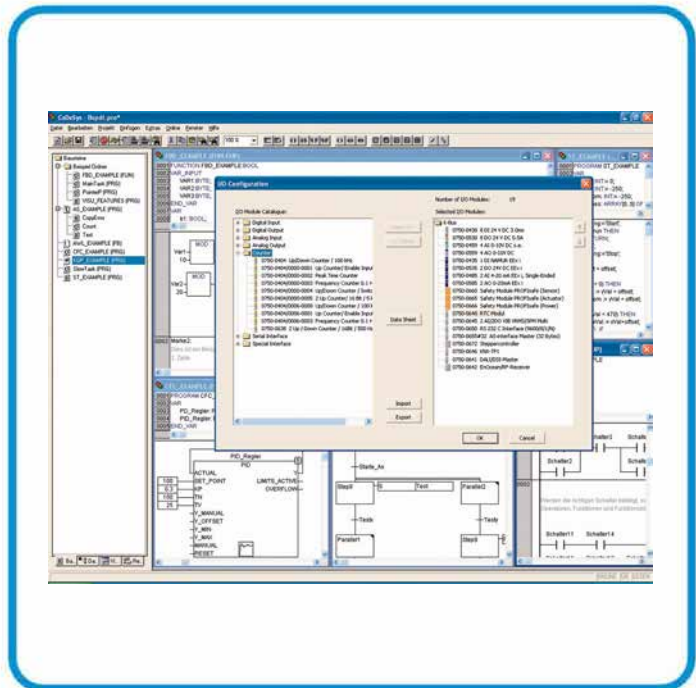


Library Description

AUTOMATION



WAGO Software CODESYS Library **WagoConfigToolLIB.lib** for device configuration of a controller

Version 1.0.0

WAGO®
INNOVATIVE CONNECTIONS

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Every conceivable measure has been taken to ensure the accuracy and completeness of this documentation. However, as errors can never be fully excluded, we always appreciate any information or suggestions for improving the documentation.

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We wish to point out that the software and hardware terms as well as the trademarks of companies used and/or mentioned in the present manual are generally protected by trademark or patent.

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1 Notes about this Documentation

1.1 Copyright

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1.2 Symbols

 **DANGER**

Personal Injury!

Indicates a high-risk, imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **DANGER**

Personal Injury Caused by Electric Current!

Indicates a high-risk, imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING**

Personal Injury!

Indicates a moderate-risk, potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION**

Personal Injury!

Indicates a low-risk, potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Damage to Property!

Indicates a potentially hazardous situation which, if not avoided, may result in damage to property.

NOTICE

Damage to Property Caused by Electrostatic Discharge (ESD)!

Indicates a potentially hazardous situation which, if not avoided, may result in damage to property.

Note

Important Note!

Indicates a potential malfunction which, if not avoided, however, will not result in damage to property.



Information

Additional Information:

Refers to additional information which is not an integral part of this documentation (e.g., the Internet).

1.3 Number Notation

Table 1: Number notation

Number code	Example	Note
Decimal	100	Normal notation
Hexadecimal	0x64	C notation
Binary	'100' '0110.0100'	In quotation marks, nibble separated with dots (.)

1.4 Font Conventions

Table 2: Font conventions

Font type	Indicates
<i>italic</i>	Names of paths and data files are marked in italic-type. e.g.: <i>C:\Programme\WAGO-I/O-CHECK</i>
Menu	Menu items are marked in bold letters. e.g.: Save
>	A greater-than sign between two names means the selection of a menu item from a menu. e.g.: File > New
Input	Designation of input or optional fields are marked in bold letters, e.g.: Start of measurement range
“Value”	Input or selective values are marked in inverted commas. e.g.: Enter the value “4 mA” under Start of measurement range .
[Button]	Pushbuttons in dialog boxes are marked with bold letters in square brackets. e.g.: [Input]
[Key]	Keys are marked with bold letters in square brackets. e.g.: [F5]

2 WagoConfigToolLIB.lib

The library WagoConfigToolLIB.lib library provides function blocks for accessing the device configuration (e.g., network settings, data and time, ongoing services).

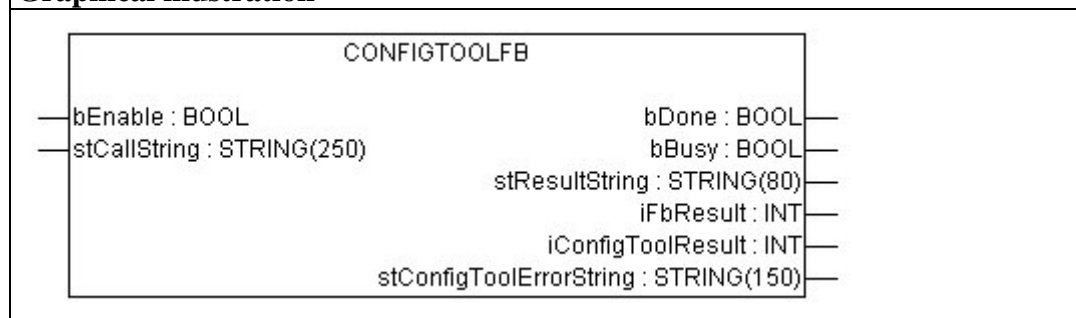
2.1 configToolFB

You can use the "configToolFB" function block to configure and parameterize the controller, such as with the WBM or the CBM.

