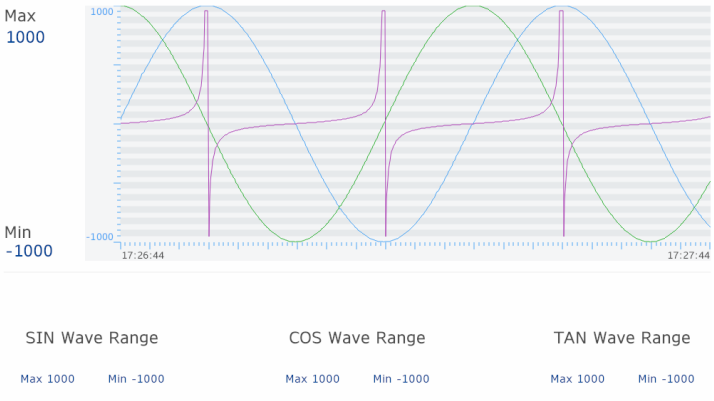
Sample Templates Document: GPC_TrigFunction01.blu



Document copyright policy:

All pertinent state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

Failure to use Schneider Electric software or approved software with our hardware products may result in injury, harm, or improper operating results.
Failure to observe this information can result in injury or equipment damage.

Safety Information

Important Information

NOTICE

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

About the Book

At a Glance

Document Scope

This manual describes how to use this product.

Validity Note

This documentation is valid for this product.
The technical characteristics of the device(s) described in this manual also appear online at *http://www.pro-face.com*.

The characteristics presented in the present document should be the same as those that appear online. In line with our policy of constant improvement we may revise content over time to improve clarity and accuracy. In the event that you see a difference between the document and online information, use the online information as your reference.

Registered Trademarks

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Product names used in this manual may be the registered trademarks owned by the respective proprietors.

Related Documents

You can download the manuals related to this product, such as the software manual, from our support site at *http://www.pro-face.com/trans/en/manual/1001.html*.

Product Related Information

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In the event this product does not run properly due to whatever reason, it may be difficult or impossible to identify a function. Functions that may present a hazard if not immediately executed, such as a fuel shut-off, must be provided independently of this product. The machine's control system design must take into account the operator being unable to control the machine or making mistakes in the control of the machine.

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

The application of this product requires expertise in the design and programming of control systems. Only persons with such expertise should be allowed to program, install, alter, and apply this product.

- Follow all local and national safety standards.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

For additional information, refer to NEMA ICS 1.1 (latest edition), "Safety Guidelines for the Application, Installation, and Maintenance of Solid-State Control" and to NEMA ICS 7.1 (latest edition), "Safety Standards for Construction and Guide for Selection, Installation and Operation of Adjustable-Speed Drive Systems" or their equivalent governing your particular location.

Table of Content

Target: All target models

Driver: None

BLUE version 3.4 or later

Template Overview

This template has Trigger Function with Minimum value and Maximum Value as Input. SIN, COS, and TAN are Different Wave Ranges.

Project structure

On Simple_Demo screen, Numeric Displays and TrendGraph are placed.

