

**Manual**

# **XL log Config**

CANcaseXL log Configuration

**Version 4.0**

**English**

## **Imprint**

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# 1 Introduction

In this chapter you find the following information:

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	Certification	
	Warranty	
	Support	
	Registered trademarks	

---

## 1.1 About this user manual

### 1.1.1 Access helps and conventions

#### To find information quickly







The user manual provides you the following access helps:

- At the beginning of each chapter you will find a summary of the contents,
- In the header you can see in which chapter and paragraph you are ((situated)).

#### Conventions

In the two following charts you will find the conventions used in the user manual regarding utilized spellings and symbols.

Style	Utilization
<b>bold</b>	Blocks, surface elements, window- and dialog names of the software. Accentuation of warnings and advices. <b>[OK]</b> Push buttons in brackets <b>File   Save</b> Notation for menus and menu entries
Windows	Legally protected proper names and side notes.
Source code	File name and source code.
Hyperlink	Hyperlinks and references.
<STRG>+<S>	Notation for shortcuts.

Symbol	Utilization
	This symbol calls your attention to warnings.
	Here you can find additional information.
	Here is an example that has been prepared for you.
	Step-by-step instructions provide assistance at these points.
	Instructions on editing files are found at these points.
	This symbol warns you not to edit the specified file.

### 1.1.2 Certification

#### Certified Quality Management System

Vector Informatik GmbH has ISO 9001:2000 certification. The ISO standard is a globally recognized standard.

### 1.1.3 Warranty

#### Restriction of warranty

We reserve the right to change the contents of the documentation and the software without notice. Vector Informatik GmbH assumes no liability for correct contents or damages which are resulted from the usage of the user manual. We are grateful for references to mistakes or for suggestions for improvement to be able to offer you even more efficient products in the future.

### 1.1.4 Support

#### You need support?

You can get through to our support at the phone number  
+49 711 80670-200 or by fax  
+49 711 80670-555  
E-Mail: [support@vector-informatik.de](mailto:support@vector-informatik.de)

### 1.1.5 Registered trademarks

#### Registered trademarks

All trademarks mentioned in this user manual and if necessary third party registered are absolutely subject to the conditions of each valid label right and the rights of particular registered proprietor. All trademarks, trade names or company names are or can be trademarks or registered trademarks of their particular proprietors. All rights which are not expressly allowed, are reserved. If an explicit label of trademarks, which are used in this user manual, fails, should not mean that a name is free of third party rights.

→ **Windows, Windows XP, Windows 2000** are trademarks of the Microsoft Corporation.



## 2 General information

In this chapter you find the following information:

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2.3	Supported file formats	page 9
2.4	Supported bus types	page 11
2.5	Requirements	page 11
2.6	Installation	page 11

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## 2.1 Disclaimer

### Information

The application of this product can be dangerous. Please use it with care.



With this software it is possible for you to influence or control a networked electronic system. Your actions can therefore lead to severe personal damages or damages to property. For this reason, only persons, who have understood the possible consequences of their actions with this software or persons, who have been specially trained for the use of this software, may use this software.

In case other persons use this software, **Vector Informatik GmbH** hereby expressly gives notice that Vector's warranty shall be limited to the correction of defects, and **Vector Informatik GmbH** hereby expressly disclaims any liability over and above the refunding of the price paid for this software.

Should you integrate this product into a higher-level system by using the product's automation interface, please note that the warranty of **Vector Informatik GmbH** shall be limited to the correction of defects, and **Vector Informatik GmbH** hereby expressly disclaims any liability over and above the refunding of the price paid for this software, since Vector does not have any influence on the implementations of the higher-level system, which may be defective.

Furthermore, **Vector Informatik** shall in no event be held liable for any user-defined scripts, regardless of whether or not you turn off this disclaimer when using this product in the batch mode.

Should you not agree with the above named limitations, please send the software back to us at our costs within one (1) month after delivery. We will then immediately refund the price you have paid.

## 2.2 Overview

### About XL log Config

**XL log Config** enables the configuration of CANcaseXL log devices and offers a wide range of settings. You may set baud rates, logging triggers and filters and manage logging files on the SD card. **XL log Config** also supports trigger and filter access by symbolic names defined in CANdb databases.

Main features are:

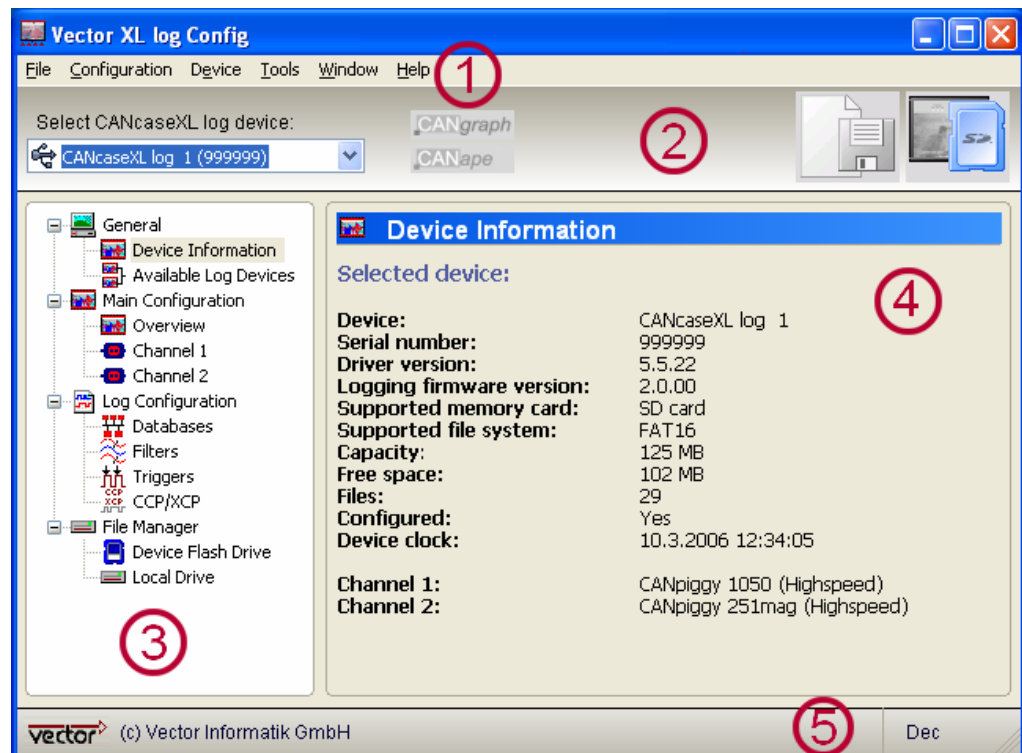
- Customizable filters for CAN and LIN messages
- Customizable triggers
- Support of databases
- Support of CCP/XCP
- File Management

To become familiar with the capabilities of the tool, have a short look on this overview and try the first step by adding a simple filter (see chapter [Adding a simple filter](#) on page 14).

### The XL log Config window

The window of XL log Config is divided into five parts:

- (1) Main menu (see chapter [Main menu](#) on page 27)
- (2) Tool bar (see section [Tool bar](#) on page 35).
- (3) Tree view (see chapter [Tree view](#) on page 37)
- (4) Property panel (see chapter [Property panel](#) on page 71)
- (5) Status bar (see chapter [Status bar](#) on page 73)



Please see the specific sections for detailed information.

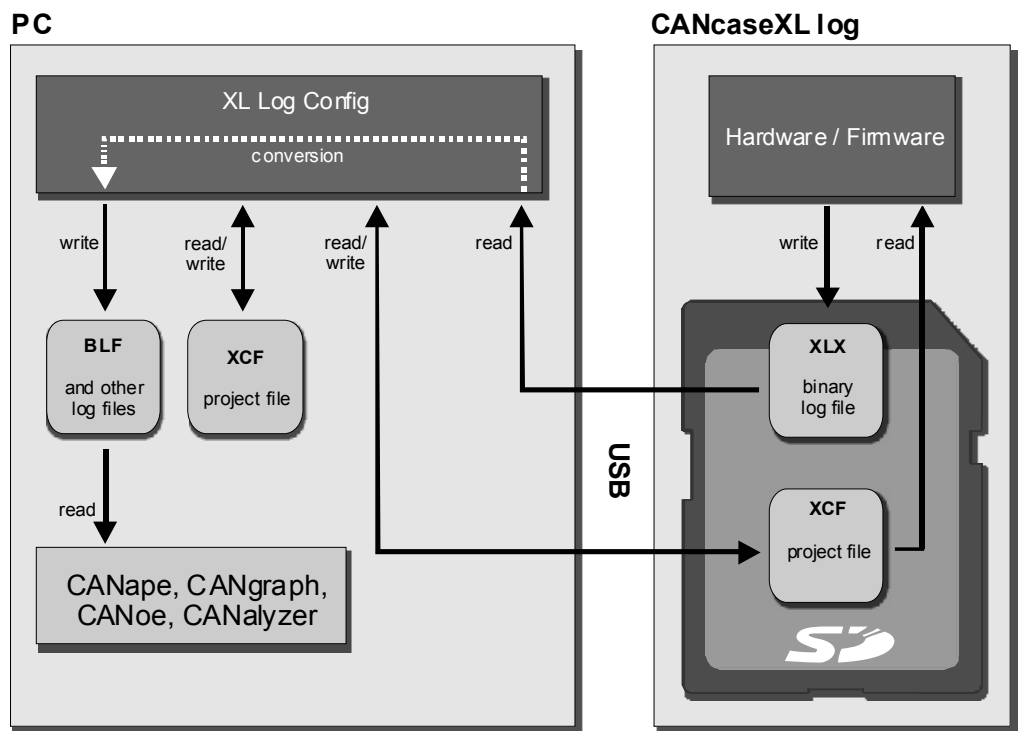
## 2.3 Supported file formats

**Used and supported file formats** XL log Config can handle the following file formats:

<b>.XCF</b>	<p>XL log Config project file. The project file contains all settings made in XL log Config and additional information like file history, file paths and so forth in plain text.</p> <p>Furthermore the project file contains a compressed binary XL log Config configuration which is read directly by the CANcaseXL log. The logger mode cannot be accessed without a valid XCF file on the SD card.</p>
<b>.XLP</b>	<p>This file is saved with the project file if the backup function is activated in <b>Tools   Options...</b> and menu <b>Configuration   Write to device...</b> or <b>Write to folder...</b> was selected. This file contains the used database information of the project and is necessary to read back by <b>Configuration   Read from device...</b> or <b>Read from folder...</b> to rebuild the databases.</p>
<b>.XLX</b>	<p>Binary CANcaseXL log log file, which can be converted to BLF, MDF or XLS.</p>

<b>.BLF</b>	The BLF Log file is a binary logging format supported by CANape, CANoe or CANalyzer. This format can be converted from <b>.XLX</b> format using <b>XL log Config</b> .
<b>.MDF</b>	The MDF format is standardized and supported by CANape, CANoe, CANalyzer and other measuring applications. This format can be converted from <b>.XLX</b> format using <b>XL log Config</b> .
<b>.XLS</b>	Tab divided ASCII log file. This format can be converted from <b>.XLX</b> format using <b>XL log Config</b> .
<b>.XCT</b>	<b>XL log Config</b> project file of previous XL log Config V1.1. This format is only supported for backward compatibility.

File formats overview



**Note:** The configuration file must be saved as `xlllogcfg.xcf` on the SD card; otherwise the configuration will not be loaded.



**Note:** Please note, that the CANcaseXL log supports **FAT16** for SD cards only. The file count is limited to 512 files.



**Warning:** By unplugging the power supply while messages are received, the messages are lost within the last second.



**Warning:** The SD card should not be removed while logging. In order to swap the SD card, stop logging, replace the SD card and restart the logging.

## 2.4 Supported bus types

### Networks

The CANcaseXL log is able to log data from CAN, LIN and as well as J1708. Since two channels can be used, the following combinations are valid:

- 2x CANpiggy
- 2x LINpiggy
- 1x CANpiggy and 1x LINpiggy
  
- 2x CANpiggy J1708
- 1x CANpiggy and 1x CANpiggy J1708
- 1x LINpiggy and 1x CANpiggy J1708

The specific bus types have to be selected in Main Configuration (see section **Main Configuration** on page 39).

