NEURO CHECK
Industrial Vision Systems

Application Software for Industrial Vision Systems

Manual Input

Plug-In

Version 6.2.6
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Introduction

About NeuroCheck plug-in DLLs in general

A plug-in DLL is a .NET assembly that serves to enhance NeuroCheck with user-defined image processing functionality. The NeuroCheck Plug-In Interface offers the opportunity to integrate user-defined check functions for image processing and data handling. A Plug-In can contain an arbitrary number of self-developed check functions.

These check functions have full access to the NeuroCheck runtime data objects such as Images, ROI Lists or Measurement Lists. The Plug-In check function can be added to a check as well as the built-in standard check functions of NeuroCheck.

Please note that for integration of a plug-in check function into your check routine, a Premium license is required. The completed check routine then can be run with any NeuroCheck license (except the Demo Version).

Installation

Installation

Copy the following files from the zip archive to the plug-in directory within the desired NeuroCheck project (e.g. '`C:\Users\Public\Documents\NeuroCheck\6.2\Default\Software Extensions\PlugIns`').

- All files inside the `Binaries` directory
- All *.chm files inside the `Documentation` directory

Loading a Plug-In

In order to use a Plug-In the Plug-In assembly must be loaded in NeuroCheck. The management of Plug-Ins takes place within the Software Settings dialog. The Software Settings dialog can be found in the System menu of NeuroCheck.

Please note that it is impossible to load or unload a Plug-In as long as a check routine is opened that contains the Plug-In check functions. If the currently opened check routine contains Plug-In check functions then close the check routine first.

Within the Software Settings dialog please select the node Plug-Ins and the sub-node Plug-In in the tree to the left. The loaded Plug-In assemblies are shown in the List of Plug-Ins. Press the Add button to open a file selection dialog in order to select a further Plug-In assembly.

Inserting a Plug-In check function to a check routine

A Plug-In check function is inserted using the Check Function Select dialog. All check functions of loaded Plug-Ins are listed in the Plug-In category of the Check Function Select dialog. Within the Plug-In category the check functions are ordered in sub-categories where each sub-category represents the check functions of one Plug-In.

Besides the category the user will hardly notice any difference between the usage of Plug-In check functions and built-in check functions.

Manual Input of Data: Introduction

Function overview

This check function interrupts the check routine and opens a dialog for manual input.

See "How to Use" for additional information.

Input data

This check function requires an image as input data objects.

Output data

This check function has no output data objects. The input will be written into a register.

Properties

Check function group Plug-In.

The check function has a Parameter Dialog.

Manual Input of Data: How to Use

The check functions in this plug-in can be used to interrupt the current check routine and ask for manual input from the operator.

