture Builder** section.



After Install Run the Current Program Updater

Ensure you have the most up to date catalog numbers, lifecycle information, pricing, and configuration tools by updating with Current Program Updater until you see “(no updates available)” under every category of software installed





ProposalWorks (PW)

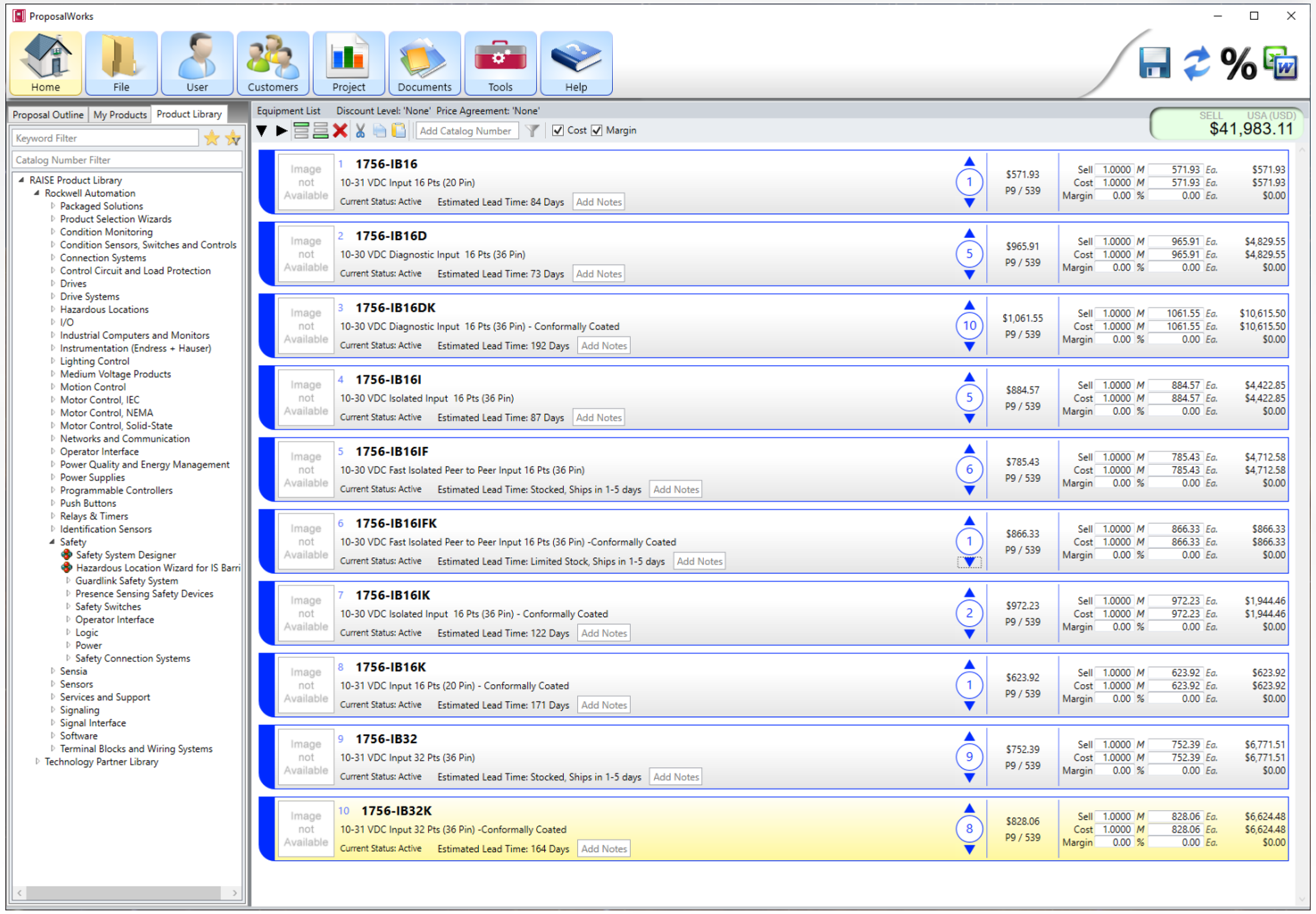
Rockwell Automation

expanding human possibility®

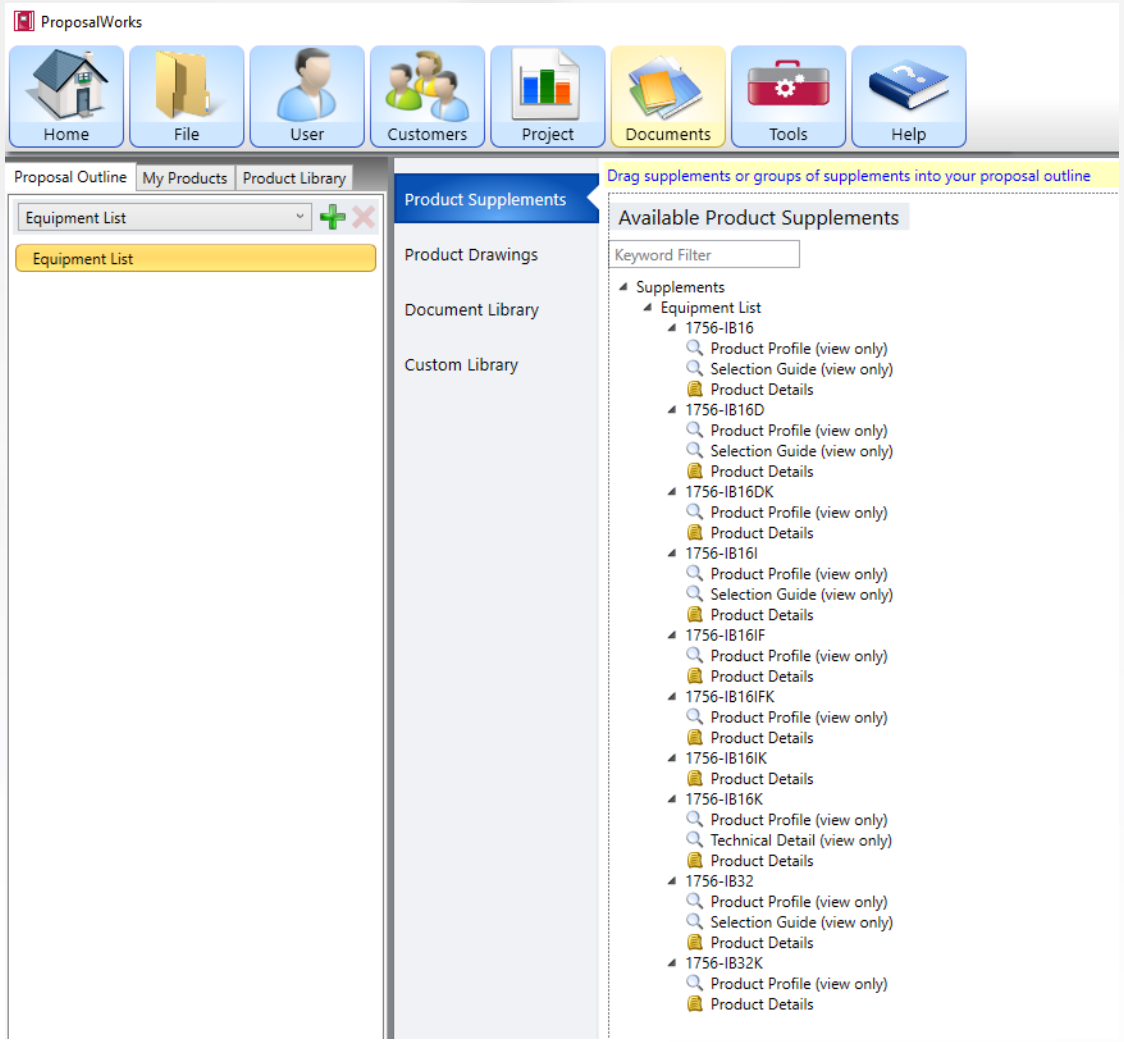
Quickly Find Budgetary Pricing for BOMs

Paste BOMs from Excel, CSV, or TSV with quantity left of catalog (with or without hyphens)

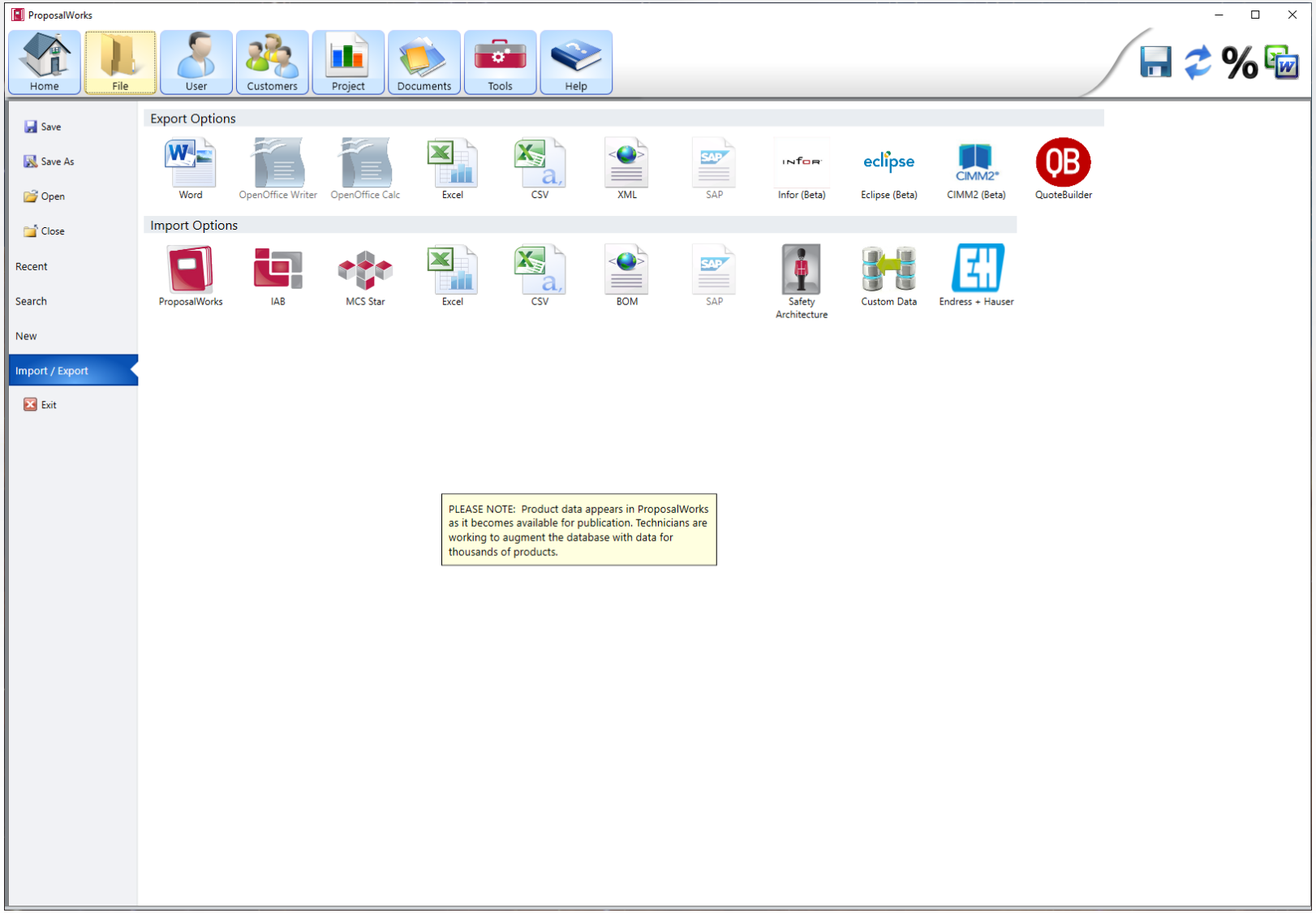
1	1756-IB16
5	1756-IB16D
10	1756-IB16DK
5	1756-IB16I
6	1756-IB16IF
7	1756-IB16IFK
2	1756-IB16IK
1	1756-IB16K
9	1756-IB32
8	1756-IB32K



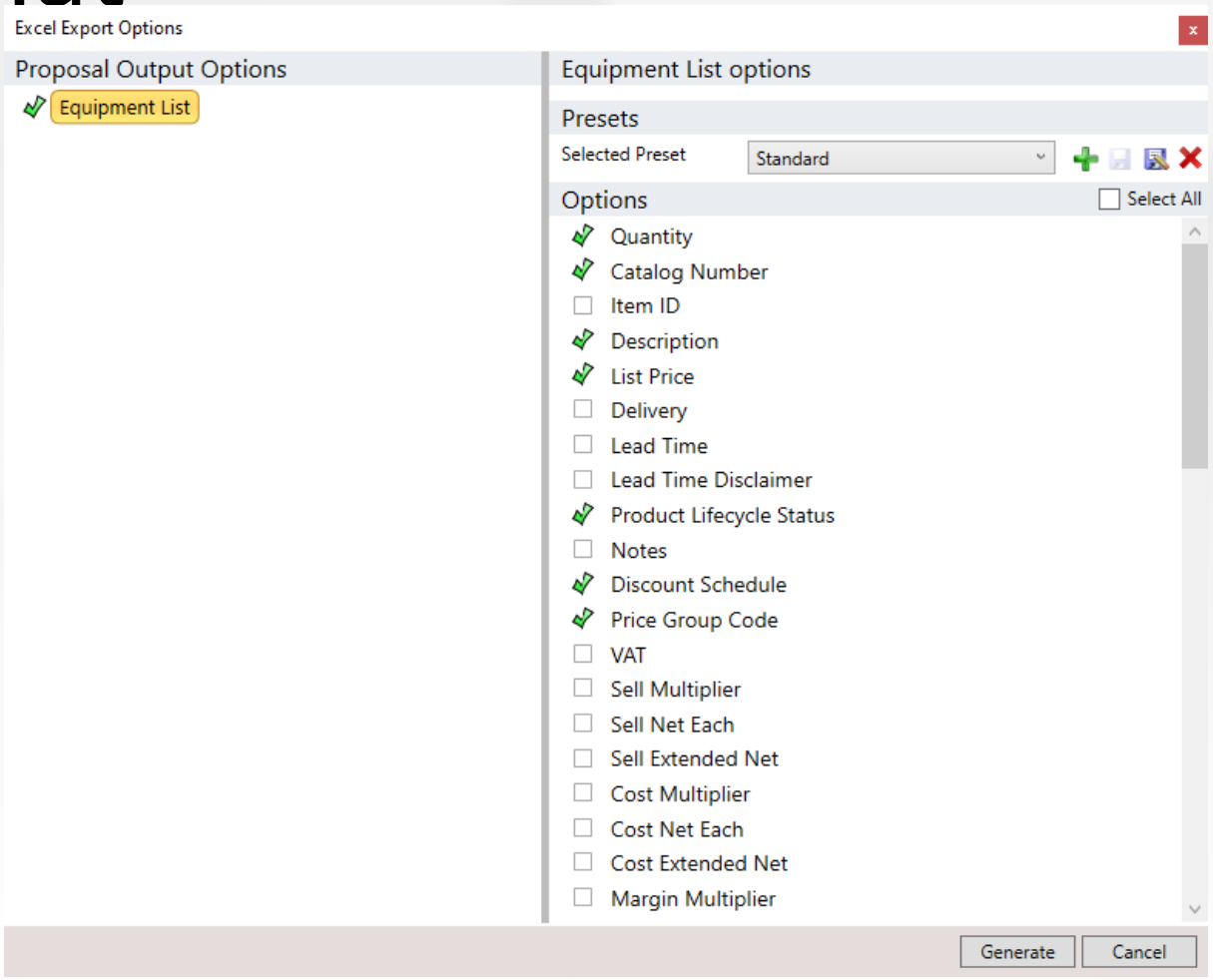
Quickly Find Relevant Documentation for BOMs



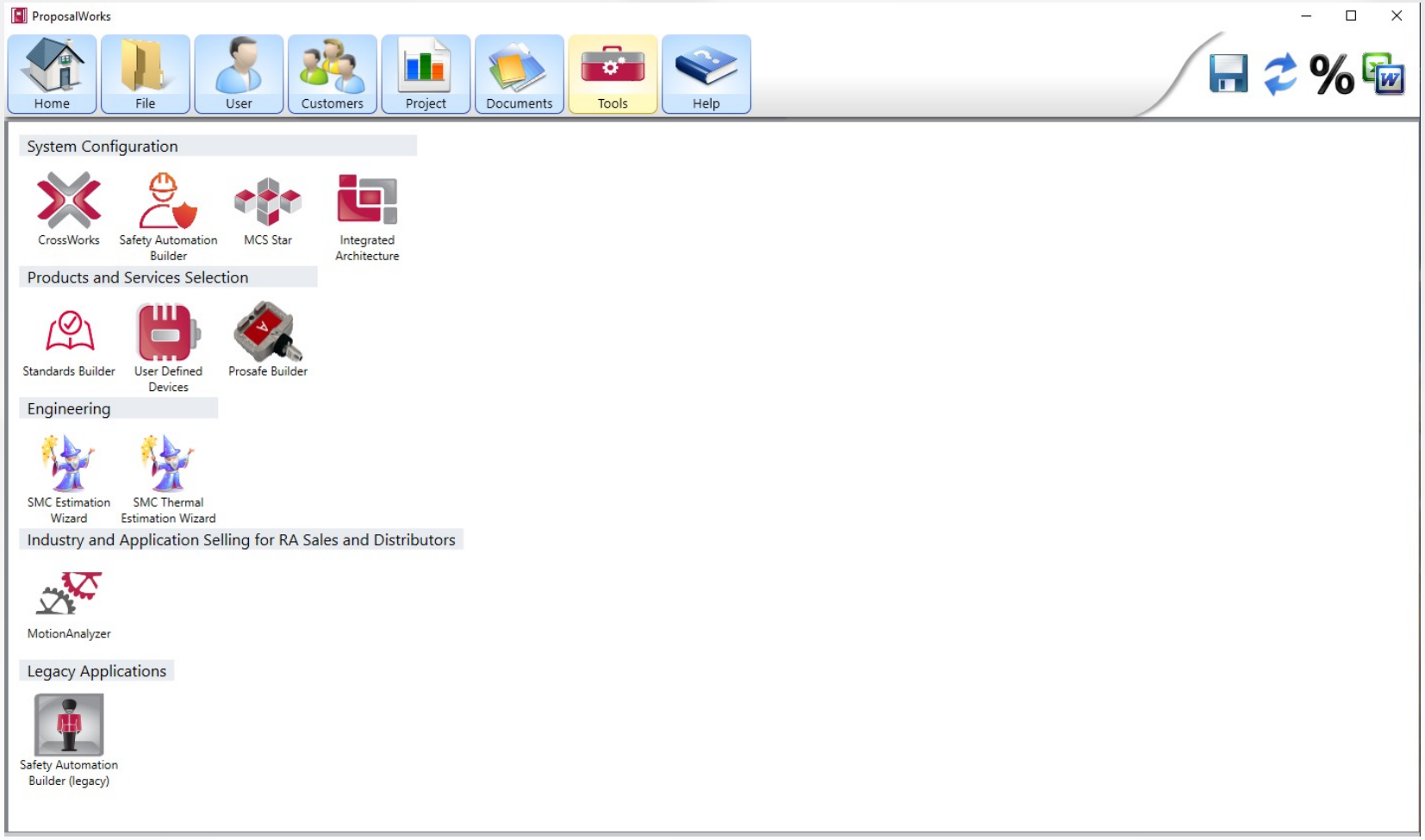
Export to / Import from various filetypes