## 2.5 Requirements

### Hardware requirements

<b>CPU</b>	Pentium III or higher
<b>Memory</b>	128 MB RAM or more
<b>Operating system</b>	Windows 2000 SP4 or XP SP2
<b>Optional Hardware</b>	CANcaseXL log for online configuration
<b>Optional Software</b>	CANdb++ (can be found on the Vector Driver Disk) CANape/CANgraph 6.1 SP2 or higher

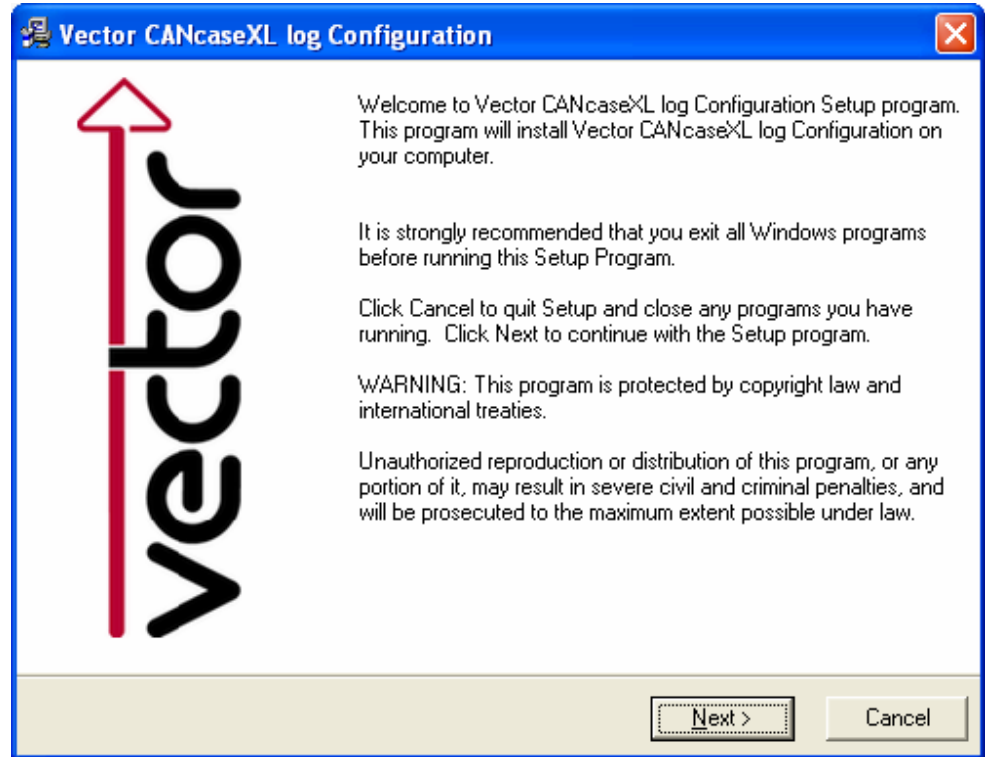
### Software requirements

## 2.6 Installation



Follow the instructions below to install the **XL log Config**.

1. Execute the setup, which is found on the Installation CD:  
 \Drivers\CANcaseXL\Tools\XL\_log\_Config\_Setup.exe or from Autostart menu of the driver disk **Hardware | CANcaseXL / log | Setup XL log Config**.
2. Please follow the instructions found there to complete the installation.



3. After successfully installation, **XL log Config** can be found (if chosen during installation) on the desktop **Start | Programs | Vector CANcaseXL log | CANcaseXL log Configuration**.



## 3 Getting started

In this chapter you find the following information:

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3.4	Adding a trigger AND group	page 23

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### 3.1 Adding a simple filter



**Example:** The following example describes how to insert a simple filter which is used in the logger mode of the CANcaseXL log. The filter settings block all received messages except for the specific message which is logged.

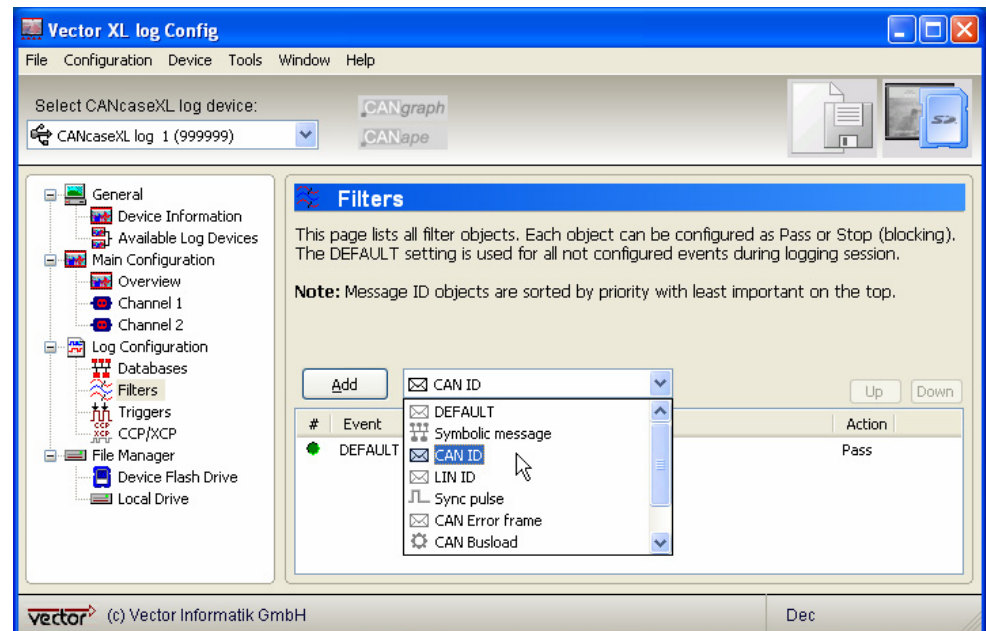
This example does not require a CANcaseXL log, since off-line configuration is used. To configure the CANcaseXL log, it must be connected to the PC with a USB cable.



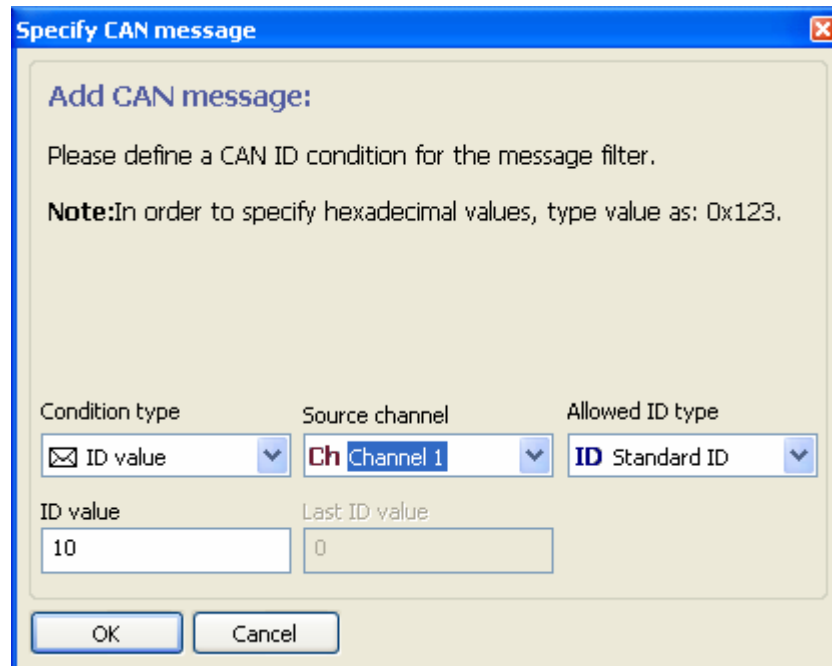
1. Open CANcaseXL log Config.
2. Open node **Log configuration** in the tree view.
3. Click on **Filters**.



4. Select **CAN ID** in the combo box in the Property panel.



5. Click **[Add]**. A filter settings dialog pops up.
6. Set **Condition type** to **ID value**, below enter the value 10 for decimal or 0xA for hex decimal value.
7. Select **Channel 1** in the combo box **Source channel**.



8. Click **[OK]**. The filter is listed in the list view now.



9. Now change the DEFAULT filter from **Pass** to **Stop** in order to block all incoming CAN and LIN messages. You can double click either the green icon in column **#** or the item in column **Action**. It is also possible to change the action by right clicking on the DEFAULT filter followed by **Stop filter**.
10. Now change the just added filter action to **Pass**. This makes sure that only CAN

messages with ID 10 get through and are logged.



11. Write the configuration to a connected CANcaseXL log by selecting the desired CANcaseXL log device from the tool bar's combo box followed by the menu **Write to device...** or clicking the SD card button in the rightmost of the tool bar.
12. Disconnect the CANcaseXL log from USB to boot the logger mode.
13. With these settings, all received messages are logged which are of type CAN with the specified ID 10.

## 3.2 Adding a filter by symbolic message



**Example:** The following example describes how to insert a filter by symbolic message which is used in the logger mode of the CANcaseXL log. The filter settings block all received messages except for the specific symbolic message which is logged.

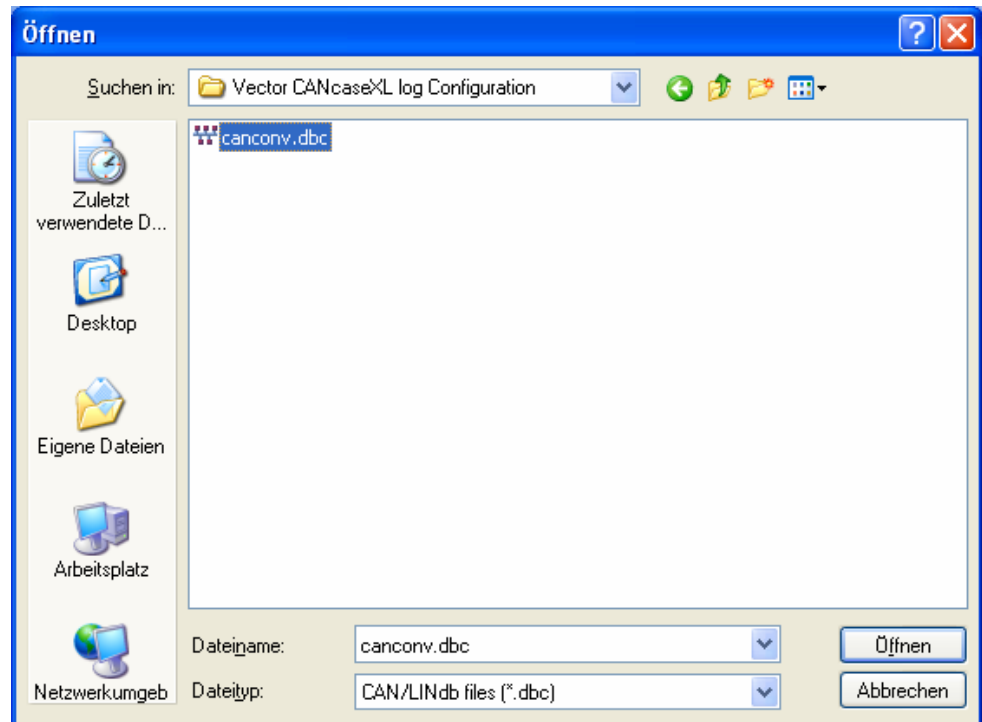
This example does not require a CANcaseXL log, since off-line configuration is used. To configure the CANcaseXL log it must be connected to the PC with a USB cable.



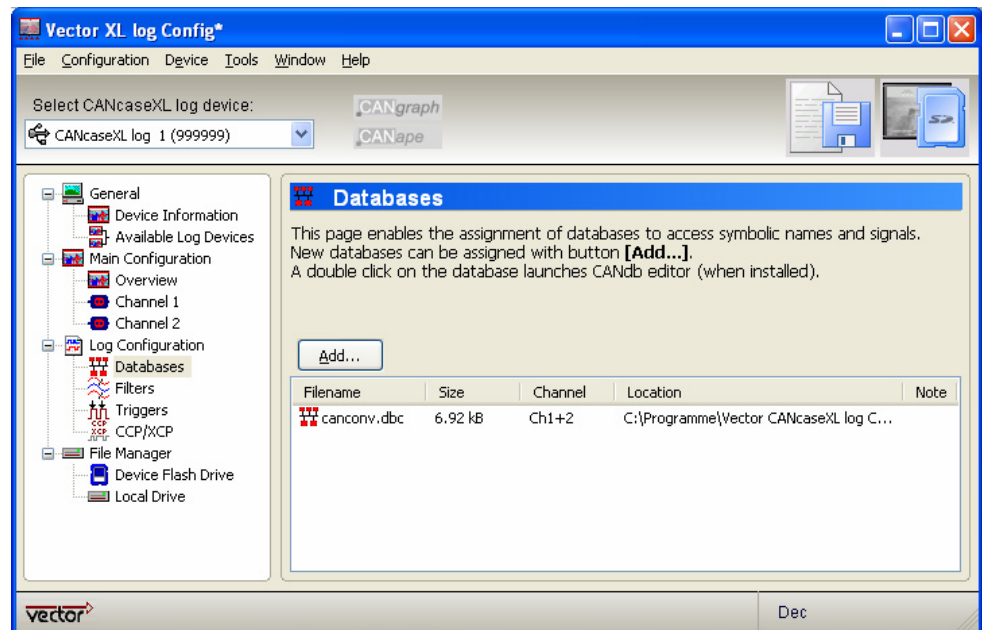
1. Open CANcaseXL log Config.
2. Open node **Log configuration** in the tree view.
3. Click on **Databases**.



