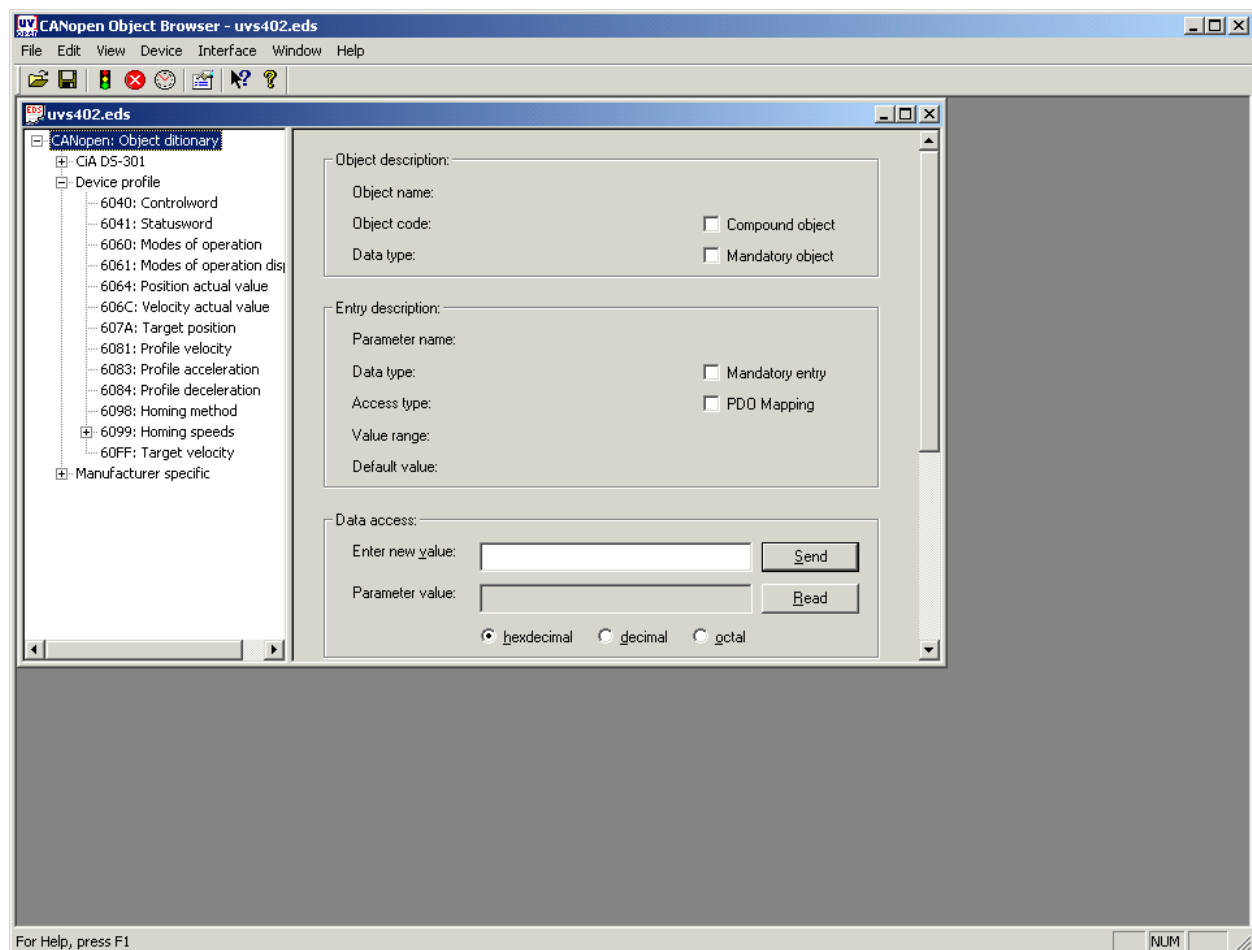


CANopen Object Browser, Version 0.5

CANopen Object Browser for generic CAN Interfaces

The CANopen Object Browser is a tool to display and browse through a CANopen Object Dictionary based on EDS-Files. The program allows an online access to any connected CANopen device. This means to read and to write individual parameter values of a connected device.



Please note: Do not connect the program to a real application with a running CANopen Master (e.g. on a PLC). This can damage your application.

This software is **FREEWARE**, without any warranty or support (see End-User License Agree).

CANopen Object Browser, Version 0.5

Getting started

Installation

Insert the **Installation CD** into your CD-ROM drive. The installation program will start automatically, otherwise browse to the main directory of the CD and start the program **Setup.exe**.

Make sure that you have administrator rights and follow the instructions of the installation program.

System requirements

At least you need a personal computer or a notebook, running with Windows® 2000 or Windows® XP, and a CAN-Interface board. For a list of supported CAN-Interface boards see below.

Libraries

To run the program the following dynamic link libraries (DLL) must be installed in the Windows system directory, or in the program directory, or somewhere in the search path:

Library	Version	Vendor
uvcop100.dll	0.5.0.241	UV Software
uvcopbrd.dll	0.5.0.241	UV Software

The libraries will be installed during program installation.

Supported CAN-Interface boards

The following CAN-Interface boards are supported by the CANopen Object Browser:

- RS-CAN-Wandler
- CANopen-over-TCP/IP (client)*
- IXXAT Virtual-CAN-Interface
- PEAK PCAN-Basic interfaces
- Vector XL Driver interfaces
- Other CAN-Interface boards on request

If a particular CAN-Interface board is supported depends on the package option of the program.

