BLUE 3.2
Read Me

Document Revision: 03

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1 SOFTWARE DESCRIPTION

This software provides an integrated development environment that enables you to use a personal computer to create a Human Machine Interface (HMI) user application. The HMI user application, used by the runtime software, can run on multiple platforms.

2 SYSTEM REQUIREMENTS (SCREEN EDITING SOFTWARE)

Please refer to the user documents.
From the Manual top page, click the [Feature Guide] icon and in the table of contents select [Before Use] and then [Operating Environment].

https://www.pro-face.com/manual/blue/history/en/index.htm

3 ACCESS RIGHTS

To Install, Uninstall or Operate the software application, you require administrator rights on your computer.

4 FOR SECURE APPLICATIONS

Please refer to the user documents.
From the Manual top page, click the [Feature Guide] icon and in the table of contents select [Before Use] and then [For Secure Applications].

https://www.pro-face.com/manual/blue/history/en/index.htm

5 LICENSE / REGISTRATION

Please refer to Help from the Schneider Electric License Manager.

6 TOOLS

You can distribute the following tools installed in the [\Tools] folder.

- Export Validation Tool
- User Management Tool

7 WHAT'S NEW

Please refer to the user documents.
From the Manual top page, click the [Feature Guide] icon and in the table of contents select [Before Use] and then [What's New].

https://www.pro-face.com/manual/blue/history/en/index.htm

8 FIXED LIMITATIONS

8.1 Screen Editing

8.1.1 Screen Editing Software

- The problem of [AltGr]+[S] behaving the same as [Save As (Alt+Ctrl+S)] has been fixed.

- The problem of the Unit Converter not working properly on the display unit when the language of the screen editing software was set to one of the following, has now been fixed.
  - French
  - German
  - Italian
  - Portuguese
  - Spanish

- The problem of the screen editing software displaying source properties that are not described in the user manual has been fixed.

- The problem of some [Name] properties allowing entry of invalid characters has been fixed.

8.1.2 Screen / Content

- The problem of not being able to use the following source properties in other properties when [Solid] in [Type] of Border or Horizontal / Vertical Line in Grid or Scroll Grid is selected, has been fixed.

  - Border.Color.Value

  - HorizontalLine.Color.Value

  - VerticalLine.Color.Value

- The problem of the object state not changing properly when changing the state from the tool bar in the Screen Editing software when a Content Display object references a content screen that has any of the following objects –which have multiple states– has been fixed.

  - CheckBox

- ➢ Lamp

- ➢ N-State Lamp

- ➢ Pipe

- ➢ Radio Button

- ➢ Switch

- ➢ Toggle Switch

- The problem of displaying the unsupported [Angle] property for screen and content layouts has been fixed.

- The problem of a bind error displaying when opening a project that had variables set up with a binding relationship with any of the following Grid or Scroll Grid properties has been fixed.
  - Border.Color.Value
  - HorizontalLine.Color.Value
  - VerticalLine.Color.Value

8.1.3 Parts/Shapes

8.1.3.1 Alarm Summary

- The problem of incorrect column titles in an Alarm Summary object when using text from a Language Table has been fixed.

8.1.3.2 N-State Lamp

- The problem of the Multi-state lamp not working properly under the following conditions has been fixed:

  - ➢ [Type] = [Word]

  - ➢ [Status Change Condition] = [Bit]

  - ➢ [Undefined Bit] = [Use]

  - ➢ [Number of States] = Less than 33

8.1.3.3 Numeric Display

- The problem of using the following Numeric Display object properties as source properties has been fixed.
  -HiHi
  -Hi
  -Normal
  -Lo
  -LoLo

8.1.3.4 Switch

- The problem with using the unit converter with the source property in a Switch part's [Text] field has been fixed.

8.1.3.5   Pie

- The problem of the screen editing software displaying an error if you associate a Pie object's [Transparency] property as the source property of a graphical object property, has been fixed.

8.1.3.6   Polygon

- The problem of associating properties with animation other than [Fill Level] has been fixed.

8.1.3.7   TextBox

- The problem of not being able to assign a source property to the [Enable] property in the [Shadow] setting when using a Text object has been fixed.

8.1.4   Converter

- The problem of not being able to type numbers directly into fields when you use 51 or more ranges in the Range Converter has been fixed.

- The problem of BOOL values not working with the "!" operator in the Expression converter has been fixed.