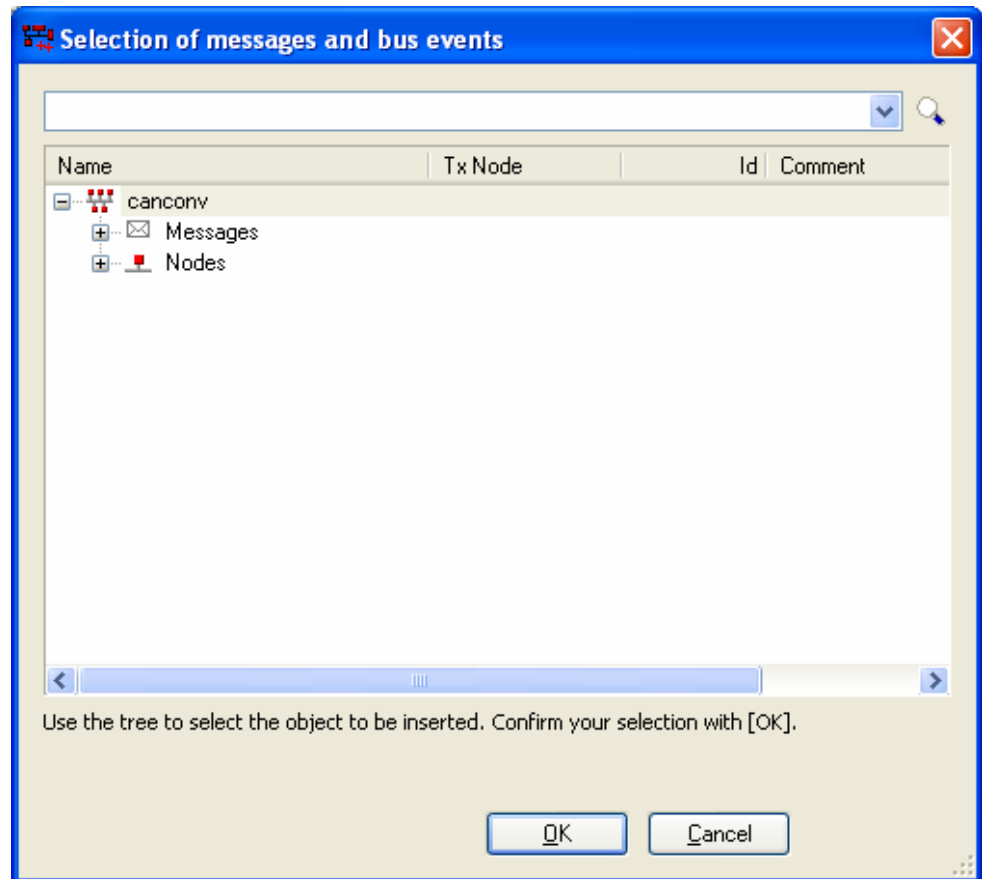
- Click **[Add...]** and select a CANdb file containing the symbolic names.



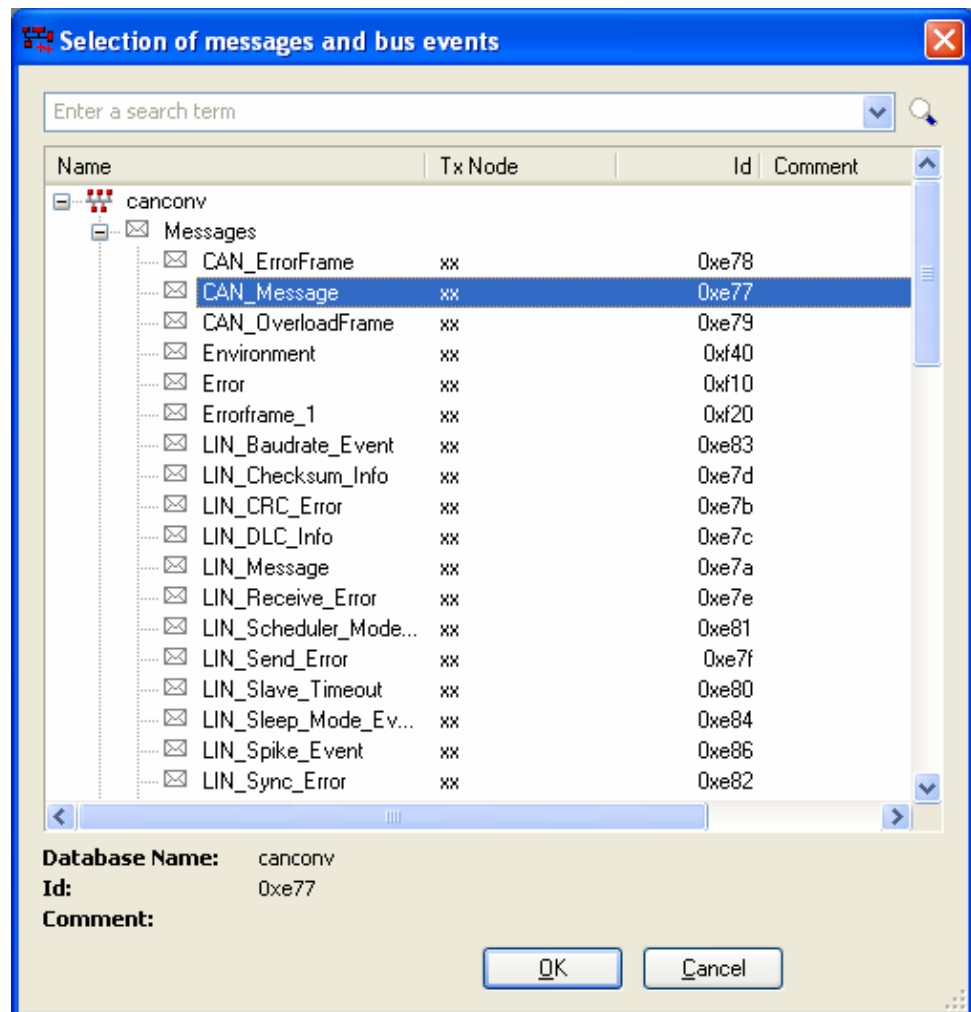
- The database is listed in the list view now.



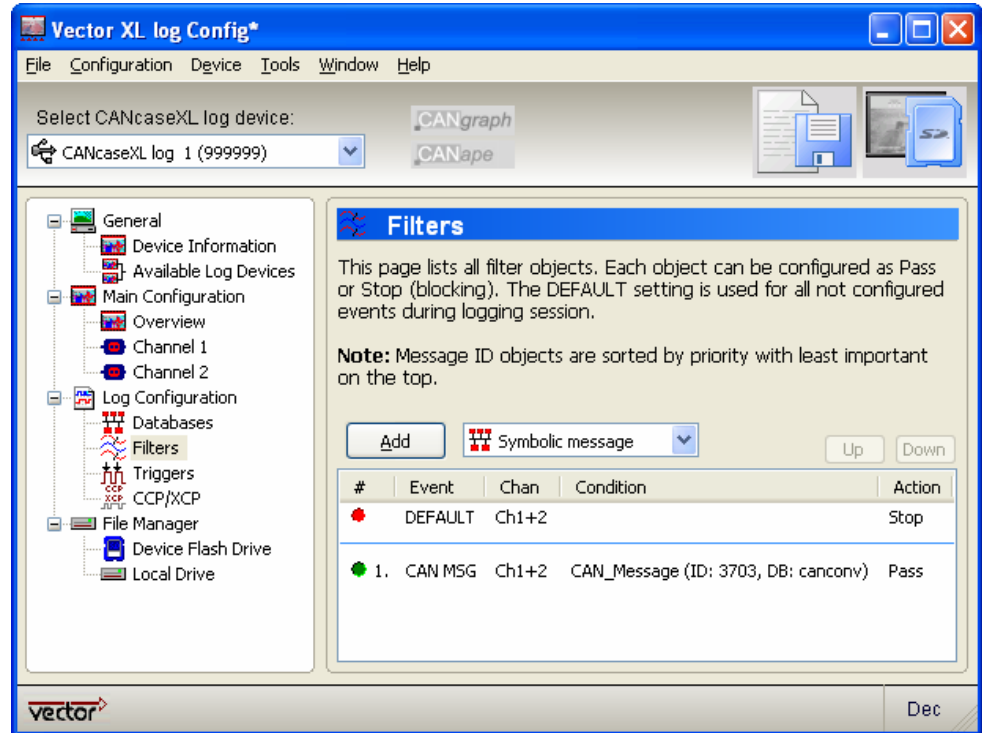
- Skip to node **Filters** and add a filter **Symbolic name**. A dialog pops up which displays the just added database.



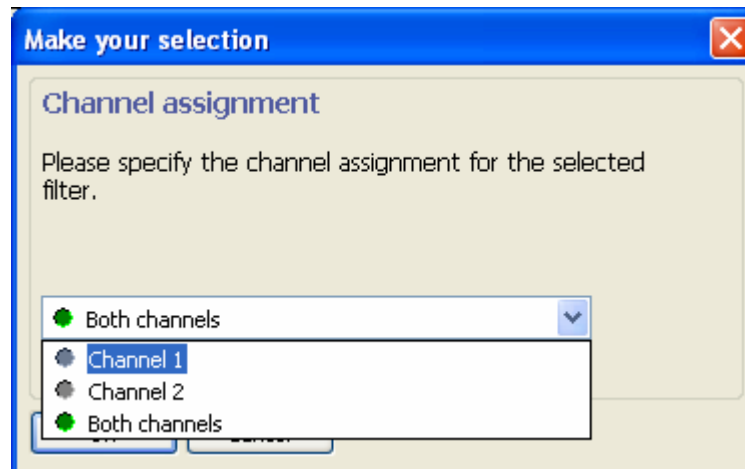
7. Open node **Messages** in this dialog and select a symbolic name for the message.



8. Click **[OK]**.
9. The filter is now listed in the list view of **Filters**. In column condition the name of the filter is displayed. Additionally the message ID and the origin database is shown in brackets)
10. Change the DEFAULT filter to **Stop** and the just added filter to **Pass**.



11. Now you can change the channel assignment of column **Chan** by double clicking it or by a right click followed by **Modify channel assignment**.



12. The symbolic name of the added filter can be changed every time by double clicking it and selecting another symbolic name from the dialog.
13. Write the configuration to a connect CANcaseXL log by selecting the desired CANcaseXL log device from the tool bar's combo box followed by the menu **Write to device...** or clicking the SD card button in the most right of the tool bar.
14. Disconnect the CANcaseXL log from USB to boot the logger mode.
15. With these settings, all received messages are logged which are of type CAN with the specified ID of the symbolic name (here ID 3703).

### 3.3 Adding a simple trigger

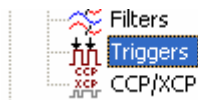


**Example:** The following example describes how to insert a trigger which is used in the logger mode of the CANcaseXL log. The trigger lets the CANcaseXL log beep if a valid message is received.

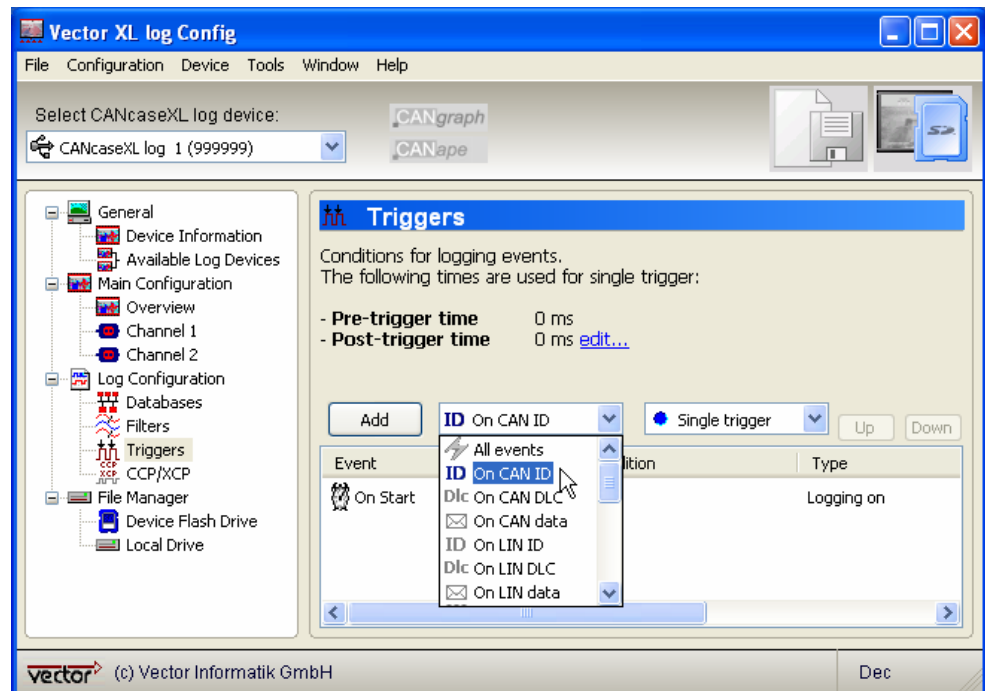
This example does not require a CANcaseXL log, since off-line configuration is used. To configure the CANcaseXL log it must be connected to the PC with a USB cable.