Category	Configuration
Name	configToolFB
Type	Function block
Name of library	WagoConfigToolLIB.lib
Required libraries	---
Applicable to	750-82xx

Input parameter		
Name	Data type	Description
bEnable	BOOL	The function block starts processing when the input registers an ascending edge.
stCallString	STRING(250)	Enter a call there as you would at the Linux panel. The manual for the specific controller provides an overview of the call-ups in the section "CODESYS Libraries" > ... > "WagoConfigToolLIB.lib."

Output parameter		
Name	Data type	Description
bDone	BOOL	Indicates whether the function block has been executed fully, or canceled after reporting an error code.
bBusy	BOOL	The function block processes a call.
stResultString	STRING	Return value displayed on the Linux console.
iFbResult	INT	The return values have the following meanings: 0: No error 1: Invalid input parameter, e.g., empty string for stCallString 2: Error during function block execution 3: Unknown Config tool 4: The results string for the Config tool is too long for the function block return parameter stResultString
iConfigToolResult	INT	This value corresponds directly to the return parameter for the Config tool.
stConfigToolErrorString	STRING(150)	This parameter displays the error description when the call "iConfigToolResult" yields a value $\neq 0$.

Graphical illustration

Description

For execution, you must have the call-ups given in the Section "CODESYS-Bibliotheken" > ... > "WagoConfigToolLIB.lib" in the manual for the controller being used. These call-ups have no impact on the task run times, as the functions are called asynchronously.

2.2 IP_TO_STRING

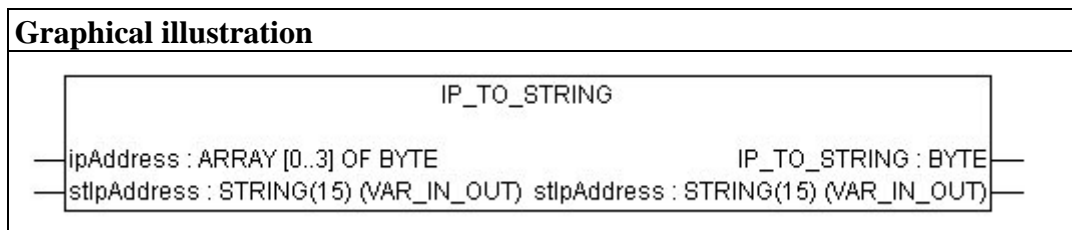
The IP_TO_STRING function converts an IP address given in binary form into a string representation.

Category	Configuration
Name	IP_TO_STRING
Type	Function
Name of library	WagoConfigToolLIB.lib
Required libraries	---
Applicable to	750-82xx

Input parameter		
Name	Name	Name
ipAddress	ARRAY [0..3] OF BYTE	

Input/output parameter:		
Name	Data type	Description
stIpAddress	STRING[15]	

Output parameter		
Name	Data type	Description
IP_TO_STRING	Byte	



2.3 STRING_TO_IP

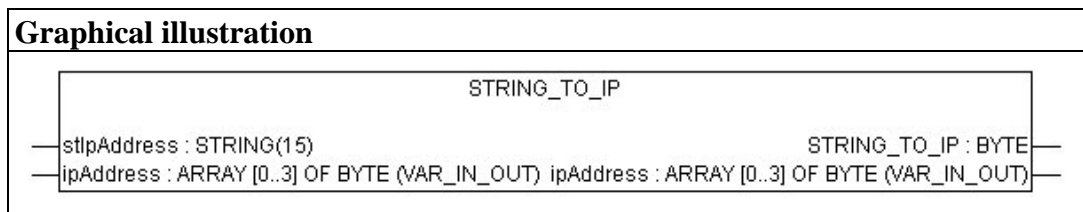
The STRING_TO_IP function transforms an IP address in string form into a binary representation.

Category	Configuration
Name	STRING_TO_IP
Type	Function
Name of library	WagoConfigToolLIB.lib
Required libraries	---
Applicable to	750-82xx

Input parameter		
Name	Name	Name
stIpAddress	STRING[15]	

Input/output parameter:		
Name	Data type	Description
ipAddress	ARRAY [0..3] OF BYTE	

Output parameter		
Name	Data type	Description
STRING_TO_IP	Byte	



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