Adjust Export BOMs as needed to match your custom format

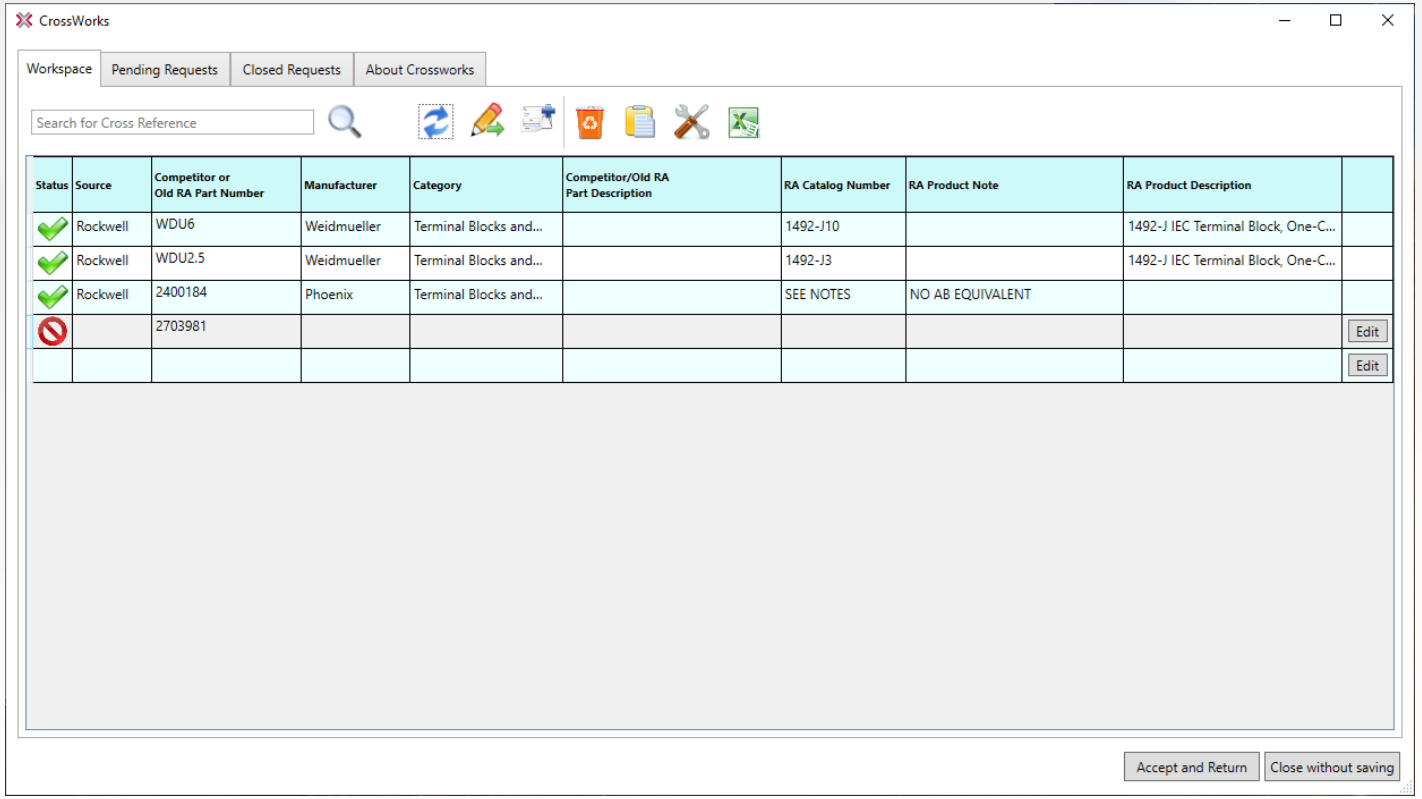


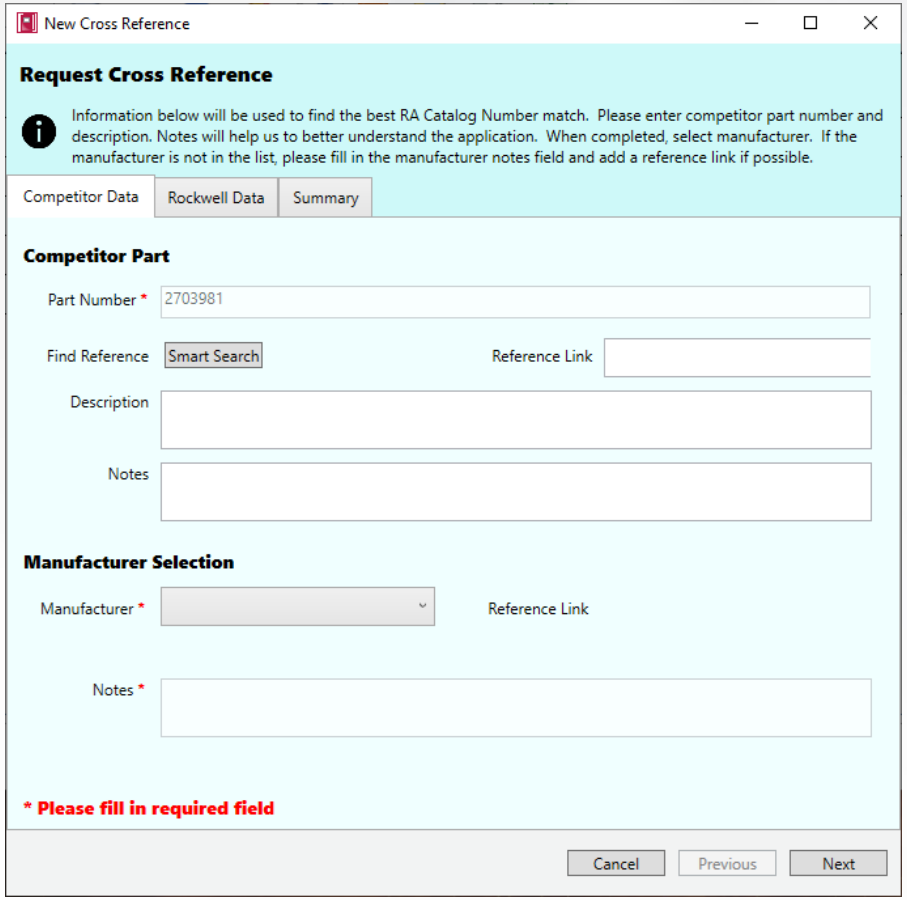
Links under Tools for formerly external software



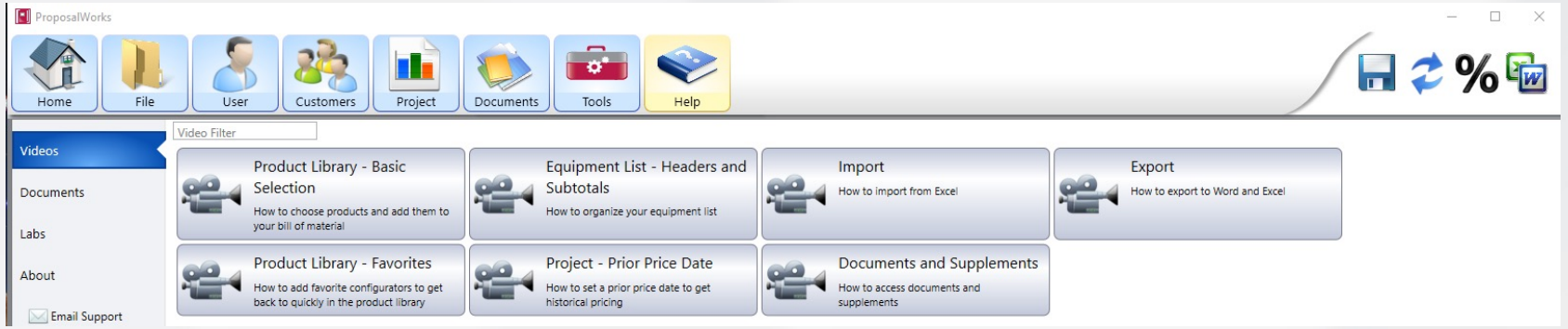
CrossWorks

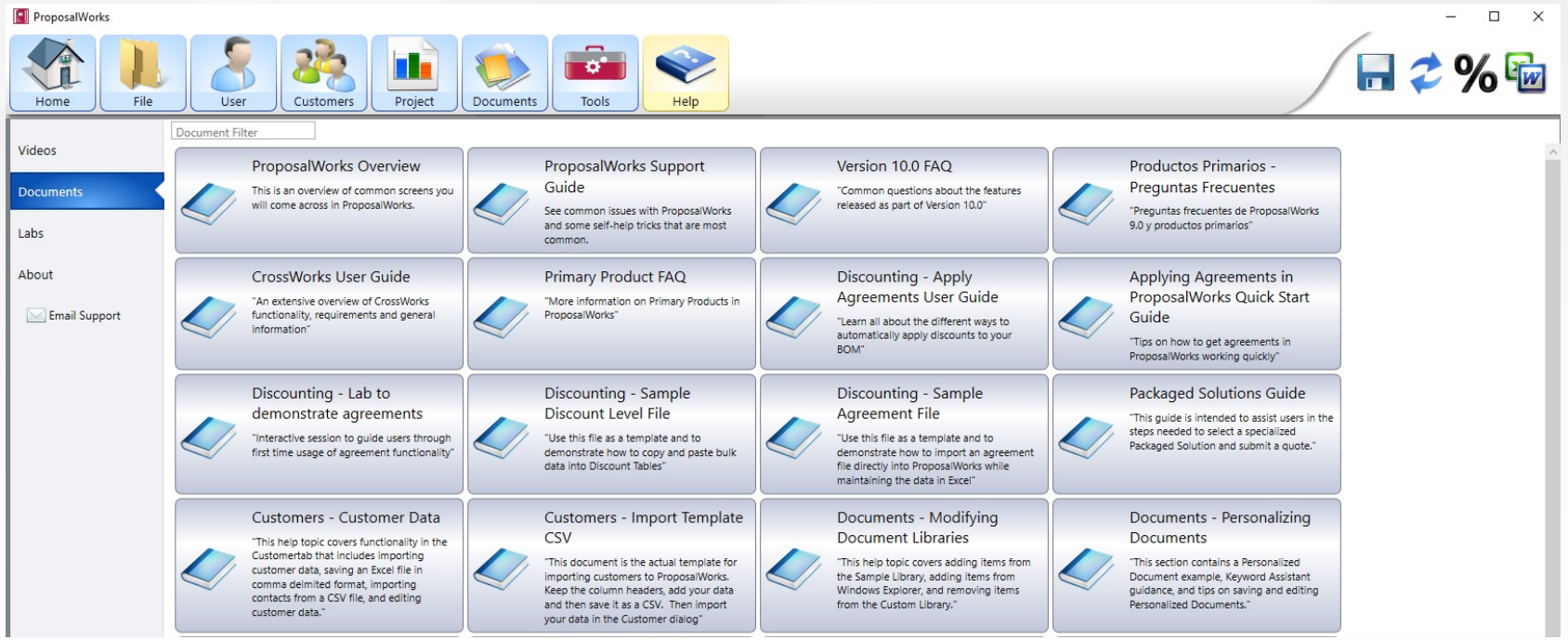
Cross competitor or old RA part numbers to current Rockwell catalogs





Videos / Lab / Help Files



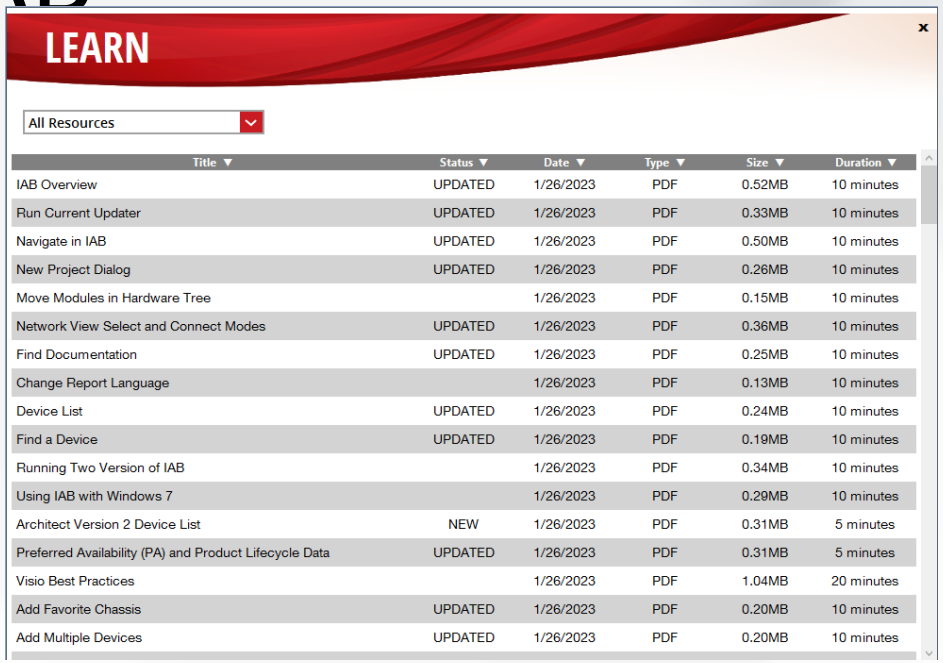


Integrated Architecture Builder (IAB)

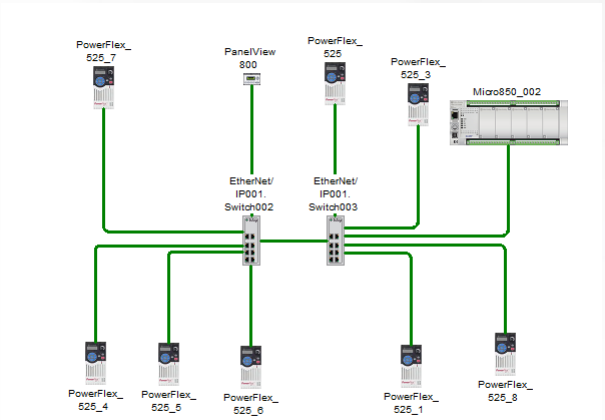
expanding **human possibility**®

Many Resources Exist for IAB

- Quick Starts
- Labs
- Online Videos
- Sample Projects
  - Located at C:\Program Files (x86)\PST\RA_IAB\Samples
- Wizards
- Process System Estimator