- The problem of the project file being corrupted and converters disappearing in the Range Converter on reopening a project after [Data Type (Result)] was set to ColorID, and after the [Value] in ranges 2 or greater was reverted to ID:3, has been fixed.

8.1.5   Script

- The problem of scripts not validating correctly, potentially causing unexpected behavior on the display unit, has been fixed.

- The problem of showing the following properties when entering "OperationLog.ExportData" in an Operation log script block has been fixed.
"OutputFolderName"
"OutputFileName"

8.1.6   Alarm

- The problem of not being able to associate a graphic object property to the Alarm Message property has been fixed.

8.1.7   Recipe

- The problem where exporting a recipe family deleted files that already existed in the destination folder has been fixed.

- The problem of the recipe editor not refreshing automatically after importing recipes has been fixed.

- The problem of not being able to delete all the recipe groups at the same when the project had many recipe groups has been fixed.

8.1.8 Security

● The problem where changing the navigation method caused issues with the Security Level function set up on each screen has been fixed.

8.1.9 Variables

● The problem of not being able to use the name "Structure" for a variable of type Structure has been fixed.

● The problem of child element names changing when copying and pasting structure variables has been fixed.

● The problem of not being able to use the [Duplicate] command to make multiple copies of an object with a property associated with an array variable that has a name that ends in the number zero "0", but not a number such as 10, 20 and so on, has been fixed.

● The problem of not being able to validate the input range for byte variables has been fixed.

8.1.9.1 Symbol Link

● The problem of not being able to import TIA Portal symbol files from external storage has been fixed.

● The problem of incorrect calculation of device addresses when importing variables created in EcoStruxure Machine Expert or SoMachine has been fixed.

● The problem of failing to import a symbol file if the names of folders and variables are the same has been fixed.

● The problem of displaying the incorrect error message when importing xsy file in Symbol Link has been fixed. The new error message is:
"Array variables with addresses cannot be imported by a xsy file because address calculation is not supported. If you use array variables with addresses, import a xvm file."

● The problem of not being able to import Rockwell L5K files that included variables with descriptions in parentheses "( )" has been fixed.

● The problem of missing symbols on opening a project file after importing symbols from a TIA Portal file has been fixed.

8.1.10 Driver

8.1.10.1 Siemens AG TIA Portal Ethernet

● The problem of not being able to import symbol files with multiple hierarchical structures has been fixed.
For example, TIA Portal PLC is in Group1 and Group2 and PLC2

8.1.10.2 CAN in Automation CANopen Slave

● The problem of a value not appearing in the [Speed] drop-down list in the communication settings for the CANOpen Slave device driver has been fixed.

8.2 Transfer

8.2.1 IPC Series and PC/AT

- The problem of not being able to use the Screen Editing software to check the status of the Write filter during transfer when the display unit uses the Windows 8.1 or later Embedded operating system has been fixed.

8.3 Display Unit Operation

8.3.1 Parts/Shapes

8.3.1.1 Block Trend

- The problem of not showing the proper range on a display unit after changing a Block Trend Graph's Min/Max global range and changing the Block Trend Graph's display mode has been fixed.

- The problem of the display unit freezing after rapidly changing screen/content that includes a block trend graph has been fixed.

8.3.1.2 Picture Display

- Fixed an issue where images failed to display properly in a Picture Display object when its [Visibility] property value was changed dynamically with a variable or script.

8.3.2 Operation Log

- Various performance issues with the operation log have been improved.

8.3.3 Logging

- The problem of logging resuming only after the specified interval elapses from the previous logging when a logging group's [Condition Type] is [Periodic] and its interlock setting (Source property name: Interlock) changes from ON to OFF has been fixed.

8.3.4 Driver

- The problem of communication recovery after downloading a program to one of the following PLCs has been fixed:
  - CoDeSys Automation Alliance – CoDeSys V3 Ethernet
  - Schneider Electric – PacDrive
  - Schneider Electric – SoMachine Network

8.3.4.1 Mitsubishi Electric Corporation - iQ-R/F Series Ethernet(SLMP Client)

- The problem of the display unit freezing or rebooting unexpectedly when reading 96 or more Module Access Devices (-G) at the same time has been fixed.

8.3.4.2 Mitsubishi Electric Corporation - Q/QnA Series Ethernet / Q/QnA Series Serial

- The problem of an incorrect value set to the last device in a write operation when writing consecutive bits in multiples of 8 bits to a TS device has been fixed.

9 LIMITATIONS

This section lists the limitations that are applicable to both the Screen Editing Software and Runtime.

