Rockwell Automation

PLANNING GUIDE

for Upgrade to PlantPAx DCS Version 5.0

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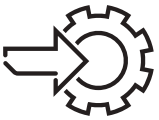
JUSTIFICATION

EVALUATION



EXECUTION

Introduction

Many industrial manufacturers are facing increased pressure to update their legacy DCS to maintain a more productive and sustainable infrastructure. It is critical to have a platform that lowers total cost of ownership (TCO) and is fully supported throughout all phases of the plant's lifecycle.

This planning guide allows existing PlantPAx® DCS users to evaluate the scope of effort to modernize from an earlier version of PlantPAx to the current 5.0 release.

As you begin scoping out the steps to modernize to PlantPAx 5.0, please consider the following 5.0 features:

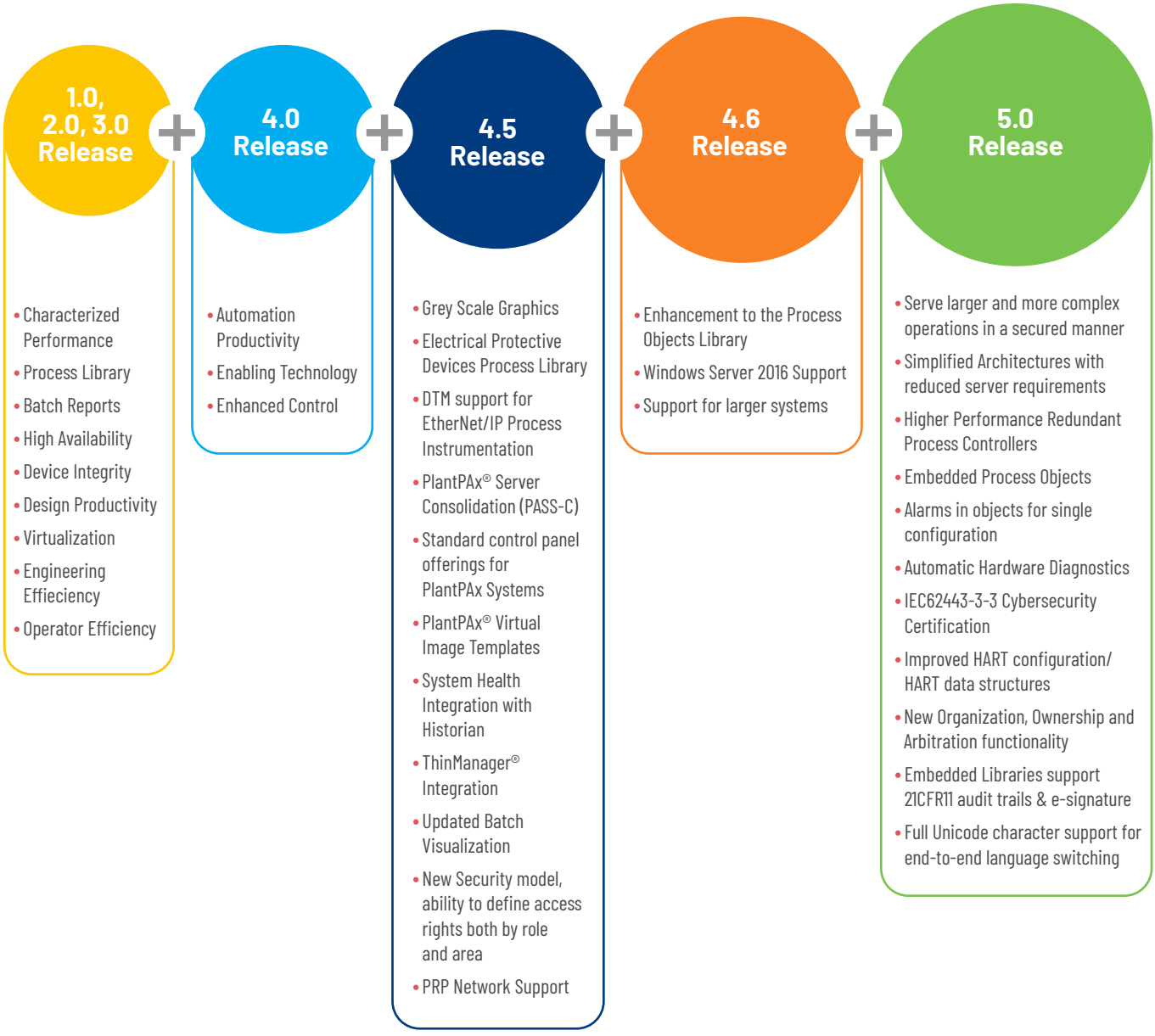
- The new process controller features process objects embedded in firmware to drive more design consistency & allows developers to focus on value-added configuration for higher-level applications.
- Using the expanded capacity of the new process controller, pre-configured alarms automatically deploy directly to the HMI. This also provides advanced diagnostic information for controllers, I/O and field devices.
- Advanced analytics and other digital technologies help protect your critical data. The system and process controllers are now aligned with international standard IEC 62443, a global security best practices based on defense-in-depth.