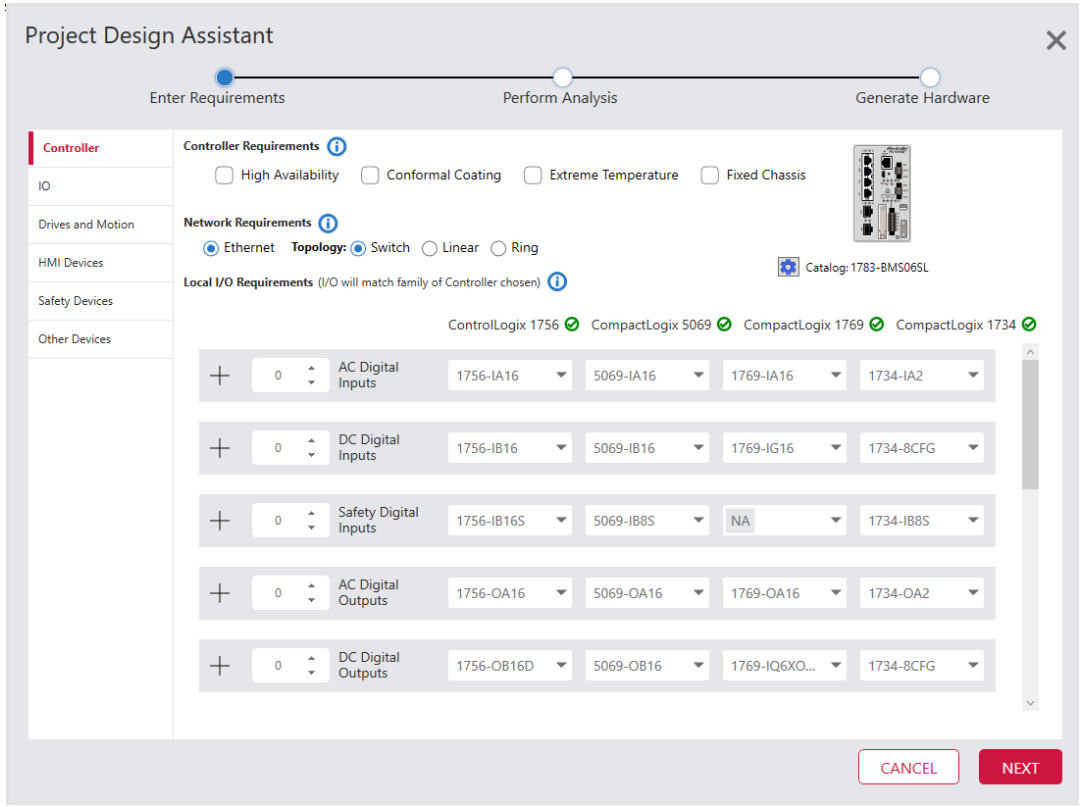
Title	Status	Date	Type	Size	Duration
IAB Overview	UPDATED	1/26/2023	PDF	0.52MB	10 minutes
Run Current Updater	UPDATED	1/26/2023	PDF	0.33MB	10 minutes
Navigate in IAB	UPDATED	1/26/2023	PDF	0.50MB	10 minutes
New Project Dialog	UPDATED	1/26/2023	PDF	0.26MB	10 minutes
Move Modules in Hardware Tree		1/26/2023	PDF	0.15MB	10 minutes
Network View Select and Connect Modes	UPDATED	1/26/2023	PDF	0.36MB	10 minutes
Find Documentation	UPDATED	1/26/2023	PDF	0.25MB	10 minutes
Change Report Language		1/26/2023	PDF	0.13MB	10 minutes
Device List	UPDATED	1/26/2023	PDF	0.24MB	10 minutes
Find a Device	UPDATED	1/26/2023	PDF	0.19MB	10 minutes
Running Two Version of IAB		1/26/2023	PDF	0.34MB	10 minutes
Using IAB with Windows 7		1/26/2023	PDF	0.29MB	10 minutes
Architect Version 2 Device List	NEW	1/26/2023	PDF	0.31MB	5 minutes
Preferred Availability (PA) and Product Lifecycle Data	UPDATED	1/26/2023	PDF	0.31MB	5 minutes
Visio Best Practices		1/26/2023	PDF	1.04MB	20 minutes
Add Favorite Chassis	UPDATED	1/26/2023	PDF	0.20MB	10 minutes
Add Multiple Devices	UPDATED	1/26/2023	PDF	0.20MB	10 minutes