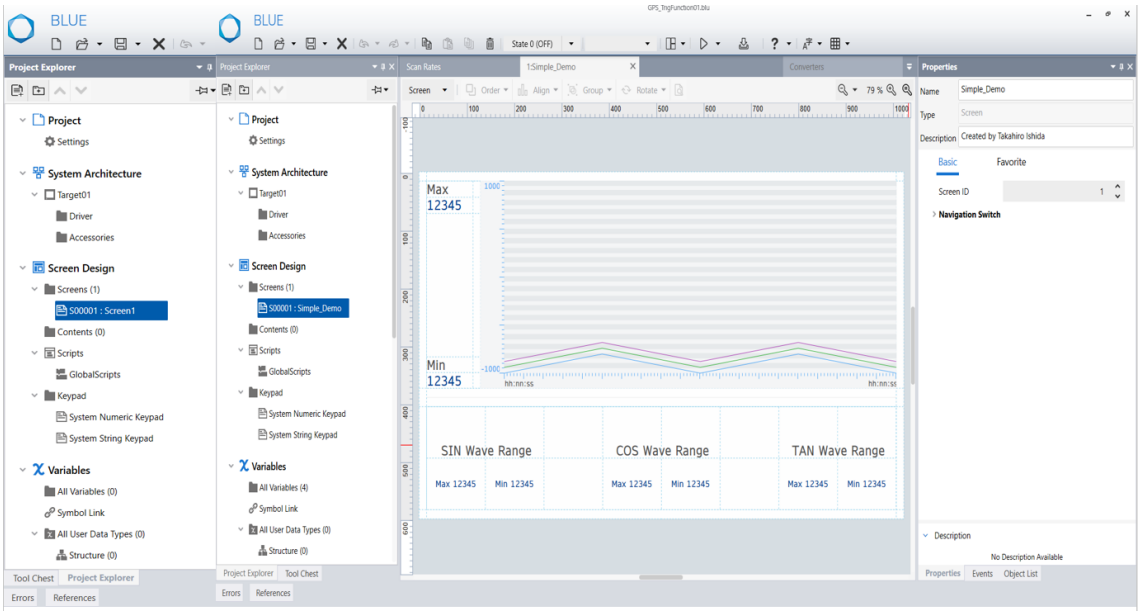
Screen	
Simple_Demo	GPS_TrigFucntion01

Run Time Behavior

Runtime/Simulation of this template has a Trigger Function, edit the max and min value with range of -1000 to 1000 to view sin, cos, and tan waves.

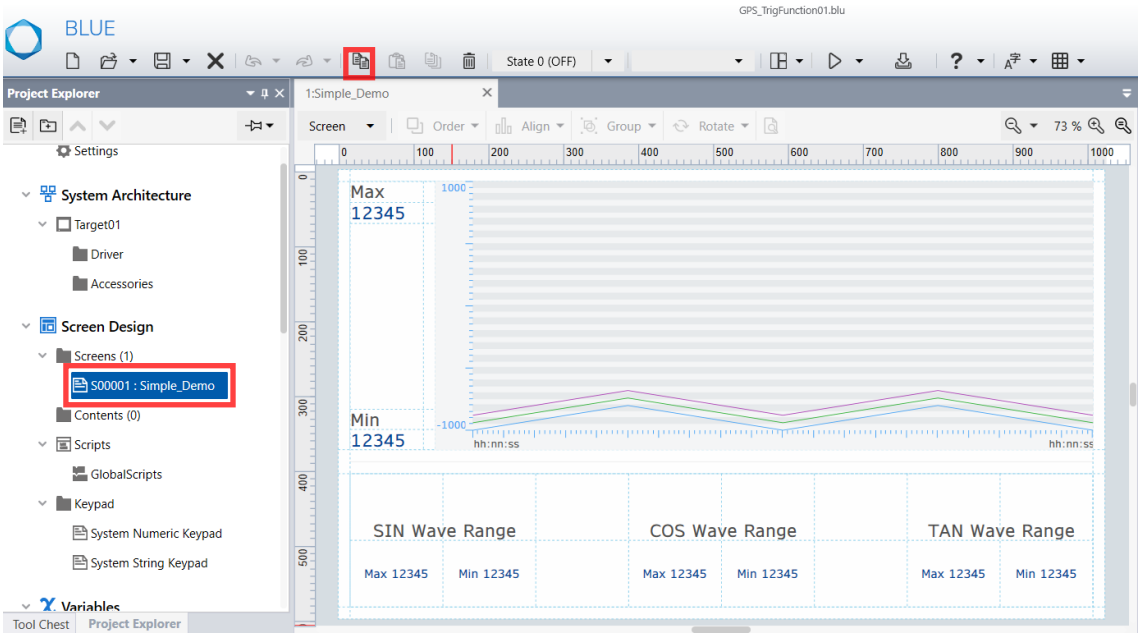
How to copy the objects to your project file