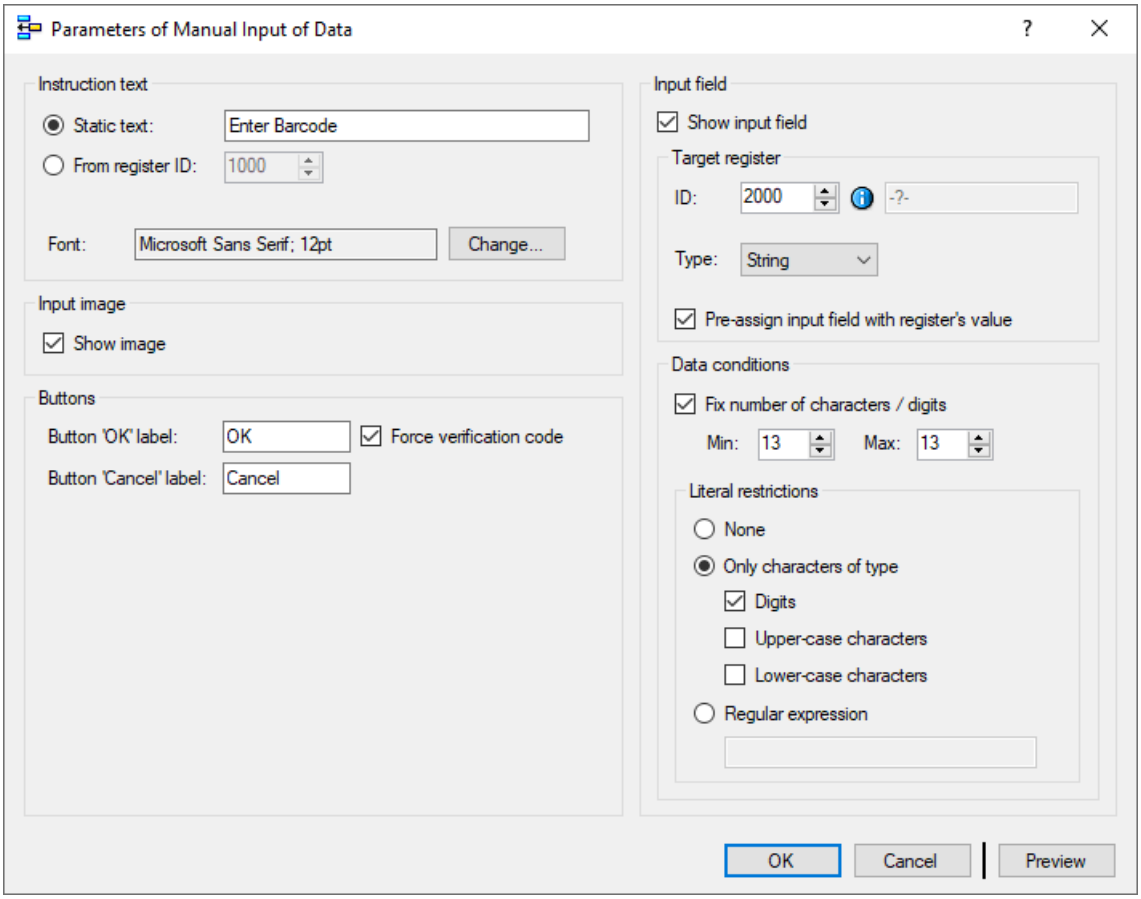
Typically, this check function is used in a sub routine when the check routine fails.

Please Note:

If you insert the manual input check function to your check routine, the manual input runtime dialog will be shown whenever you execute a check function or open a parameter dialog of a check function after the manual input.