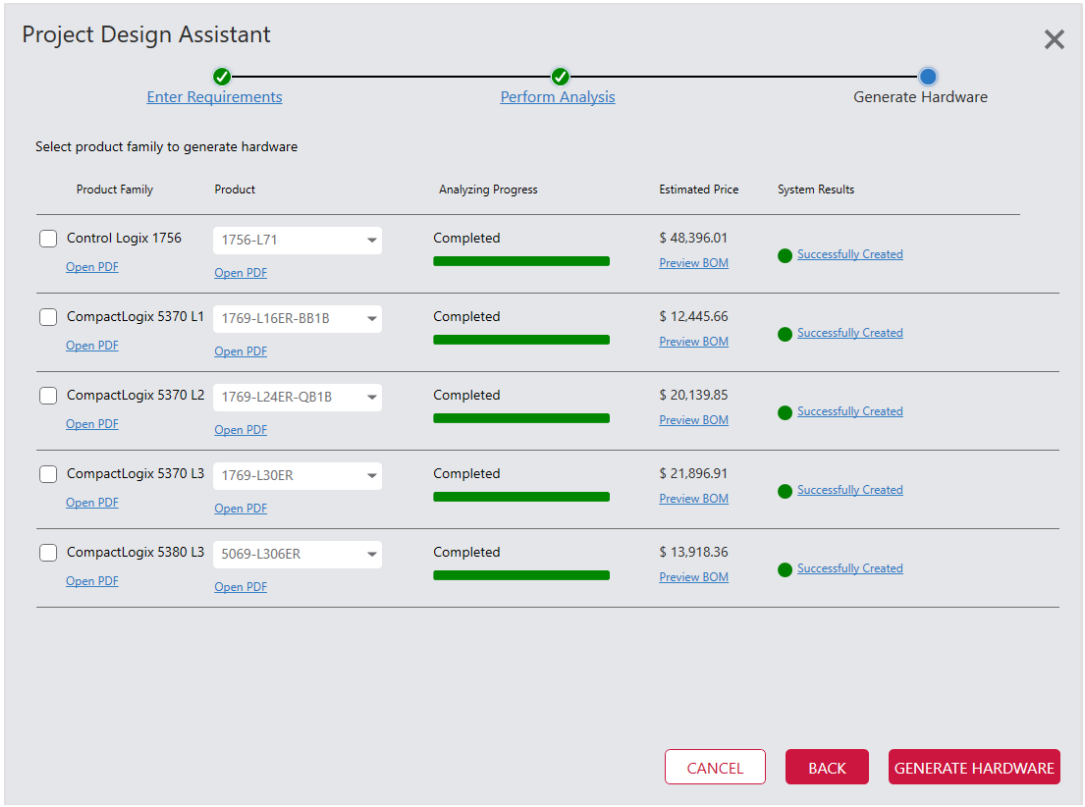


IAB Wizards

Project Design Assistant

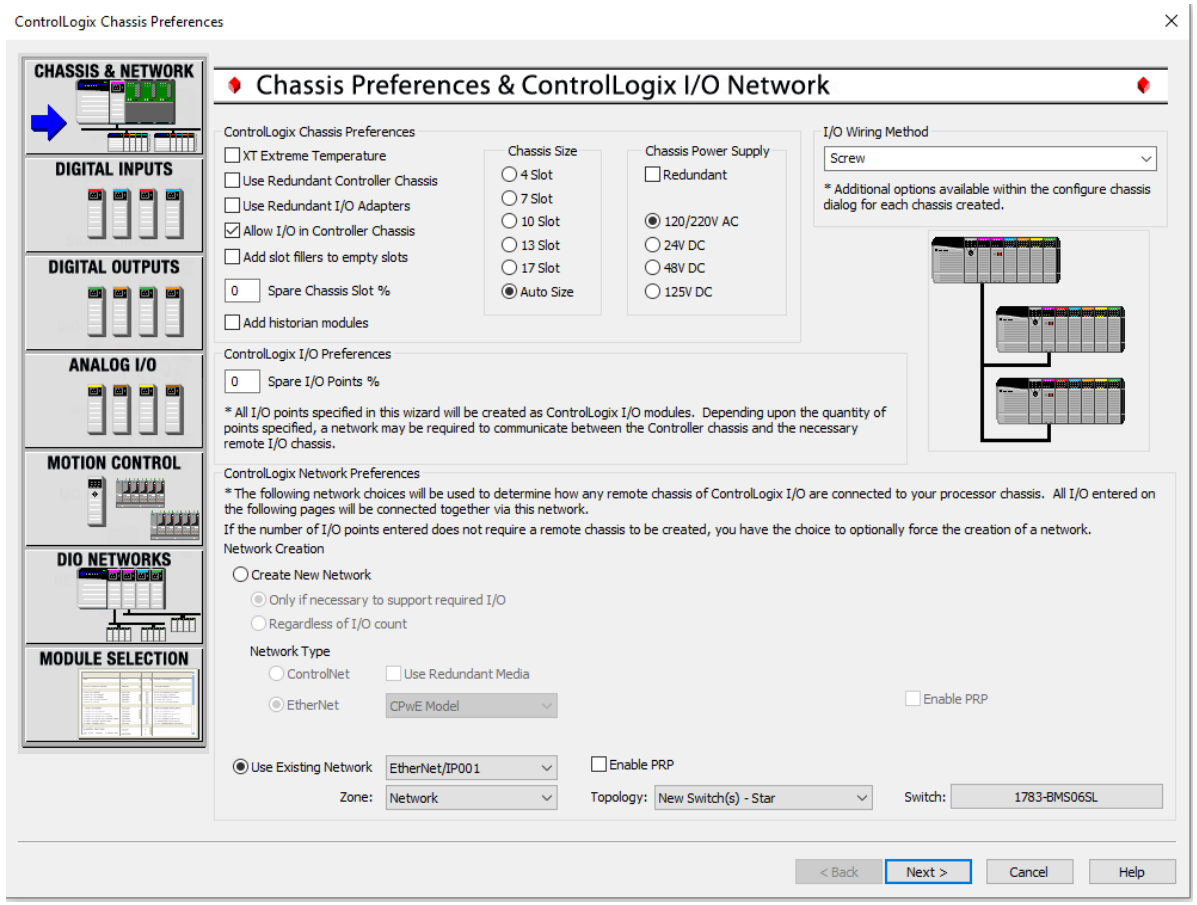
- Compare options between platforms

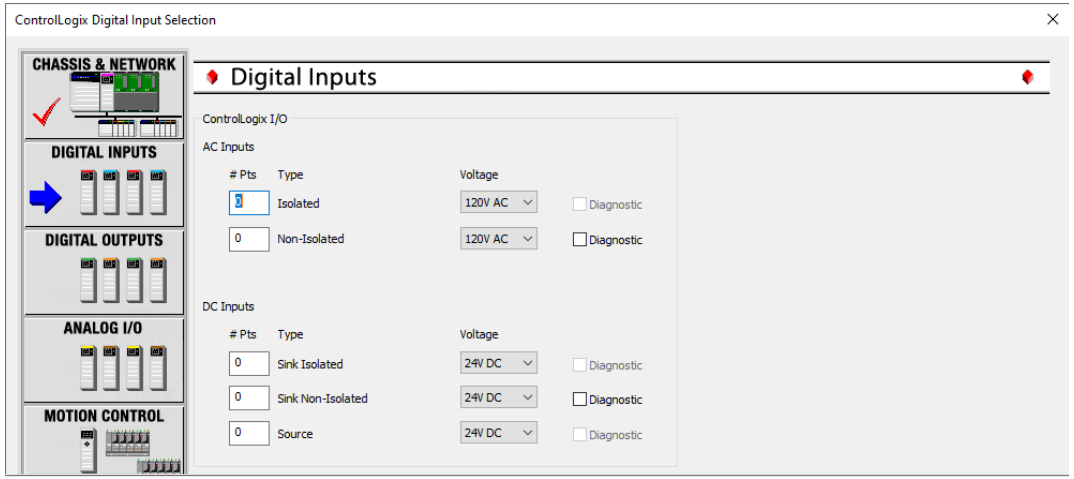


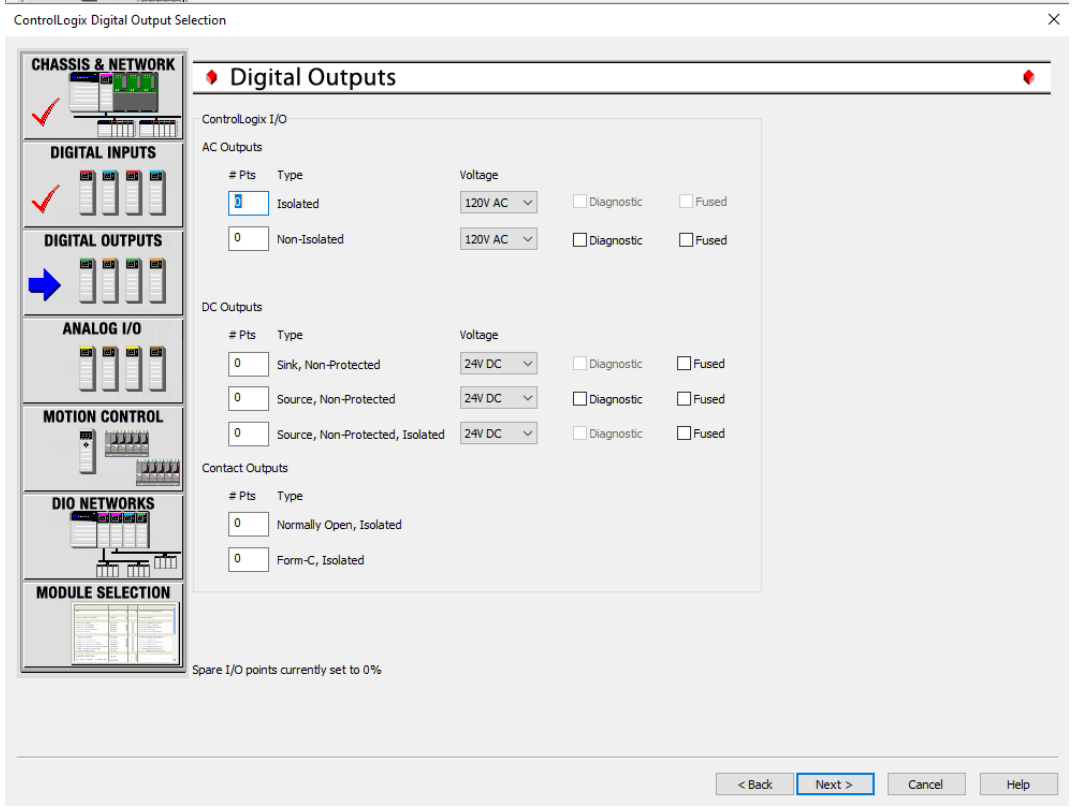


IAB Wizards

ControlLogix Wizard

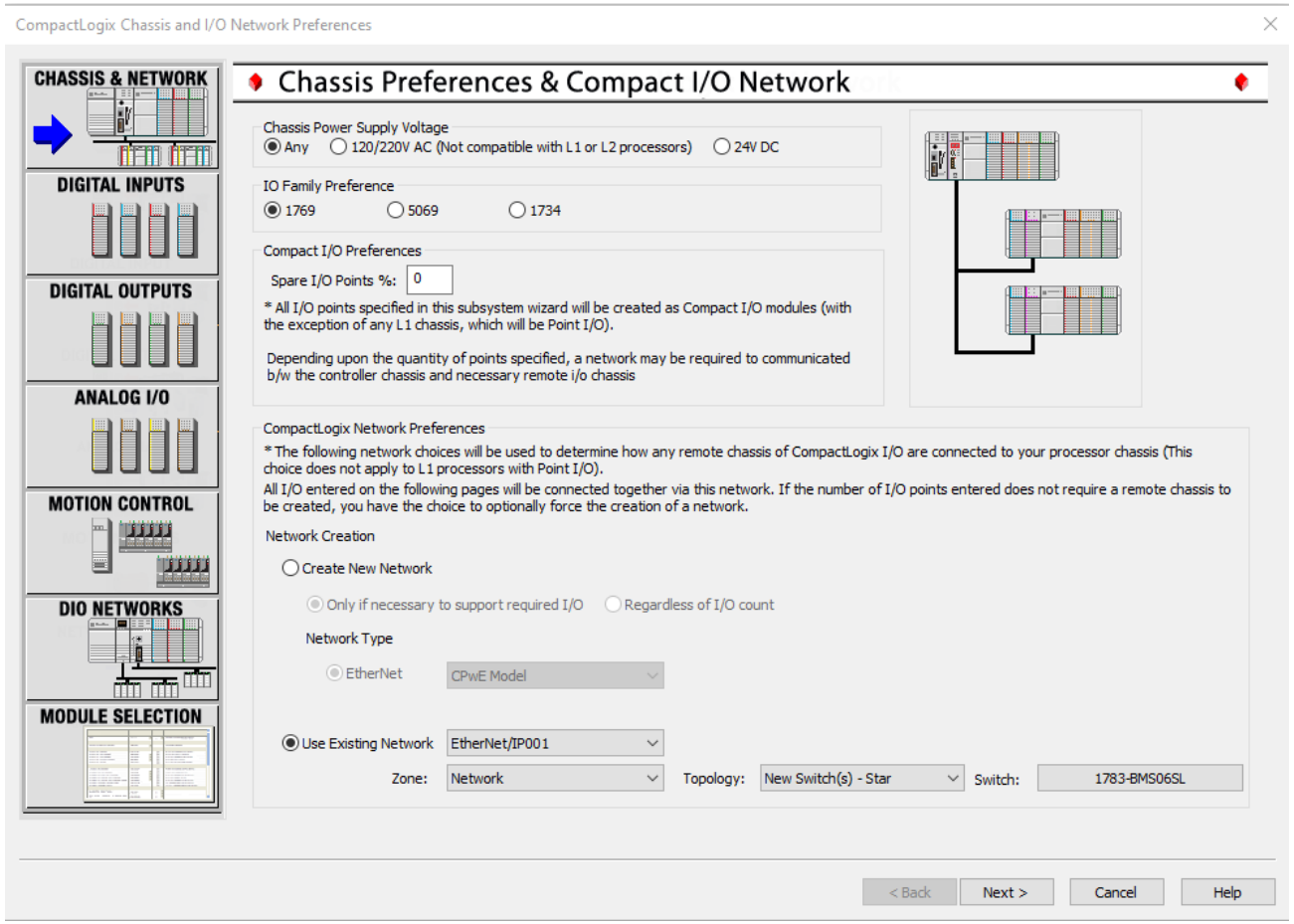






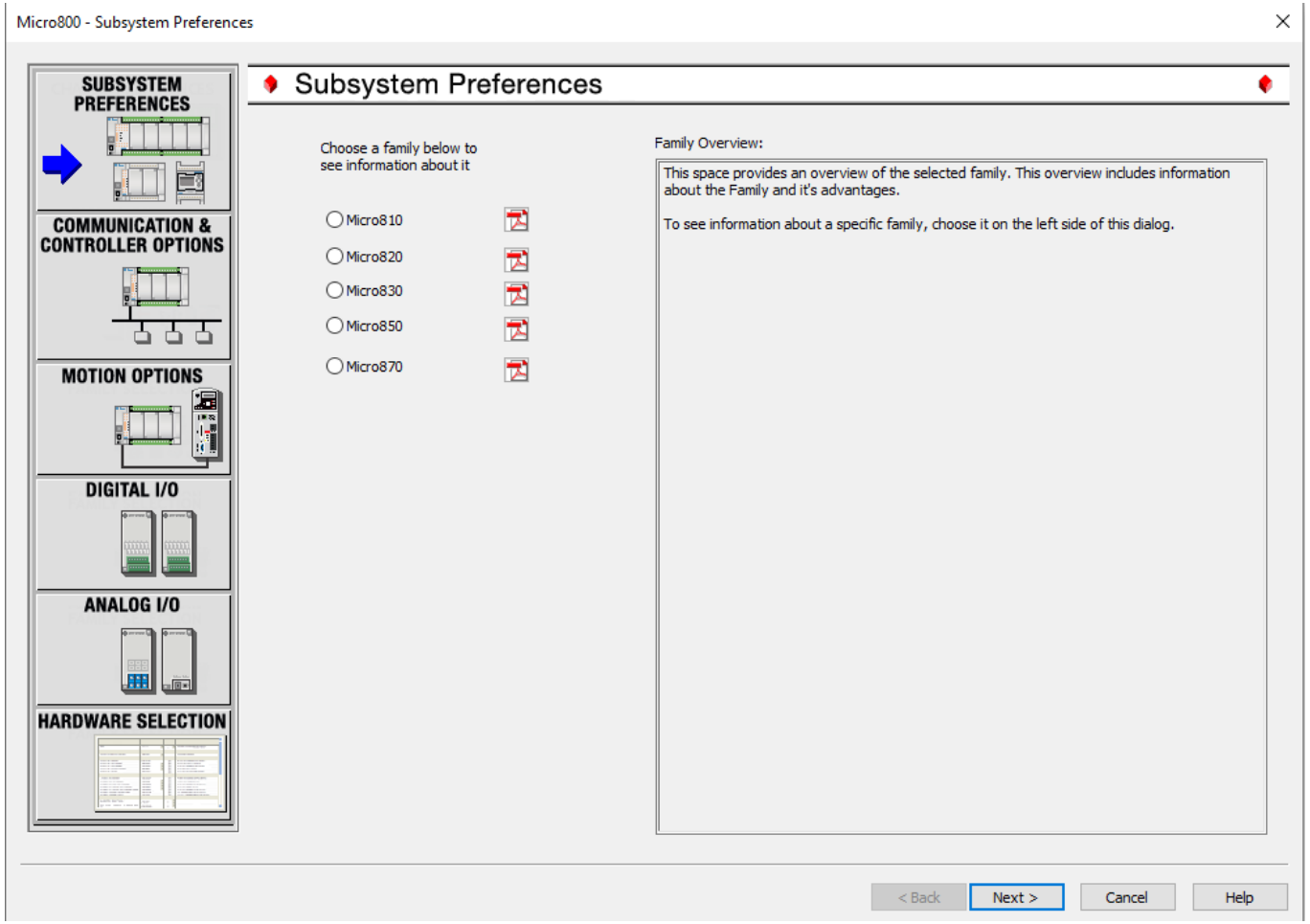
IAB Wizards

CompactLogix Wizard



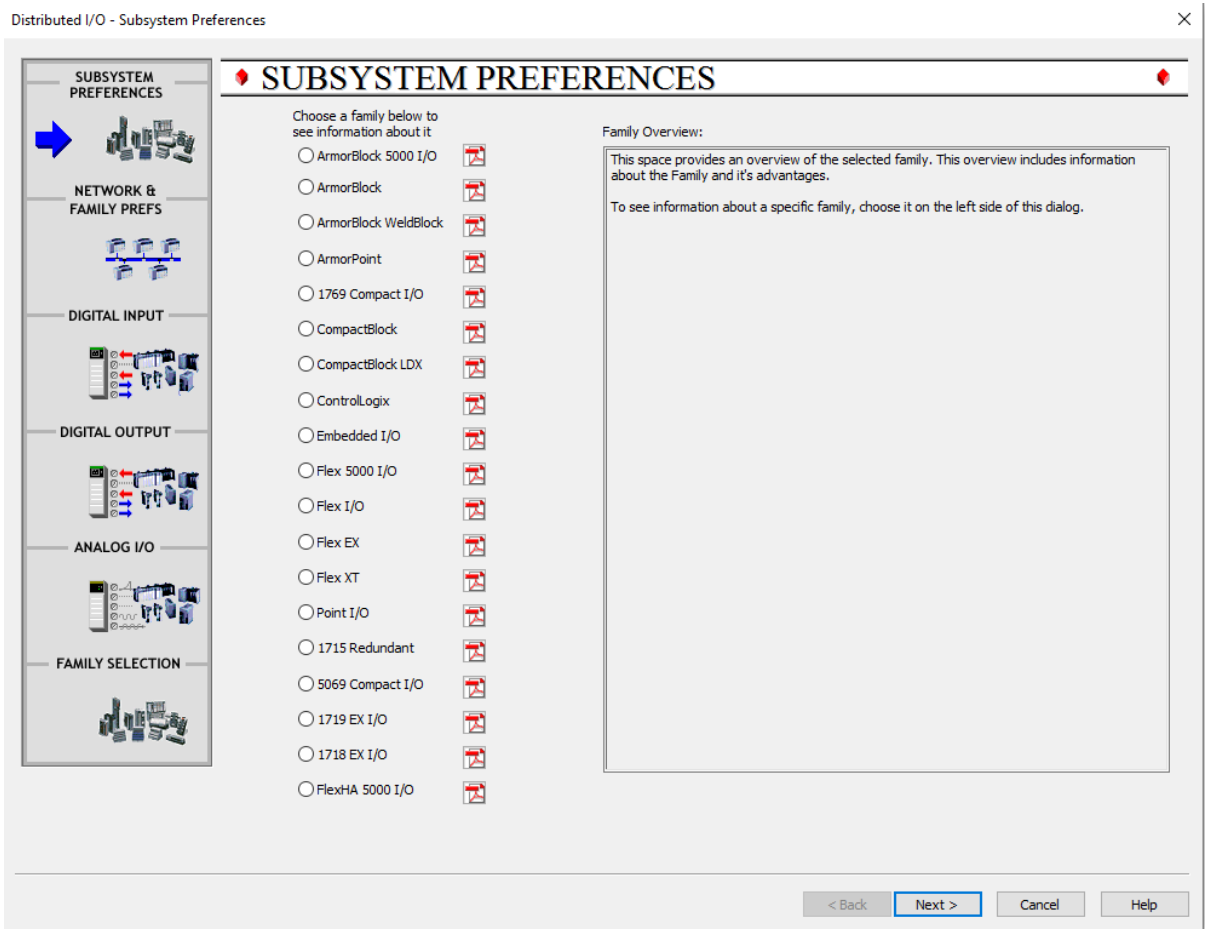
IAB Wizards

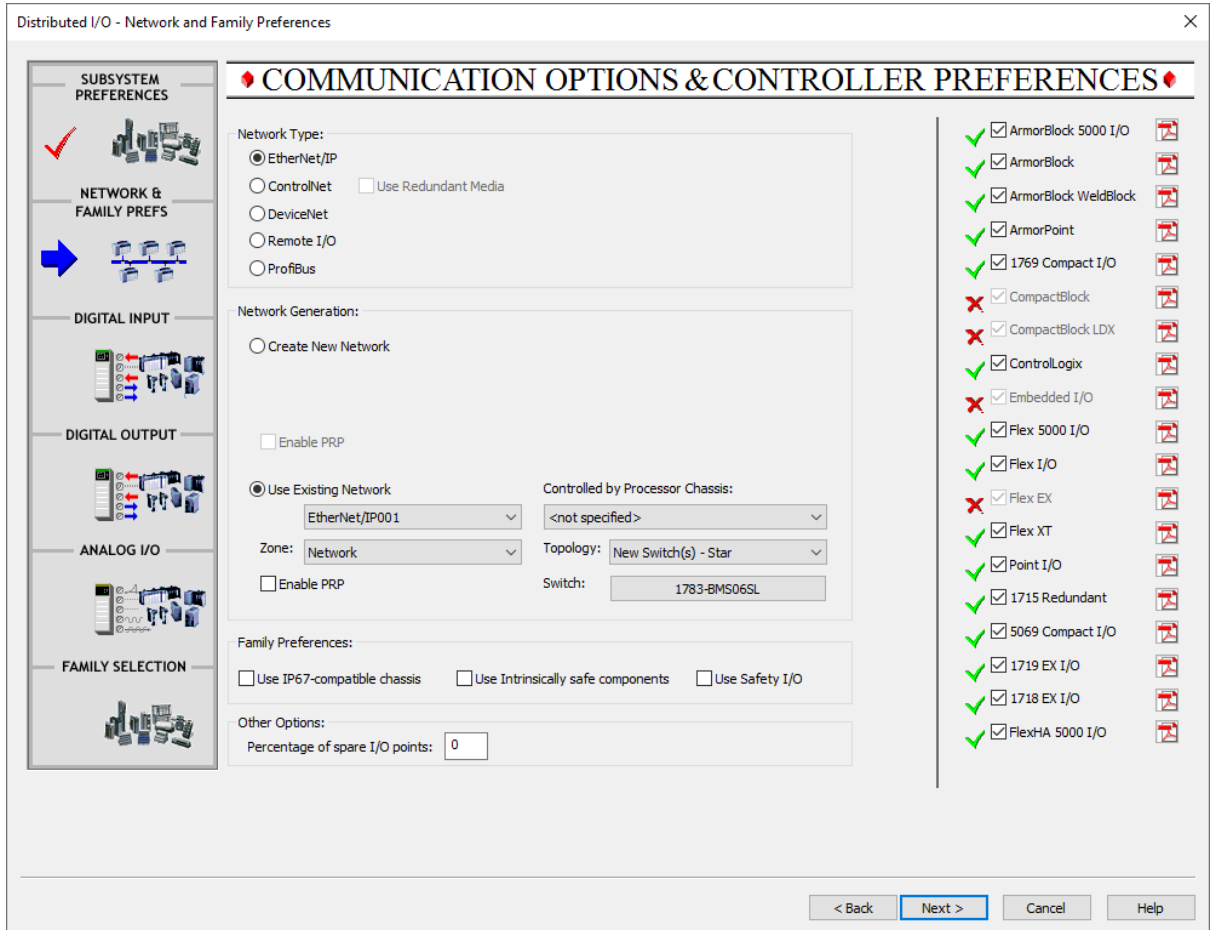
Micro800 Wizard



IAB Wizards

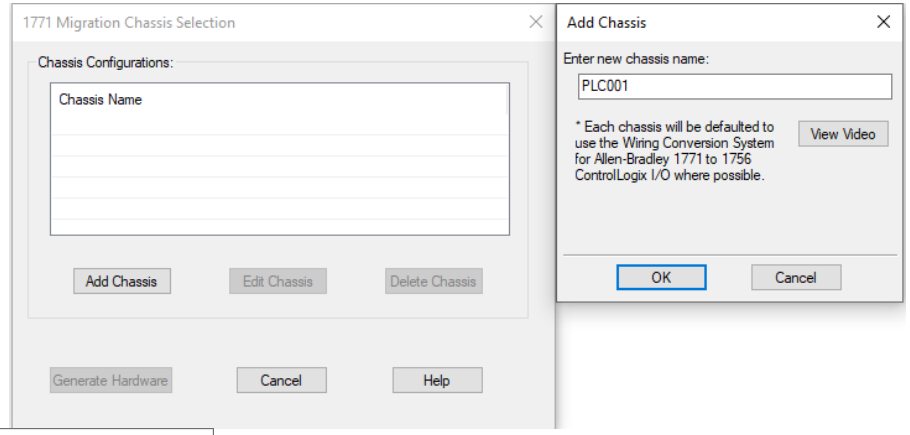
Distributed I/O Wizard

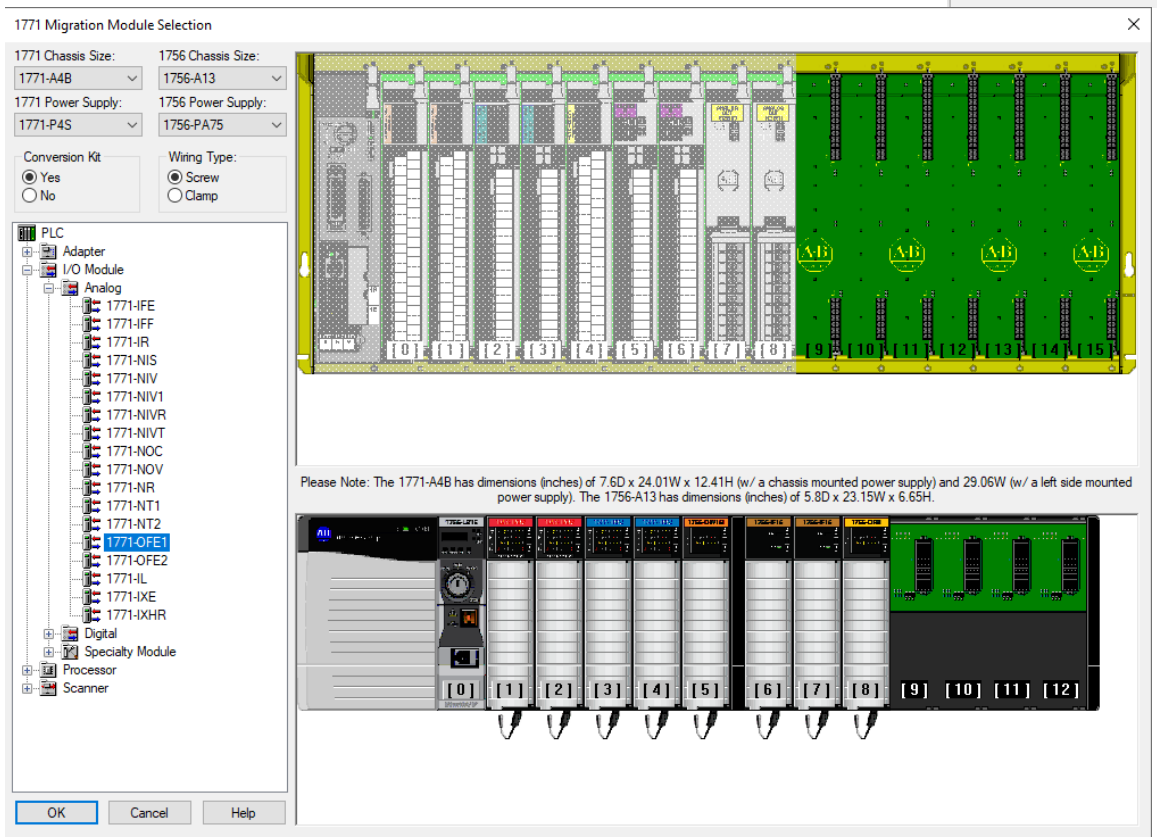


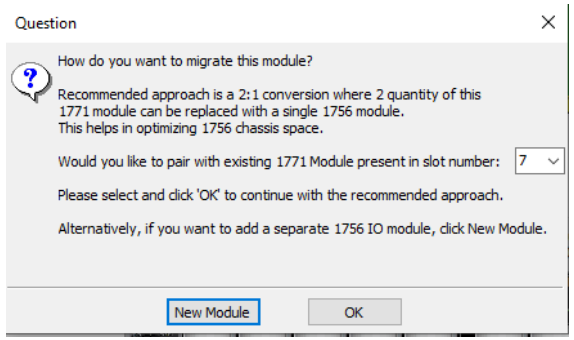


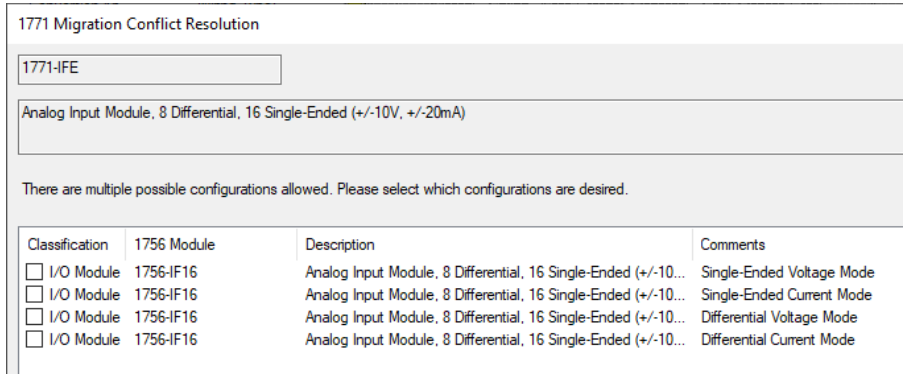
IAB Wizards

1771 PLC-5 Migration Wizard