1. Open your project file and downloaded project file simultaneously.

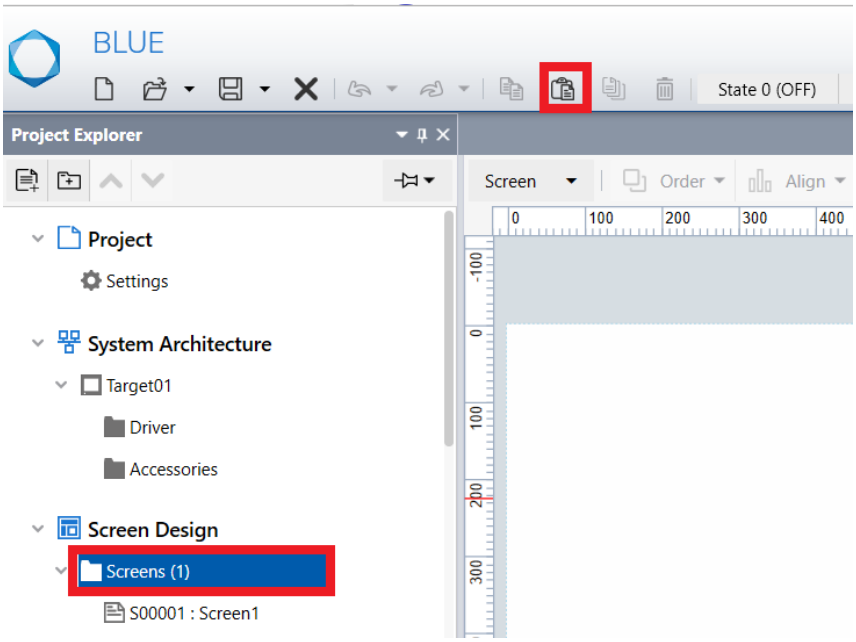


2. Open the downloaded project file.

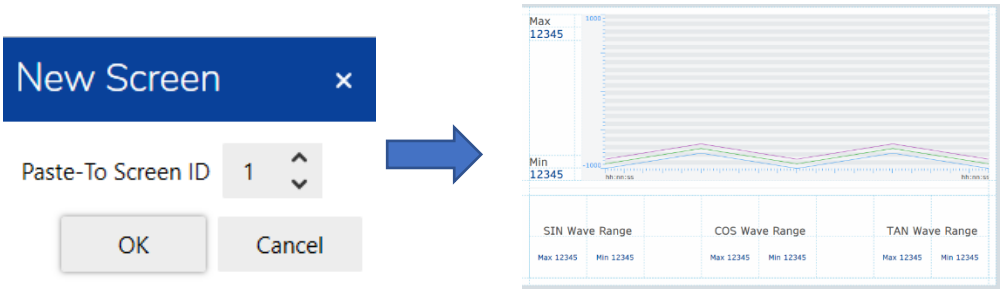
Click the Screen:00001 from “Screens” and copy the screen using  copy icon in global Toolbar.



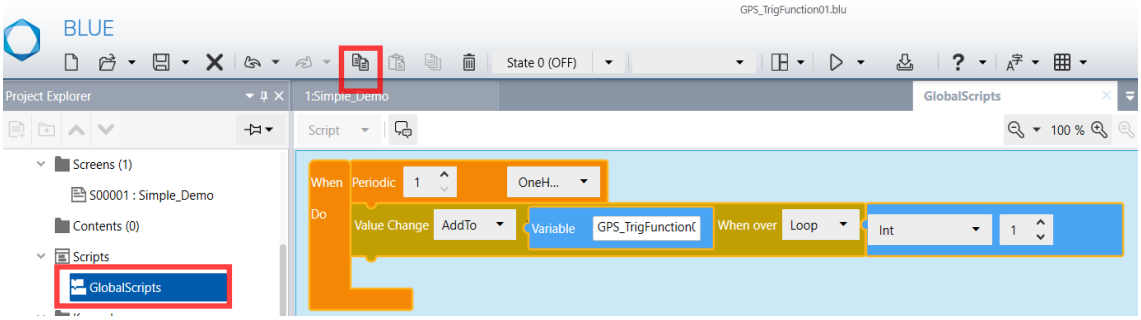
3. Open your project file.
   Click “Screens” and paste icon in global Toolbar.