These capabilities help save significant time during initial development – and throughout the lifecycle of your system as process requirements evolve.

In addition, if you need more detailed information about technical and financial reasons to help support the need to modernize, click to open the Justification for Migration white paper.

Benefits and Critical System Changes

Upgrade to PlantPAx 5.0 library and gain the collective benefits of previous PlantPAx versions and current release improvements:



As you begin scoping out the steps to modernize to PlantPAx 5.0, please consider the following features:

- PlantPAx v5.0 no longer references Studio 5000 Architect® in the project development cycle
- PlantPAx v5.0 introduces new process controllers:
  - 1756-L81EP
  - 1756-L83EP
  - 1756-L85EP
  - 5069-L320ERP
  - 5069-L340ERP
- This new release of the Process Objects Library transitions the library from an open object-based library using AOIs to an embedded set of instructions native to the design environment.
- PlantPAx v5.0 adopts the 5094 (FLEX 5000™) I/O platform as part of the recommended hardware. This new platform utilizes an Ethernet based backplane for communications and is designed for process applications. 5094 Technical Data Sheet
- The reference architectures for this release are expanded and focus on the risk profile of the application.
- New reference architectures that provide guidance on how to properly architect a system that follows the IEC 62443-3-3 standard.
- FactoryTalk® AssetCentre v10.0 no longer supports Process Device Configurations or Calibration Management. FactoryTalk AssetCentre v9.0 is the last release to support these features and will be supported for 3 years beyond the release of v10. Please refer to KnowledgeBase Article # 1125567 for up-to-date guidance. We recommend the adoption of Endress and Hauser, Fieldcare or PACTware as replacements for these capabilities.

Changes in PlantPAx v5.0 Controller Sizing

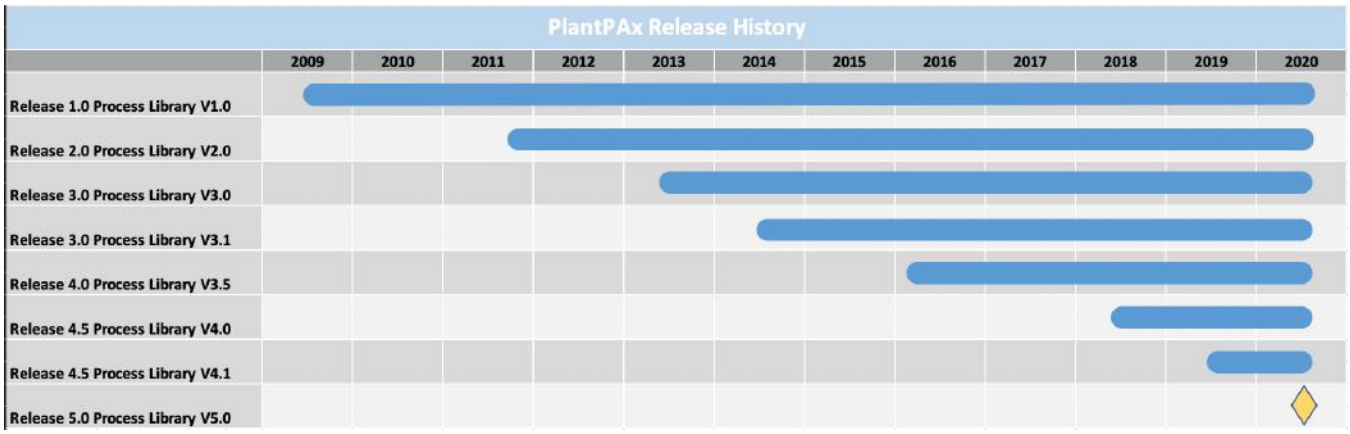
Based on preliminary testing for PlantPAx v5.0, we expect to see:

- Up to 30% reduction of servers in redundant and non-redundant applications
- For simplex systems, memory consumed by the controller application is reduced by approximately 30%. In addition, the memory in the new controllers is greater than the previous generation. When using an L8 controller, sizing is now accounted for by connections, not by nodes. Preliminary testing has shown that most systems will be limited by memory before connections. Adoption of node counting will align with the AFC of PlantPAx 5.0
- In general, the 5580 class redundant solution will provide significant improvement in applications that are currently memory limited. Applications where the CPU is scan time limited should not expect relief from 5580 redundant solutions.
- Scan time:
  - While the 5580 controller significantly out-performs the 5570 class of Logix controllers in simplex configuration, the system is not able to maintain these performance gains in a redundant configuration for this release. The recommendation at this time is to size redundant 5580 solutions as you would a 5570 solution.
- Memory:
  - 5580 redundant solutions significantly improve available application memory. In addition to 5580 controllers in general having more memory then their 5570 counterparts, the 5580 class controllers have almost no impact to memory when redundancy is enabled. This is unlike 5570 class controllers in redundancy, which typically require 40% of the controller's memory be consumed for cross loading functions.
- Up to approximately a 35% reduction in redundant controller pairs required after migration. However, this number is dependent on the application properly following the PlantPAx system design optimization guidelines.
- 5580 class controllers also do not require the 50% of the remaining memory reservation guideline typically needed for 5570 class controllers used for creating HMI communications and messaging.
- Switchover performance remains similar to 5570 performance
- Significant improvement to HMI responsiveness after a switchover occurs over the 5570 numbers.