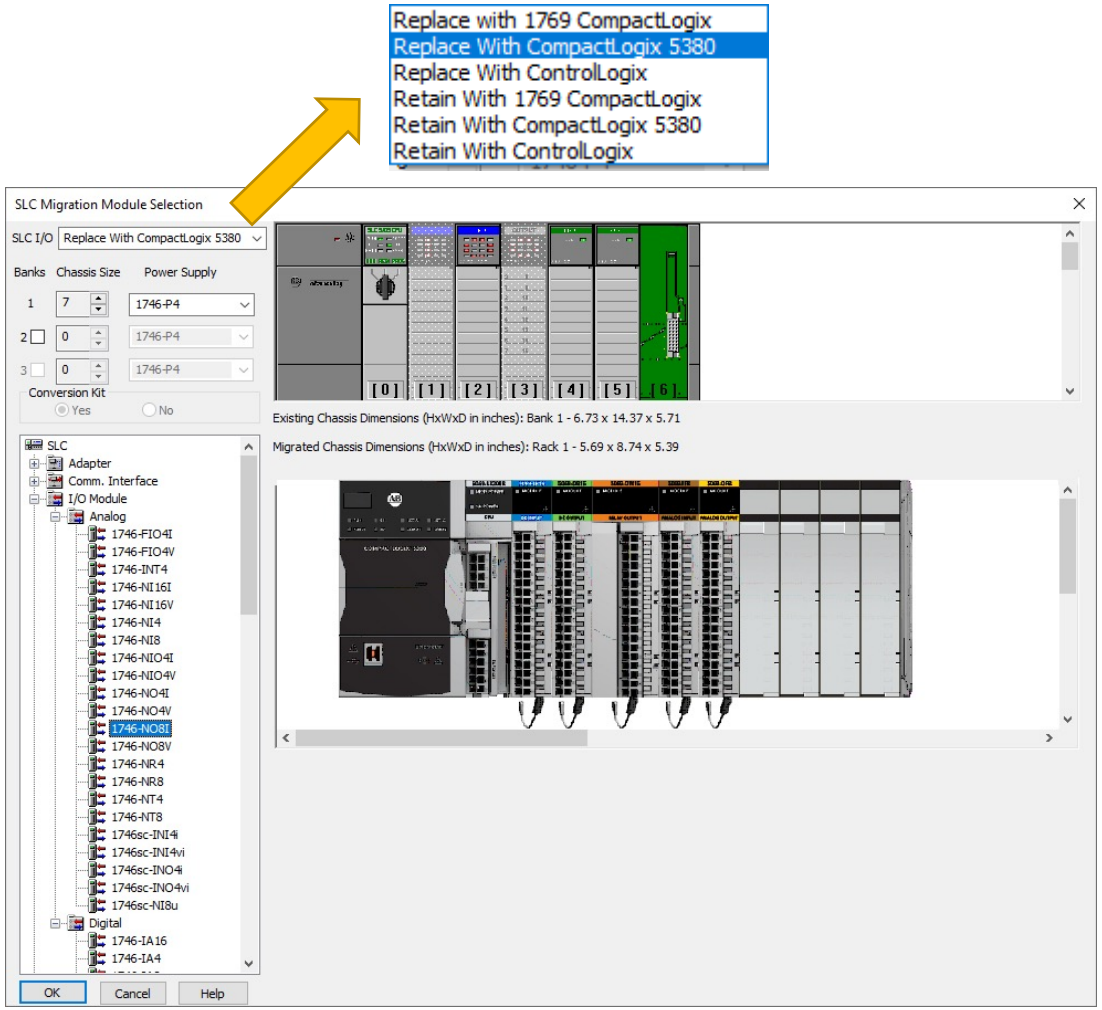






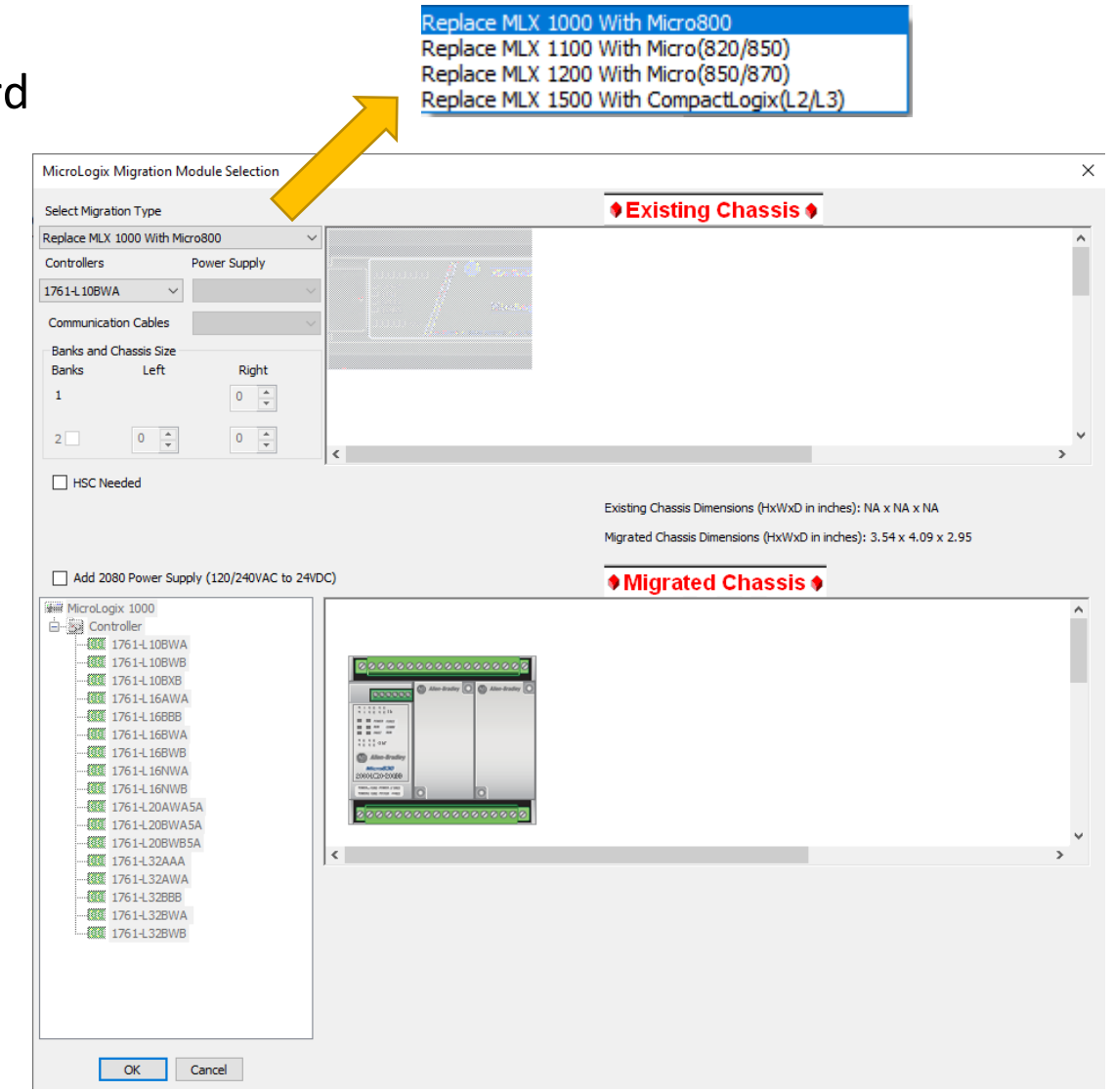
IAB Wizards

1746 SLC Migration Wizard



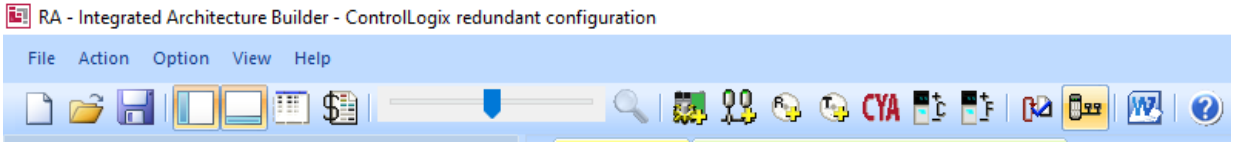
IAB Wizards

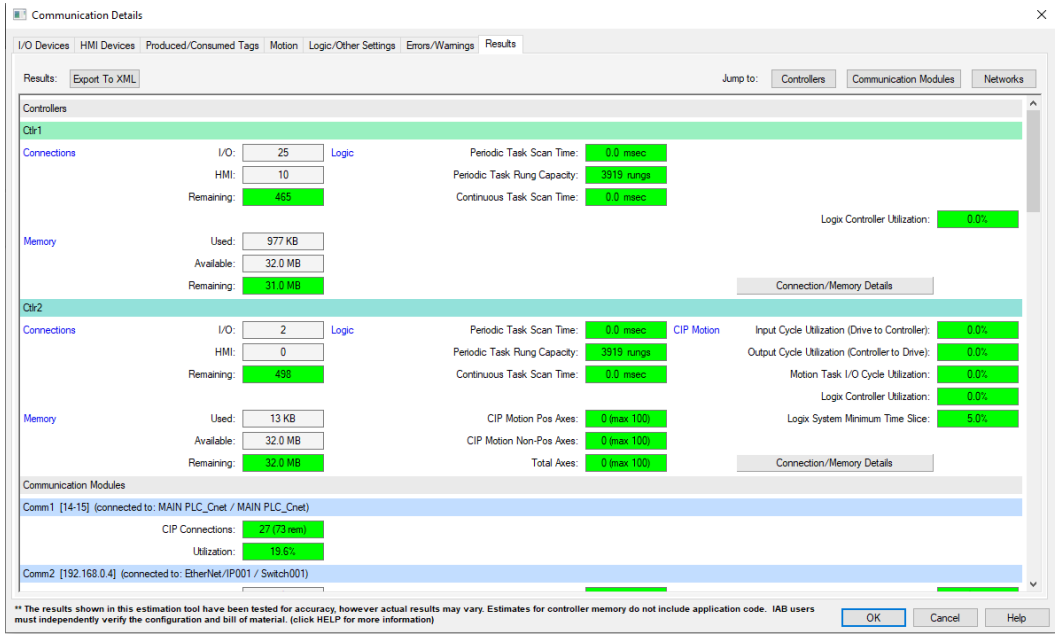
MicroLogix Migration Wizard

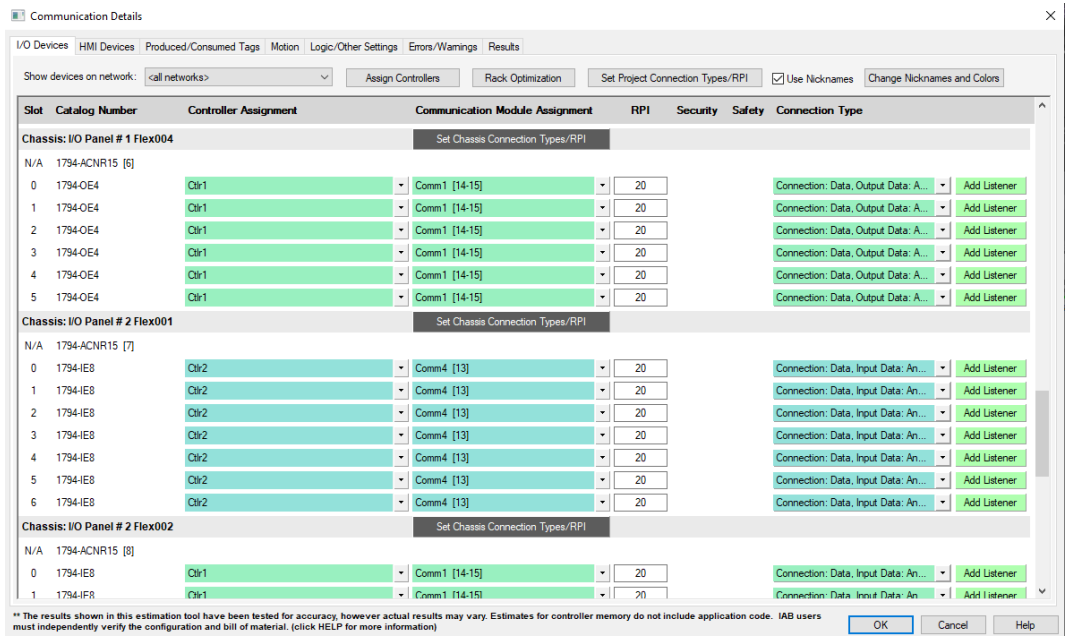


IAB Tools

Advanced Communication Details

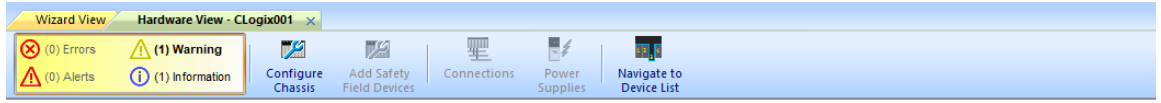


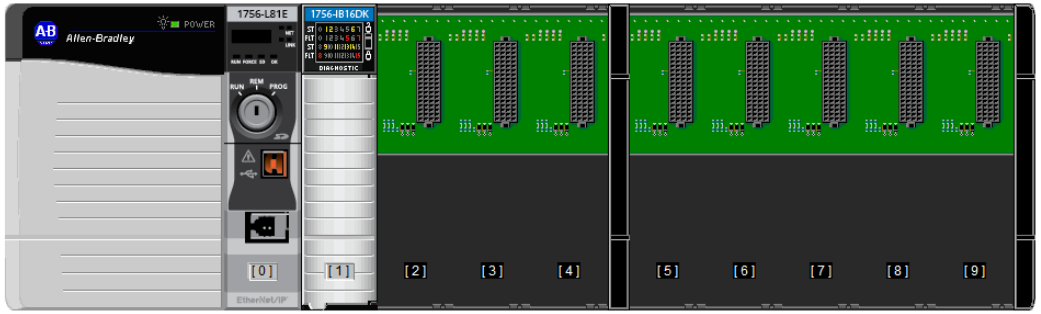


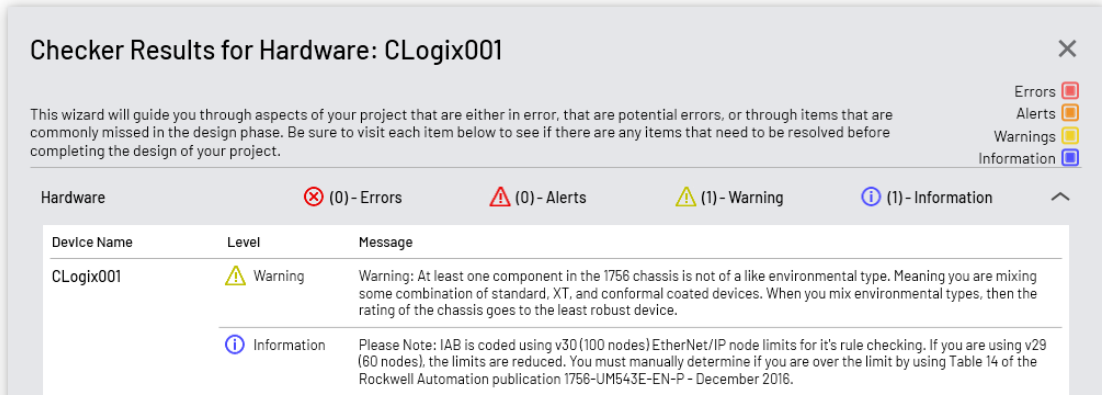


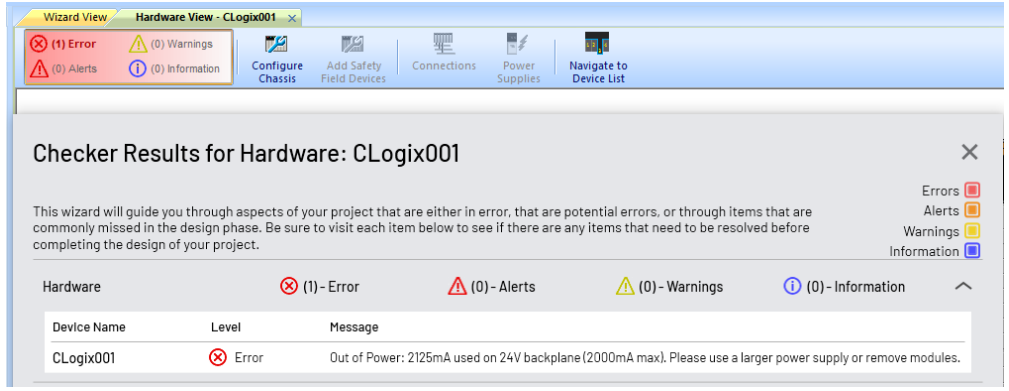
IAB Tools

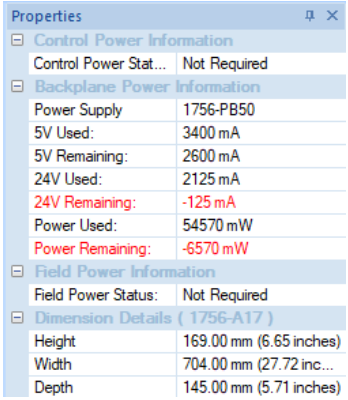
Warnings, Errors, Alerts, Information





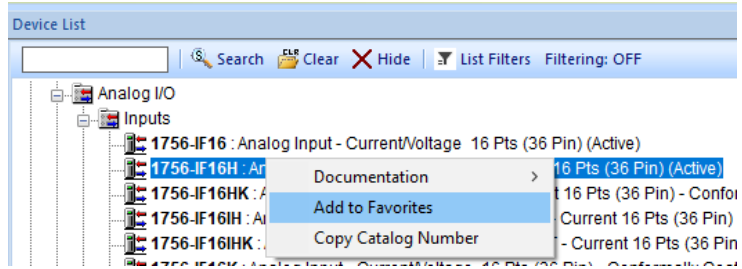


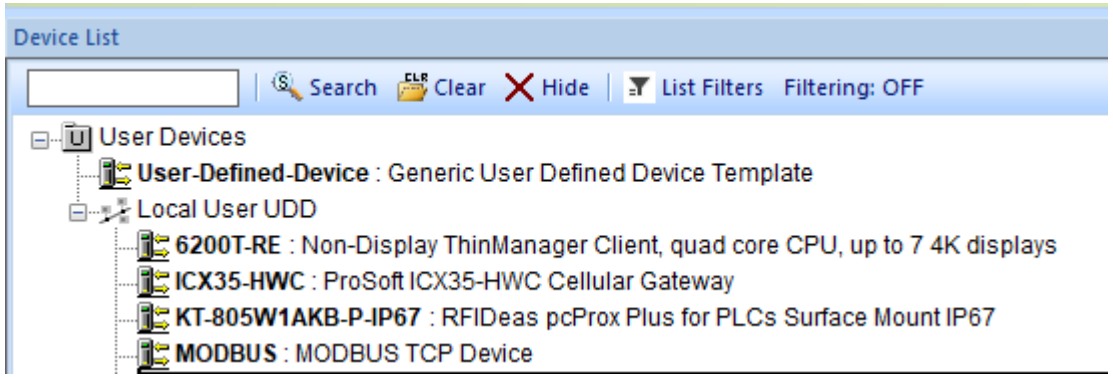




IAB Tips & Tricks

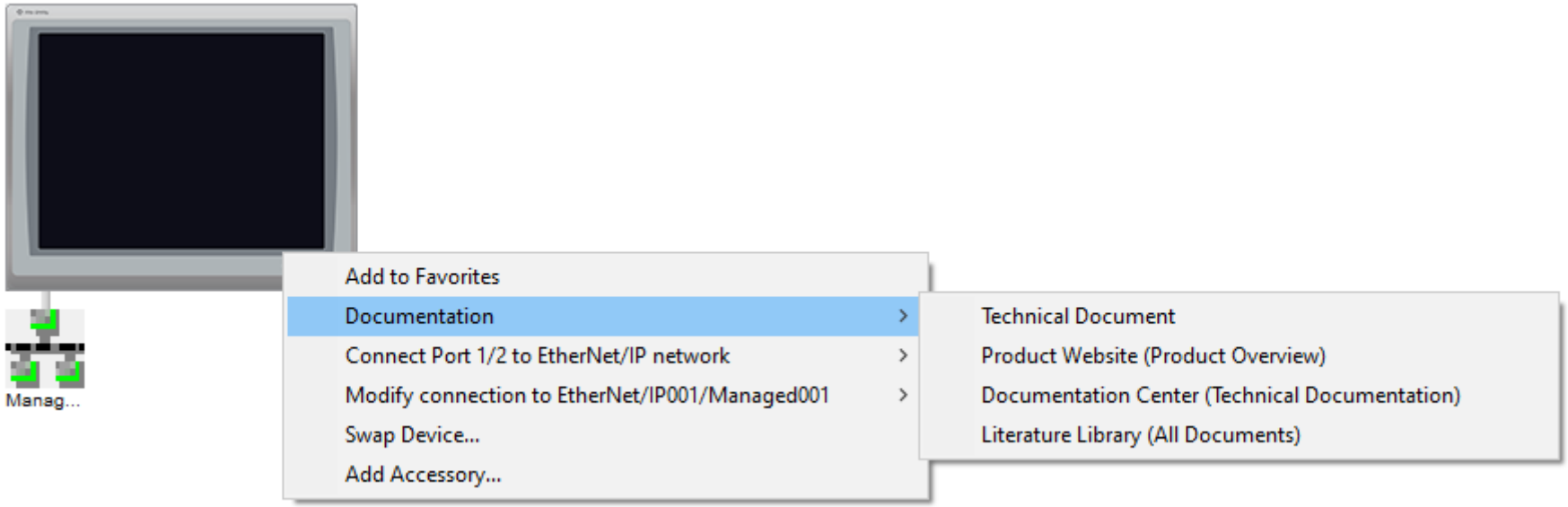
Add Favorites for commonly used items & custom User Devices

