Welcome to the Productivity Suite Programming Software 1.6 Release Notes

----
This document describes some of what's new in this release of the Productivity Suite Programming Software. It also includes updated information for the documentation provided with this software. The information in this file and in the Help system is more up-to-date than that in the manual.

Contents

1. Welcome
2. Getting Started
3. What's New?
4. Technical Support Procedures.
5. Help File Changes.
6. Uninstalling the Productivity Suite Programming Software.
7. Contact Technical Support

Part 1: Welcome

AutomationDirect.com would thank you for using the Productivity Suite Programming Software. We have loaded many powerful and exciting features to the New Productivity Suite software; however we know that our customers sometimes have great ideas for features. Please feel free to give us input on the Productivity3000 product line and you may even request features that you feel would add more value to the software for your application.

http://support.automationdirect.com/techcontact.html

 Part 2: Getting Started

You can find "Getting started with Productivity Suite" information in the Productivity Suite help file by selecting the Getting Started topic in the Software Help file.

Part 3: What's New?

Please note that the entries in this section have been rotated to read information relevant to the current version first.

Productivity Suite Release Notes
Version 1.6.2.4
November 27, 2012

IMPORTANT NOTICES: Using this version of Productivity Suite to save or download a project created with previous versions may alter the project and its functionality. Making backup copies of projects is recommended.

Bugs Fixed:

1.) Outputs intermittently stay ON in Remote Slave units during a stop mode transfer.(Only applies to software version 1.6.1.6 & 1.6.0.19)

Note: If using a version older than 1.6, upgrade of software is not required.

Welcome to the Productivity Suite Programming Software 1.6 Release Notes

Productivity Suite Release Notes
Version 1.6.1.6
July 25, 2012

IMPORTANT NOTICES: Using this version of Productivity Suite to save or download a project created with previous versions may alter the project and its functionality. Making backup copies of projects is recommended.

Bugs Fixed:

1. Copy & Paste between projects can create multiple tags with the same Modbus address.
2. Dataview icon on the Monitor toolbar does not bring up Dataview Window.
3. Find/Replace fails to provide results for array tags when an index is provided. (1D and/or 2D)
4. FILI instruction in ladder, using Print Preview has rendering problems.
5. Copy-Past of an instruction using Bit-of-Word between GUIs does not create a new tag.
6. Firmware upgrade Report text indicates wrong slot number for HSO module.
7. Find/Replace fails to replace array elements with a new basic tag of the same type (1d and/or 2D)
8. Upload current retentive values and copy to initial values option not working.
9. Allow individual array tags to remain in Dataview on project upgrade from versions 1.4.1.1 or older.
10. Software locks up when transferring project with maximum monitor sessions.
11. Software fails to retrieve firmware info from the firmware file if not connected to the PAC.
12. Project containing an HSI module can still be downloaded to the PAC with older firmware.
13. When using 9 or more LCD instructions an error "LCD name not found" is generated.
14. Cannot enter and create a Bit-of-Word tag from any instruction that allows Bit-of-Word.
15. Print settings do not retain when moving between print & preview selections.
16. If a rung has 5 or more contacts and uses Bit-of-Word, the logic doesn't work correctly.
17. TagDB rename using any existing references in instructions that use Bit-of-Word will not follow the name change.

Productivity Suite Release Notes
Version 1.6.0.19
April 25, 2012

IMPORTANT NOTICES: Using this version of Productivity Suite to save or download a project created with previous versions may alter the project and its functionality. Making backup copies of projects is recommended.

Bugs Fixed:

1. Integer & Float tags will not print.
2. Opening project file from folder using right or double click opens software, but not the project.
3. SEQ instruction if 'Limit Cycles' is not enabled, done bit is not greyed out.
4. Use of array tags in PID tuning window causes error.

Features Added:

Welcome to the Productivity Suite Programming Software 1.6 Release Notes

1. Support for new P3-HSO (High Speed Output), P3-HSI (High Speed Input) & P3-16TD3P (Fault Protected) modules now supported.(Note: 1.6 S/W & 1.1.12.x F/W or later Required)
2. New High Speed Instructions:
   a. SMOV (Simple Move)
   b. VMOV (Velocity Move)
   c. WHSO (Write High Speed Outputs)
   d. SPOS (Set Position)
   e. REG (Registration)
   f. HOME(Find Home)
3. High Speed Module Testing Utility used to quickly test motor, input & output wiring connections.
4. Web Server feature that allows viewing of read only system tags & the ability to open, save or delete files from USB pen drive (if installed).
5. Bit of Word allowing a user to gain bit level access to Integer tag data types (includes 1D and 2D arrays).
6. Updated toolbars using icons that allow convenient access to functions plus adds more workspace for ladder, dataview & task management panels.
7. PID tuning window enhancements that allow viewing up to a maximum of 5 loops & data is kept updated if moving between tabs.
8. Ability to now do a Partial search & replace tag names using Find/Replace tool.
9. Find New High Speed Instruction Filtered Option added to Instruction Search of the Find/Replace tool.
10. Firmware update tool updated with new features:
    a. Be able to filter on selected modules from firmware file.
    b. View firmware file off line & view firmware file version(s).
    c. New individual firmware files in .adfw format.
    d. New all-in-one firmware file that contains all current module firmware for easy upgrade.
    e. 1.6 or higher software can use new .adfw or .zip file format.
Note: If upgrading from version 1.1.11.28 or older a second upgrade with the same 1.1.12.x firmware file is needed in order to use the web server.
11. Leading zeros for integer's option added for PKS (Pack String) Instruction.
12. Adjusting Font size in Print window now affects ladder & characters to help reduce number of overall printed pages.