Important: These numbers are presented as order of magnitude guidance and are subject to change by Rockwell Automation as further testing is conducted.

Process Objects Library and PlantPAx DCS

PlantPAx DCS is more than just the Process Objects Library (POL) that it utilizes. As such, the Process Objects Library versions are tracked independently of the PlantPAx system release version. For your convenience, below is a timeline showing how the PlantPAx system releases align to the POL releases. Each new library release expands the functions and features of PlantPAx. It is recommended that users adopt the most recent release of the POL their system will support.



Important: Rockwell Automation provides the Process Object Library for use by our customers to enable greater lifecycle support. New for PlantPAx 5.0, most of the Process Objects Library is embedded in the firmware of the new Process Controllers to drive a more consistent experience for our customers. Altered libraries are not supported. Part of the superior support are the development of tools that update the library for the user. Performance of the migration tool on modified libraries is not ensured.

SOFTWARE						
Date	June 2013	September 2014	March 2016	August 2018	June 2019	September 2020
PlantPAx Release Version	3.0	3.0	4.0	4.5	4.6	5.0
PlantPAx Process Object Library	3.0	3.1	3.5	4.0	4.1	5.0
Studio 5000 Logix Designer® application	N/A	N/A	24.x	31.x	31.x	33.x
RSLogix 5000®	20.x	20.x	N/A	N/A	N/A	N/A
Studio 5000 Architect® application	N/A	N/A	1.0	3.0	4.x	N/A
FactoryTalk® View	7.0	8.0	8.1	10.x	11.x	12.x
FactoryTalk® Batch	11.01	12.01	12.01	13.x	13.x	14.x
FactoryTalk AssetCentre	4.1	5.0	6.1	8.0	9.x	10.x
FactoryTalk® VantagePoint®	4.5	5.0	6.13	8.0	8.x	8.2
FactoryTalk® Historian	3.01	4.0	4.0	5.0	6.x	7.x
Studio 5000® Application Code Manager	N/A	N/A	N/A	1.0	2.0	4.x

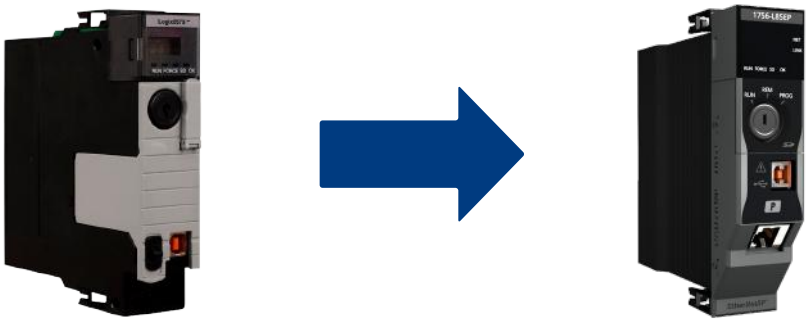
*For detailed information refer to PlantPAx selection manuals

HARDWARE							
Date	June 2013	September 2014	March 2016	April 2016	August 2018	June 2019	September 2020
PlantPAx Release Version	3.0	3.0	4.0	4.0	4.5	4.6	5.0
PlantPAx Process Object Library	3.0	3.1	3.5	3.5	4.0	4.1	5.0
Process Controller (ControlLogix®)	1756-L71 1756-L72 1756-L73 1756-L74 1756-L75						1756-L81EP 1756-L83EP 1756-L85EP
Skid Based Controller (CompactLogix™)	1769-L24ER-QBFC1B 1769-L33ER		1769-L24ER-QBFC1B 1769-L33ER 1769-L36ERM		1769-L24ER-QBFC1B 1769-L19ER-BB1B 1769-L33ER 1769-L36ERM		5069-L320ERP 5069-L340ERP
Redundancy module	1756-RM2						
Ethernet interface (DLR Support)	1756-EN2TR 1783-ETAP 1783-ETAP1F 1783-ETAP2F				1756-EN2TR		
Ethernet interface (direct PRP Support)	N/A				1756-EN2TP		
Ethernet interface (no DLR Support)	1756-EN2T 1756-ENBT 1756-EWEB 1756-EN2F				1756-EN2T, 1756-EN2F		
Ethernet interface (for converting topology or media - supports DLR topology)	N/A				1783-ETAP, 1783-ETAP1F, 1783-ETAP2F		
Ethernet interface (secure connection support)	1756-EN2TSC						
ControlNet interface (if applicable)	1756-CN2, 1756-CN2R, 1756-CNB, 1756-CNBR						N/A