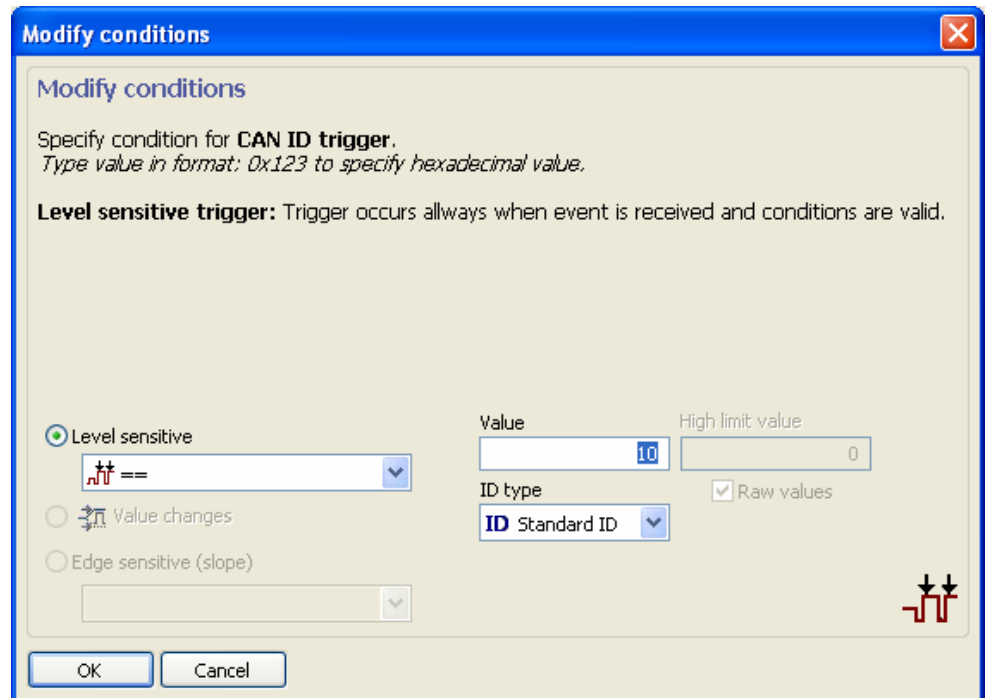
1. Open CANcaseXL log Config.
2. Open node **Log configuration** in the tree view.
3. Click on **Triggers**.



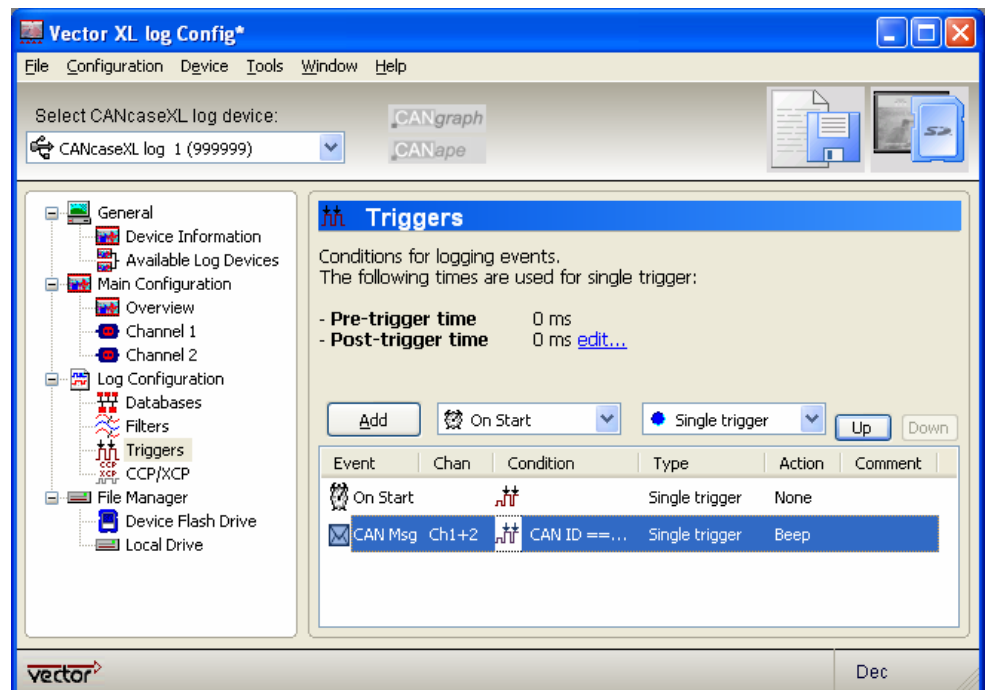
4. Select **On CAN ID** in the combo box.
5. Select **Single trigger** in the second combo box



6. Click **[Add]**.
7. Set **Level sensitive** to **==** in the dialog which pops up.
8. Enter value 10. This setting will trigger to all received CAN messages with ID 10.
9. Set **ID type** to **Standard ID**.



10. Click **[OK]**.
11. Change the trigger action to **Beep** by few double clicks on the trigger item in column **Action** or alternatively by a right click followed by **Modify action | Beep**.



12. Edit the trigger comment if desired by a double click or alternatively by a right click followed by **Edit comment...**
13. Write the configuration to a connected CANcaseXL log by selecting the desired CANcaseXL log device from the tool bar's combo box followed by the menu **Write to device...** or clicking the SD card button in the most right of the tool bar.
14. Disconnect the CANcaseXL log from USB to boot the logger mode.

- Now, the CANcaseXL log will beep on every received event which is a CAN message with ID 10.

### 3.4 Adding a trigger AND group



**Example:** The following example describes how to insert a trigger AND group which is used in the logger mode of the CANcaseXL log. The trigger lets the CANcaseXL log beep if all conditions in the AND group are valid.

This example does not require a CANcaseXL log, since off-line configuration is used. To configure the CANcaseXL log it must be connected to the PC with a USB cable.



- Open CANcaseXL log Config.
- Open node **Log configuration** in the tree view.
- Click on **Triggers**.



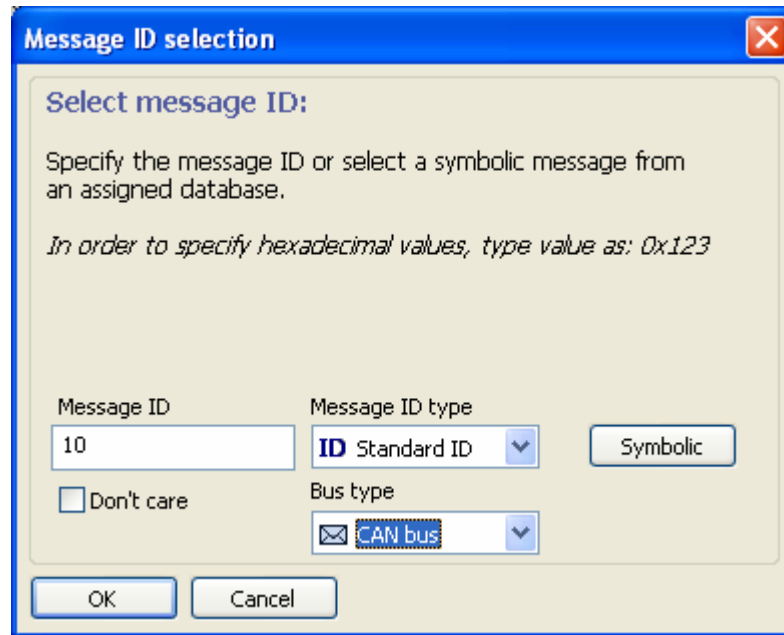
- Click with the right mouse button into the list view and select **New group | AND group**.

Event	Chan	Condition	Type	Action	Comment
On Start			Logging on	None	

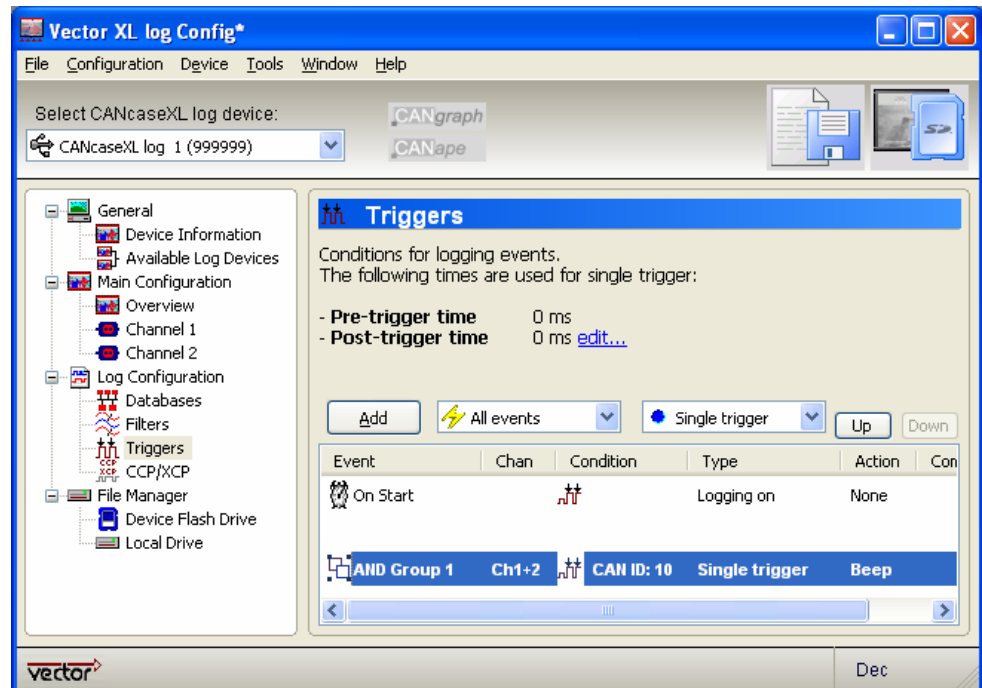
  

New trigger	N ▶	
New group	G ▶	AND group
Modify channel assignment		

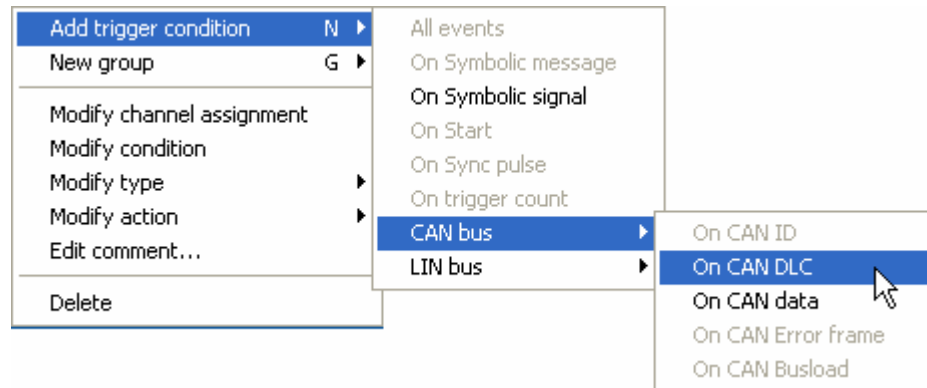
- Enter value 10 in **Message ID**.
- Set **Message ID type** to **Standard ID**.
- Set **Bus type** to **CAN bus**.



8. Click **[OK]**.
9. The AND group is displayed in the list view.
10. Change the trigger action to **Beep**.



11. Now click with the right mouse button onto the just added AND group and select **Add trigger action | CAN bus | On CAN DLC**.



12. Select Level sensitive == and enter the value 4.

13. Click **[OK]**.

Write the configuration to a connected CANcaseXL log by selecting the desired CANcaseXL log device from the tool bar's combo box followed by the menu **Write to device...** or clicking the SD card button in the most right of the tool bar.

14. Disconnect the CANcaseXL log from USB to boot the logger mode.

15. Now the CANcaseXL log will beep on every received event which

→ is a CAN message with ID 10 AND and

→ with a DLC of 4.



## 4 Main menu

In this chapter you find the following information:

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4.4	Tools	page 30
	CANape/CANgraph	
	Options	
4.5	Window	page 34
4.6	Help	page 34

---

## 4.1 File

### Menu items

File	Configuration	Device	Tools	Window	Help
New project...					Ctrl+N
Open project...					Ctrl+O
Save project					Ctrl+S
Save project as...					
<hr/>					
Exit					

### New projects...

Clears all settings and restores to default values.

### Open project...

Opens a project which was previously saved.

### Save project

Saves the project with the current project name. The project is saved in XCF or XCT file format.

### Save project as...

Saves the project with a new project name. The project is saved in XCF file format and it is used for the start up configuration in logger mode. The alternative XCT file format can be used for testing purposes and manually editing, but it is not readable for startup in logger mode.

### Exit

Closes the application.

## 4.2 Configuration

### Menu items

Configuration	Device	Tools	Window	Help
Write to device...				Ctrl+Shift+S
Write to folder...				
<hr/>				
Use from device				F6
Restore from device...				
Restore from folder...				
<hr/>				
Check				Ctrl+F
<hr/>				
Preview CAN standard ID filter				
Preview LIN ID filter				
Device mode / Ring buffer configuration				

### Write to device...

If the CANcaseXL log is connected to the PC by a USB cable, this option writes the current project to the SD card.

If **Tools | Options... | Archive databases to device** and **Tools | Options... | Archive CANgraph/CANape project** respectively is set to **Yes**, the databases and CANgraph/CANape project are stored to the SD card, too.

### Write to folder...

Same as **Write to device...** but related to any local drive.

### Use from device

If the CANcaseXL log is connected to the PC by a USB cable, this option reads the

configuration from the inserted SD card. This is useful in cases, if additional filters or triggers has to be added and resaved back to the device. This setting can be automated by **Tools | Options... | Configuration auto sensing**.

### Restore from device...

If the CANcaseXL log is connected to the PC by a USB cable, this option reads the configuration, the archived databases and CANgraph/ CANape project (if available) from the inserted SD card.

The following options are available in the dialog:

- **Restore project to following folder**  
Path where the logger configuration (project) should be saved.
- **Restore also CANdb files**  
If activated the databases are saved in the same folder as specified for the logger configuration (project).
- **Restore CANgraph/CANape project to following folder**  
Path where the CANgraph/CANape project should be saved

### Restore from folder...

Same as **Read from device...** but related to any local drive.