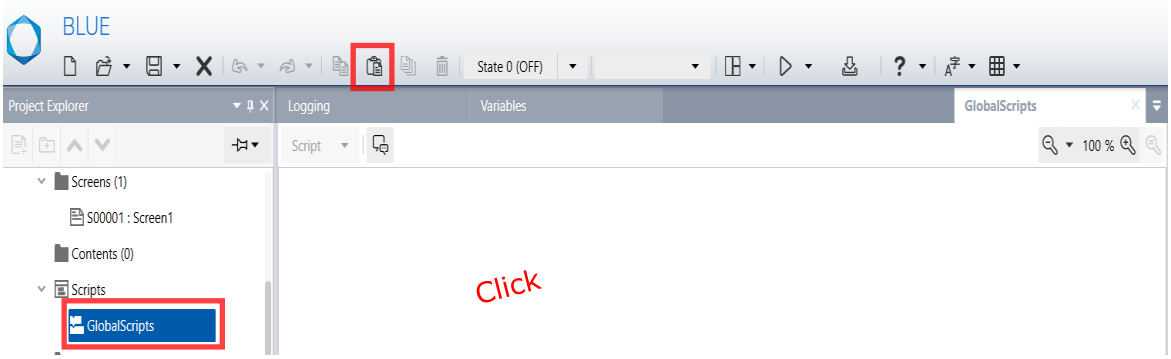
4. Select desired screen ID and click “OK”.
   Result: Copied screen is successfully pasted in your project.



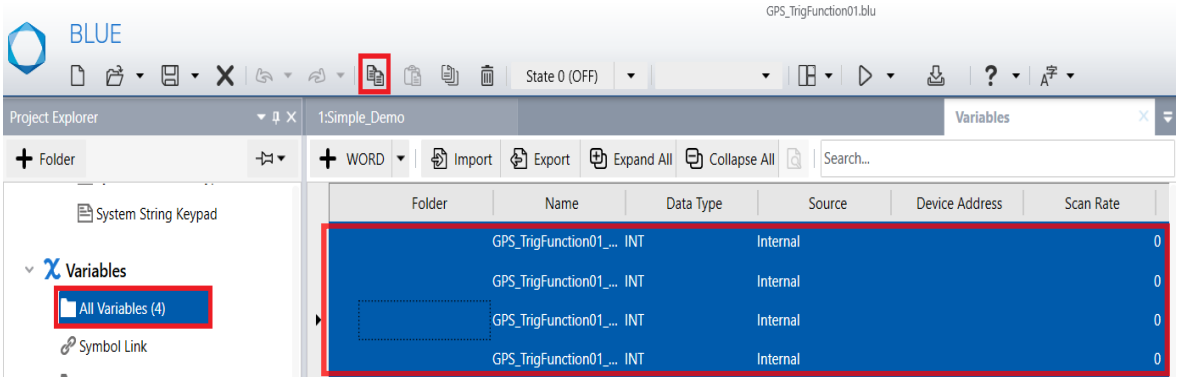
5. Open downloaded project file and select Global Script and click on Copy from Global Tool bar.