Productivity Suite Release Notes
Version 1.5.1.2
November 29, 2011

IMPORTANT NOTICES: Using this version of Productivity Suite to save or download a project created with previous versions may alter the project and its functionality. Making backup copies of projects is recommended.

This version of software is **required** if upgrading any P3-550 unit to firmware version 1.1.11.27.

Bugs Fixed:

1. GUI locks up while transferring projects with retentive string array enabled.
2. String Array length is reset to 0 while transferring projects with retentive to initial value option enabled.
3. 2D Array with only 1 element for the "Row" dimension displays incorrectly in Tagname Database.

Productivity Suite Release Notes
Version 1.5.0.21

Welcome to the Productivity Suite Programming Software 1.6 Release Notes

November 16th, 2011

IMPORTANT NOTICES: Using this version of Productivity Suite to save or download a project created with previous versions may alter the project and its functionality. Making backup copies of projects is recommended.

This version of software is **required** if upgrading any P3-550 unit to firmware version 1.1.11.26.

Bugs Fixed:

1. After installing Productivity Suite software sometimes would come up in Demo Mode.
2. Several instructions will not fully paste into a new project. They will paste, but not all their tags will be added to the tag database.
3. P3-08THM MST tag names can be deleted in hardware configuration window.
4. Copy and pasting a task would cause duplicate task numbers.
5. Constant Strings have the wrong sizes when compiled using LCD instruction.
6. RX and TX: remote project tags are lost when saving the projects.
7. Rung Comments can be lost during normal edit operations.
8. Copying and pasting a rung with blank sub rung re-arranges rungs incorrectly after compiling.
9. After changing a tag from 32 bit to 16bit the now unused Modbus address is not freed.
10. When transferring a Project from USB Drive, duplicate SystemIDs can be created.
11. No word wrapping for Wire Label or Comment fields.
12. Monitor mode causes software to become sluggish.
13. Error Message when creating more than 1000 tags was improved to indicate a stop mode transfer is required.
14. Issue when using Tag Indexed Array Element in the Math instruction would cause wrong result.

Features Added:

1. Improvements to PRINT function to include:
    a. Wrap rungs
    b. Individual font setup for all comments
    c. Print selectable task & Dataview windows
    d. Additional tag DB print selections
2. Off delay function added to STMR instruction.
3. New Dataview tab added to Options to allow new features
4. Improvements to Dataview to include:
    a. Live trend graphing of tags
    b. Block fills on Discretes
    c. Enter an entire array into Dataview
5. The ability to Monitor values to a Dataview window from any instruction or from a ladder rung(s).
6. P3-USER-M is now installed with the software & available from windows menu.
7. New integer & string system tags for firmware major & minor versions.
8. Added new options for PID bias freeze of either on or use back calculation.
9. Improved software installer that allows the installation of multiple instances of the Productivity Suite software.
10. Removed P3-550 from hardware configuration list of hardware components & removed the ability to delete the P3-550 from the base.
11. New Comment & Instruction search feature added to the Find/Replace function.
12. Added the ability to send/ receive string tags with the MRX, MWX, RX & WX instructions.

13. Added new port ready MST bits to both P3-550 & P3-RS communication ports to indicate module ports are ready after a hot swap.
14. New P3-RS I/O update rate to allow a user to set the P3-550 to scan remote I/O every scan or custom settings of number of scans or a set time period.
15. Mouse Scroll sensitivity is page by page, not rung by rung.
16. Allow reordering of Tabs in Dataview.

Productivity Suite Release Notes
Version 1.4.1.1
Jan 31, 2011

IMPORTANT NOTICE: Using this version of Productivity Suite to save or download a project created with previous versions may alter the project and its functionality. Making backup copies of projects is recommended.

Bug Fixed:
1. Opening a project with Productivity Suite version 1.4.0.29 would remove the tags from the project's data logging configuration. If the project were sent to a PAC, no data would be logged.