### Check

Checks the configuration for valid settings, e.g. if used piggybacks fit to configured channels and so forth.

### Preview CAN standard ID filter

Displays the complete list of passed or stopped CAN IDs, depending on the configuration in **Filters** (see chapter [Filters](#) on page 42).

### Preview LIN standard ID filter

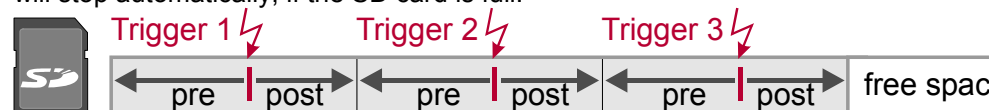
Displays the complete list of passed or stopped LIN IDs, depending on the configuration in **Filters** (see chapter [Filters](#) on page 42).

### Device Mode / Ring buffer configuration

The CANcaseXL log can be operated in the following logging modes:

#### → Normal mode

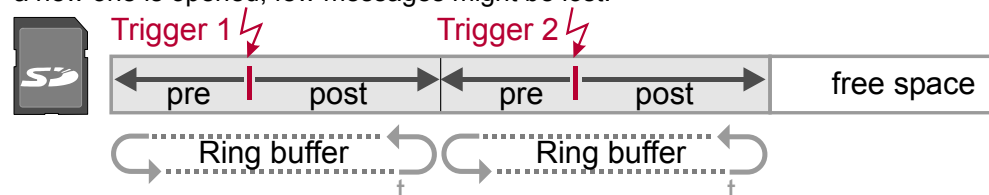
The data is logged on the SD card as long free space is available. The logging will stop automatically, if the SD card is full.



The pre-trigger time is limited to 320 kB.

#### → Multiple file Ring buffer

The data is logged continuously on the SD card. Each new trigger will create a separate logging range (separate file) with a previously specified buffer range. The less the buffer range is selected, the more triggers can be logged. If the SD card is full, the whole logging process will stop. While the ringbuffer is closed and a new one is opened, few messages might be lost.

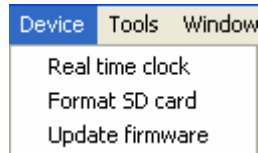


The pre- and post-trigger times are limited by the size of the ring buffer only:  
 $pre\text{-trigger size} = ring\ buffer\ size - post\text{-trigger size}$

On device start a new file is generated within the free space (means new ring buffer range).

## 4.3 Device

### Menu items



### Real time clock

Opens a dialog for real time clock settings. Press **[Update]** button to write the current PC time to the CANcaseXL log device. The device must be connected to the PC by a USB cable and selected in the list box in the tool bar.

### Format SD card

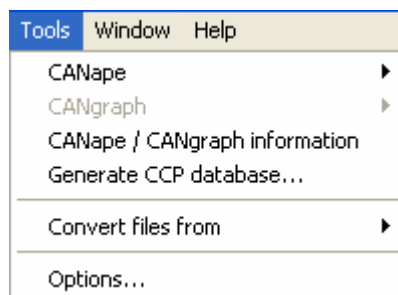
Formats the inserted SD card of the currently selected CANcaseXL log device. File system is FAT16.

### Update firmware

Programs a new logger mode firmware if available, which is delivered with XL log Conf.

## 4.4 Tools

### Menu items



### CANape

Allows interaction with CANape. See chapter [CANape/CANgraph](#) on page 33 for further details.

### CANgraph

Allows interaction with CANgraph. See chapter [CANape/CANgraph](#) on page 33 for further details.

### CANape / CANgraph information

Detects if CANgraph/CANape is installed and displays several information.

### Generate CCP database...

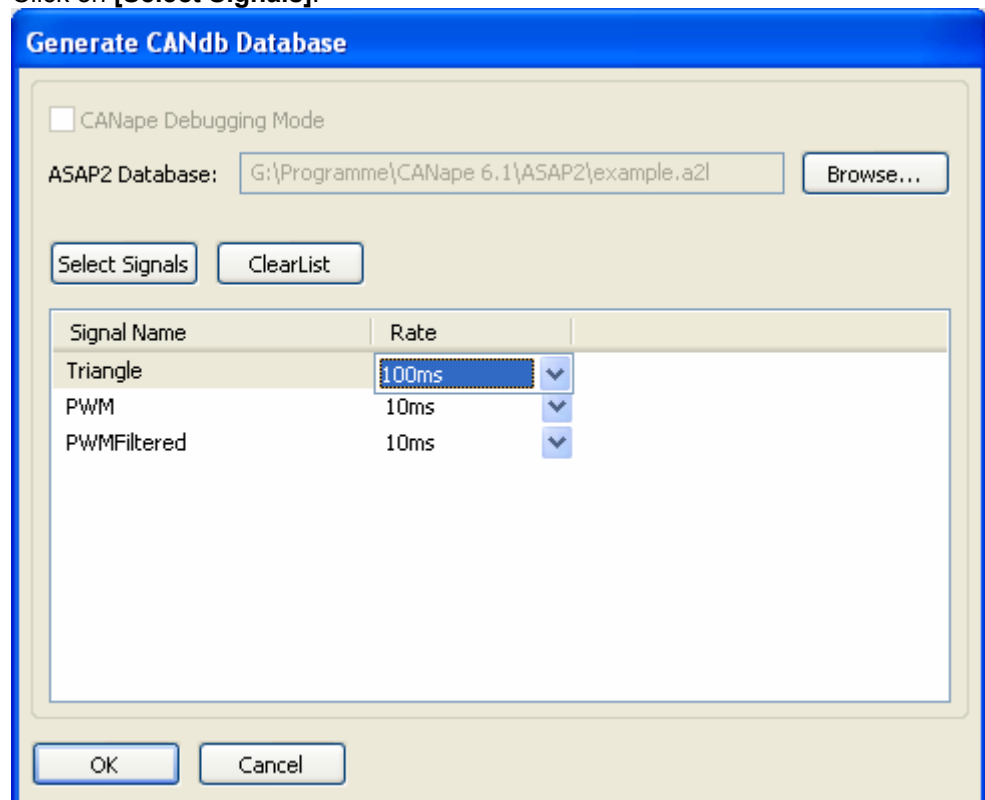
This feature requires at least CANape 6.1 SP2 and an ASAP2 file for an ECU. See below, which steps can be taken to edit an ASAP2 file to create the database in off-line mode.

The checkbox **CANape Debugging Mode** opens a CANape window containing detailed information while creating a database.



### Generation in online mode with an ECU

1. Ensure, that your ECU is connected and running. For testing purpose you can start CCPsim (please ask support for a CCPsim version without Seed&Key). Be sure, that CANape and CCPsim are assigned to a virtual channel in Vector Hardware Config, e.g. CANape CAN1 assigned to Virtual channel 1, CCPsim CAN1 assigned to Virtual channel.
2. Click **Tools | Generate CCP database...** in XL log Config. A dialog appears.
3. Open an ASAP2 file. CANape should access the ECU then.
4. Click on **[Select Signals]**.



5. A CANape dialog opens, where the signals can be chosen and applied.
6. Close the CANape dialog.
7. The selected signals appear in the list of the dialog. Furthermore the acquisition rate can be changed for each signal. Click **[OK]**.
8. A dialog will appear that the database generation succeeded. Click **[OK]**.
9. The generated database will be listed in tree view **Log Configuration | Databases**.



### Generation in offline mode without an ECU

In order to generate a CCP database without an ECU being connected (online), the following steps are necessary:

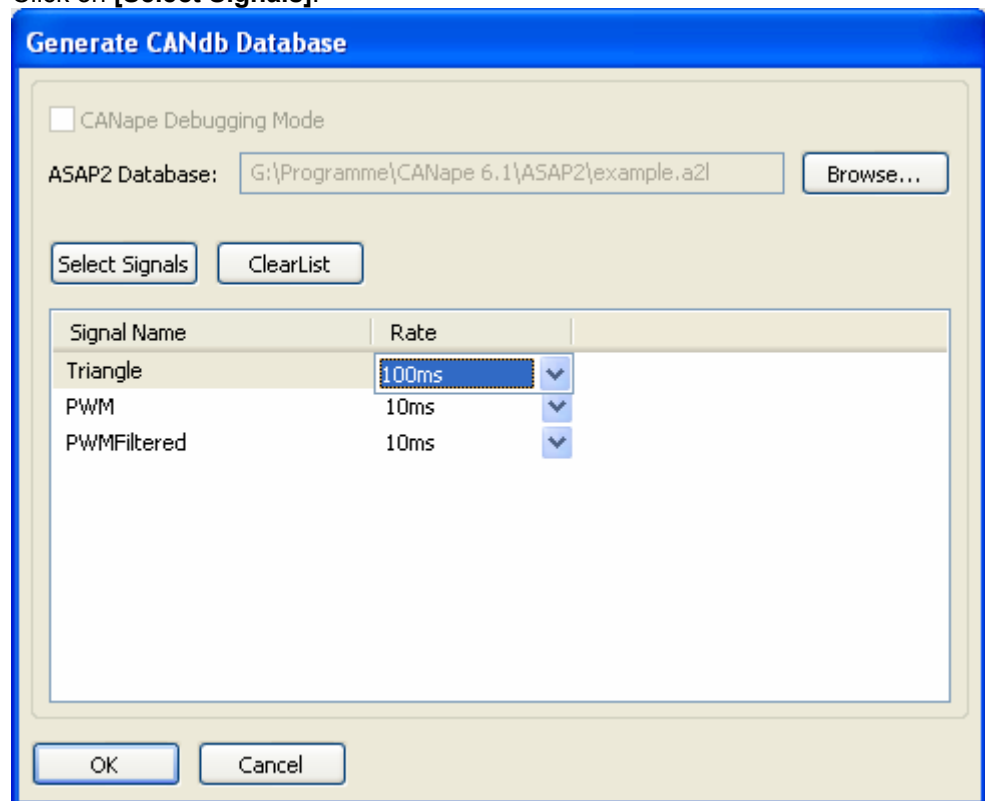
1. Open the CANape project, where the ASAP2 file is part of it.
2. In the settings for Driver installation, click tab DAQ list.

3. Disable Automatic Detection.
4. Insert new DAQ list with ECU-specific First PID and Count of ODT.  
Following lines will be added in the A2L file:
 

```

/begin SOURCE
    "DAQ List" 0 0
    /begin QP_BLOB 0
    LENGTH 12
    FIRST_PID 1
    /end QP_BLOB
/end SOURCE

```
5. Click **Tools | Generate CCP database...** in XL log Config. A dialog appears.
6. Open an ASAP2 file.
7. Click on **[Select Signals]**.



8. A CANape dialog opens, where the signals can be chosen and applied.
9. Close the CANape dialog.
10. The selected signals appear in the list of the dialog. Furthermore the acquisition rate can be changed for each signal. Click **[OK]**.
11. A dialog will appear that the database generation succeeded. Click **[OK]**.
12. The generated database will be listed in tree view **Log Configuration | Databases**.

### Converts files from

Converts logging files (XLX) located on PC or on SD card to BLF, MDF and XLS or copies them only to a location.

### Options...

General XL log Config options. See chapter Options on page 33 for further information.

### 4.4.1 CANape/CANgraph

<b>CANape/CANgraph</b>	XL log Config is able to interact with CANape or CANgraph via the menu entries in <b>Tools   CANape</b> or <b>Tools   CANgraph</b> as follows:
<b>Start with current configuration...</b>	Opens CANape/CANgraph with the CANape/CANgraph configuration set in <b>Tools   Options...</b> For this no assigned database is necessary.
<b>Quickview device log files...</b>	Use this option to view the current log files on the SD card in CANape/CANgraph in a single window. This option needs the same databases as were used for the logging, because the log file content is displayed relating to signal names.
<b>Replace device log files...</b>	This option replaces the first measurement file in CANape Graph with the selected logging file, while keeping the whole view configuration unchanged.

### 4.4.2 Options

- **CANgraph/CANape config**  
Path to a CANgraph/CANape configuration file which should be used together with XL Log Config.
- **CANgraph/CANape project**  
Path to a CANgraph/CANape project folder which should be used together with XL Log Config.
- **Archive databases to device**  
If this option is switched to **Yes**, all databases are combined in one file and stored if **Configuration | Write to device...** or **Configuration | Write to folder...** is selected. This setting is useful to use the database information on other PCs.
- **Archive CANgraph/CANape project**  
If this option is switched to **Yes**, the specified CANgraph/CANape project is combined with the current configuration and stored if **Configuration | Write to device...** or **Configuration | Write to folder...** is selected. This setting is useful to use the CANgraph/CANape project on other PCs.
- **Show only log files in File Manager**  
When this option is switched to **Yes**, only log files are visible otherwise all files with other extensions are shown.
- **- Log file extension**  
Here the file extensions of the log files can be specified (default: .plx). This option can only be used, if **Show only log files in File Manager** is set to **YES**.
- **Default log file prefix**  
Prefix to be added to the log files.
- **Display file notes in File Manager**  
It is possible to display additional file notes (e.g. title of the session, see **Main Configuration | Overview**) in the **File Manager** either for the local drive only, for the local drive and the device or never. In order to improve the performance of the **File Manager** it is recommended to select **On local drive**.
- **Default select all log files**  
Selects all available log files when entering the conversion dialog.
- **Configuration auto sensing**  
This enables the config tool to read the configuration automatically, if an installed and connected CANcaseXL log is selected (see also **Configuration | Use from**

device...).