*For detailed information refer to PlantPAx selection manuals

Hardware planning

Rockwell Automation introduced a new process controllers in both the ControlLogix® and CompactLogix™ format. These new controllers are built on the existing 5580/5380 generation of controller but, enhanced for process applications. To improve consistency among PlantPAx systems, the Process Objects are now embedded into the firmware, as opposed to previous versions that contained Process Objects using Add-On-Instructions (AOIs).



Each release of PlantPAx DCS is tested and characterized on a defined set of hardware available at the time of release. For each release, and is documented in the PlantPAx Distributed Control System Hardware Certifications and Specifications. PlantPAx has utilized the same hardware families since release. New for v5.0 is the addition of the CompactLogix 5380 controllers and the 5094 IO family.

Systems change over time resulting in a high number of permutations of installed hardware. As such, we recommend that users utilize the resources listed in the Assessing Current State section of this guide to evaluate the installed hardware specific to their facilities. This will allow identification of specific modules life cycle status.

Infrastructure planning

PlantPAx DCS utilizes EtherNet/IP networks for communications, an open industry standard to support seamless integration of system components. EtherNet/IP provides device-level communication for the DCS with real-time results from the plant floor to the top floor. A modern, secure, and reliable information infrastructure connects your assets, people, and information. It is the foundation on which your DCS is built upon. To provide the best solutions and support for our customers, we partner with industry leaders such as Panduit, Cisco, VMware, Microsoft, E+H, P+F, Spectrum, and others.

PlantPAx v5.0 no longer utilizes ControlNet or DeviceNet in its newest architectures. If your facility utilizes ControlNet infrastructure, please refer to the ControlNet to Ethernet/IP Migration Reference Manual, as it has reached Active Mature status and is not suitable for new upgrades or installations. DeviceNet continues to be an active product at the time of this publication.

Each release of PlantPAx DCS brings enhancements to the reference architectures available for our customers. These come in the form of adoption of new technology, expanded application guidance for cybersecurity, and new products. PlantPAx v5.0 reference architectures are now based on network resiliency required rather than the size of the application.

Utilizing the ISA99/IEC 62443 industry framework, there is new reference architecture guidance that provides guidance on the best way to deploy PlantPAx 5.0 in a more secure manner. This will reduce the amount of effort and risk involved in developing a system architecture that aligns with the industry framework.

The Rockwell Automation Industrial Network Services group is available to support customers in evaluation of existing infrastructures and support modernization to current architectures. Please reach out to your local process sales lead for more information.

Software Planning

Controller Configuration

Application code and controller configuration are developed in Studio5000 Logix Designer®. PlantPAx v5.0 will utilize v33 with the new process controllers. Application code developed using previous releases of Studio5000 Logix Designer can easily be migrated to more recent releases. The new process controllers are an extension of the 5580 series controllers. Due to new controller architecture some core instructions execution has changed. For info on migrating your application, please refer to: Replacement Guidelines: Logix 5000™ Controllers. This will support all non-process specific modernization efforts.

Upgrade code and current control strategies using the PlantPAx Migration Tool. The Product Compatibility Download Center (PCDC) can be used to compare Studio 5000 Logix Designer versions with Process Library versions. For example, following the table you can see that Studio 5000 Logix Designer version 21.03.02 is compatible with Process Library 4.10.01 .

	Process Library 4.10.01	Process Library 4.00.02	Process Library 3.50.11	Process Library 3.10.05	Process Library 3.00.10	Process Library 2.00.10	Studio 5000 Logix Designer 32.02.01	Studio 5000 Logix Designer 31.02.00
Compatibility								
Process Library 4.10.01	✓	●	●	●	●	●	✓	✓
Process Library 4.00.02	●	✓	●	●	●	●	✓	✓
Process Library 3.50.11	●	●	✓	●	●	●	!	!
Process Library 3.10.05	●	●	●	✓	●	●	!	!
Process Library 3.00.10	●	●	●	●	✓	●	!	!
Process Library 2.00.10	●	●	●	●	●	✓	!	!
Studio 5000 Logix Designer 32.02.01	✓	✓	!	!	!	!	✓	✓
Studio 5000 Logix Designer 31.02.00	✓	✓	!	!	!	!	✓	✓
Studio 5000 Logix Designer 30.02.00	!	!	!	!	!	!	✓	✓
Studio 5000 Logix Designer 29.00.02	!	!	!	!	!	!	✓	✓
Studio 5000 Logix Designer 28.03.01	!	!	!	!	!	!	✓	✓
Studio 5000 Logix Designer 27.00.01	!	!	!	!	!	!	✓	✓
Studio 5000 Logix Designer 26.01.01	!	!	!	!	!	!	✓	✓
Studio 5000 Logix Designer 24.02.00	✓	✓	✓	✓	✓	!	✓	✓
Studio 5000 Logix Designer 23.00.01	✓	✓	✓	✓	✓	!	✓	✓
Studio 5000 Logix Designer 21.03.02	✓	✓	✓	✓	✓	!	✓	✓

*Refer to PCDC section in this document for help on how to use this.