Productivity Suite Release Notes
Version 1.4.0.29
Dec 09, 2010

Bugs Fixed:
1. Histogram configurations lost if a runtime project transfer performed. 'Send Configuration to PAC' would need to be repeated to restore histogram function.
2. Array Statistics (STA) instruction overflow bit would not reset when error condition was removed. Overflow bit would clear upon disabling the instruction instead.
3. Improvement to printing layout of tag database.
4. Toggle Coil (TGC) instruction input was missing the edge-driven indicator, an upward facing arrow.
5. It was possible to corrupt the tag database with multiple entries of a single tag name, each having a different system ID. The issues that allowed the corruption to occur have been fixed. The integrity of the tag database is now regularly checked during editing and each time the project is compiled.
6. Data type of an array could not be changed once created. Attempting to change it would merely increment the system ID or freeze up the tag database.
7. Network Read (RX) and Network Write (WX) 'Refresh' button would not properly update the tags between the projects.
8. Functions assigned some shortcut keys are corrected.
a. CTRL-F9 download project from PAC
b. ALT-F opens File menu
c. ALT-S opens Setup menu
d. ALT-P opens PAC menu
e. ALT-T opens Tools menu
9. Some Ethernet situations between the programming PC and PAC were not handled properly, infrequently causing a project transfer failure.
10. The task names of multiple CALL (CALL) instructions were case-sensitive. If the case of the specified tasks did not match the character case of the task name exactly, the calls would not execute.
11. Array Statistics (STA) will now only allow Sum operation when the array is Boolean. Other mathematic functions are not allowed.

12. Using Custom Protocol Input (CPI) or Custom Protocol Out (CPO) instruction in a called task would result in a project that would halt when that task was called.

13. Dialog concerning tuning constants was misleading. Also, the project status (out of date vs. up to date) was not properly updated after changes to the tuning options.

14. Project Backup Directory could not be changed.

15. A tag could be incorrectly marked as In Use even if removed from all ladder.

16. Or Out (Or) instruction not working properly with Debug Single Step.

17. DataWorx (DWX) instruction that employed a string tag for the Where field and the MAP field list was empty would not compile after reopening a project.

18. A project with more than 64 GS Drives Read (GSR) 64 GS Drives Write (GSW) instructions could cause a CPU fault on transfer, or not operate properly if a transfer was successful.

19. Copy Data (CPD) instruction would stop copying tags if one tag were erroneous (array index out of range). It will now copy all data of all valid tags even if an invalid tag is encountered.

20. Normally Closed (NC) contact using an array tag with a variable index and a branch would fail compile.

21. GS Drives Read (GSR) instruction could apply values to the wrong tags (P2.00 - P2.10) depending on which drive model is selected and which of these tags were in use.

22. It was possible for actions in Hardware Config to cause an I/O module to be missing a tag in the tag database. The cause of this issue has been fixed. If this problem is found in an existing project, drop the same module on top of the one with the missing tag. This will regenerate the tags for it in the tag database.

23. Using Unpack String (UPKS) instruction with a Destination tag of data type 'Integer, 8 Bit Unsigned' would interpret the characters as Hex instead of Decimal values. The instruction should translate as Decimal regardless of the destination data type.

24. If a contact were shorted (wire drawn around a contact, as for troubleshooting) the values displayed in monitor mode on that rung would be misplaced. The rung would operate as expected though.

25. Having five or more PID loops in a project would cause loops to not execute.

Features Added:

1. Added features to make connections to a PAC over the internet more reliable and more manageable:

a. Added selectable UDP Port Number to the User Defined Connections settings. Connectivity to multiple PACs behind a firewall requires unique UDP Port Numbers.

b. Added adjustable timeout (up to 30 seconds) for the PAC connection attempt. The setting is located under Tools/Options/Connection.

c. Software connection attempt to User-Defined connections will now make two retries. A connection countdown timer was added to the PAC Connections dialog to show the progress.

d. User-Defined PAC connections are now automatically saved and can be imported and exported for moving them between PCs.

e. Messaging between a PAC and Productivity Suite over Ethernet has been made more tolerant of messages being out of order, lost, or delayed.

2. CTRL-A selects all ladder in a task

3. Adding a contact in ladder will now advance the cursor to the right, instead of remaining on the new contact.

4. The cursor location will now jump to column 11 if any coil is placed somewhere other than the end of the rung. Previously, a warning would appear stating the location was invalid for a coil.

5. Added management rules and tools for in-use tags of modules being swapped or deleted in the hardware configuration.

6. The hardware configuration right click menu for the P3-550 has a new option: Enable All Hot Swap. It will mark all PAC I/O Hot Swap Enabled. It is intended for code troubleshooting in the absence of a complete hardware setup.

7. Added Standard Deviation option to Data Statistics (DATA) instruction.

8. Added option to make the inputs of several instructions level driven that were previously edge driven only. This can simplify their use in run when called tasks.