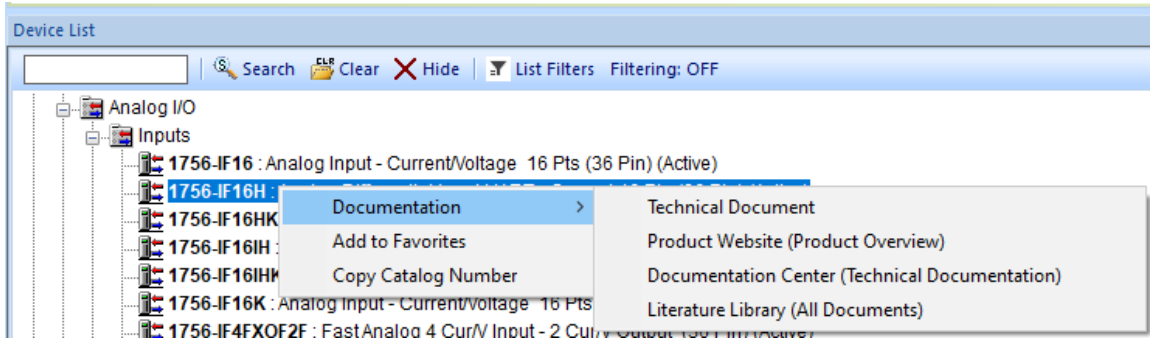




IAB Tips & Tricks

Find relevant documentation quickly by right clicking within the hardware view or Device List

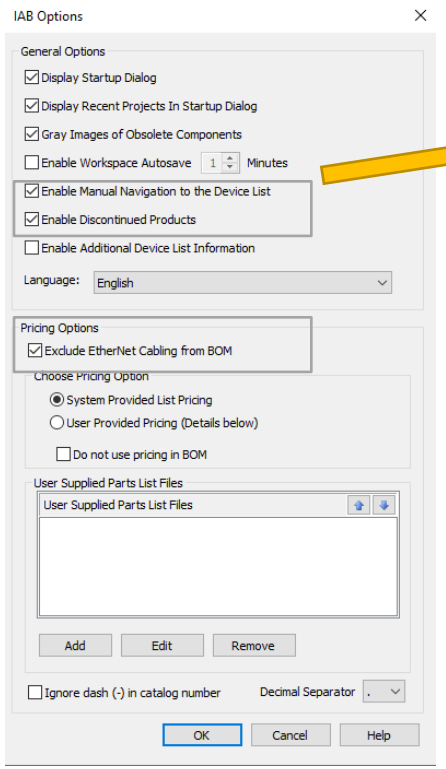


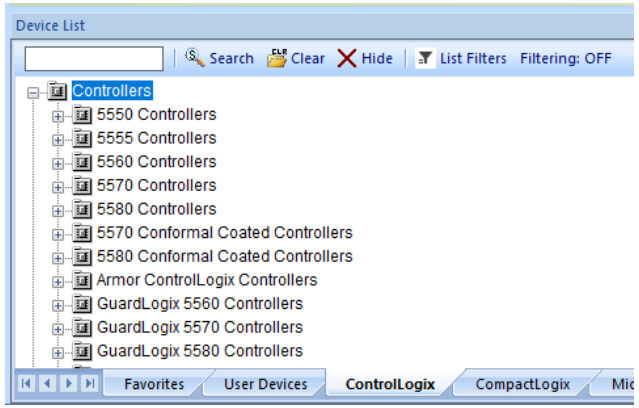


IAB Tips & Tricks

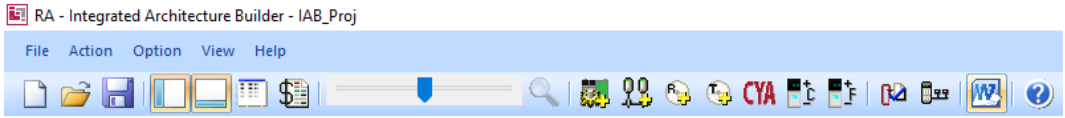
Under Option -> IAB Options

- Enable Manual Navigation to the Device List
- Enable Discontinued Products (if you are replicating something you have)
- Exclude EtherNet Cabling from BOM



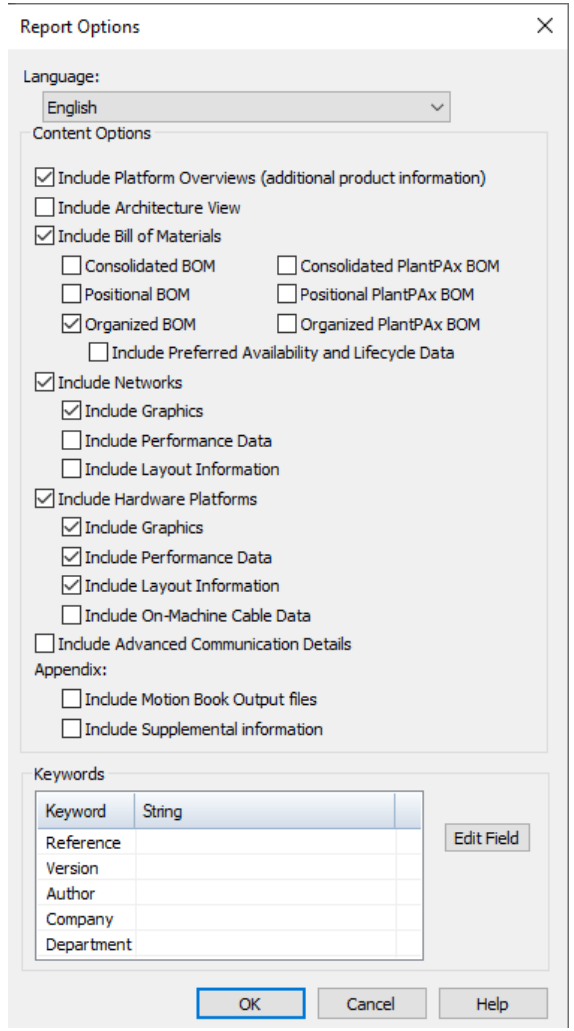


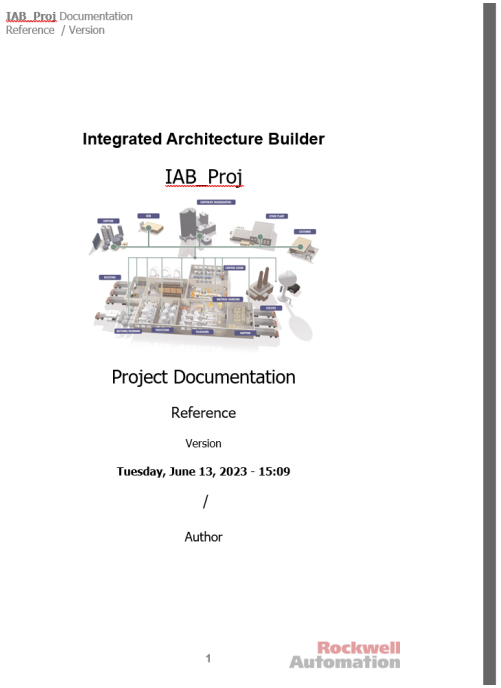
IAB Tips & Tricks

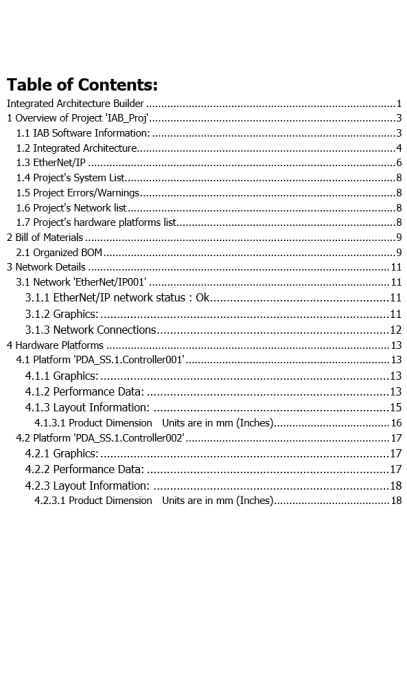


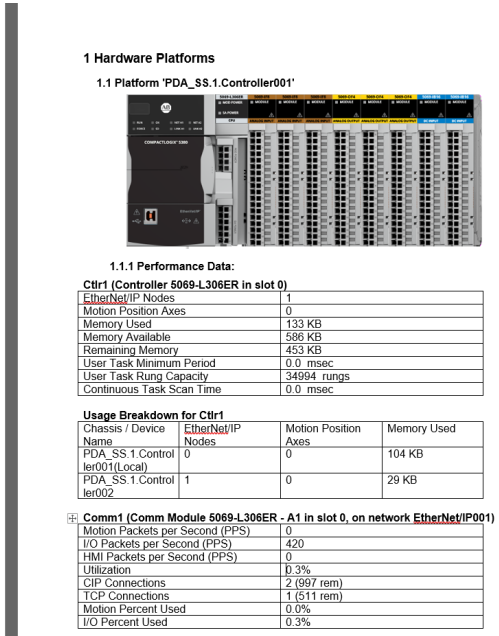
Under Option -> Report Options

- Adjust as needed for your Word document reports
  - Typically only one type of BOM needed
  - Sometimes Architecture View and Network View are duplicate information on small or uncomplicated projects
  - Platform Overviews are not always needed

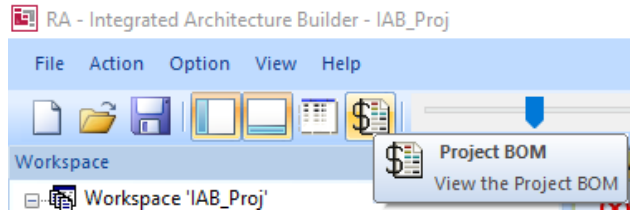






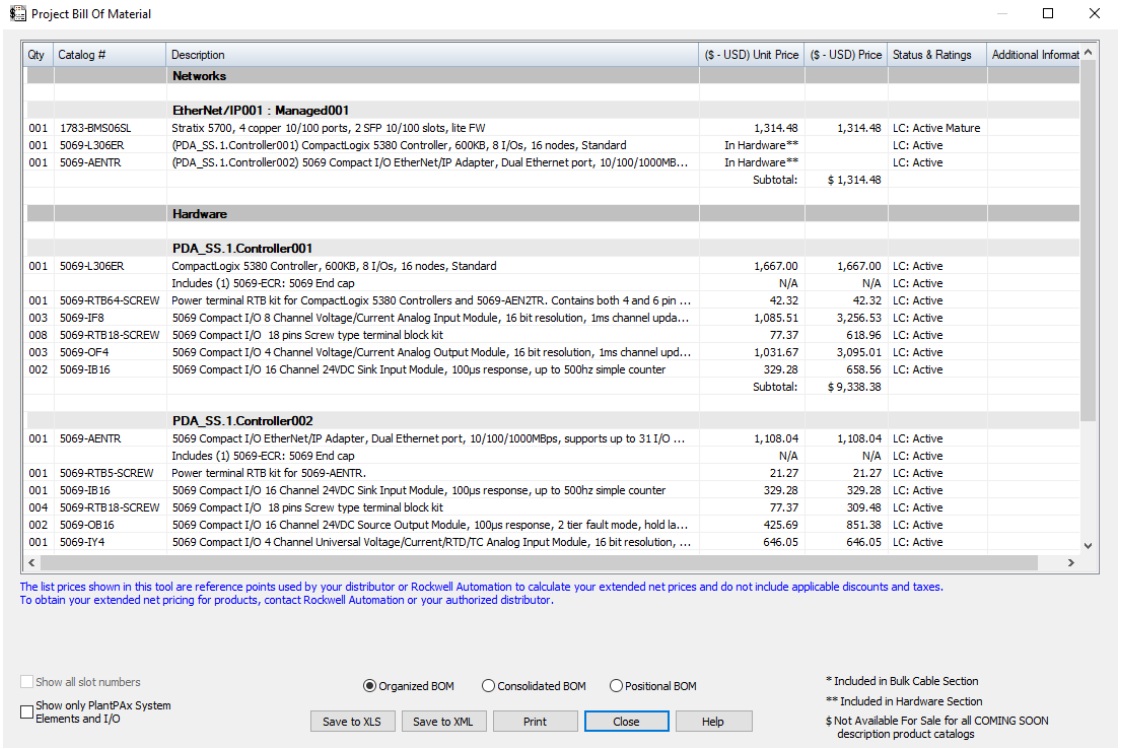


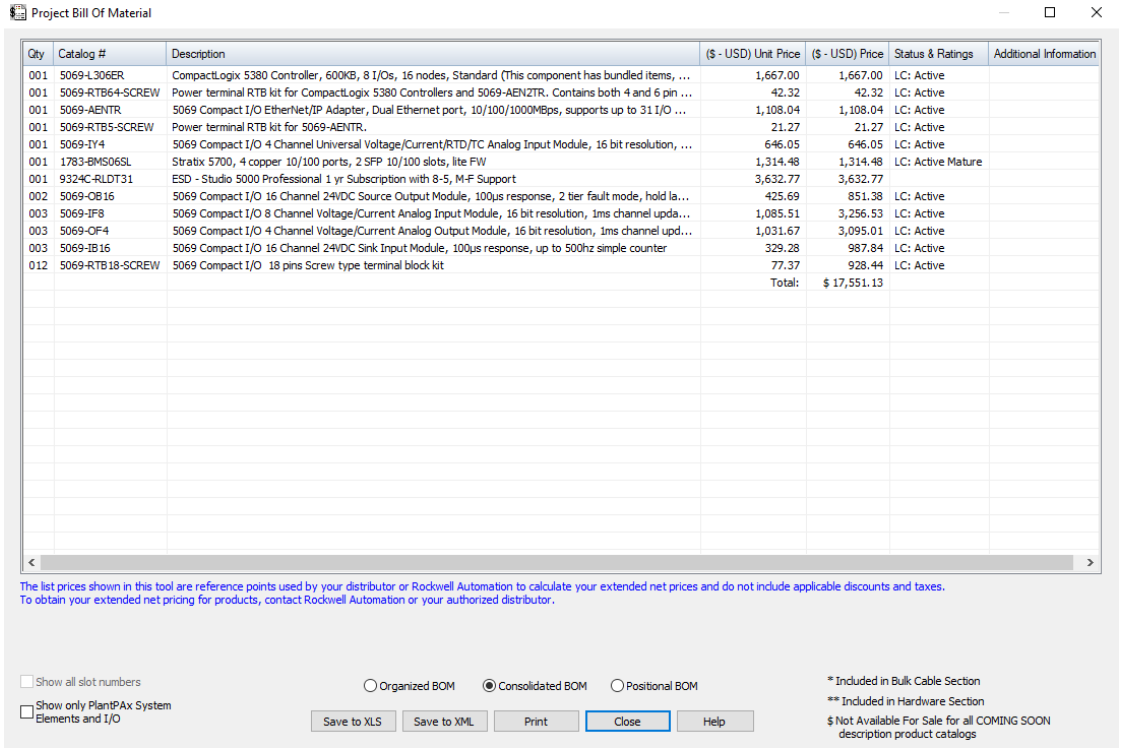
IAB Tips & Tricks



View Different Types of BOMs in Excel

- Organized – generally broken up by rack/chassis/network
- Consolidated – no duplicates in list, easiest / fastest for distributor quote
- Positional – per item breakout, very long, rarely used