**PCDC will be updated at time of release.

HMI Configuration

The HMI configuration software required for full functionality of PlantPAx release v5.0 is FactoryTalk® View Site Edition version 12. Upgrading the process display global object references using the PlantPAx Migration Tool, outlined in Tools and Methods section below. The Product Compatibility Download Center (PCDC) can be used to compare versions of FactoryTalk View Site Edition for compatibility with older version of the process objects library. Refer to PCDC section for help on how to use this.

PlantPAx 5.0 standardizes on FactoryTalk® View Site Edition to improve consistency and integration of disparate systems. Users that require PanelView™ support can continue to use v4.1 release of the Process Objects Library with FactoryTalk® View Machine Edition.

In the table below, you can see that FactoryTalk View Site Edition version 11.00.00 is compatible with Process Library 4.10.01 .

	Process Library 4.10.01	Process Library 4.00.02	Process Library 3.50.11	Process Library 3.10.05	Process Library 3.00.10	Process Library 2.00.10	FactoryTalk View Site Edition 11.00.00	FactoryTalk View Site Edition 10.00.01	FactoryTalk View Site Edition 9.00.00	FactoryTalk View Site Edition 8.20.00
Compatibility										
Process Library 4.10.01	✓	●	●	●	●	●	✓	✓	✗	✗
Process Library 4.00.02	●	✓	●	●	●	●	✓	✓	✗	✗
Process Library 3.50.11	●	●	✓	●	●	●	✓	✓	✓	✓
Process Library 3.10.05	●	●	●	✓	●	●	✓	✓	✓	✓
Process Library 3.00.10	●	●	●	●	✓	●	!	!	!	!
Process Library 2.00.10	●	●	●	●	●	✓	!	!	!	!
FactoryTalk View Site Edition 11.00.00	✓	✓	✓	✓	!	!	✓	●	●	●
FactoryTalk View Site Edition 10.00.01	✓	✓	✓	✓	!	!	●	✓	●	●
FactoryTalk View Site Edition 9.00.00	✗	✗	✓	✓	!	!	●	●	✓	●
FactoryTalk View Site Edition 8.20.00	✗	✗	✓	✓	!	!	●	●	●	✓
FactoryTalk View Site Edition 7.00.00	✗	✗	✓	✓	✓	✓	●	●	●	●
FactoryTalk View Site Edition 6.10.00	✗	✗	✗	✗	✗	✓	●	●	●	●
FactoryTalk View Site Edition 5.10.00	✗	✗	✗	✗	✗	✗	●	●	●	●
FactoryTalk View Site Edition 4.00.00	✗	✗	✗	✗	✗	✗	●	●	●	●
FactoryTalk View Site Edition 3.20.00	✗	✗	✗	✗	✗	✗	●	●	●	●
FactoryTalk View Machine Edition 11.00.00	✓	✓	✓	✓	!	!	✓	✓	✓	✗
FactoryTalk View Machine Edition 10.00.01	✓	✓	✓	✓	!	!	✓	✓	✓	✗
FactoryTalk View Machine Edition 9.00.00	✗	✗	✓	✓	!	!	✓	✓	✓	✗
FactoryTalk View Machine Edition 8.20.00	✗	✗	✓	✓	!	!	✗	✗	✗	✓
FactoryTalk View Machine Edition 7.00.00	✗	✗	✓	✓	✓	✓	✗	✗	✗	✗
FactoryTalk View Machine Edition 6.10.00	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗
FactoryTalk View Machine Edition 5.10.00	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