→ **Tray icon operation**

Modes for tray icon.

→ **Disable balloon info**

If this option is switched to **Yes** no balloon tips will be shown in the tray menu.

→ **New visual style**

Changes the style of the list view.

→ **Border color, Skin color 1, Skin color 2, Feature list color**

Color settings for the user interface in RGB

→ **Enable dialog time out**

If this option is switched to **Yes** critical dialogs will have a time out before a button click is possible.

→ **Show values as (F2)**

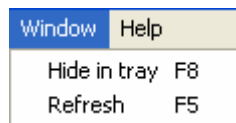
This is equivalent to a click on Dec or Hex in the status bar and displays the values in the list view in the according format.

→ **Accept disclaimer**

If set to YES, the disclaimer at startup will not be shown anymore.

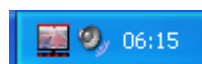
## 4.5 Window

### Menu items



### Hide in tray

Hides the window in the tray bar. In order to unhide the window, double-click on the XL log Conf icon in the tray bar.

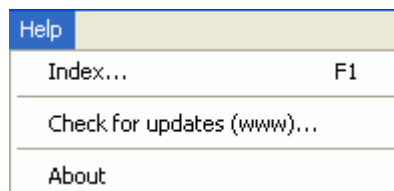


### Refresh

Refreshes the window contents.

## 4.6 Help

### Menu items



### Index

Opens the online help.

### Check for updates

Opens the Vector driver web page.

### About

Information about XL log Config (version number).

## 5 Tool bar

In this chapter you find the following information:

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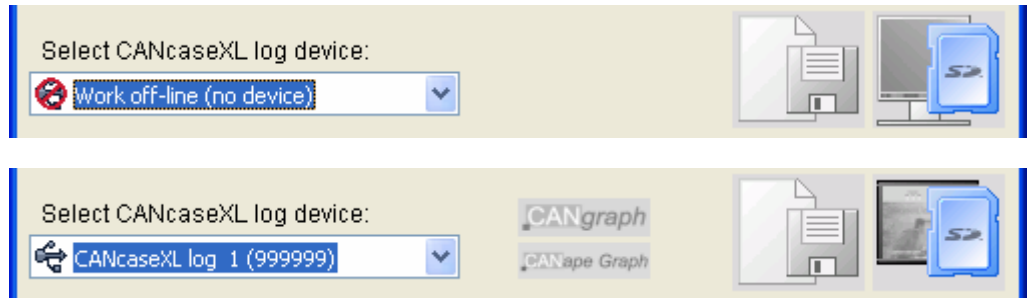
5.1 Device selection and project saving

page 36

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## 5.1 Device selection and project saving

### Screenshots



### List box

The list box shows all connected CANcaseXL log devices. If no device is plugged only offline work is possible. Select a device for online configuration.

### Tool bar buttons

The left button is equivalent to main menu **File | Save project**



The right button is equivalent to main menu **Configuration | Write to device...**



### CANape/CANgraph Quickview

The buttons next to the list box are equivalent to **Tools | CANape | Quickview device log files...** and **Tools | CANgraph | Quickview device log files...** and enables to view log inside CANape or CANgraph.



## 6 Tree view

In this chapter you find the following information:

---

6.1	General	page 38
	Device Information	
	Available Log Devices	
6.2	Main Configuration	page 39
	Overview	
	Channel 1/2	
6.3	Log Configuration	page 41
	Databases	
	Filters	
	Triggers	
	CCP/XCP	

---

## 6.1 General

### 6.1.1 Device Information

#### Device Information

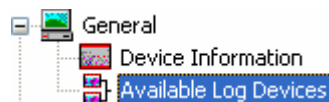


If this tree node is selected miscellaneous details about the selected CANcaseXL log device are displayed in the property panel (right part of the window):

- **Device**  
Name of the currently selected CANcaseXL log device with its hardware index (one based).
- **Serial number**  
Serial number of the currently selected CANcaseXL log device.
- **Driver version**  
Displays the driver version installed on the current PC
- **Logging firmware version**  
This will display the firmware version of the selected CANcaseXL log device.
- **Supported memory card**  
Displays the supported memory cards.
- **Supported file system**  
Displays the supported file system for memory cards.
- **Capacity**  
Capacity of the inserted memory card.
- **Free space**  
Free disk space of the inserted memory card.
- **Files**  
Displays the number of log files stored on the inserted memory card.
- **Configured**  
Notifies if the CANcaseXL log device is already configured.
- **Device clock**  
Displays the current clock settings.
- **Channel 1**  
Displays the inserted piggyback type of channel 1.
- **Channel 2**  
Displays the inserted piggyback type of channel 2.

### 6.1.2 Available Log Devices

#### Available Log Devices



If this tree node is selected, the property panel displays all connected CANcaseXL log devices. The serial number of the log device is displayed in brackets. Additionally the currently selected device is marked with "(selected)".



**Note:** If no CANcaseXL is connected to the PC, the message **No logger device available** is displayed.

## 6.2 Main Configuration

### 6.2.1 Overview

#### Overview



If this tree node is selected, the status of the selected CANcaseXL log device is displayed in the property panel. If the configuration of the device is not valid, several errors or warnings are displayed.

- **ID**  
Automatically generated session ID. The ID is displayed for project files and log files in the File Manager. This ID helps to check which project file was used for a specific log file.
- **Short Description**  
Session name, which will appear in column **Note** of the File Manager.
- **Long Description**  
A long session description, only for project file purpose.
- **Error and warning expressions**  
This is a setting for the logger mode. Any errors or warnings can either be notified by LEDs only (see User Manual CANcaseXL/log, section 2.4.2 Additional LEDs) or by the piezo buzzer or both.
- **Ring buffer configuration**  
Opens the dialog for ring buffer configuration. See section **Configuration/Device Mode / Ring buffer configuration** on page 28 for further details.
- **Current configuration status**  
Warnings or errors are displayed, if there is a problem with the current settings. Otherwise valid configuration will be reported.



**Note:** If no piggyback is inserted into the CANcaseXL log device, the following error will be displayed depending on the channel:

**Error: Channel xy is configured for CAN Bus, but no piggyback is inserted.**

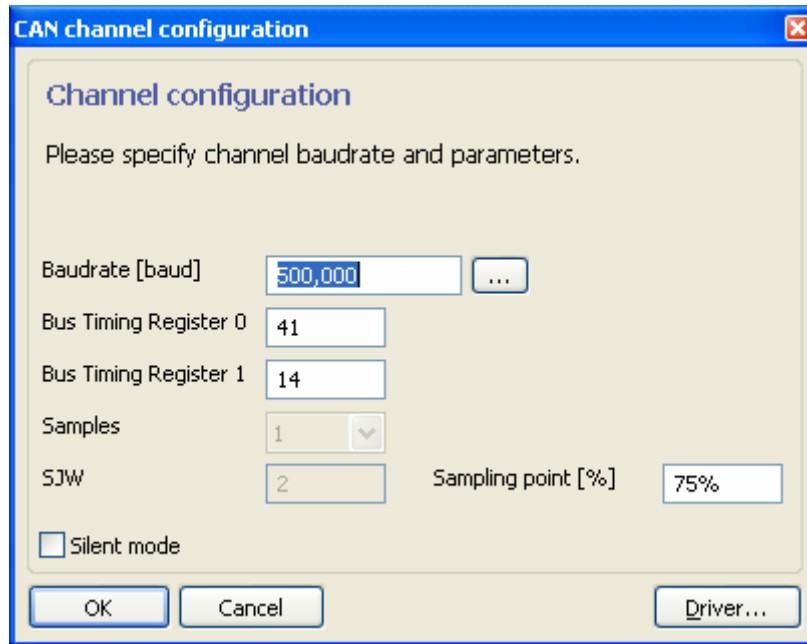
### 6.2.2 Channel 1/2

Channel 1  
Channel 2



If this tree node is selected, channel settings of the selected CANcaseXL log device can be made in the property panel. The button **[Edit...]** opens the channel dialog with the following settings:

Channel 1/2  
dialog settings



<b>Baudrate [baud]</b>	Click the [...] button to select from pre-defined baudrates or enter a user defined baudrate.
<b>Bus Timing Register</b>	The two Bus Timing Registers defines how an individual bit of the serial bit stream is assembled on the bus. Please refer to the data sheet for the CAN controller for the values that should be entered here. Enter the values in hexadecimal numbers.
<b>Sampling Point [%]</b>	Sets the sampling point for CAN signals. Have a look on the CAN protocol for further details.
<b>Silent mode</b>	If enabled, the CANcaseXL log device sends no acknowledge messages when data is received. Please note that the Silent Mode has to be deactivated for the Send Message trigger action (see section Triggers on page 46).
<b>Button [Driver...]</b>	Opens the Vector Hardware Config.



**Info:** The baudrate for J1708 is set to 9600 baud and cannot be changed. The inter character bit time is set to 2 by default.

## 6.3 Log Configuration

### 6.3.1 Databases

#### Databases




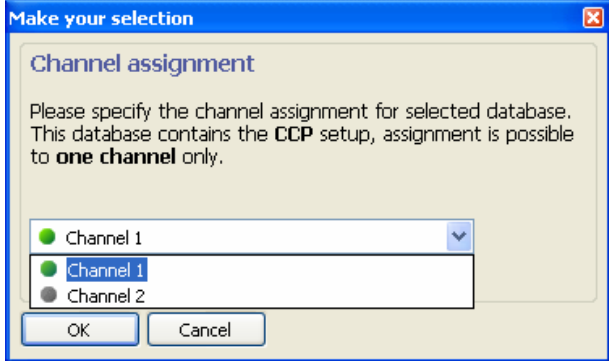
If this tree node is selected, the property panel contains a list view, where databases can be added, edited or removed. In order to configure filters or triggers by **symbolic signals**, at least one CANdb database must be added with **[Add... ]** before. The list view contains the following information:



**Info:** It is not allowed to add a J1708 database here. J1708 databases are only required for CANoe to interpret the log files with J1708 data and to display them correctly in the trace windows of CANoe.

#### List view columns

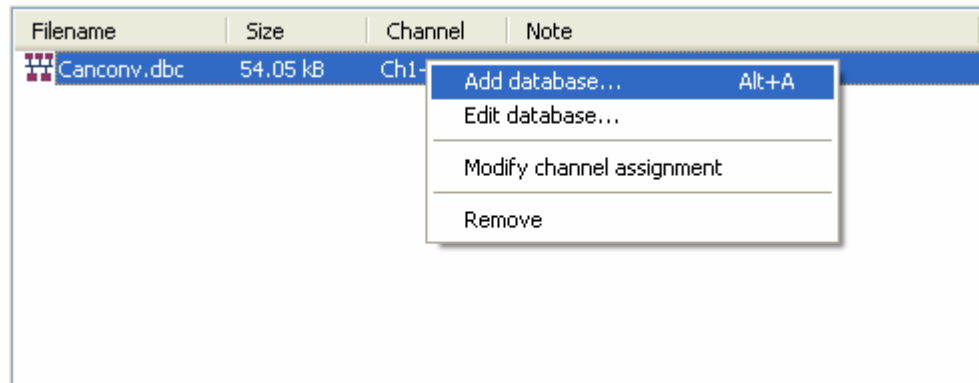
Filename	Size	Channel	Note
 Canconv.dbc	54.05 kB	Ch1+2	CAN database

<b>Filename</b>	<p>Name of the database.</p> <p>A double-click on the file name opens the database editor for editing. Ensure that CANdb++ is already installed (found on the installation CD).</p>
<b>Channel</b>	<p>Selected channel(s) which is (are) used with the added database.</p> <p>A double-click on it opens the channel selection dialog.</p> 
<b>Location</b>	<p>Location of the stored database.</p> <p>A double-click opens the file browser with the database location.</p>
<b>Note</b>	<p>Information about the added database. E.g. if a databases with XCP commands is added, it will be displayed as <b>XCP setup present</b>.</p>

<b>Filename</b>	Name of the database. A double-click on the file name opens the database editor for editing. Ensure that CANdb++ is already installed (found on the installation CD).
-----------------	--

List view  
context menu

The database list view is right click sensitive and offers a context menu as follows:



<b>Add database...</b>	Adds an existing CANdb database to the current configuration.
<b>Edit database...</b>	Opens selected CANdb database in CANdb++.
<b>Modify channel assignment</b>	Changes channel assignment.
<b>Remove</b>	Removes the selected CANdb database.



