

WORD_AS_STRING

March 8, 2022 8:56 PM

The screenshot shows the CODESYS IDE interface for a project named "20220308 RPi1x4 (DST).project". The main window displays the "Library Manager" with a list of libraries and their effective versions. The "WORD_AS_STRING (FUN)" function is selected, and its documentation is shown in the right pane.

Library Manager List:

Name	Namespace	Effective Version
system_visuinputs = visuinputs, 4.1.0.0 (system)	visuinputs	4.1.0.0
System_VisNativeControl = VisuNativeControl, 4.1.0.0 (System)	VisuNativeControl	4.1.0.0
Time and Date, 3.5.17.0 (3S - Smart Software Solutions GmbH)	Time_and_Date	3.5.17.0
Util = Util, 3.5.17.0 (System)	Util	3.5.17.0
CBML = Common Behaviour Model, 3.5.17.0 (3S - Smart Software Solutions GmbH)	CBML	3.5.17.0
CmpErrors2 Interfaces, * (System)	CmpErrors	3.5.17.0
Standard = Standard, 3.5.17.0 (System)	Standard	3.5.17.0
SysMem = SysMem, 3.5.17.0 (System)	SysMem	3.5.17.0
SysTimeRtc = SysTimeRtc, 3.5.17.0 (System)	SysTimeRtc	3.5.17.0
SysTypes2 Interfaces, * (System)	SysTypes	3.5.17.0
VisuDialogs = VisuDialogs, 4.1.0.0 (System)	VisuDialogs	4.1.0.0

WORD_AS_STRING (FUN) Documentation:

FUNCTION WORD_AS_STRING : STRING(2)
Converts one word into its ASCII string representation

Example:

```
Input: '16#AF'  
Byte order: FALSE  
->  
String: 'AF'
```

InOut:

Scope	Name	Type	Comment
Return	WORD_AS_STRING	STRING(2)	A STRING(2) representing the HEX code of the input w
Input	w	WORD	Input value
	ORDER	BOOL	TRUE: Swaps high and low byte

Messages: Total 1 error(s), 0 warning(s), 0 message(s)

Library Manager: 1 error(s), 0 warning(s), 0 message(s)

Bottom Bar: Last build: 0 errors, 0 warnings, 0 messages. Precompile: checked. Project user: (nobody)

Devices

- 20220308 RPi1x4 (DST)
 - PFC200_LAB (CODESYS Control for PFC200 S...
 - PFC200_TEST (CODESYS Control for PFC200 S...
 - RPi102_HOME (CODESYS Control for Raspber...
 - PLC Logic
 - RPi1
 - 000 TechNotes
 - 030 TIMING
 - 040 DATATYPES
 - 050 FUNCTION BLOCKS
 - 060 FUNCTIONS
 - 095 CodeEx
 - 51x1 LIMIT
 - 61x1 BYTES
 - 61x2 HEXASCII
 - CExASCII (PRG)
 - _MAINx095 (PRG)
 - 100 TEST
 - 102 RPI
 - 800 NAV LOGIC
 - 900 SUBMENU
 - 950 SCADA
 - gvl
 - ImagePool
 - Library Manager
 - Task Configuration
 - subMenuList
 - Visualization Manager
 - RPi1_Codesys
 - SoftMotion General Axis Pool
 - I2C
 - GPIOs_A_B (GPIOs A/B)
 - Onewire
 - Camera device

```
PROGRAM CExASCII
VAR
inByte      : BYTE;
outHexAscii : WORD;

inWord      : WORD;
outByte     : BYTE;

iWord       : WORD;
oString     : STRING;

END_VAR
```

```
1
2
3
4 (* Converts one byte of binary code into one word in HEX code representing its ASCII value *)
5 outHexAscii := UTIL.BYTE_TO_HEXinASCII(inByte);
6
7
8 (* Converts one word in HEX code representing its ASCII value into one byte of binary code *)
9 outByte := UTIL.HEXinASCII_TO_BYTE(inWord);
10
11
12 (* Converts one word into its ASCII string representation *)
13 oString := WORD_AS_STRING(iWord,FALSE);
```

Messages - Total 1 error(s), 0 warning(s), 0 message(s)

Library Manager 1 error(s) 0 warning(s) 0 message(s)

Description	Project	Object	Position
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Properties

Filter Sort by Sort order

Property

Description

Visualization Prop...