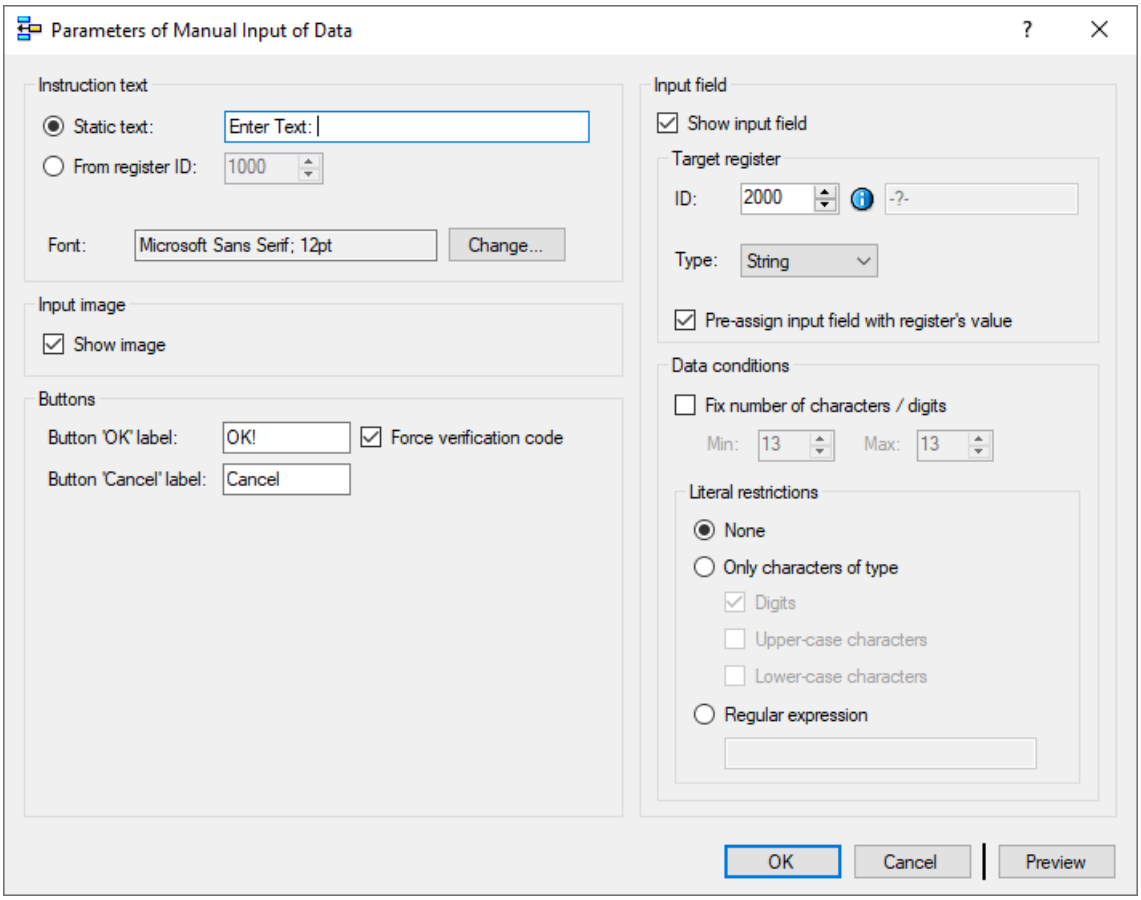
Use Case: Manual Input of Number

Show Manual Input of Number Use Case



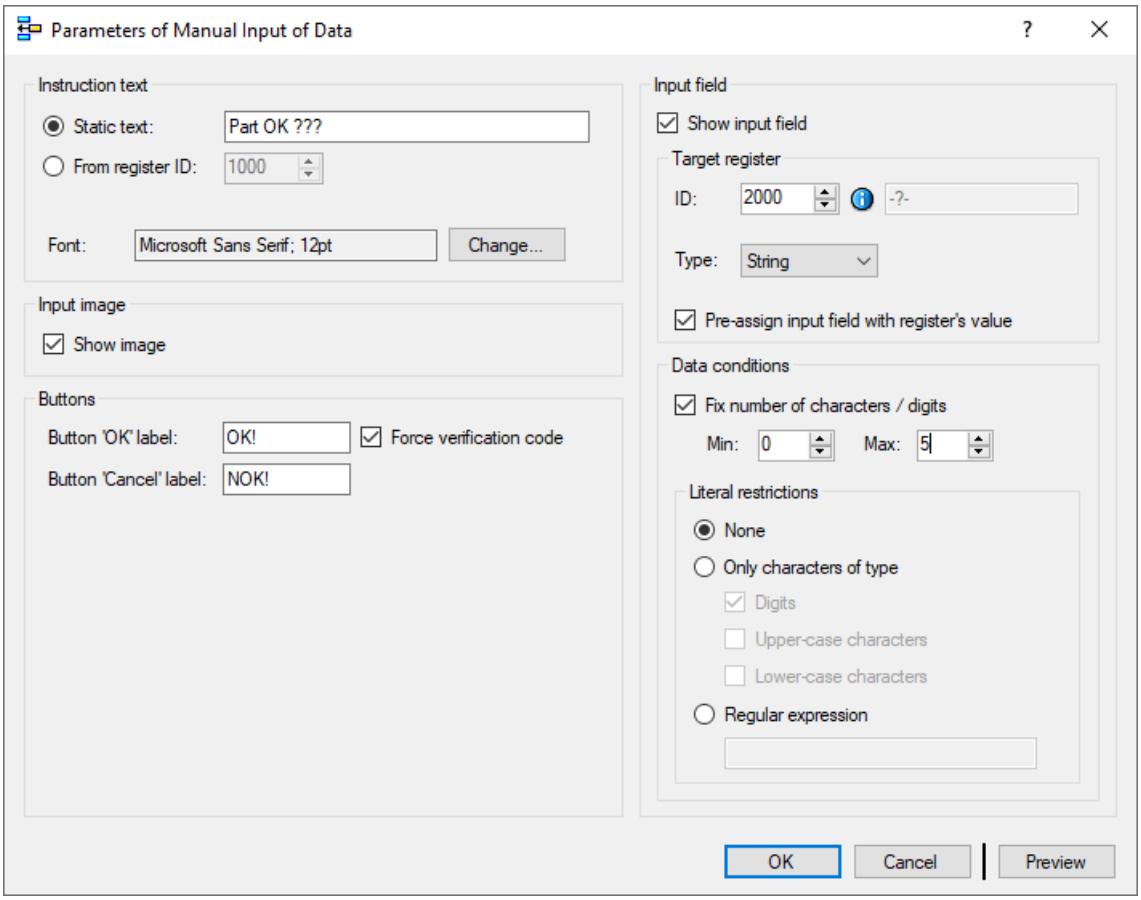
Use Case: Manual Input of String

Show Manual Input of String Use Case



Use Case: Manual Input of Result

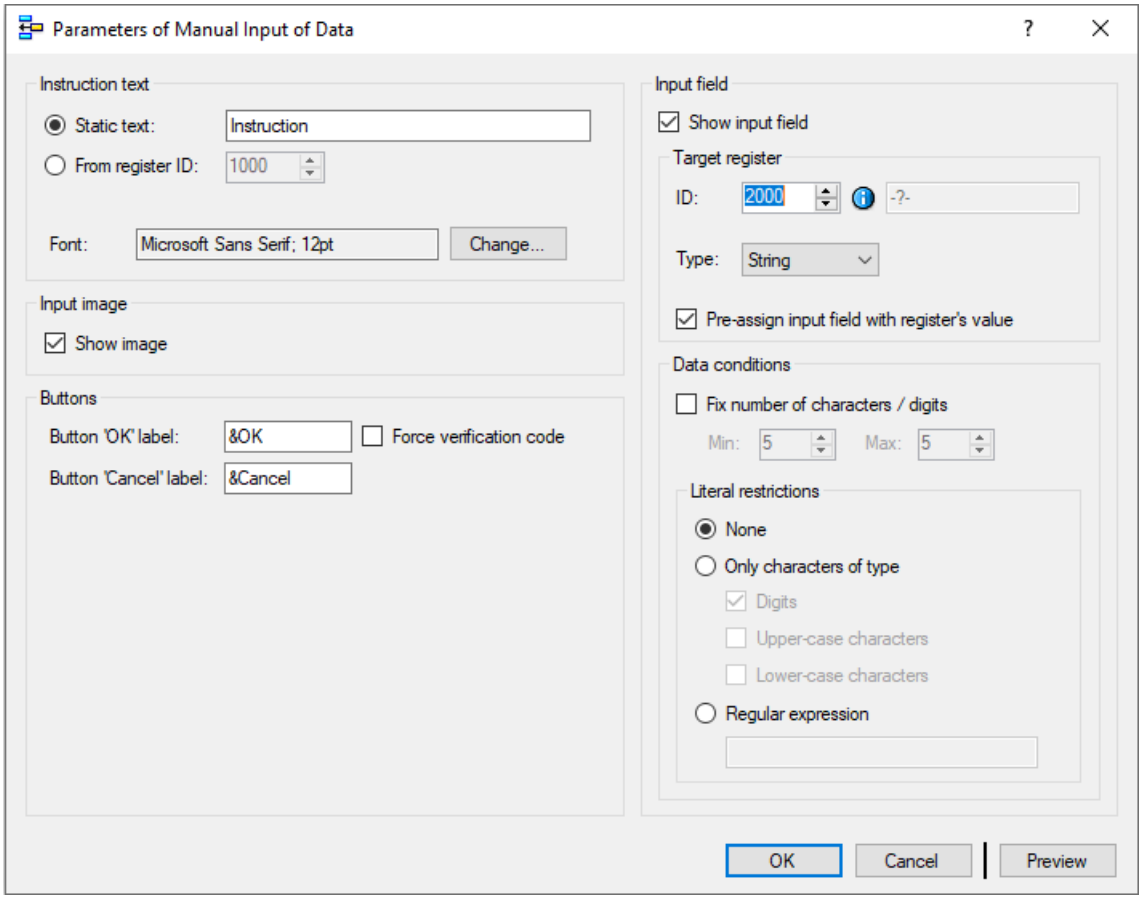
Show Manual Input of Result Use Case


Parameters of Manual Input of Data
Instruction text
Static text:
Part OK ???
From register ID:
1000
Font:
Microsoft Sans Serif; 12pt
Change...
Input image
Show image
Buttons
Button 'OK' label:
OK!
Force verification code
Button 'Cancel' label:
NOK!
Input field
Show input field
Target register
ID:
2000
-?-
Type:
String
Pre-assign input field with register's value
Data conditions
Fix number of characters / digits
Min:
0
Max:
5
Literal restrictions
None
Only characters of type
Digits
Upper-case characters
Lower-case characters
Regular expression
OK
Cancel
Preview

Manual Input of Data: Parameter Dialog

This plug-in check function has a **Parameter** dialog.