9.1 License

● In the Schneider Electric License Manager, if a version 3.0 trial license is still active, please remove it.

9.2 Screen Editing

9.2.1 Screen Editing Software

● You cannot search for a variable in an array variable element by its full variable name. Search for either the name of the array variable or the variable used in the array element. For example, if the search target is "Var1[Var2.Value].Value", search "Var1.Value" (name of array variable) or "Var2.Value" (name of variable used in element). Search will not work with "Var1[Var2.Value].Value".

● If there are a large number of variables (for example 20000) and you perform many filter actions in the Variable Editor columns, the mouse may show the busy icon in the Variable Editor. On relaunching the application, the mouse will return to its normal icon.

● You cannot use the comma "," as a decimal separator in the screen editing software.

9.2.2 Project File Conversion

● When using the screen editing software with a project converted from a previous version, an error is incorrectly shown for a N-State Lamp object's [Variable] property during validation.
Double click the error and the error will disappear.

● Before opening a project file in this version, refer to the user documents.
From the Manual top page, click the [Feature Guide] icon and in the table of contents select [Before Use] and then [Notes of Project File Conversion].

https://www.pro-face.com/manual/blue/history/en/index.htm

9.2.3 Project File Size

● If any of the following applies to the project file, run Screen Editing Software on a 64-bit operating system.

➢ The total number of variables (Primitive and Complex) is 40000 or more

➢ The total number of Symbol Links is 10000 or more

➢ The total number of recipe aggregates is 10000 or more

➢ The total number of screens and content is 150 or more

9.2.4   Parts/Shapes

9.2.4.1   Alarm Summary

- In an Alarm Summary part, when you change column items or change their order from the default, you cannot reference the "Columns[*].Title" property from other properties. If you do make this reference, errors may arise or the application may not run properly.

9.2.4.2   N-State Lamp

- Even if some of the conditions of states in a N-State Lamp are undefined, an error may not display in the screen editing software. Double-check the conditions for all the states.

9.2.4.3   Web Browser

- The Web browser part does not support Serbian fonts. In the Screen Editing software, even though you can set the [Font Type] to [Serbian_Gothic], the Serbian font will not appear on the display unit.

9.2.4.4   Content Display

- The width and height of a content display and referenced content may not be correct when the values are referenced from other properties or script.

9.2.5   Font

- Chinese_Simplified_GB2312_Gothic will not be supported in the next version, nor in later versions. Project files that use this font from previous versions will be converted to Chinese_Simplified_GB18030_Gothic.

9.2.6   Trigger / Operation

- An error does not occur even if you set one of the following unsupported objects on a Touch trigger.

  - Alarm Summary

  - Hardware Configuration

  - Ingredient Viewer

  - Picture Display

  - Web Browser

  - All Layout Objects

  - Screen / Content

  - Group Object

- [Alarm Group] operations do not support system errors. In the Screen Editing software, even though you can set [Alarm Group] operation to [SystemErrorGroup], it will not run on the display unit.

- For the [Alarm Occurrence] trigger if you specify an alarm group and select [When Occur], on reopening the project it returns to [==].

9.2.7 Variables

- In the array editor, if you change array dimensions while narrowing the search criteria in the search function, the search may not update correctly.

- Do not import a variable file with a variable named "Structure".

9.2.7.1 Symbol Link

- After importing a symbol file, do NOT delete the associated driver and then add it again. If you need to delete and add the driver, first delete the symbol file and then delete the driver.

- The following data types are either not supported or they are converted to another data type during Symbol Link import:

  Not Supported

  ➢ ENUM

  ➢ INTERFACE

  Converted to a primitive type of the source

  ➢ SUBRANGE

  ➢ POINTER TO

  ➢ REFERENCE

  Converted to Structure

  ➢ UNION

  ➢ FUNCTION_BLOCK

- NamedBasicType in Rockwell L5K File is imported as String type in Symbol Link.

- Non-IEC formatted addresses in Unity-Pro File are imported in Symbol Link, however the addresses for these variables become blank. Please delete these variables.

- When importing a SoMachine Basic Modbus Symbol file (.SMBP), variables associated with registers %IWS and %QWS do not import correctly.

- After importing variables in Symbol Link, you can create variables with a user data type based on the Symbol Link. If you delete the Symbol Link, the Screen Editing Software does not display an error message to identify there is no reference for the created variable. You need to manually delete these variables or create the user data type.