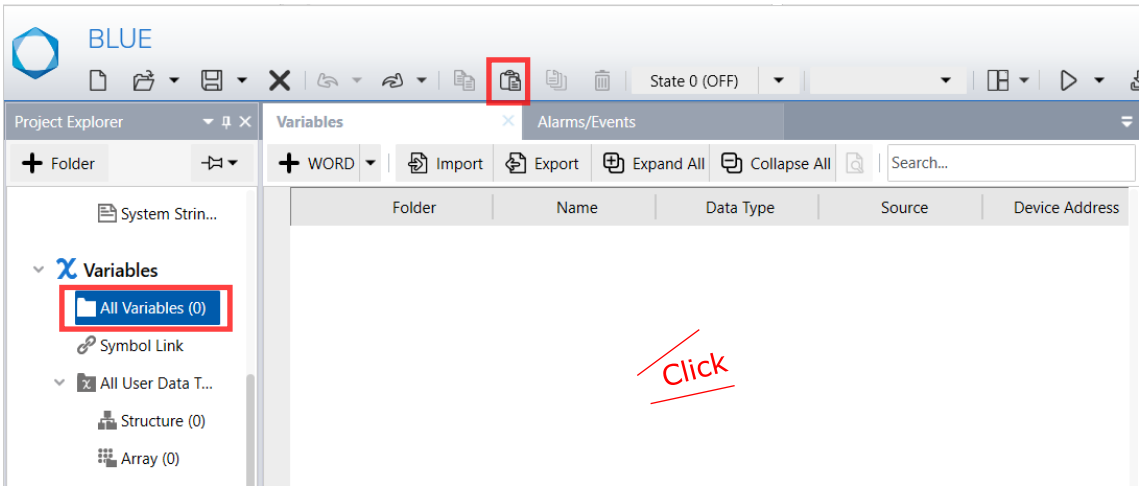
6. Open your Project file and Select Global Script and click on Paste button from Global Tool bar.



7. Open downloaded project file and select “All variables”. Select all the displayed variables and click the copy icon from global Toolbar

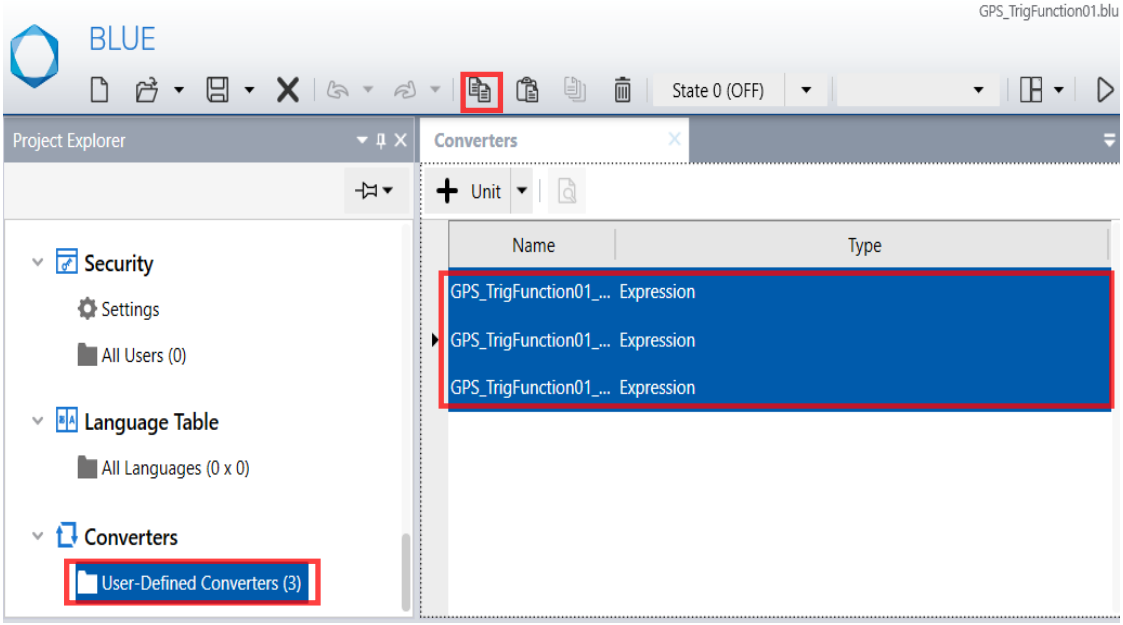


8. Open your project file and select “All variables”. Click on the variable screen and click paste icon from the global Toolbar.