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 - 800 NAV LOGIC
 - 900 SUBMENU
 - 950 SCADA
 - +templates
 - HMIx00_BOOT
 - HMIx11_MAIN
 - HMIx13_LOGIC
 - HMIx21_TIME
 - HMIx51_LIMITS
 - HMIx61_BITS
 - HMIx61_BYTES
 - TAB61x1
 - TAB61x2

```
PROGRAM CExASCII
VAR
    inByte : BYTE;
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    inWord : WORD;
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    iWord : WORD;
    oString : STRING;
END_VAR
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12 oString := WORD_AS_STRING(iWord, FALSE);
13
```

TAB61x2_AS

BINARY TO HEX ASCII

INPUT BYTE %s %X
OUTPUT WORD %s %X

HEX ASCII TO BINARY

INPUT WORD %s %X
OUTPUT BYTE %s %X

WORD_AS_STRING

hex: %X %S

Properties

Filter Sort by Sort order Advanced

Property	Value
Element name	GenElemInst_428
Type of element	Spin Box
Position	
X	18
Y	244
Width	70
Height	32
Variable	CExASCII.iWord
Number format	
Interval	1
Text properties	
Color variables	
State variables	
Absolute movement	
Input configuration	
OnMouseDown	Configure...
Write Variable	Variable : CExASCII.iWord, InputType : Default, Min ...
Toggle	
Variable	
Tap	
Access rights	Not set. Full rights.

Messages - Total 1 error(s), 0 warning(s), 0 message(s)

Library Manager 1 error(s) 0 warning(s) 0 message(s)

Description Project Object

Write a Value to a variable using a editbox for input.

Visualization Toolbox Properties

Devices

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```

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2 VAR
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4   inByte   : BYTE;
5   outHexAscii : WORD;
6
7   inWord   : WORD;
8   outByte  : BYTE;
9
10
11   iWord   : WORD;
12   oString : STRING;
13
14 END_VAR

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TAB61x2_AS

BINARY TO HEX ASCII

INPUT BYTE %s %X
OUTPUT WORD %s %X

HEX ASCII TO BINARY

INPUT WORD %s %X
OUTPUT BYTE %s %X

WORD_AS_STRING

hex: %X %S

Properties

Filter | Sort by | Sort order | Advanced

Property	Value
Element name	GenElemInst_430
Type of element	Rectangle
Position	
X	17
Y	288
Width	90
Height	20
Angle	0
Colors	
Use gradient color	<input type="checkbox"/>
Gradient setting	linear, Black, White
Appearance	
Texts	
Text	hex: %X
Tooltip	
Text properties	
Absolute movement	
Relative movement	
Text variables	
Color variables	
State variables	
Input configuration	
OnMouseDown	Configure...
Write Variable	Variable : , InputType : Default, Min : , Max : , Dialog...
Toggle	
Variable	
Tap	
Access rights	Not set. Full rights.

Messages - Total 1 error(s), 0 warning(s), 0 message(s)

Library Manager

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 - HMIx61_BYTES
 - TAB61x1
 - TAB61x2
 - gvl
 - ImagePool

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PROGRAM CExASCII
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TAB61x2_AS

BINARY TO HEX ASCII

INPUT BYTE %s %X
OUTPUT WORD %s %X

HEX ASCII TO BINARY

INPUT WORD %s %X
OUTPUT BYTE %s %X

WORD_AS_STRING

hex: %X

Properties

Filter | Sort by | Sort order | Advanced

Property	Value
Element name	GenElemInst_414
Type of element	Rectangle
Position	
X	136
Y	267
Width	75
Height	40
Angle	0
Colors	
Use gradient color	<input type="checkbox"/>
Gradient setting	linear, Black, White
Appearance	
Texts	
Text	%s
Tooltip	
Text properties	
Absolute movement	
Relative movement	
Text variables	
Text variable	CExASCII.oString
Tooltip variable	
Color variables	
State variables	
Input configuration	
Access rights	Not set. Full rights.

Variables to be displayed within the text or tooltip of this element

Messages - Total 1 error(s), 0 warning(s), 0 message(s)

Library Manager

1 error(s) 0 warning(s) 0 message(s)



BYTES HEXASCII System

TAB61x2_ASCII

BINARY TO HEX ASCII

0

INPUT BYTE 0 0

OUTPUT WORD 12336 3030

HEX ASCII TO BINARY

0

INPUT WORD 0 0

OUTPUT BYTE 0 0

WORD_AS_STRING

38

hex: 26 &

SYSTEM INFO

Time Since Boot	Time Since Download
<input type="checkbox"/> dst	ms: 73
sec: 57	sec: 2
min: 17	min: 17
hrs: 0	hrs: 0
days: 0	days: 0

6 << BITS&BYTES >>

6.1



BYTES HEXASCII

TAB61x2_ASCII

0 **BINARY TO HEX ASCII**

INPUT BYTE 0 0

OUTPUT WORD 12336 3030

0 **HEX ASCII TO BINARY**

INPUT WORD 0 0

OUTPUT BYTE 0 0

42 **WORD_AS_STRING**

*

hex: 2A

System

SYSTEM INFO

Time Since Boot	Time Since Download
<input type="checkbox"/> dst	ms: 81
sec: 47	sec: 52
min: 19	min: 18
hrs: 0	hrs: 0
days: 0	days: 0