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This document is automatically generated. Because of this, the chapter 30 Visualization is not shown in this document. If you are interested in getting to know more about visualization, we refer to the library manager of e!Cockpit.

Subject to Changes

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Personnel Qualification

All tasks that are carried out with libraries made for the e!COCKPIT software must only be performed by qualified electrical specialists instructed in PLC programming according to IEC 61131-3.

All tasks that have an effect on the properties or the behavior of automation hardware or software products must only be performed by qualified employees with a thorough knowledge of handling the products concerned.

Intended Use of e!COCKPIT Libraries

Libraries created for the e!COCKPIT software are used to simplify the development of application projects in the IEC 61131-3 programming languages.

For automation tasks, WAGO offers programmable logic controllers in a wide variety of performance classes. In combination with a wide range of I/O modules, the controllers can process standard types of field signals. Controllers can be implemented centrally or in decentralized configurations. The controllers offer interfaces for the most commonly used fieldbuses for use in decentralized configurations. Fieldbus independent I/O modules are then linked via fieldbus couplers. WAGO controllers offer a runtime environment for user programs called e!RUNTIME. Software projects for implementation in e!RUNTIME environments can be created in e!COCKPIT. The programming environment in e!COCKPIT is based on the established CODESYS 3 industrial standard. Users with a previous knowledge of CODESYS 3 will thus find this environment largely familiar. The following programming languages of the IEC 61131-3 standard are available:

- Structured Text (ST)
- Ladder Diagram (LD)
- Function Block Diagram (FBD)
- Instruction List (IL)
- Sequential Function Chart (SFC)
- Continuous Function Chart (CFC)

The individual programming languages can also be combined as required during the development of the software. A portfolio of prepared libraries can be accessed for many frequently used functions in order to make software development more efficient. This document provides an overview of the WagoAppSerial.Scanner that WAGO offers for e!COCKPIT.
Function block for simple serial ASCII communication e.g. Barcodescanner with a startchar and an endchar ¹

Further library information are summarized here:

- **Company**: WAGO
- **Title**: WagoAppSerial_Scanner
- **Version**: 1.6.1.0
- **Categories**: WAGO LayerView/App; Application; WAGO FunctionalView/Connectivity/Serial
- **Author**: WAGO / u010545
- **Placeholder**: WagoAppSerial_Scanner

¹ Based on WagoAppSerial_Scanner.library, last modified 13.08.2019, 20:52:05.
The content of this file was automatically generated with None on 13.08.2019, 20:52:07
This folder contains program organization units

2.1 FbScanner (FB)

Interface variables
**Function**  Control and read a Barcode Scanner.

This functionblock supports the use of a serial barcode scanner with an simple ascii protocol using a startchar and an endchar.

**Example**  `<STX>`asci data`<ETX>`

---

<table>
<thead>
<tr>
<th>Scope</th>
<th>Name</th>
<th>Type</th>
<th>Initial</th>
<th>Comment</th>
<th>Inherited from</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>xConnect</td>
<td>BOOL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I_Port</td>
<td>WagoTypesCom.I_WagoSysComBase</td>
<td></td>
<td>Name of the Interface (e.g. ‘COM1’, ‘SER7.2’, )</td>
<td>FbBaseInterface</td>
</tr>
<tr>
<td></td>
<td>udiBaudrate</td>
<td>UDINT</td>
<td></td>
<td>Baudrate (9600 = 9k6)</td>
<td>FbBaseInterface</td>
</tr>
<tr>
<td></td>
<td>usiDataBits</td>
<td>USINT</td>
<td></td>
<td>Number of Bits per frame (5..8)</td>
<td>FbBaseInterface</td>
</tr>
<tr>
<td></td>
<td>eParity</td>
<td>WagoTypesCom.eTTYParity</td>
<td></td>
<td>Parity</td>
<td>FbBaseInterface</td>
</tr>
<tr>
<td></td>
<td>eStopBits</td>
<td>WagoTypesCom.eTTYStopBits</td>
<td></td>
<td>Number of Stop-Bits, see note (1)</td>
<td>FbBaseInterface</td>
</tr>
<tr>
<td></td>
<td>eHandshake</td>
<td>WagoTypesCom.eTTYHandshake</td>
<td></td>
<td>TYPE of handshake (XON/XOFF, etc)</td>
<td>FbBaseInterface</td>
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<tr>
<td></td>
<td>ePhysical</td>
<td>WagoTypesCom.eTTYPhysicalLayer</td>
<td></td>
<td>RS232, RS422, RS485, etc</td>
<td>FbBaseInterface</td>
</tr>
</tbody>
</table>