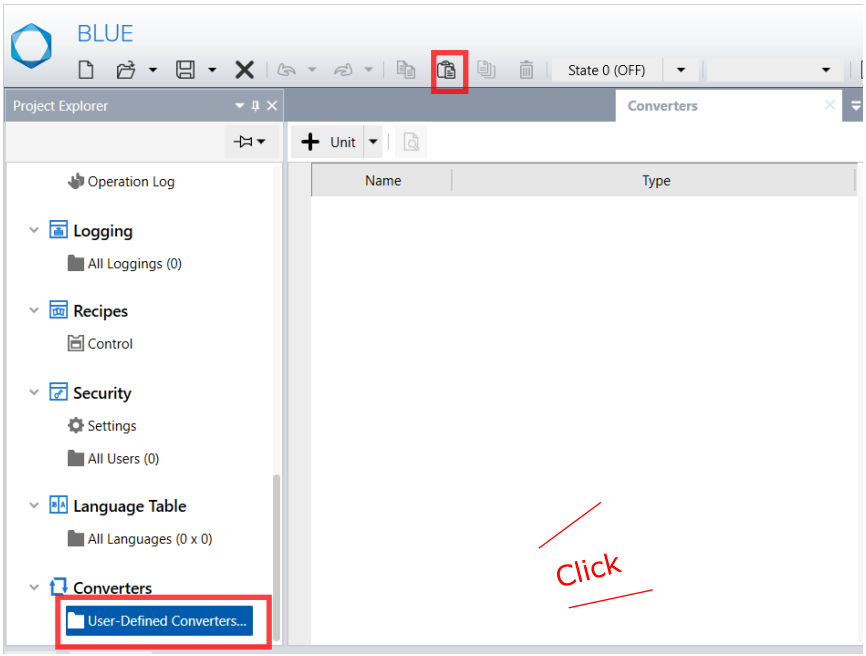


Note: You can also create your own variables to bind with Dialog. For more details, refer [How to change Trigger Function Variables.]

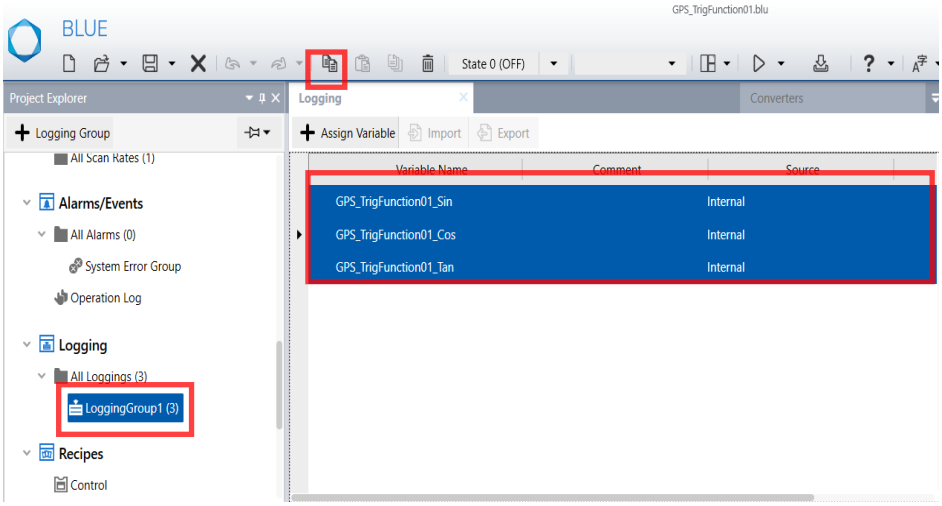
9. Open the downloaded project file, select “User-Defined Converters”. Select the displayed converter and click the copy icon from the global Toolbar.