RS-CAN-Wandler

The **RS-CAN-Wandler** (Converter) is used for interfacing a personal computer (PC) or a programmable logical controller (PLC) to a CAN/CANopen network via serial

* New in version 0.5

communication (RS-232). With the Converter you can extend in an easy way your application with CANopen devices.

All CAN baud rates from 10 KBit/sec to 1 MBit/sec according to the CiA bit-timing specification are supported by the Converter and can be selected by DIP switches or configured by software. On the RS-232 side four different baud rates are adjustable by DIP switches: 9.6, 19.2, 38.4 or 57.6 Kbaud.

The Converter provides a CAN Layer 2 access with standard identifier (11-bit COB-IDs) to the devices in the network as well as CANopen Master services according to CiA communication profile DS-301 (Version 4.02).

Libraries

To run the program with the **RS-CAN-Wandler** the following dynamic link libraries (DLL) must be installed in the Windows system directory, or in the program directory, or somewhere in the search path:

Library	Version	Vendor
uvcopasp.dll	0.6.0.214	UV Software

The library will be delivered with the **RS-CAN-Wandler** hardware. To connect the RS-CAN-Wandler you need one serial port (RS-232).

Note: This device is not available anymore.

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CANopen-over-TCP/IP (client)

The CAN user organisation (CAN in Automation) has specified a profile for interfacing CANopen with TCP/IP: CiA DS-309. The CANopen Object Browser now supports **CANopen-over-TCP/IP** connections according to CiA DS-309/3 (*Interfacing CANopen with TCP/IP, Part 3: ASCII Mapping*; version 1.1).

Libraries

To run the program as a **CANopen-over-TCP/IP** client the following dynamic link libraries (DLL) must be installed in the Windows system directory, or in the program directory, or somewhere in the search path:

Library	Version	Vendor
uvcoptcp.dll	0.2.0.218	UV Software

To use the **CANopen-over-TCP/IP** (client) you need a connection to a CANopen-over-TCP/IP gateway (according to CiA DS-309/3) over Ethernet.

A software solution of a **CANopen-over-TCP/IP** gateway using the SocketCAN interface on Linux operating systems can be downloaded from my web site: http://www.uv-software.de/dokuwiki/doku.php?id=uv:programs#canopen_commadline_tool. It runs well with a PEAK PCAN-USB-Dongle on Debian Etch.

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IXXAT Virtual-CAN-Interface

IXXAT Automation offers a wide range of CAN-Interface boards to be connected to a personal computer or a notebook. The IXXAT CAN-Interface boards come with a driver for Windows® and an application programming interface (API): **Virtual-CAN-Interface** (VCI V2).

Libraries

To run the program with the IXXAT **Virtual-CAN-Interface** (VCI V2) the following dynamic link libraries (DLL) must be installed in the Windows system directory, or in the program directory, or somewhere in the search path:

Library	Version	Vendor
vcillun6.dll	2.16	IXXAT Automation
uvcopvci.dll	0.2.1.3	UV Software

The **Virtual-CAN-Interface** (VCI V2) will be delivered with the IXXAT hardware, or can be downloaded from the IXXAT web site.

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PEAK PCAN-Basic

PEAK-System Technik offers several CAN-Interface boards to be connected to a personal computer or a notebook. The PEAK CAN-Interface boards come with a driver for Windows® and an application programming interface (API): **PCAN-Basic**.

Libraries

To run the program with the PEAK **PCAN-Basic** interface the following dynamic link libraries (DLL) must be installed in the Windows system directory, or in the program directory, or somewhere in the search path:

Library	Version	Vendor
PCANBasic.dll	1.0.6.19	PEAK-System Technik
uvcoppcb.dll	0.2.0.241	UV Software

Or alternatively the older PEAK **PCAN-Light** interface:

Library	Version	Vendor
pcan_usb.dll	≥ 1.52	PEAK-System Technik
uvcoppcl.dll	0.3.1.3	UV Software

The **PCAN-Basic** interface will be delivered with the PEAK hardware, or can be downloaded from the PEAK web site. Only the PEAK USB-to-CAN dongle (PCAN-USB) was tested with the CANopen Object Browser.

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Vector XL Driver

Vector Informatik is a manufacturer of hardware and software for networking in electronic systems based on CAN. The Vector CAN-Interface boards come with a driver for Windows® and an application programming interface (API): **Vector XL Drivers**.

Libraries

To run the program with the **Vector XL Drivers (VXL)** the following dynamic link libraries (DLL) must be installed in the Windows system directory, or in the program directory, or somewhere in the search path:

Library	Version	Vendor
vxlapl.dll	5.7.16.0	Vector Informatik
uvcopvxl.dll	0.1.1.3	UV Software

The **Vector XL Drivers (VXL)** will be delivered with the Vector hardware, or can be downloaded from the Vector Informatik web site.

Contact

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History

Date	Release	Changes
04/04/2008	0.4.100	Initial revision of the document.
03/05/2009	0.5.100	Support of CAN Interface boards added: - Vector XL Driver interfaces - CANopen-over-TCP/IP Version information updated.
11/11/2010	0.5.100.244	Support of CAN Interface boards added: - PEAK PCAN-Basic API Version information updated.

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