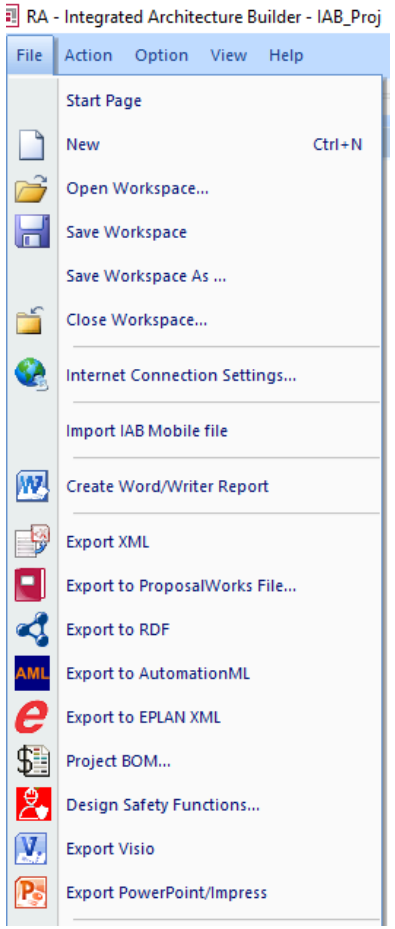




IAB Tips & Tricks

Export to ProposalWorks

- Useful if items need to be added to the BOM that aren't located within IAB



Integrated Architecture Builder (IAB)

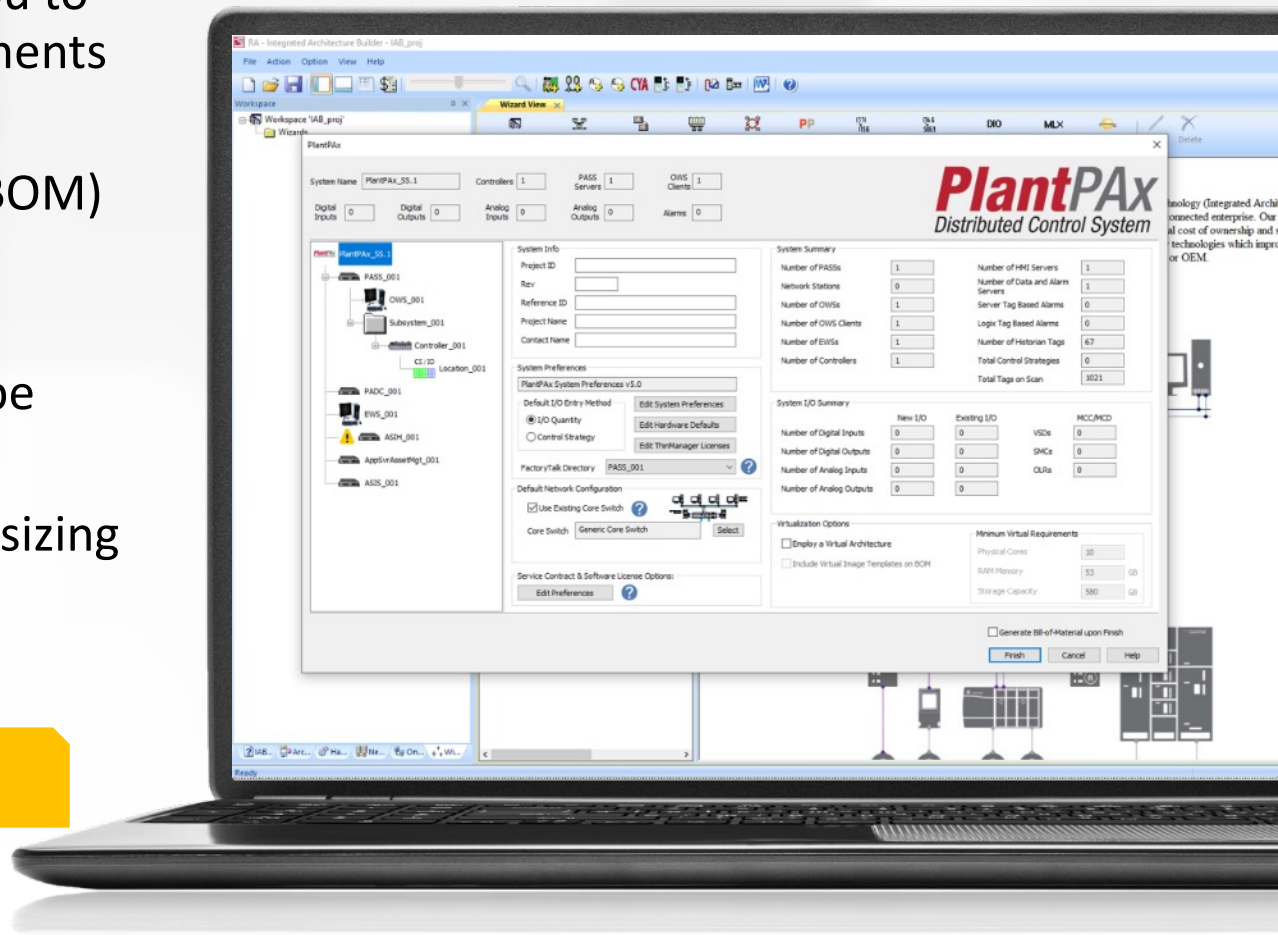
Process System Estimator (PSE)

Rockwell Automation

expanding human possibility®

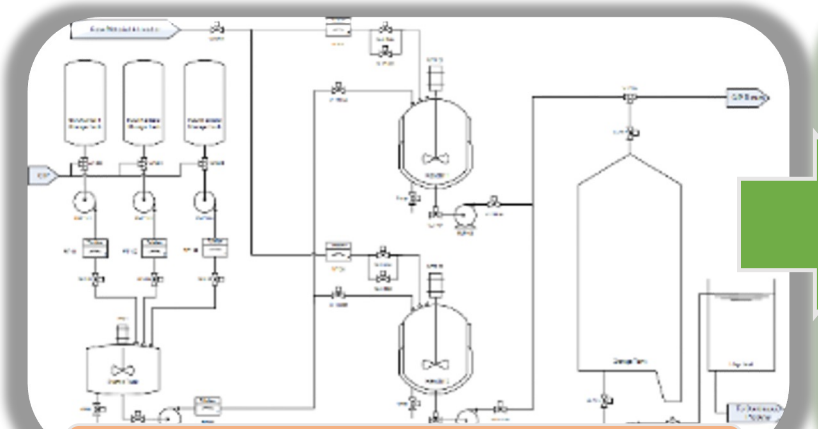
What is the PlantPAx® System Estimator (PSE)?

- The **PlantPAx® System Estimator (PSE)** is a wizard built into **Integrated Architecture® Builder (IAB)** that allows you to estimate sizing and loading of **PlantPAx®** system elements based on your application requirements.
- The **PSE** will help you generate the bill of materials (BOM) for the proposed **PlantPAx®** system.
- The **PSE** automatically estimates system loading and provides warnings if your proposed design needs to be modified to meet performance requirements.
- The **PSE** is fully customizable! You can create custom sizing rules based on your application.

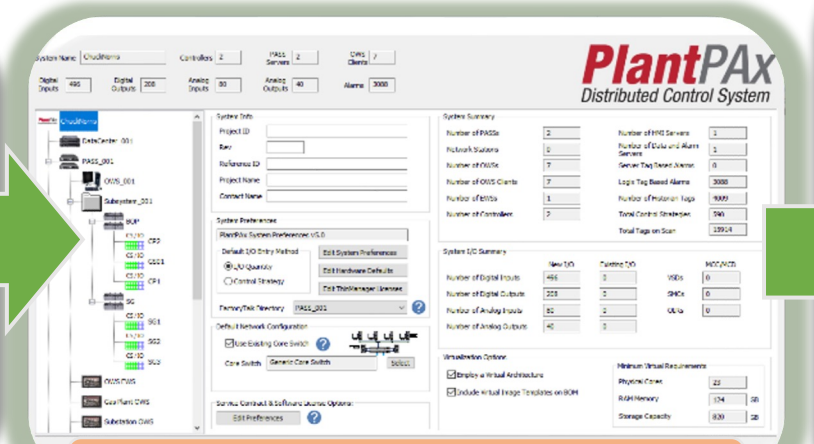


Always use the **PSE** to design you **PlantPAx®** system!

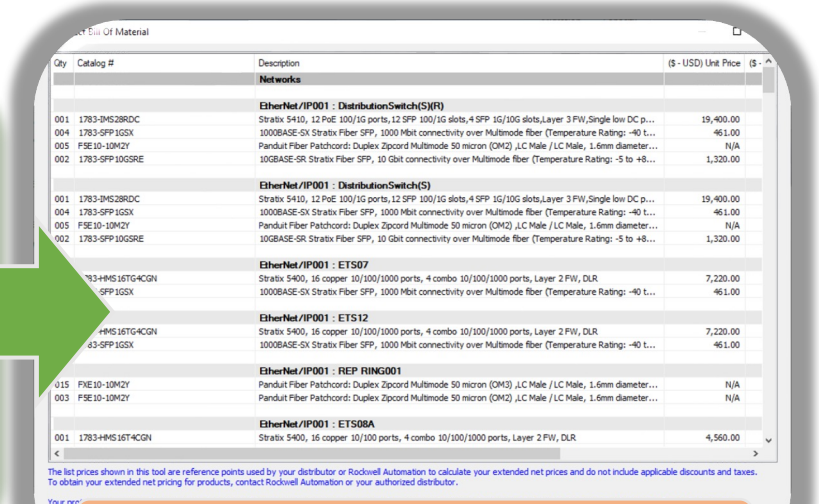
PSE - Typical Workflow



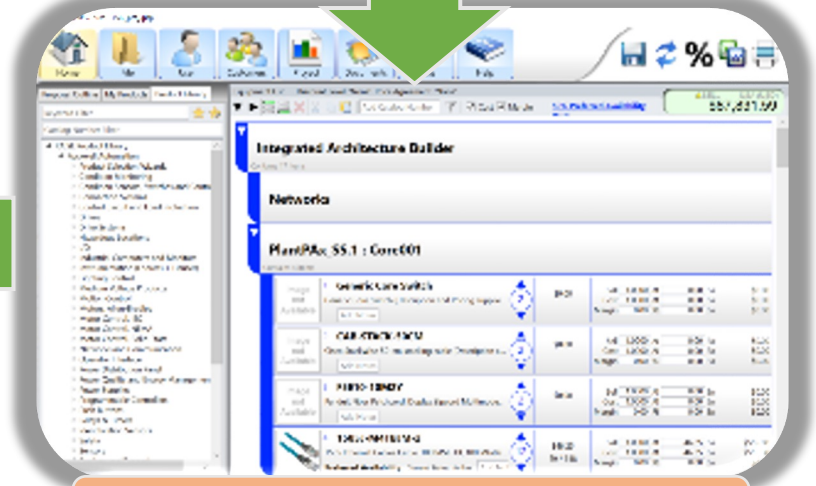
User Requirements



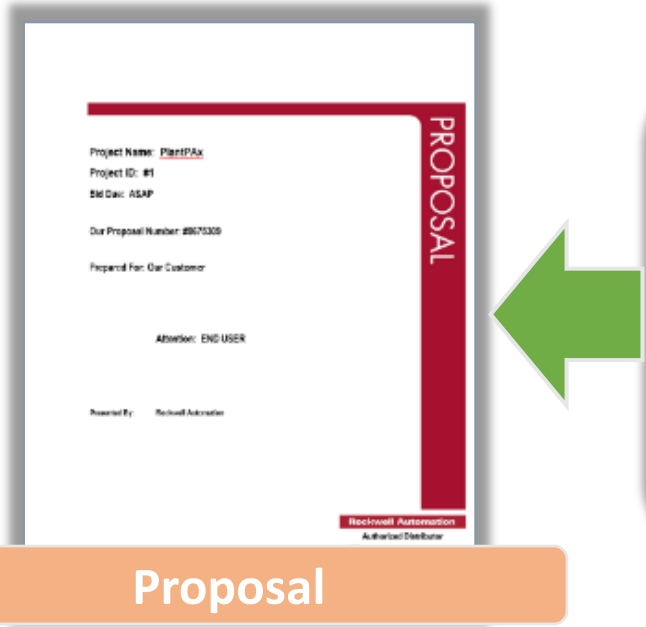
PSE Wizard



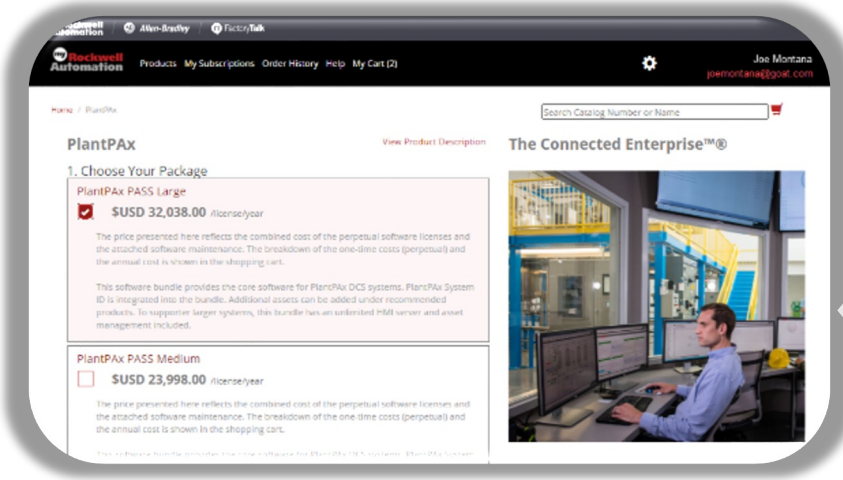
BOM



ProposalWorks™



Proposal



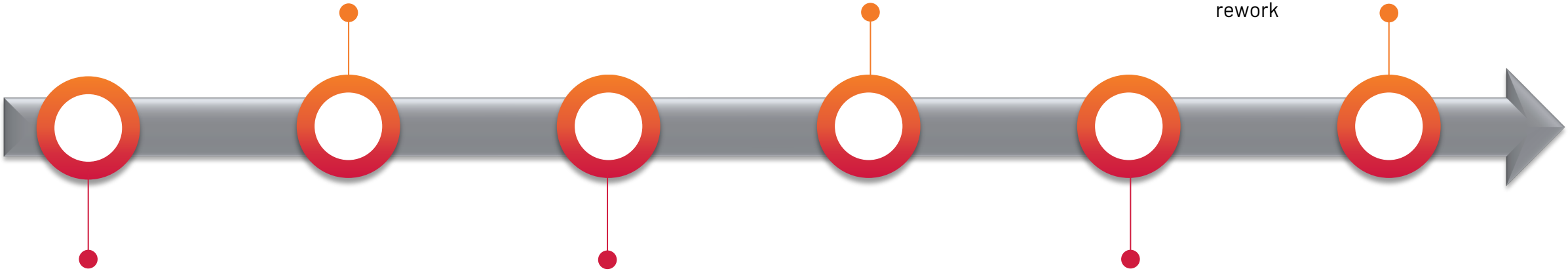
Rockwell Automation Software Portal

Project Workflow

Process System Estimator (PSE)
- Define control strategies
- Define execution times
- Define hardware
- Determine software loading
- Determine network architecture and loading
- Determine virtualized architecture and loading

PlantPAx® Configuration Tool
- Setting alarm groups and commands
- Setting interlock text descriptors and navigation
- Sets values in the offline Automatic Call Distribution (ACD) file

PlantPAx® Verification Tool
- Audit Implementation iteratively as a check to make sure that the system is within boundaries
- Compare against PSE to be sure that the deployment matches the design
- Catches problems early to reduce rework



Project Documentation
- P&ID
- Process Narrative
- Instrument List
- Plant Layout Diagram
- Networking Layout Diagram

Application Code Manager (ACM)
- Assigns Process Strategies to instruments and devices
- Loads data from Instrument List into each object to avoid manual entry
- Allows efficient creation of large projects
- Creates HMI Graphics
- Creates Historian import file

Deploy Project
- Deploy servers from templates
- Deploy network per Topology Worksheet
- Finalize server deployment with Configuration and Implementation Guide UM-100
- Import all application files

FactoryTalk Updater

Controlflash Plus

Rockwell Automation

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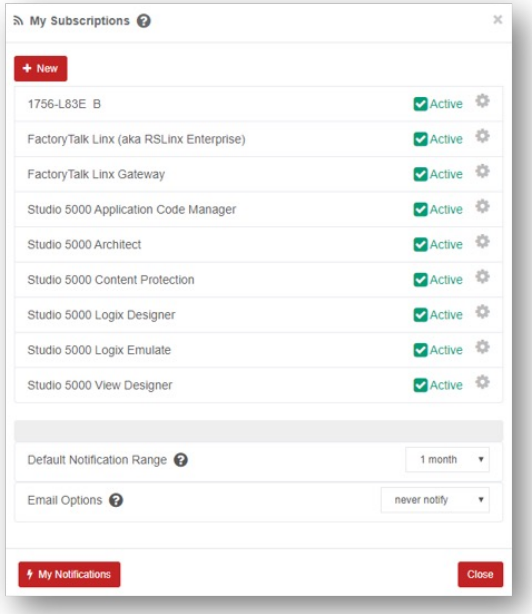
Managing Software and Firmware

Address a very common customer productivity barrier in 3 ways.

Get actively notified when a new Version is published.

PCDC

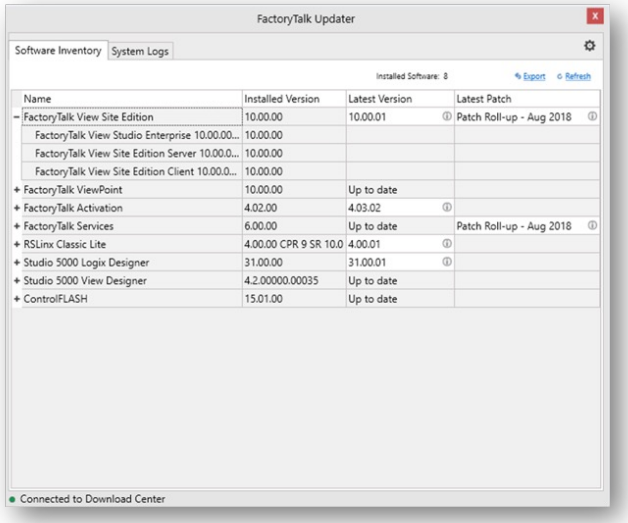
- Set up notifications for the products you use, get notified when a new Version is published.