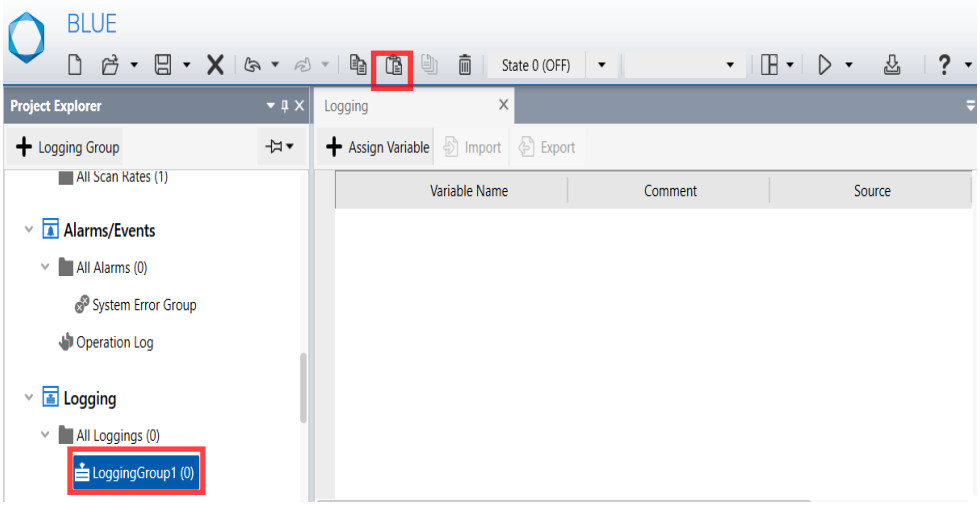
10. Open your project file, select “User-Defined Converters”. Click on the Converter screen and click paste icon from the global Toolbar.



11. Open the downloaded project file, select “Logging Group”. Select the displayed Logging Group and click the copy icon from the global Toolbar

