

### **Program Tiers**

#### Bronze

requirements
One credentialed
resource
for one capability

#### Silver

requirements
Two credentialed
resources
for minimum of two
capabilities

**Gold** requirements Three credentialed resources for minimum of three capabilities

Platinum
requirements
Four credentialed
resources
For minimum of
four capabilities

# Global System Integrator Program PlantPAx Capability Overview



The PlantPAx Capability is intended to promote a System Integrators' expertise in delivering process solutions leveraging the tools and techniques offered by Rockwell Automations unique PlantPAx solutions. <u>Link to product offering</u>

The PlantPAx Capability Learning Plan is available and posted to the System Integrator learning plan on Rockwell Automation University (RAU). Please review the SI Welcome Kit for more information on how to access RAU. PlantPAx Capability credentials are valid for two years.

Based on program tier requirements, companies must have a certain number of trained employees for recognized Capabilities. Certain capabilities have prerequisites. These prerequisites are required at the company level and do not require the same individual to be qualified for both the prerequisite and pursued capabilities. The training modules described below are the topics covered in the PlantPAx Assessment but are not required to be completed to achieve the PlantPAx Capability.

In addition to passing the PlantPAx Assessment, the System Integrator must submit to an Initial Project Audit of one process application to confirm they are meeting the design criteria laid out in our PlantPAx documentation. The reviews will be performed by local process domain experts. Partners must also complete an annual self-assessment.

## Requirements to receive capability

- Required number of employees obtain the Control and Visualization Capabilities based on partner tier level.
- 2. Required number of employees must pass the PlantPAx Assessment with a score of 80% or higher.
- 3. Complete an Initial Project Audit of delivered solutions, with an annual self-assessment.

Training Module	Platform	Course
		length (Minutes)
PRC23503 PlantPAx Model Builder	RAU	120
PlantPAx 5.0 How to Videos (3)	RAU	46
Overview of RM200 and HMI Framework		
Quick Start on the Process Library		
Building Alarms using PlantPAx Tools		
PRC21501 What is PlantPAx?	RAU	21
PRC21508 PlantPAx Process Library and Tools	RAU	37
PRC22601 Introduction to PlantPAx System Estimator	RAU	20
PRC23502 PlantPAx Regulatory Control Instructions	RAU	20
PRC23505 PlantPAx Real Time Process Optimization	RAU	10
PRC24506 Demonstrating PlantPAx Process Network Connectivity	RAU	11
PRC11002 Distinguishing Continuous vs. Batch Processes	RAU	11
PRC11011 Understanding Control in Process Applications	RAU	21
PRC11015 Basics of PID Control and Tuning	RAU	21
PRC21101 Understanding Alarm Management Standards	RAU	7
PRC24503 Demonstraining PID Control and Tuning	RAU	20
PRC21507 PlantPAx Batch Solutions	RAU	25
PlantPAx 5.0 Hardware Lab in OnCourse: PlantPAx 5.0 New Controller and	onCourse	120
Applications Development Lab <b>or</b> PlantPAx 5.0 Intro to Process System for		
Operations and Maintenance Lab		
On-Demand: PlantPAx 5.0 Features In-Depth (5)	RAU	600
<ul> <li>PlantPAx 5.0 On-Demand – New Features</li> </ul>		
<ul> <li>PlantPAx 5.0 On-Demand – I/O Processing Instructions</li> </ul>		
<ul> <li>PlantPAx 5.0 On-Demand – Regulatory Instructions</li> </ul>		
<ul> <li>PlantPAx 5.0 On-Demand – Motor Instructions</li> </ul>		
<ul> <li>PlantPAx 5.0 On-Demand – Cross Functional Instructions</li> </ul>		
PRC201EL PlantPAx System Design and Configuration (PRS019 or PRS019SI in	RAU	300
person courses also acceptable)		
Total Hours - PlantPAx		23.5 hours



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In addition to building competency, PlantPAx Capable System Integrators are required deploy solutions leveraging recommended practices as called out in the following publications. To maintain the PlantPAx Capability, participating System Integrators are required to pass an annual project review. The documents highlighted below provide details and instructions on how to implement a successful PlantPAx 5.x solution.

- 1. The bill of materials that comprise the system must align with the system elements published in the PlantPAx Selection Guide (**Proces-SG001**). <u>link to document</u>
- 2. The architectures used to deploy the PlantPAx DCS must align with the reference architectures published in the PlantPAx Configuration and Implementation Manual (Proces-UM100A). Link to document
- 3. The usage of Rockwell Automation's Process Objects (embedded or downloadable) ensures the system behavior aligns with performance, migration efficiency and industry standards (**Proces-RM200A**). <u>link to document</u>
- The PlantPAx Deployment Recommendations and Verification Tool found in Proces-UM100A, Appendix C shall be used to provide best practices and audit tools. <u>link to document</u>

## PlantPAx Project Review requirements are as follows:

- Complete the PlantPAx System Estimator (PSE) for the system and implement the system as defined in the PSE.
- At least 1 controller within the system is a P\_Controller with a minimum of 200 IO points and the embedded firmware instructions are utilized for the controllers IO.
- Utilize the HMI Graphics Framework as outlined in the <u>Rockwell Automation Library of</u> <u>Process Objects</u>. (Chapters 2 & 3)
- Complete the PlantPAx Verification Tool found in the <u>PlantPAx DCS Configuration and Implementation User Manual</u>. The Design Recommendations Tab of the PlantPAx Verification Tool must be followed and **some** of the specific items within it include:
  - HMI Application developed based upon the ISA 101 Level 1 thru Level 4 Organization principles.
  - Logical Organizer folders must be used within controllers to align with the Level 1-4
    organization used in the HMI. Controller is organized by process areas, NOT by device
    type ie. Do not program all motors in 1 program.
  - Each Level 3 Display has a corresponding Logical Organizer folder in the controller(s).
     Each Level 3 Logical Organizer folder contains a program(s) associated to a specific Level 3 P&ID type display.
  - Devices (Motors, Valves, Analog Inputs, etc.) must use Rockwell's Control Strategies
    implemented within Function Block 1 device/Routine. Devices that appear on a Level
    3 display are programmed within the associated Programs within the Logical Organizer
    dedicated to that specific Level 3 display.
  - Using PlantPAx tools, generate/configure alarms that are automatically grouped based upon the Logical Organizer within the controller(s).
  - HMI Display navigation configured to associate each button to annunciate alarm status for the buttons' associated display.
  - Register the PlantPAx system by obtaining a PlantPAx System ID