Know what software you have and where it is.

FactoryTalk® Updater

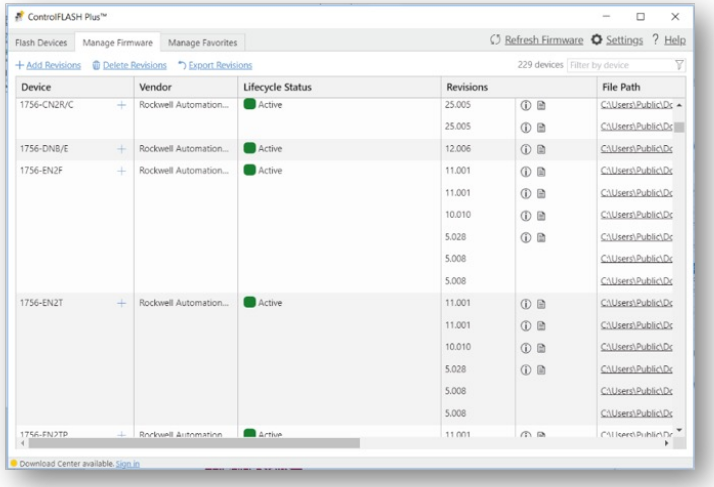
- Inventory what your organization has installed including software and Add-On Profiles.
- Manage what is installed, what's being used, by who and where.



Know what firmware your devices have and what's available.

ControlFLASH Plus

- Inventory the firmware in devices, what you have downloaded and what is available from RA.
- Push firmware updates to numerous devices at once.



FactoryTalk® Updater 4.0

FactoryTalk

Rockwell Automation

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FactoryTalk® Updater

May 2018

1.0

- Local Computer
- Computer Software Inventory

March 2020

2.0

- Networked Computers
- Software On-prem Inventory
- License On-prem Inventory

October 2021

3.0

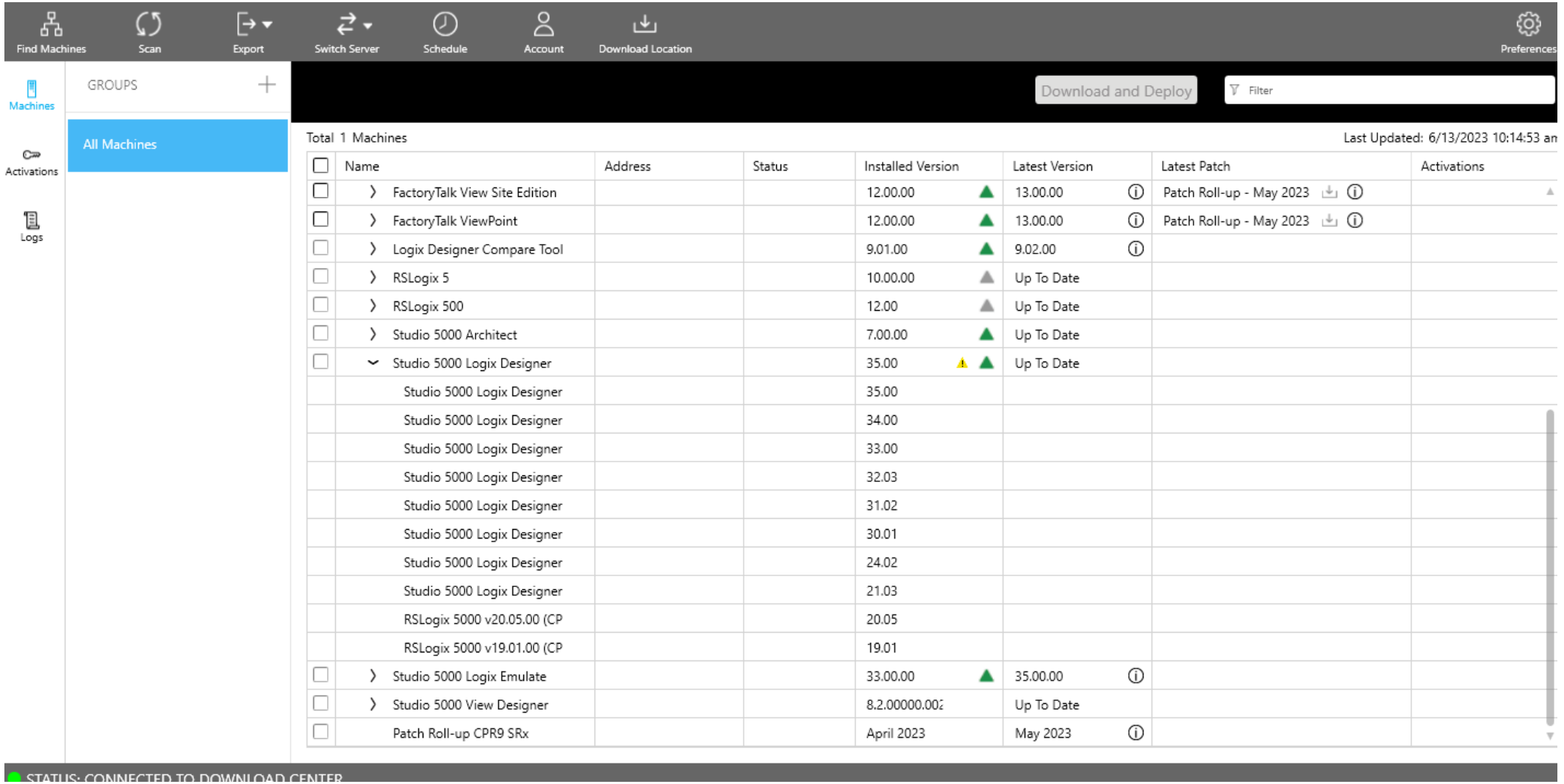
- Networked Computers on Domain
- License On-prem Usage
- Patch Deployment to Network

November 2022

4.0

- Add on Profile Network Inventory
- Web Client
- Cloud Upload to Dashboard

FactoryTalk® Updater



Rockwell Automation

expanding **human possibility**™

ControlFLASH Plus™

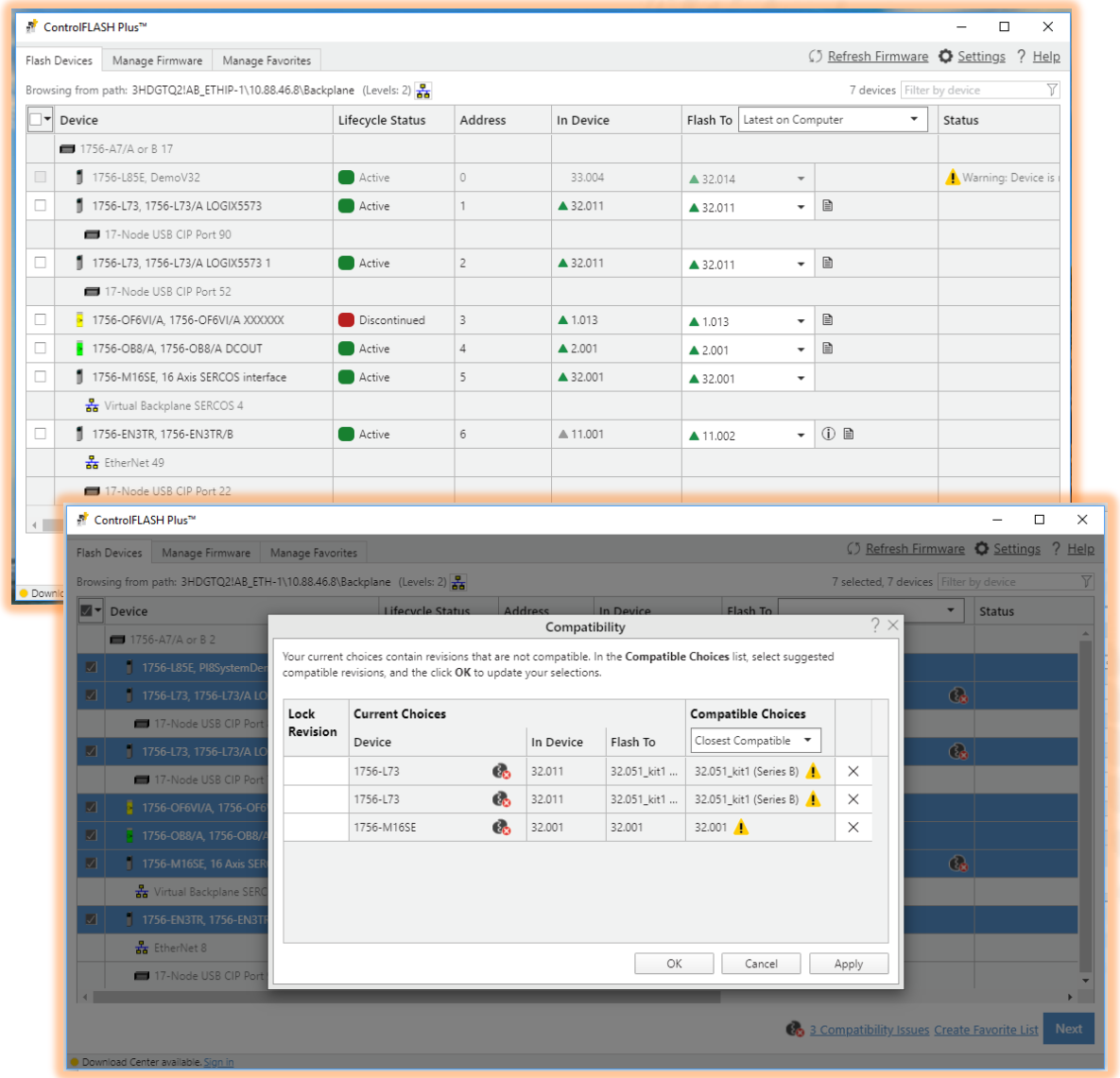
ControlFLASH Plus™

Improved productivity

- Firmware revision cross-compatibility checking – identifies issues and suggests compatible choices
- Added firmware revision lifecycle states on Flash Devices and Manage Firmware tabs
- Added hardware lifecycle state on Flash Devices tab
- Automatic detection and reporting of Logix 5000® controllers in run mode and safety-locked before update operation starts – address devices in wrong states before starting flash operations
- Added permission control for firmware deletion and Product Compatibility Download Center (PCDC) connection via FactoryTalk® Security

Improved usability

- Firmware inventory building performance improvements
- Includes FactoryTalk® Updater V2.00, FactoryTalk® Services and FactoryTalk® Linx V6.20
- V5 includes flashing of 5015 FLEXHA



ControlFLASH Plus™

Device	Lifecycle Status	Address	In Device	Flash To: Latest from Download Center	Status
Ethernet					
1783-BMS20CGPK, 1783-BMS20CGP Stratix 5700	Active Mature	192.168.1.1	9.001	15.021 (Series...	
1783-BMS10CGP Stratix 5700		192.168.1.2			
1783-BMS06TL Stratix 5700		192.168.1.3			
PowerFlex 525 1P 110V 50HP		192.168.1.5			
1756-EN2TR/B		192.168.1.11			
1756-A4/C 4					
17-Node USB CIP Port 4					
PowerFlex 525 1P 110V 50HP		192.168.1.20			
FactoryTalk Linx - Desktop, CORPUSCHRISTILA	Please check with ve...	192.168.1.21	13.001	No firmware found	
1789-A17/A Virtual Chassis					
5069-L310ER, 5069-L310ER/A	Active	192.168.1.32	32.014	35.011 (Series...	
2 Slot 5069 Backplane 2					
5069-L310ER, 5069-L310ER/A	Active	0	32.014	35.011 (Series...	
5069-IB16/A, 5069-IB16/A	Active	1	2.011	2.015 (Series A)	
17-Node USB CIP Port 13					
1756-L81E, 1756-L81E/B	**Active**	**192.168.1.34**	**32.011**	35.011_kit1	
1756-A4/A or B 2					
17-Node USB CIP Port 15					
1756-EN2T, 1756-EN2T/C	**Active**	**192.168.1.35**	**5.028**	11.004 (Signe...	

Ethernet/IP Capacity Tool

Prosoft Wireless Designer

Rockwell Automation

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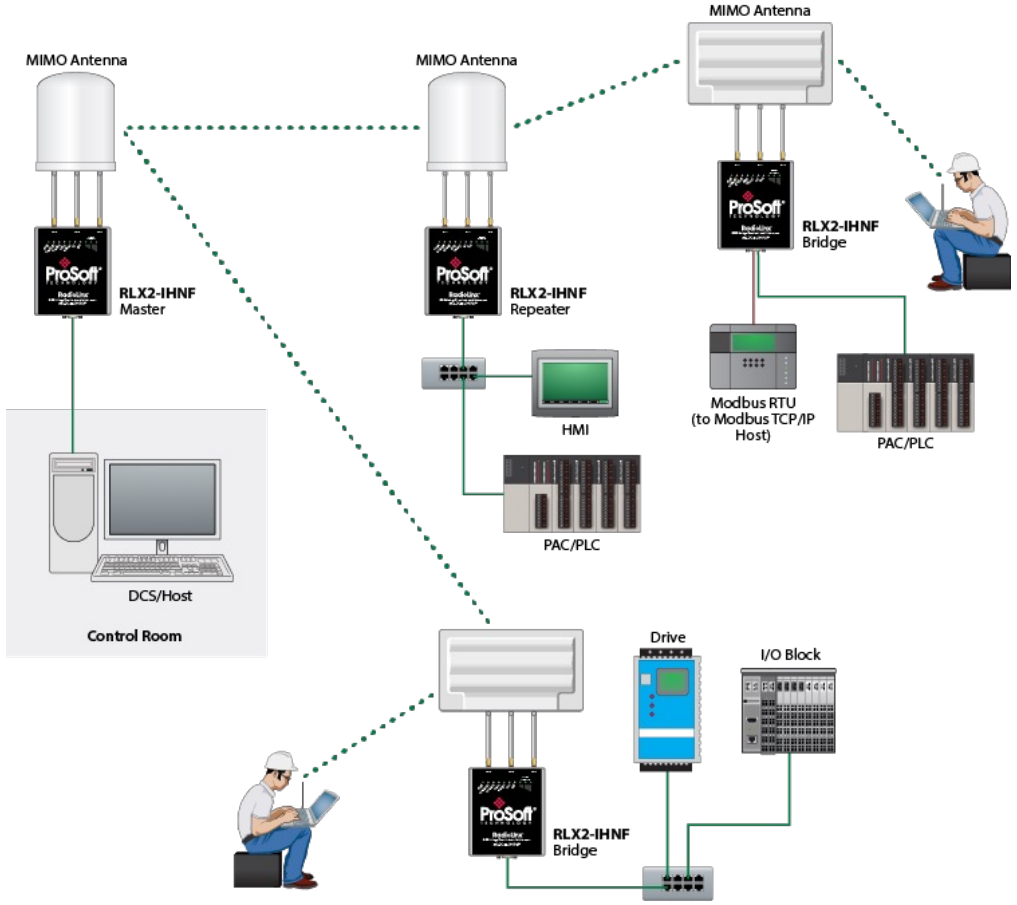
Ethernet/IP Capacity Tool

EtherNet/IP Capacity Tool that has been designed to help you calculate the resources required to support a control network. The tool takes a conservative approach to estimating the requirements of your network usage based on a few data points you provide it.

The EtherNet/IP Capacity Tool is used to measure the networking capacity of a single **Scanner Processor**. A Scanner Processor is either an EtherNet/IP module, such as the ControlLogix EN2T, or a Logix controller with a built-in EtherNet/IP port, such as the CompactLogix 5380.

Prosoft Wireless Designer

Designer simplifies the task of planning and specifying your ProSoft Wireless network. The easy to use, wizard-based interface creates a visual layout of your radios and sites, and generates a complete Bill of Materials including radios and accessories



Additional Resources

expanding **human possibility**®

Helpful tools from Rockwell

Rockwell Download by Serial Number – older area that tends to be easier for finding relevant downloads if you have the serial number of the software and one other piece of identifying information

Rockwell Product Selection Toolbox - PST - full .iso download (~7GB) here - Includes quite a few useful tools such as **ProposalWorks** and **Integrated Architecture Builder** which can help speed up the design of a particular system as well as come up with some budgetary estimations. This is a free suite of tools that I use every day. Make sure to run the Current Program Updater after installation to get the latest product updates and migration information into the software as the initial download is dated February 2017. You may have to run the Current Program Updater a couple of times in order to bring everything up to date.

Integrated Architecture Builder - IAB - Overview of hardware products and light overview of software portfolio. This will allow you to perform a system buildout and verification per Rockwell's recommendations. It will give pricing at list price and you can also create reports for a particular project. There are labs, quick starts, sample configurations, and videos available under the help menu of IAB. Using these will give you a very good base to quickly come up with a BOM for a Rockwell system with Encompass Partner products.

Rockwell Literature Library - Access to the latest brochures, case studies, user manuals, technical data, certifications, etc.

Rockwell Online Product Configurator – online version of what you will find within ProposalWorks

Rockwell Knowledgebase - helpful site that includes a ton of documentation on known issues

Rockwell Product Drawings – some of these are included within ProposalWorks but they may not all be or if you are trying to discover something specific, this can be a good resource

Rockwell Product Compatibility & Download Center - PCDC - allows one to check the compatibility of hardware with software revisions and can lists any known anomalies

Rockwell Product Lifecycle Status - allows one to check the projected lifecycle of a Rockwell product and if a discontinued date is known

Rockwell Partner Locator – search for distributors, OEMs, SIs, Technology Partners, and sales offices