| Output | xIsConnected | BOOL | | | FbBaseInterface |
|        | xError | BOOL | | | FbBaseInterface |
|        | oStatus | WagoSysErrorBase.FbResult | | | FbBaseInterface |

| Input | bStartChar | BYTE | 16#2 | `<STX>` start char of the wanted receive frame |
|       | bEndChar | BYTE | 16#3 | `<ETX>` end char of the wanted receive frame |

| Inout | xNewDataReceived | BOOL | | |

| Output | sScanCode | STRING | | scan code without the defined startchar and endchar |

| Input | sCommand | STRING | | string to send to the scanner |

| Inout | xStartCommand | BOOL | | **start send command to the scanner** -> |

- This variable have to set by the application and will be reseted by this fb when the job is done.
Function Block
FbScanner

xConnect  BOOL  xIsConnected
I_Port     I_WagoSysComBase  BOOL  xError
ud1Baudrate UDINT  FbResult  oStatus
usiDataBits USINT  STRING  sScanCode
eParity    cTTYParity
eStopBits  eTTYStopBits
eHandshake  eTTYHandshake
ePhysical  eTTYPhysicalLayer
bStartChar  BYTE
bEndChar    BYTE
xNewDataReceived  BOOL
sCommand    STRING
xStartCommand  BOOL

Fig. 2.1: Graphical Interface of FbScanner
## VersionHistory (GVL)

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
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</thead>
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<tr>
<td>WagoAppSerial_Scanner</td>
<td>WagoSysVersion.ProjectInfo</td>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Author</th>
<th>Change</th>
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</tr>
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<td>03.06.2015</td>
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Library Reference

This is a dictionary of all referenced libraries and their name spaces.

**Standard**

*Library Identification:*
Placeholder: Standard
Default Resolution: Standard, * (System)
Namespace: Standard

*Library Properties:*

- LinkAllContent: False
- QualifiedOnly: True
- SystemLibrary: False
- Optional: False

**WagoSysErrorBase**

*Library Identification:*
Placeholder: WagoSysErrorBase
Default Resolution: WagoSysErrorBase, * (WAGO)
Namespace: WagoSysErrorBase

*Library Properties:*

- LinkAllContent: False
- QualifiedOnly: False
- SystemLibrary: False
- Optional: False

*Library Parameter:*
Parameter: RES_LOG_MAX_FILESIZE = 2000
Parameter: RES_LOG_MAX_FILES = 1
Parameter: RES_LOG_MAX_ENTRIES = 200
Parameter: RES_LOG_NAME = ’WagoAppResultLogger’

**WagoSysSerial**
Library Identification:
Placeholder: WagoSysSerial
Default Resolution: WagoSysSerial, * (WAGO)
Namespace: WagoSysSerial

Library Properties:
- LinkAllContent: False
- QualifiedOnly: False
- SystemLibrary: False
- Optional: False

WagoSysVersion
Library Identification:
Name: WagoSysVersion
Version: 1.0.0.0
Company: WAGO
Namespace: WagoSysVersion

Library Properties:
- LinkAllContent: False
- QualifiedOnly: True
- SystemLibrary: False
- Optional: False

WagoTypesCom
Library Identification:
Placeholder: WagoTypesCom
Default Resolution: WagoTypesCom, * (WAGO)
Namespace: WagoTypesCom

Library Properties:
- LinkAllContent: False
- QualifiedOnly: False
- SystemLibrary: False
- Optional: False

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