	Process Library 2.00.10	FactoryTalk View Site Edition 11.00.00	FactoryTalk View Site Edition 10.00.01	FactoryTalk View Site Edition 9.00.00	FactoryTalk View Site Edition 8.20.00
Compatibility					
Process Library 4.10.01	●	✓	✓	✗	✗
Process Library 4.00.02	●	✓	✓	✗	✗
Process Library 3.50.11	●	✓	✓	✓	✓
Process Library 3.10.05	●	✓	✓	✓	✓
Process Library 3.00.10	●	!	!	!	!
Process Library 2.00.10	✓	!	!	!	!
FactoryTalk View Site Edition 11.00.00	!	✓	●	●	●
FactoryTalk View Site Edition 10.00.01	!	●	✓	●	●
FactoryTalk View Site Edition 9.00.00	!	●	●	✓	●
FactoryTalk View Site Edition 8.20.00	!	●	●	●	✓
FactoryTalk View Site Edition 7.00.00	✓	●	●	●	●
FactoryTalk View Site Edition 6.10.00	✓	●	●	●	●
FactoryTalk View Site Edition 5.10.00	✗	●	●	●	●
FactoryTalk View Site Edition 4.00.00	✗	●	●	●	●
FactoryTalk View Site Edition 3.20.00	✗	●	●	●	●
FactoryTalk View Machine Edition 11.00.00	!	✓	✓	✓	✗
FactoryTalk View Machine Edition 10.00.01	!	✓	✓	✓	✗
FactoryTalk View Machine Edition 9.00.00	!	✓	✓	✓	✗
FactoryTalk View Machine Edition 8.20.00	!	✗	✗	✗	✓
FactoryTalk View Machine Edition 7.00.00	✓	✗	✗	✗	✗
FactoryTalk View Machine Edition 6.10.00	✓	✗	✗	✗	✗
FactoryTalk View Machine Edition 5.10.00	✗	✗	✗	✗	✗

*Refer to PCDC section in this document for help on how to use this.

**PCDC will be updated at time of release.

Important:
A special consideration is needed to be made for Factory Talk View Site Edition (SE) versions before 10 which used HMI alarms. In newer versions the alarms can be hosted and handled in an Alarm and Events server that is accessible through FactoryTalk® View SE software. However, for PlantPAx the Process Objects Library alarms are tag based. Reference Knowledgebase article Tool: Converting FactoryTalk View SE HMI Alarms to A&E Tag-Based Alarms KBID: QA51785 depending on your starting point. How alarm severity is configured changed in FactoryTalk View v8.0, which resulted in changes for the Process Objects Library version 3.5.
Area based Security Configurations are also important to update if the current PlantPAx version is prior to 4.0. Refer to Rockwell Automation Library of Process Objects: Configuration and Usage Reference Manual or Knowledgebase article PlantPAx Process Library 4.x security setup for FactoryTalk View SE & ME: QA39210.

Communication

The communication software required for the PlantPAx v5.0 is FactoryTalk® Linx. Studio 5000 Logix Designer version 18 through version 30 uses RSLinx Classic and v31 through v33 use FactoryTalk® Linx (aka FactoryTalk Linx). This needs to be considered when upgrading a system. KnowledgeBase article FactoryTalk Linx (formerly RSLinx Enterprise) Release History: IN5425 outlines FactoryTalk Linx (formerly FactoryTalk Linx) Release History. The table below highlights this change from the PCDC. Please reference to the PCDC for more compatibility information.

	FactoryTalk Linx (aka RSLinx Enterprise) 6.11.00	FactoryTalk Linx (aka RSLinx Enterprise) 6.00.00	FactoryTalk Linx (aka RSLinx Enterprise) 5.90.00	FactoryTalk Linx (aka RSLinx Enterprise) 5.80.00	FactoryTalk Linx (aka RSLinx Enterprise) 5.74.00	RSLinx Classic 4.12.00	RSLinx Classic 4.00.01
Compatibility							
Studio 5000 Logix Designer 32.03.01	✓	●	✗	✗	✗	✓	✓
Studio 5000 Logix Designer 31.02.00	●	✓	✗	✗	✗	✓	✓
Studio 5000 Logix Designer 30.02.00	✗	✗	✗	✗	✗	✓	✓
Studio 5000 Logix Designer 29.00.02	✗	✗	✗	✗	✗	✓	✓
Studio 5000 Logix Designer 28.03.01	✗	✗	✗	✗	✗	✓	✓

*Refer to PCDC section in this document for help on how to use this.

**PCDC will be updated at time of release.

Windows Operating Release

As outlined by the PlantPAx Selection Guides associated with each PlantPAx release, a specific Windows operating system is specified along with the requirements for each virtual image needed. System release 5.0 specifies Windows Server 2016 operating system, 64 bit for its App Servers and Windows 10, 64 bit for its work stations. Depending on the size of the current PlantPAx system and associated virtualization, appropriate sizing is needed for migration. For more Windows Operating System details prior to 5.0 release please contact regional process sales specialist.

Support Options

Assessing Current State

One of the first steps in planning for a modernization of the DCS is an evaluation of the existing installed base of software and hardware. A thorough review of the lifecycle of existing equipment and spares inventory will help assess modernization needs and identify the Rockwell Automation products. Rockwell Automation offers professional services that support the evaluation of the installed equipment at your facility. If a customer chooses to do a self-evaluation, the following tools are publicly available for their use. Options available to help include:

- Product Lifecycle Status tool: Our online product lifecycle status tool can help you determine the lifecycle status of existing equipment. The tool can be accessed at http://www.rockwellautomation.com/global/solutions-services/capabilities/migration-solutions/product-search/overview.page
- Installed Base Evaluation™ Service Agreement: Rockwell Automation offers an evaluation of an installed base with lifecycle analysis.
- FactoryTalk AssetCentre: Access the latest device lifecycle information with integration with the Product Compatibility and Download Center website.
- Product Compatibility and Download Centre: Lifecycle status of firmware, software, and hardware.