**Note:** The enabled menu entries depend on the selected item/column in the list view.

## 6.3.2 Filters

Filters






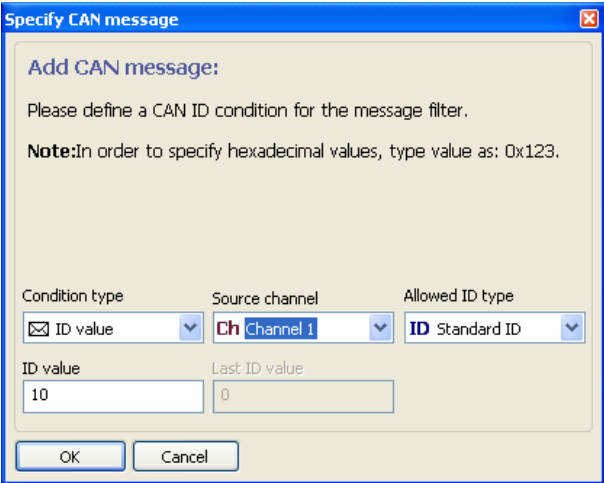
If this tree node is selected, CAN and/or LIN messages can be passed or stopped in logger mode in the property panel. The right part of the window contains the following filter information in a list view:



**Info:** Filters on J1708 messages are not allowed.

List view columns

#	Event	Chan	Condition	Action
	DEFAULT	Ch1+2		Pass
	1. CAN MSG	Ch1+2	CAN ID == 45	Stop
	2. LIN MSG	Ch1+2	LIN ID == 2	Pass

#	Red icon means message is stopped and not logged to SD card. Green icon means message is passed and logged to SD card. A double-click changes the state.
Event	The set filter type. A double click opens the filter type dialog.
Chan	Channel to which the filter is applied to. A double-click opens the channel dialog.
Condition	<p>The set filter condition, e.g. CAN ID == 10. A double-click opens the condition dialog, if available.</p>  <p>→ <b>Condition type</b> ID value: a single ID is filtered. ID range: an ID range is filtered.</p> <p>→ <b>Source channel</b> Channel to which the filter should be applied to.</p> <p>→ <b>Allowed ID type</b> Standard ID, Extended ID.</p> <p>→ <b>ID value</b> The ID which should be filtered.</p> <p>→ <b>Last ID value</b> The last ID, which should be filtered. This text box is only active if filter <b>condition</b> is set to <b>ID range</b>.</p>
Action	Action for the filtered message (Pass or Stop). A double-click changes the state.



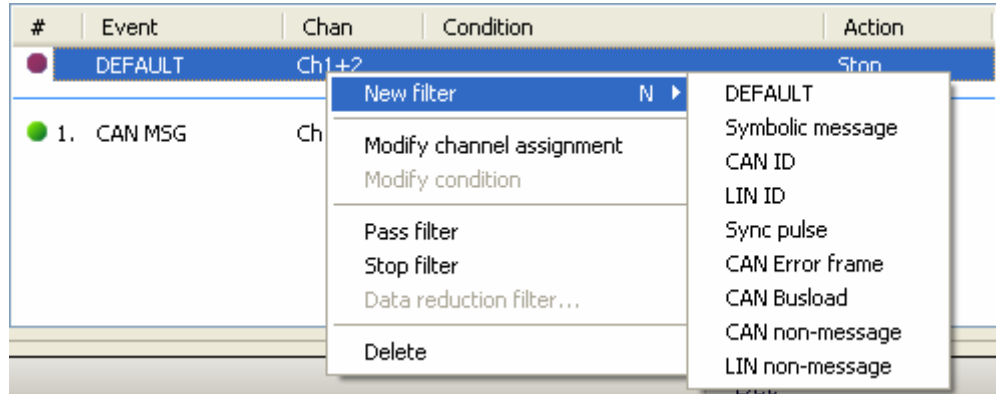
**Note:** All CAN and LIN messages are **passed** by default.

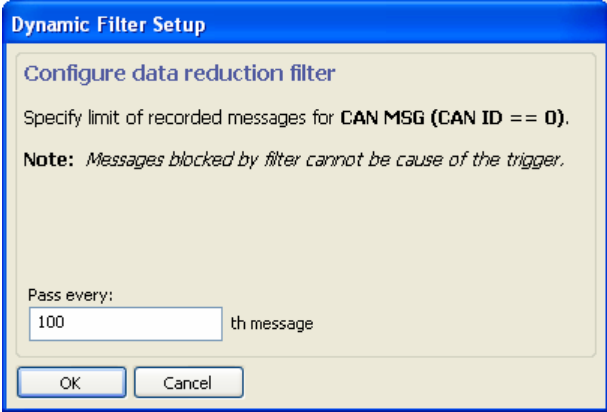


**Caution:** Filters are processed first, triggers after. It is not possible, to use a filtered message for a trigger condition.

List View context menu

The Filters list view is right click sensitive and offers a context menu as follows:

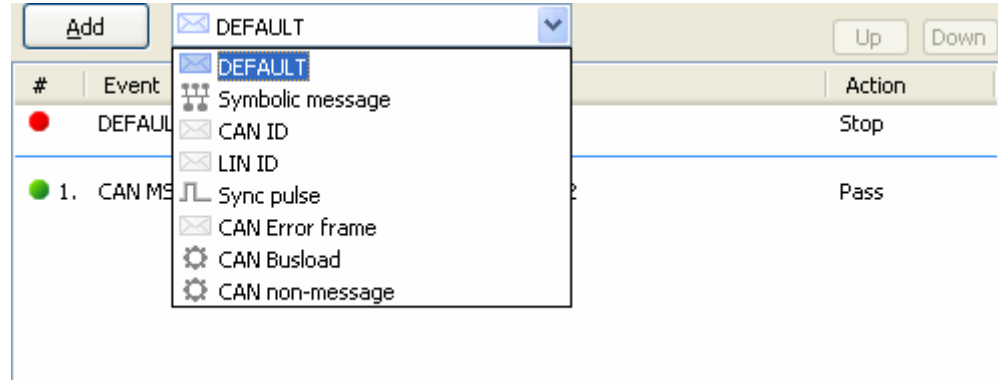


<b>New filter</b>	Inserts a new filter of the selected type (see below).
<b>Modify channel assignment</b>	Changes channel assignment.
<b>Modify condition</b>	Changes trigger condition (see below).
<b>Pass filter</b>	Passes the specified message (logged).
<b>Stop filter</b>	Blocks the specified message (not logged).
<b>Data reduction filter</b>	<p>Reduces the data logged on SD card by ignoring messages in a defined interval. Example: Change value to 100 will log only every 100th message to the SD card.</p>  <p>This dialog can also be opened by a double-click on column <b>Action</b> in the list view.</p>
<b>Delete</b>	Deletes the selected filter.



**Note:** The menu entries depend on the selected item/column in the list view.

### Filter types



<b>DEFAULT</b>	Assigned to all messages and events.
<b>Symbolic message</b>	Filters a message by a symbolic name. In order to use symbolic names, at least one CANdb database must be added (see tree node Databases)
<b>CAN ID</b>	Filters a defined CAN ID.
<b>LIN ID</b>	Filters a defined LIN ID.
<b>Sync pulse</b>	Filters all Sync Pulses from synchronization line.
<b>CAN Error frame</b>	Filters all error frames.
<b>CAN Bus load</b>	Filters all bus load messages.
<b>CAN non-message</b>	Filters all non-messages, like transceiver events.



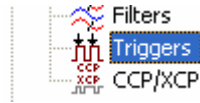
**Note:** The **CAN Bus load** is measured twice per second for each channel. The **LIN Bus load** is measured twice per second for each channel.

### Filter conditions

<b>Pass</b>	Passes the specified message (logged).
<b>Stop</b>	Blocks the specified message (not logged).

### 6.3.3 Triggers

#### Triggers



If this tree node is selected, triggers can be specified in the property panel. Triggers can be used to control the start and stop of the logging session or to send a CAN message. It is also possible to place triggers in AND groups for combined conditions.

The start and stop range of an event logging can be affected by setting the pre and a post time in the property panel. This means if a **Single trigger** event occurs not only the event itself is logged, but also a specified time before and after of the event.



- **Pre trigger time**  
Logging start when the Single trigger (see trigger types) occurs.
- **Post trigger time**  
Logging follow-up time when Single trigger (see trigger types) occurs.



**Note:** The pre-trigger time is linked to the available memory of the CANcaseXL log (not SD card) and it is displayed in the Pre/Port trigger configuration dialog which can be opened in the Property panel by clicking **[edit...]**.



**Info:** Triggers on J1708 messages/signals are not allowed.



**Caution:** Triggers are processed after the filters. It is not possible, to use a filtered message for a trigger condition.

#### Pre / Post-Trigger configuration

**Pre / Post-Trigger configuration** ✖

**Pre-/Post-Trigger configuration**

This calculator helps to setup the best history logging options. Press button **[Optimize]** to choose best settings.

**Available memory:** 320 kB  
**Needed memory:** 243.00 kB  
**Logging performance:** 27.00 kB/s

Pre-trigger time [ms]   
 Post-trigger time [ms]   
 Infinite post-trigger time  
 Average messages per second



**Warning:** The most important setting in this dialog is **Average messages per second** which is needed for the pre-trigger time calculation. Ensure that this value fits to the expected message rates on the bus. The higher this value is set the lower the pre-trigger time can be specified. If the real message load (while logging) exceeds the specified value, the pre-trigger time will be shortened.



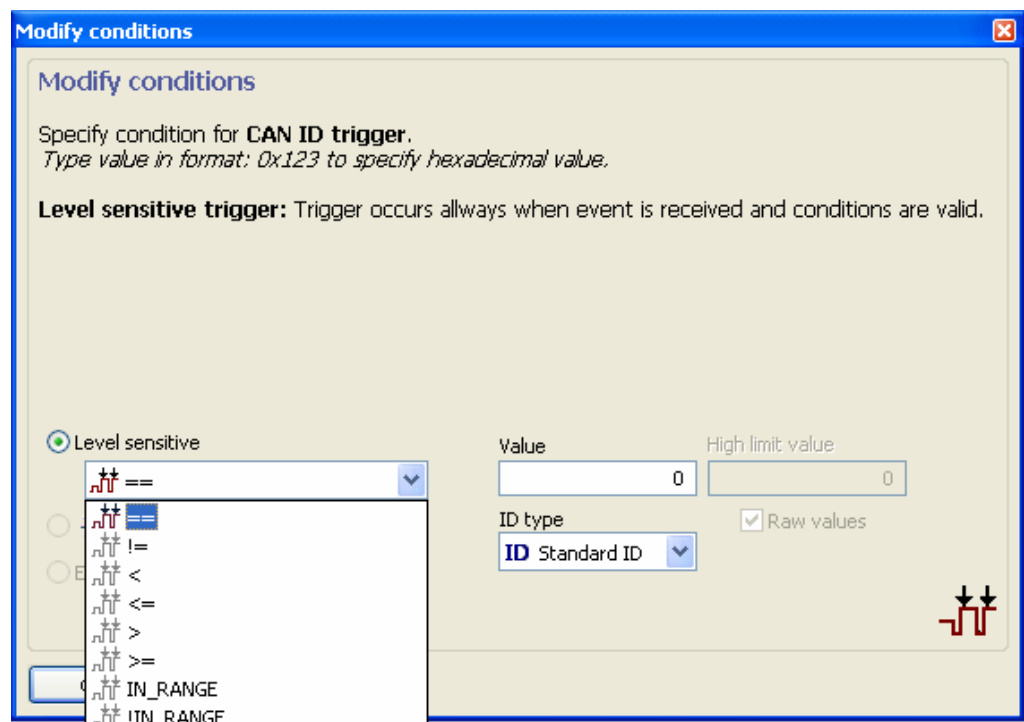
**Note:** If any entered values exceed the available memory the settings can be optimized to the highest possible values by clicking the button **[Optimize]**.



In order to add a trigger:

1. Select the trigger event in the left list box on the property panel.
2. Select the trigger type in the right list box on the property panel.
3. Click **[Add...]**, a new dialog will appear, depending on the selected trigger event.
4. Make your settings.

### Dialog Modify conditions



The dialog consists of the list box **Level sensitive**, the text boxes **Value** and **High limit value**, a list box **ID type**, a checkbox **Raw values**, an option for **Value changes** and **Edge sensitive (slope)**. This elements are described as follows:

### Level sensitive

The following options are available:

==	Trigger occurs, when the received ID or DLC is equal to text box <b>Value</b> .
!=	Trigger occurs, when the received ID or DLC is NOT equal to text box <b>Value</b> .
<	Trigger occurs, when the received ID or DLC is less than text box <b>Value</b> .









<=	Trigger occurs, when the received ID or DLC is less/equal than text box <b>Value</b> .
>	Trigger occurs, when the received ID or DLC is more than text box <b>Value</b> .
>=	Trigger occurs, when the received ID or DLC is more/equal than text box <b>Value</b> .
IN_RANGE	Trigger occurs, when the received ID or DLC is between text box <b>Value</b> and text box <b>High limit value</b> .
!IN_RANGE	Trigger occurs, when the received ID or DLC is NOT between text box <b>Value</b> and textbox <b>High limit value</b> .

- Value** Enter the value for the desired condition here.
- High limit value** If Level sensitive is set to **IN\_RANGE** or **!IN\_RANGE**, this value means the last value in a range.
- ID type** Standard ID or Extended ID. This depends on your setup and the CAN messages you receive.
- Raw values** When trigger event is **On Symbolic signal**, raw values can be used for a specific trigger.

**Value Changes** The trigger will occur on any value change.

- Edge sensitive (slope)** The trigger will occur when one of the following conditions is set and valid:
- ➔ **Positive edge, reach threshold**  
trigger occurs, when the received value increases and reaches exactly the configured **Value**.
  - ➔ **Positive edge, exceed threshold**  
trigger occurs, when the received value increases and exceeds the threshold as set in **Value**.
  - ➔ **Negative edge, reach threshold**  
trigger occurs, when the received value decreases and reaches exactly the configured **Value**.
  - ➔ **Negative edge, exceed threshold**  
trigger occurs, when the received value decreases and exceeds the threshold as set in **Value**.