Welcome to the Productivity Suite Programming Software 1.6 Release Notes

a. Inc/Dec (INC)
b. Toggle Coil (TGC)
c. Shift Rotate Array (SRA)
d. Shift Rotate Bits (SFR)
e. Counter (CNT)
f. Simple Counter (SCNT)
g. FIFO/LIFO (FILI)
9. The Find tool becomes Find/Replace with an expanded search area, improved display of results and selective replacement of tags.
10. PID (PID) minimum sample rate goes from 50ms to 0ms. When set to 0ms (or any value below the current scan time), the PID loop calculates on every scan.
11. Task Comments can be displayed at the top of ladder.
12. All system tags of new projects now have standard comments associated with them by default. These comments will not be added to existing projects to avoid overwriting user-entered comments.
13. Added 'Copy Binary' option to Copy (CPY) instruction. This option will copy the binary pattern from one tag to another instead of copying the value.
14. Windows 64-bit operating systems have USB port support for programming.
15. Added validation for the project version. Upon opening a project, Productivity Suite will determine which version of Productivity Suite was used to generate the project. If a project is being pulled forward to a new version of Productivity Suite, the user is prompted to make a backup copy. Pulling projects backwards is not allowed and the user would be prompted to obtain the appropriate version of software to continue.

Productivity Suite Release Notes
Version 1.3.0.13.
Mar 31, 2010

Bugs Fixed:
1. Ladder with an OR, two ANDs and another OR could execute as all ORs.
2. Logical Word (LOGW) instruction allowed float and BCD inputs.
3. The space preceding (in a constant string would be removed from the string.
4. Disabled instructions (STA, CPA, FLA, SRA, ALM, LALM, LIM, CMPV, FIB) would write to Boolean outputs.
5. Increasing the size of an existing array could cause some elements of two arrays to be assigned same memory locations.
6. ASCII Out (AOUT) instruction enable leg not labeled as edge-trigger.
7. Custom Protocol Out (CPO) instruction enable leg not labeled as edge-trigger.
8. Clear Serial Port Buffer (ACLR) instruction enable leg not labeled as edge-trigger.
9. Exported CSV does not include Initial Values for String Array.
10. Cannot embed empty parenthesis in a string literal.
11. Array tags IN USE indication not always correct.
12. Software not enforcing the limit of 64 forceable tags maximum.
13. Absolute encoder (ABSE) instruction not asserting offset to counts in Gray Code modes.
14. PID bias freeze not working properly.
15. CPD instruction could circumvent force tag if single tag was changed successively in one instruction.
16. Average (AVG) instruction time units were labeled and documented as milliseconds but executed as seconds. Execution changing to be milliseconds.
17. Average (AVG) instruction output response rate potentially altered by fast scan time or data types assigned.
18. Modbus Write (MWX) or Network Write (WX) instructions SKIP EXECUTION IF BUFFER IS GREATER THAN XX% FULL not functional on P3-RS serial port.

Welcome to the Productivity Suite Programming Software 1.6 Release Notes

Features Added:
1. Copy/paste of a task now supported.
2. On project transfer, copy current values to initial values for retentive tags.
3. Red forced tag indicator in Data View.

Part 4: Technical Support Procedures

If you need technical assistance, you may find the information you need on our web site at
www.automationdirect.com/support. If you prefer, you can send us your inquiry at
http://support.automationdirect.com/techinquiry.html.Or you may call AutomationDirect at 1-770-844-4200 -- our
technical support team is available to answer your questions weekdays from 9 AM - 6 PM EST. Or you can fax the
information to us at 1-770-886-3199 any time of day. Please provide the Version information when requesting technical
support. You'll find it under the Help > About.

Part 5: Help File Changes

We request that you contact us with any corrections, enhancements, changes that you would like to see in the
documentation please send us an inquiry at p3000feedback@automationdirect.com or select the feedback topic in the
software help file, Please always check the On-Line Help files and our web site at
http://www.aboutplcs.com/P3000/software/help/P3000.htm for updated and new information.

Part 6: Uninstalling Productivity Suite Programming Software

Before Starting: Data Backup
If you have saved projects that you feel are important to you, then you will need to make a backup of these files. Please
backup your project files before uninstalling.

Before Starting: Remove USB Cable
If the P3-550 is connected to the PC USB port, then the USB driver will be active. Please Remove USB Cable between PC
and P3-550 before Uninstalling.

Part 7: Contact Technical Support

Telephone: 1-770-844-4200
Our technical support hours are from 9am to 6pm Eastern Standard Time Monday through Friday.

FAX: 1-770-886-3199

Technical Support Inquiry
http://support.automationdirect.com/techinquiry.html

Discussion Forum: AutomationDirect Customer Forum
http://forum1.automationdirect.com/