- After importing a TIA Symbol file, do NOT rename the folder for the imported symbol file. If you need to rename the folder, first close the project and exit the screen editing software.

- Changing the input range of variables imported using Symbol Link cannot be saved.

- Do not import L5K symbol files that include Arrays or Structures as pre-defined tags.

9.2.8 Driver

- When using the following drivers, after importing the Symbol File, remove all unused variables.

  ➢ CoDeSys Automation Alliance - CoDeSys V3 Ethernet

  ➢ CoDeSys Automation Alliance - CoDeSys V2 Ethernet

  ➢ Schneider Electric - PacDrive

  ➢ Schneider Electric - SoMachine Network

9.3 Transfer

- In broken mode, you cannot use File System transfer to upgrade the run time before version 3.1.100.

- When transferring a project file that exceeds the maximum size limit, the Screen Editing software will sometimes show an incorrect error message. The project size limit depends on the display unit.
  When transferring via USB cable or Ethernet, the Screen Editing software displays the message "Download Failed".
  On the other hand, when transferring via File System, even if you press the [Transfer] button, the display unit shows no indication of an error. However, if you review the system error log, you can see a record that indicates the display unit does not have enough space.

- Do not press the [ALT] key during a transfer operation. Pressing [ALT] will sometimes cause the transfer operation to fail.

- Transferring a project with many image files to the display unit may take a considerable amount of time.

- The first time you download to a display unit with GP-Pro EX installed, if [Download Ethernet Settings] is enabled in the project file, at the end of the download operation the screen editing software shows a download error even if download is successful.

9.3.1 IPC Series and PC/AT

- When using run time version 3.1 or earlier, you cannot transfer project files from version 3.1 Service Pack 1 or later.
  If you transfer the project file in the above condition, the following error message appears in the screen editing software.
  [Unable to update using download operation. Use the installer to update run time to the latest version.]
  In order to transfer, the run time must be re-installed with the same version, or later, as the screen editing software.
  Install the run time from the following path on the installation DVD.
  "\BLUE_Setup\BLUERuntime\BLUERuntime.exe"
  Installing the run time erases any previously transferred project files. After installation,

transfer the project files again.
If .NET Framework is not already installed in the run time installation destination, or its version is older, .NET Framework is also installed. After .NET Framework is installed, the destination unit is restarted.
When installing the run time, there is no need to uninstall the previously installed run time.

9.3.2 External Storage (SDCard / USBStorage)

- For the following data, when using USB storage as the save destination, and following the initial transfer you remove USB storage and delete the data, after the next transfer you may not be able to save the data to USB storage.

  ➢ Alarms

  ➢ Recipes

  ➢ Logging

  When this occurs, use File System transfer.

9.4 Display Unit Operation

9.4.1 Screen / Content

- If the Scroll Grid Content is smaller than the Content Display object, the Scroll Grid Content is magnified to the Content Display object.

- Changes in values may not be reflected in screen drawings while there are frequent system errors, you are continually accessing back up memory, and there are many changes to variable values.

9.4.2 Hardware Configuration Screen

- When restarting the run time by using an operation in the Hardware Configuration screen, the status of external storage may not be updated.
  When that happens, cycle the power on the display unit.

- When implementing a filter in the filter setup screen [Filter Simplified] with the Operation Log Screen in a Hardware Configuration, sometimes items do not display correctly.

- In the Hardware Configuration screen, when you configure Pro-face Connect parameters for the first time, [Save & Restart] will not restart the display unit. Use some other method to restart, such as powering OFF/ON.

9.4.3 Keypad

- While the keypad is displayed, reverse display may not show properly for rapid touches. This is only a display issue and values are written properly.

9.4.4 Parts/Shapes

9.4.4.1 Alarm Summary

- You can display up to 146 items in the Alarm Summary part's filter setup screen [Filter Simplified]. When there are more than 146 items, narrow down the list by either using the [Search] field or the [Filter Detailed] settings.

- When implementing a filter in the filter setup screen [Filter Simplified] with the Alarm Summary part, sometimes items do not display correctly.

9.4.4.2 Numeric Display

- Using a Numeric Display, you cannot enter values after the decimal point for recipe ingredients set up with float values.
  Please use the Ingredient Viewer to modify these ingredient values.

9.4.4.3 Web Browser

- The Web browser part no longer supports TIFF and MNG image file formats.

9.4.5 Trigger / Operation

- When animation or change in visibility hides a pressing object, Touch trigger (Release or Click) does not occur during that. The triggers operate as if the object is not hidden.