Screenshot of Parameter Dialog



The **Parameter** dialog contains the following elements:

Element	Description
Instruction Text	Selects either a static text which will be the text from the input field next to it, or get the text from the chosen register. If you do not want to have any description in the runtime dialog, select the static text and delete the text in the field. The description text will use the chosen font.
Input Image	Shows or hides the input image.
Buttons	The runtime dialog has two buttons. An OK button which will proceed the check routine and a cancel button which aborts the routine. You can change the text on the buttons with the two input fields. If an input field is empty, the default text will be shown on the button. Both buttons also support mnemonics, which allow users to "click" them using only the keyboard (mouse-free). This is done by defining active keys for each button using the "&" prefix, e.g. "&OK" (where "o" is the active key). These can be triggered by pressing the Alt key along with the active key simultaneously. Active keys can also be made visible by pressing the Alt key alone, where the active keys get highlighted with an underscore below them.
Verification code	With the verification code, you can make sure the operator has to type in a random generated number, before the check routine proceeds.
Input field	Shows or hides the input field.
Target Register	Selects the target register. The result of the manual input will be written into this register.
Data Conditions	Limits the length of the manual input.
Literal Restrictions	Restricts the manual input for specific character types or a regular expression.
Preview	View the runtime dialog as it will be shown during the execution of the check routine.

Manual Input of Data: Runtime Dialog

This plug-in check function has a **Runtime** dialog. The following screenshot shows the runtime dialog with the default parameters from the parameter dialog including the use of the random number.

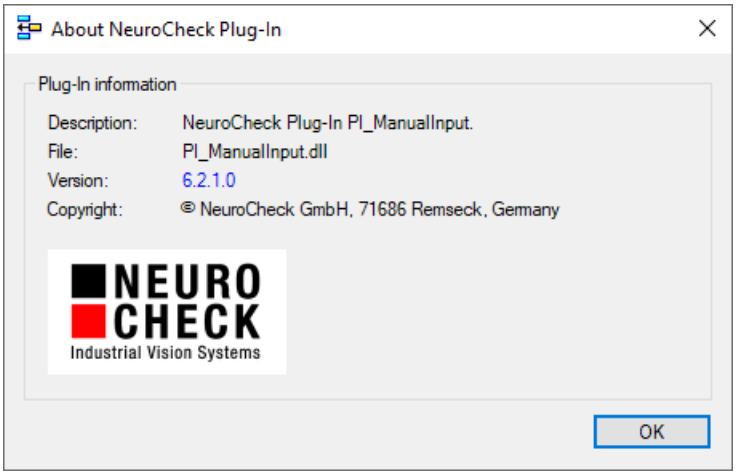
Screenshot of Parameter Dialog

Element	Description
Random Number	Type in the random number to proceed with the check routine.
Manual Input	Write the input into the field. The OK button will be enabled when the input fits to the restrictions from the parameter dialog.

About Dialog

This dialog displays version information about the NeuroCheck Plug-In **PI_ManualInput.NET.dll**.

Screenshot of About Dialog



Support Services

For technical support, please contact your local NeuroCheck partner or NeuroCheck GmbH:

Phone: +49 (0) 7146 - 89 56-40
E-Mail: support@neurocheck.com
Web: www.neurocheck.com

Before contacting us, please provide some important information about your system:

Information about your NeuroCheck installation and your PC setup:

- Use the NeuroCheck Diagnostics tool to check your installation and computer configuration.
- The NeuroCheck Diagnostics is installed in the "Tools" folder within your NeuroCheck installation.

Log file information:

- Logging for NeuroCheck can be activated in **System** > **Software Settings** > **Diagnosis** > **Logging**.