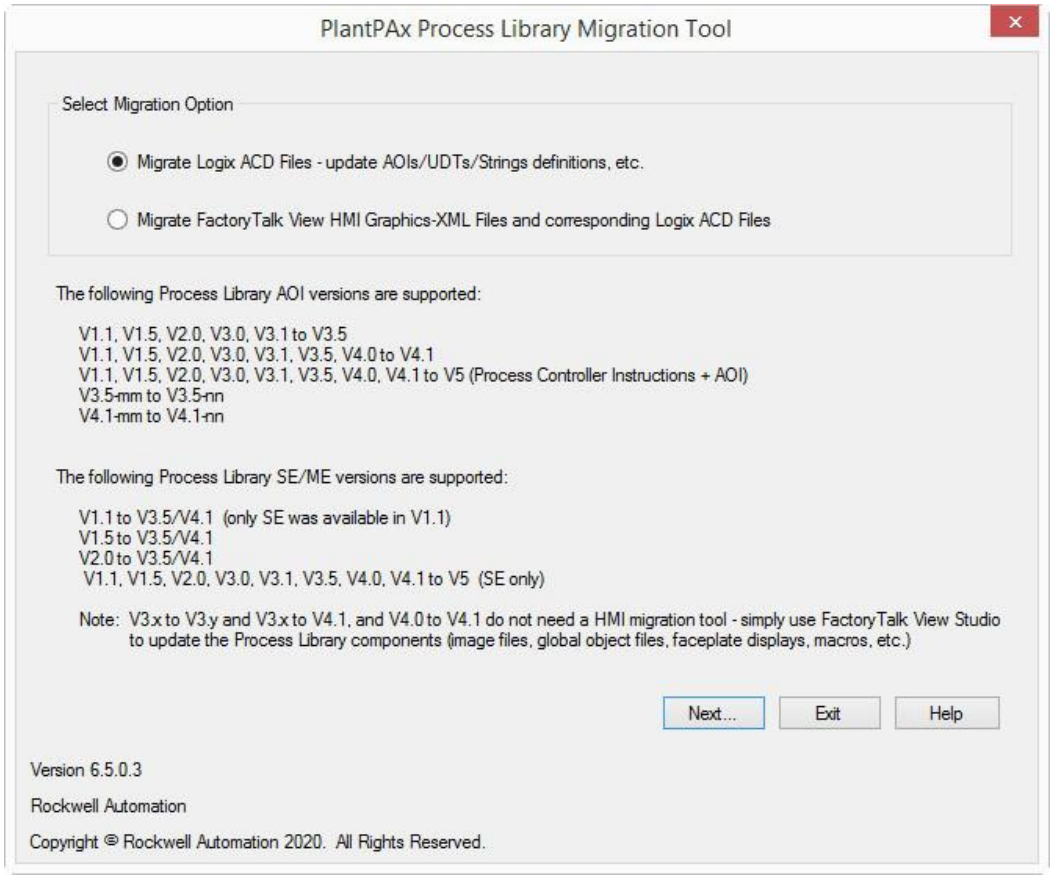
Rockwell Automation maintains lifecycle management strategies for all the hardware and software it produces. The status for software and firmware is integrated into the Product Compatibility and Download Centre webpage. Information about the status of our hardware is available on the Product Lifecycle Status Website. Descriptions of the lifecycle management policies found in the appendix of this document.

The PlantPAx lifecycle management strategy sits overtop of the individual product statuses and each system releases support is coordinated to align with the products used to characterize it for release. For more information specific to the PlantPAx Lifecycle strategy, please contact your local process sales resource.

Tools and Methods

Once hardware, software and network infrastructure are upgraded, the PlantPAx migration tool is available to assist in migrating previous versions of PlantPAx to version 5.0. The migration tool is used for updating the tags and control logic in controller ACD files to version 5 process instructions. It is also used for updating process graphics displays containing global object references from previous library versions to the latest version. It is used for updating process graphic displays containing global object references from previous library versions to the latest version and will help minimize the amount of manual rework required.

Note: The tool does not support migration of AOIs or faceplates that have been customized or edited.



Lifecycle Services

Modernizing a DCS encompasses more than upgrading a system, it is about maximizing its life. By designing in support capability that will provide digital insight, maintainability, and the ability to optimize and improve over the life of the investment. Rockwell Automation provides professional services that actively support you throughout the lifecycle of your investment. Our integrated services agreements provide you the flexibility to support the system at the level that best complements your existing team and needs.