- The more [Array] Operations with the [All] check box selected, the longer it will take for the first screen change.

- When using the [File Management] Operation, if the file or folder name uses non-ASCII characters, the file or folder name will not display correctly in the [Confirmation Message] displayed by the [File Management] Operation.

- While external storage is not recognized by the display unit and an [External Storage] operation is run, there is no system error.

- The [Inactivity] trigger does not recognize calibration as a touch operation, so the inactivity status will continue.
  As a result, when using the [Inactivity] trigger, it may be executed in the middle of a calibration touch operation.
  When using the [Inactivity] trigger, consider combining with other conditions in executing operations.

- When a [Value Change] trigger, set up with a Hold Delay, is associated with an object property, a change in any of that object's properties caused the timer for the Hold Delay to reset even though there was no change in the actual object property selected for the trigger.

9.4.6 Alarm

- When starting up the run time, the more Active state alarms you have in the project the longer the start up time.

9.4.7 Logging

- If a data logging operation occurs while a [File Management] Operation is in progress, sometimes data may not be logged depending on the logging frequency.

- SQL reserved words may not be used for the names of logging groups.

9.4.8 Network

- If you set an IP address that duplicates another device on the local network in operation, or if you connect a device with an IP address that duplicates the display unit to the local network, you cannot detect duplicating IP addresses.
  Only at runtime startup, the runtime check the IP address of the device on the local network and a system error occurs if there is duplication with the display unit.
  After changing the IP address of the display unit, the runtime will be rebooted, so please check whether system error has occurred after rebooting.

9.4.9 OPC UA Server

- When using the OPC UA server function, on first starting up the display unit generates a server certificate. On first connecting to the server, the OPC UA client verifies the server's certificate.
  As the server certificate is renewed in the following cases, the OPC UA client may have to check the server certificate again.

  - ➢ In the Hardware Configuration screen, from the [OPC UA Server] menu the command [Regenerate Certificate] is selected.

  - ➢ Transfer via File System (This issue does not arise with Ethernet and USB cable transfer.)

- When using OPC UA Server node ID with Structure and Array variables, a duplicate of the Structure or Array name will appear.
  For example, the node ID for [Target1] in [Str.WORD1] becomes "[Target1.Str.Str.WORD1]".

9.4.10 SP5000 Series Power Box / Open Box

- When using CANopen Slave and TIA Portal Ethernet drivers at the same time, do not add any more drivers. Additional drivers could interfere with CANopen Slave communication.

9.4.11 SP5000 Series Power Box

- As there was an issue with availability when using Web Server and Web Viewer simultaneously, you cannot simultaneously use them in this version. Using them simultaneously will be supported in a future version.

9.4.12 GP-4100 Series

9.4.12.1 CoDeSys Automation Alliance - CoDeSys V2 Ethernet / Schneider Electric – PacDrive

- When using GP-4100 Series with the following driver, sometimes connection system errors will occur.

> ➢ CoDeSys Automation Alliance - CoDeSys V2 Ethernet

> ➢ Schneider Electric - PacDrive

9.4.13 ST6000 Series

- Flow control XON/XOFF is not available.

9.4.13.1 Rockwell Automation, Inc. DH-485

- If you use a speed of 9600, sometimes a timeout error occurs.

9.4.14 IPC Series and PC/AT

- When using multibyte characters for file or folder names for logging, operation log, and alarm export destinations, the system locale for the operating system must be set appropriately.

- When using multibyte characters for the file or folder name for an Image Display part's image save destination, the system locale for the operating system must be set appropriately.

- When the group name for general users is not "Users", such as "utilisateurs" on a French operating system, add full control access rights to C:\ProgramData\Pro-face\BLUE Runtime\data to the user group.

- Use [Run as administrator] the first time you start the run time after installing it. From the Start menu, right-click the [BLUE Runtime] icon and from the shortcut menu select [Run as administrator]. If you do not run as administrator, the Welcome Screen may not appear.

9.4.15 External Storage (SDCard / USBStorage)

- While USB storage is being continuously accessed, even though you eject the USB device, it may not work.
  Provide a function to either interrupt access to USB storage or change the storage destination.

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10.2   SQLCipher

10.3   OpenSSL

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10.5   libpng

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10.6   libxml2

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10.7   ipsec-tools

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10.8   ProtocolBuffers

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10.9   protobufjs

10.10 deepmerge

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