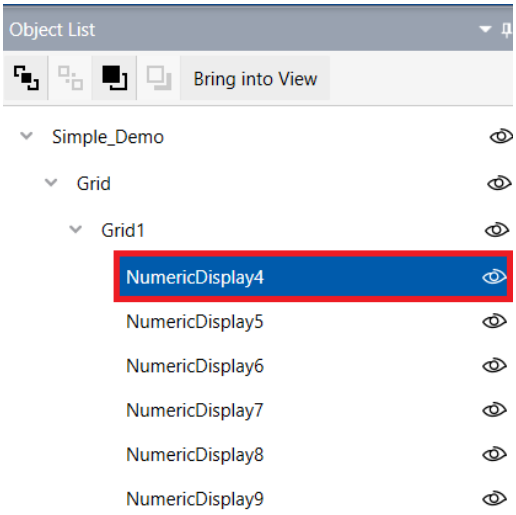


12. Open your project file, select “All Loggings”. click paste icon from the global Toolbar.

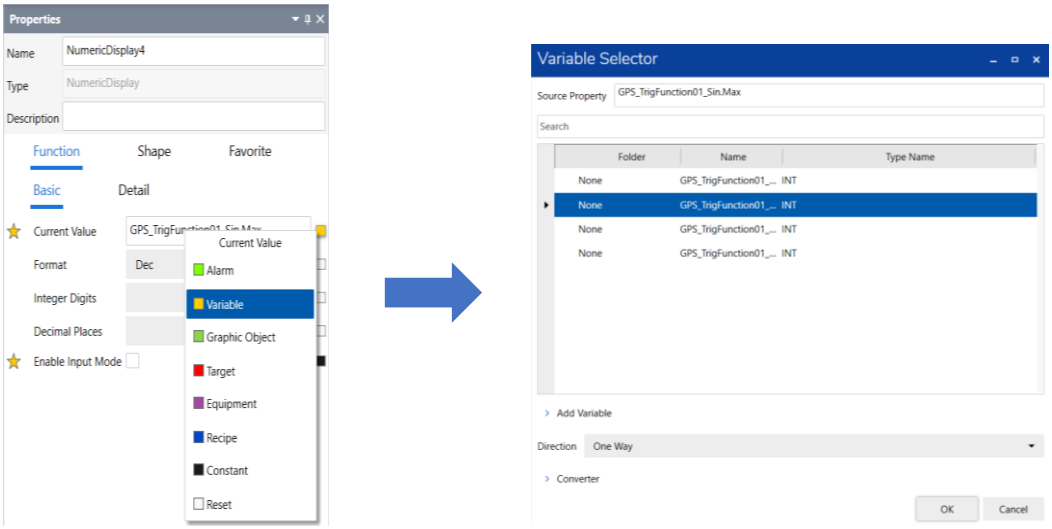


How to change Trigger Function Variables

1. Open your project, in the screen, select NumericDisplay4 from object list.

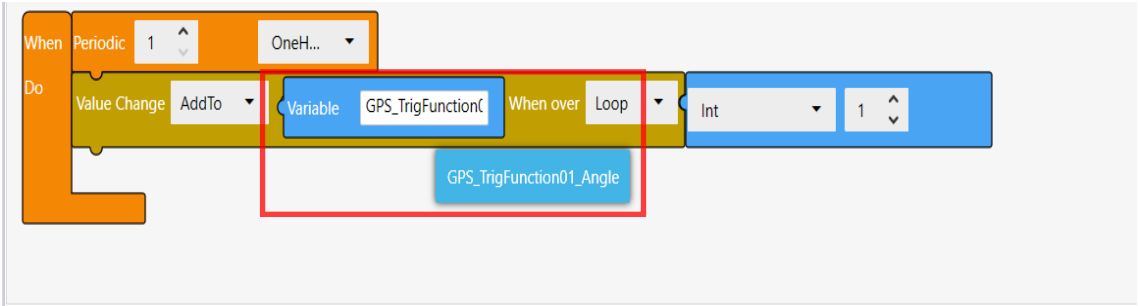


2. In Properties tab, select **Function** > **Basic** > **Current Value** and bind the max property of desired variable from variable selector.



Note: The variable used here will be used to Display value of Trigger Function.

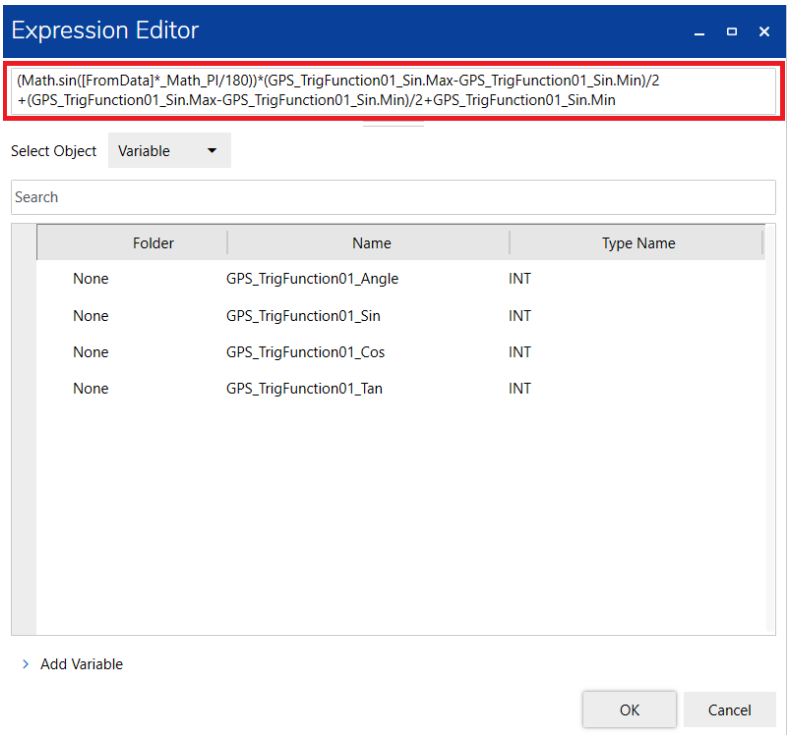
3. In Globalscripts, select the variable same as above in value change operation.



4. In Project Explorer, select “User-Defined Converters”. Then Select GPS_TrigFunction01_Sin

5. In Properties, Click ... to open Expression Editor.

6. In Expression Editor, select the variable used in step (2) and its Min/Max in expression and click ok.



7. Repeat the above Steps for remaining Expression in User Defined Converters.

How to change variable input range

1. Open your project, click on ‘All Variables’, and select the variable binded to trigger function.

2. In Properties tab, change the ‘Minimum’ and ‘Maximum’ value for the input range.