Appendix

Product Compatibility and Download Center

The Product Compatibility and Download Center (PCDC) can help you find product-related downloads, including firmware, release notes, associated Software, drivers, tools and utilities.

PCDC Website - Where the PCDC is.

PCDC Job Aid - How to use the PCDC website to compare products.

PCDC Quick Reference Guide - How to use the PCDC website to download products.

Asset Center

AssetCentre Inventory Agent Video - Using the Inventory Agent in AssetCentre

Manage Asset Lifecycles using FT AssetCentre - Manage Asset Lifecycles using FactoryTalk AssetCentre

Supporting Documentation

PlantPAx Distributed Control System Hardware Certifications and Specifications
https://literature.rockwellautomation.com/idc/groups/literature/documents/sr/proces-sr027_-en-e.pdf

PlantPAx Distributed Control System Selection Guide v.4.6
https://literature.rockwellautomation.com/idc/groups/literature/documents/sg/proces-sg001_-en-p.pdf
- During pre-release please reach regional process specialist for more information.

ControlNet to Ethernet/IP Migration Reference Manual
https://literature.rockwellautomation.com/idc/groups/literature/documents/rm/cnet-rm001_-en-p.pdf

PlantPAx Distributed Control System Infrastructure Configuration User Manual (available at launch)
- During pre-release please reach regional process specialist for more information.

Rockwell Automation Library of Process Objects: Configuration and Usage Reference Manual

Note: If you have any legacy DCS other than Rockwell PlantPAx to modernize, please see this link:
Distributed Control System Migration – Legacy competitive DCS

Supporting KB (RA Knowledgebase) articles

Tool: Converting FactoryTalk View SE HMI Alarms to A&E Tag-Based Alarms KBID: QA51785

PlantPAx Process Library 4.x security setup for FactoryTalk View SE & ME: QA39210

FactoryTalk Linx (formerly RSLinx Enterprise) Release History: IN5425

Knowledge base article 19232 – 'ControlLogix Hardware, Software, and Firmware for Redundancy KBID: 19232

Software Lifecycle Policies

Version Lifecycle		
▲	Preferred	• What customers should adopt to stay current • Priority for addressing anomalies • Priority for operating system patch qualification testing • Phone / self-assist support available
▲	Managed	• What customers adopt to stay current if they cannot adopt Preferred versions due to hardware dependencies • Priority for addressing anomalies • May be updated for new Windows OS support • Priority for operating system patch qualification testing • Phone / self-assist support available
▲	Limited	• Available to support customers who do not desire to stay current • Not a priority for anomaly resolutions • Phone / self-assist support available
▲	Retired	• Not available for download - May be available through technical support • Anomalies and Windows OS Support behaviors will not be addressed • Phone / self-assist support available

Hardware Lifecycle Policies

Product Lifecycle		
■	Active (Applies to Latest Offering)	Most current offering within a product category.
■	Active Mature	Product is fully supported, but a newer product or family exists. Gain value by migrating.
■	End of Life	Discontinued date announced - actively execute migrations and last time buys. Product generally orderable until the discontinued date. Outages on specific items may occur prior to the Discontinued date.
■	Discontinued	New product no longer manufactured or procured. Limited stock may be available in run-out mode, regionally. Repair/exchange services may be available.
■	LifeCycle Details	You will see this icon when a product represents multiple product lifecycles. Click the icon for the respective product to view the full listing of lifecycles.

Controller Hardware Comparison Chart

Controller Hardware Comparison Chart						
PlantPAx Release	PlantPAx Library	Controller Family	Controller	User memory	Ethernet/IP Nodes	Motion Axis
Process Controllers - ControlLogix						
5.0	5.0	5580EP	1756-L81EP	4MB	100	N/A
			1756-L83EP	20MB	250	N/A
			1756-L85EP	40MB		
4.6 4.5 4.0 3.0 3.0	4.1 4.0 3.5 3.1 3.0	5570	1756-L71	2MB	Network connections, per network module: 256 EtherNet/IP; 128 TCP (1756-EN2x)	Supports as many as 8 CIP Motion axes if using 1756-EN2T(R)
			1756-L72	4MB		
			1756-L73	8MB		
			1756-L74	16MB		
			1756-L75	32MB		
Skid Based Controllers - CompactLogix						
5.0	5.0	5380EP	5069-L32ERP	2MB	40	8
			5069-L34ERP	4MB	90	20
4.6 4.5 4.0 3.0 3.0	4.1 4.0 3.5 3.1 3.0	5370	1769-L24ER-QBFC1B	0.75MB	All CompactLogix 5370 controllers support 256 CIP™ connections and 120 TCP/IP connections	N/A
			1769-L33ER	2MB		N/A
4.6 4.5 4.0	4.1 4.0 3.5		1769-L36ERM	3MB		As many as 16 axes
4.6 4.5	4.1 4.0		1769-L19ER-BB1B	1MB		N/A

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