**List view columns**

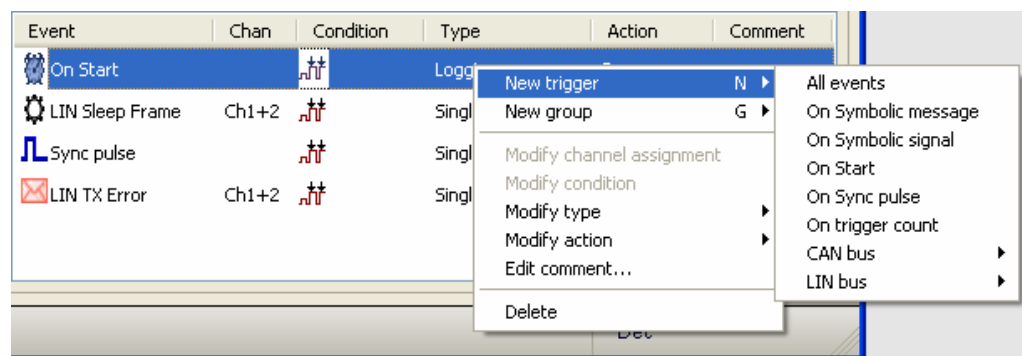
Event	Chan	Condition	Type	Action	Comment
 On Start			Logging on	Beep	
 LIN Sleep Frame	Ch1+2		Single trigger	Sync pulse	
 Sync pulse			Single trigger	Beep	
 LIN TX Error	Ch1+2		Single trigger	None	

<b>Event</b>	Displays the set event type.
<b>Chan</b>	Channel to which the trigger is applied to. A double-click on it lets you change the settings.

<b>Condition</b>	Specified condition of the trigger. A double click opens a settings dialog.
<b>Type</b>	Trigger type. See below further details about trigger types. A double-click switches between the trigger types.
<b>Action</b>	The specified action when trigger occurs. A double-click switches between the trigger actions.
<b>Comment</b>	A user comment. A double-click lets you edit a comment for the trigger.

### List view context menu

The list view is right click sensitive and offers a context menu as follows:

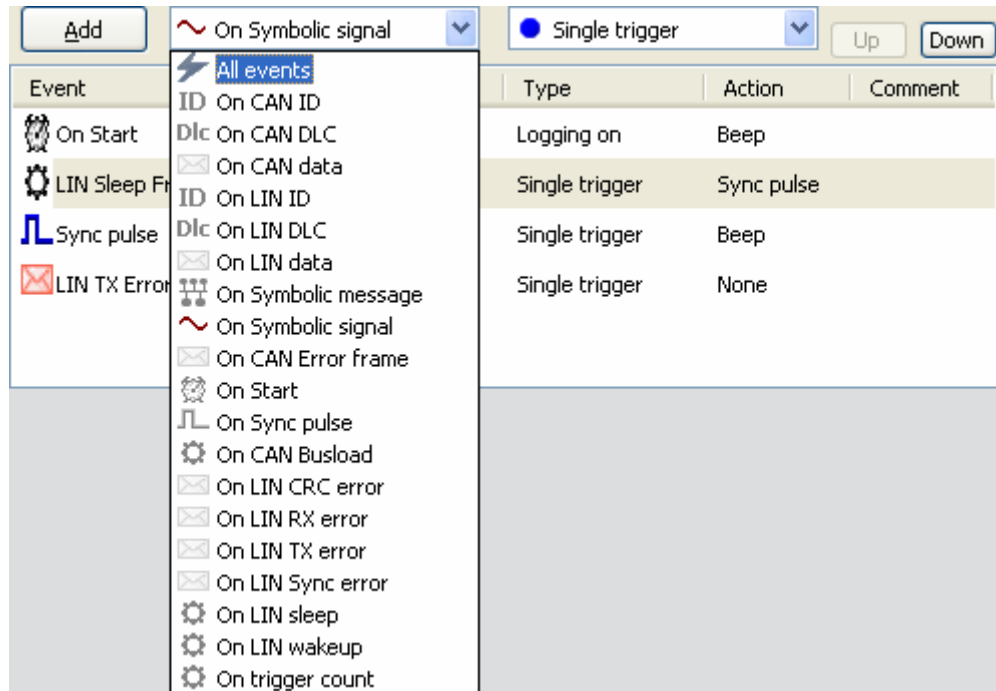


<b>New trigger</b>	Adds a new trigger as described above.
<b>New group</b>	Adds a new AND group depending on a CAN or LIN ID. Further group items can be added by right-click the AND group <b>Add trigger condition...</b>
<b>Modify channel assignment</b>	Modifies channel assignment.
<b>Modify condition</b>	Modifies the trigger condition as described above.
<b>Modify type</b>	Modifies the trigger type as described below.
<b>Modify action</b>	Modifies the trigger action as described below.
<b>Edit comment...</b>	Modifies the trigger comment as described above.
<b>Delete</b>	Deletes the selected trigger.



**Note:** The menu entries depend on the selected item/column in the list view.

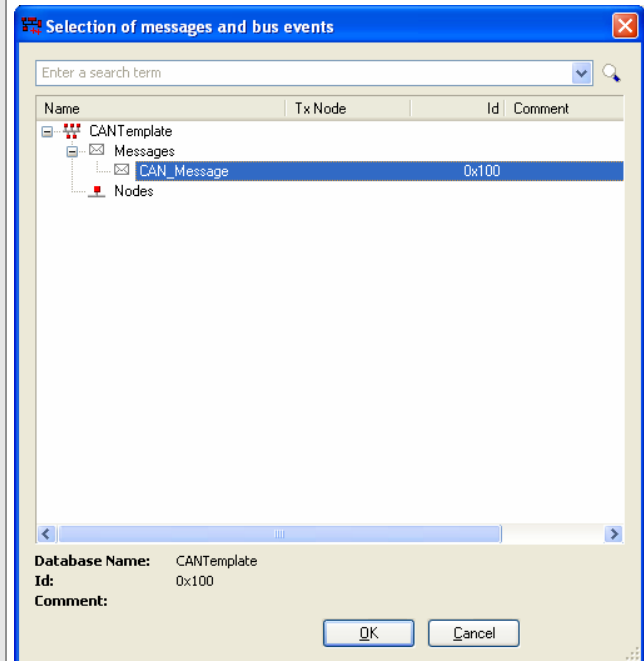
Trigger events



<b>All events</b>	Trigger if any event occurs.
<b>On CAN ID</b>	Trigger if a CAN message with a specified ID is received.
<b>On CAN DLC</b>	Trigger if a CAN message with a specified DLC is received.
<b>On CAN data</b>	Trigger if specified CAN data is received.
<b>On LIN ID</b>	Trigger if a LIN message with a specified ID is received.
<b>On LIN DLC</b>	Trigger if a LIN message with a specified DLC is received.
<b>On LIN data</b>	Trigger if specified LIN data is received.

**On Symbolic message**

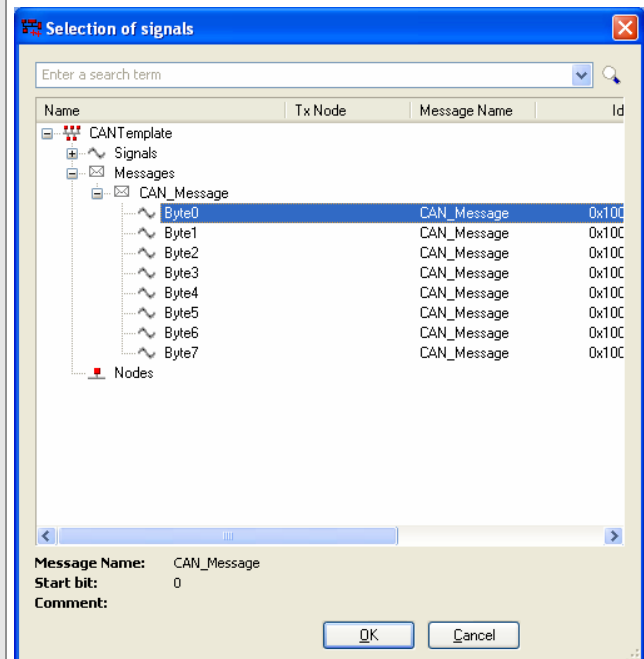
Trigger if specified symbolic message is received.



This dialog will appear if **On Symbolic message** is selected. A message from a previous added database can be selected there.

**On Symbolic signal**

Trigger if specified symbolic signal inside a symbolic message is received and its condition is valid.



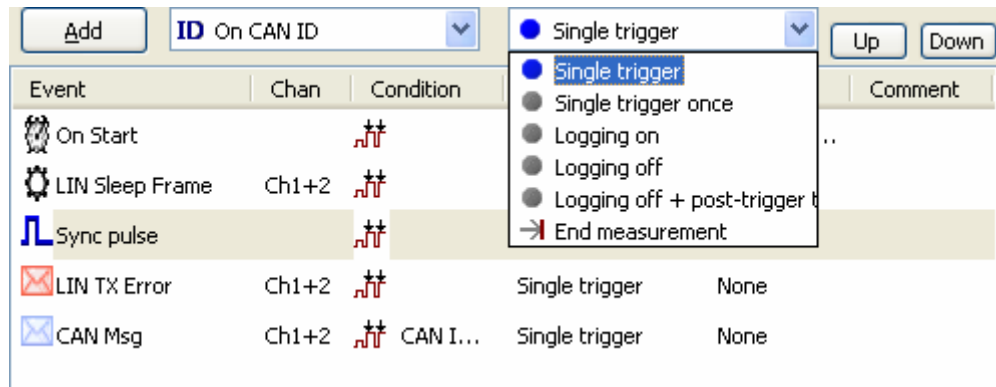
This dialog appears if **On Symbolic signal** is selected. A signal from a previous added database can be selected there. After the selections has been made, the dialog **Modify conditions** appears.

**On CAN Error frame**

Trigger if an Error frame is received.

<b>On Start</b>	Trigger immediately after boot.
<b>On Sync pulse</b>	Trigger if sync pulse from synchronization line is received.
<b>On CAN Busload</b>	Trigger if defined percentage is reached.
<b>On LIN CRC error</b>	Trigger if a LIN CRC error occurs.
<b>On LIN RX error</b>	Trigger if a LIN Receive error occurs.
<b>On LIN TX error</b>	Trigger if a LIN Transmit error occurs.
<b>On LIN Sync error</b>	Trigger if a LIN Sync error occurs.
<b>On LIN sleep</b>	Trigger if a LIN sleep occurs.
<b>On LIN wakeup</b>	Trigger if a LIN wakeup occurs.
<b>On trigger count</b>	Trigger if the number of occurred triggers matches the defined condition.

Trigger types



<b>Single trigger</b>	Triggers always, when trigger condition is valid. Starts logging on SD card with set pre and post trigger times. Logging can only be stopped by a hardware reset
<b>Single trigger once</b>	Same as Single trigger but only one time.
<b>Logging on</b>	Starts logging on SD card. Logging will stop when a Logging off action occurs or by a hardware reset. This feature is not available for Multiple file Ring buffer.
<b>Logging off</b>	Stops logging if it was started by a <b>Logging on</b> action before. This feature is not available for Multiple file Ring buffer.
<b>Logging off + post-trigger time</b>	Stops logging if it was started by a <b>Logging on</b> action before with additional logging follow-up time. This feature is not available for Multiple file Ring buffer.
<b>End measurement</b>	Stops the measurement. No further logging will be done. This feature is not available for Multiple file Ring buffer.

## Trigger action

<b>None</b>	No action will be done when the trigger occurs.
<b>Sync pulse</b>	A sync pulse is generated when the trigger occurs.
<b>Beep</b>	A beep on the piezo summer will be generated when the trigger occurs
<b>Beep and sync pulse</b>	Combination of Beep and Sync pulse (see above).
<b>Send message...</b>	Sends a specified CAN message when the defined trigger occurs. This trigger action is only available in the context menu (right click on the list view <b>Modify action   Send message...</b> ). Please note that the Silent Mode has to be deactivated before (see section Channel 1/2 on page 40).

**CCP/XCP command...**

Sends a specified CCP/XCP command. E.g. this setting can be used to connect to an ECU or to start requesting data, if it was set to **No** in the CCP/XCP Property Panel **CONNECT on power-up**:

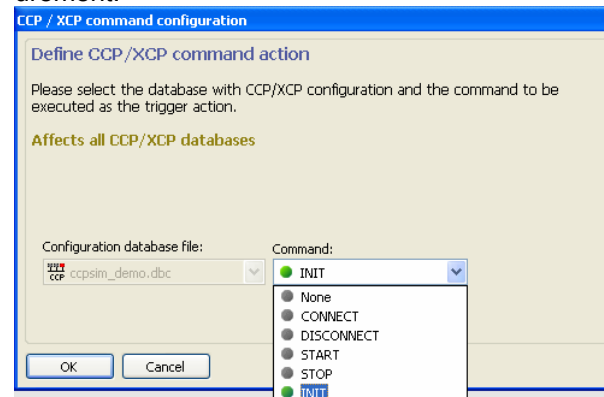
**Global settings:**

**CONNECT on power-up:** [No](#)  
**On communication error:** [Stop](#)

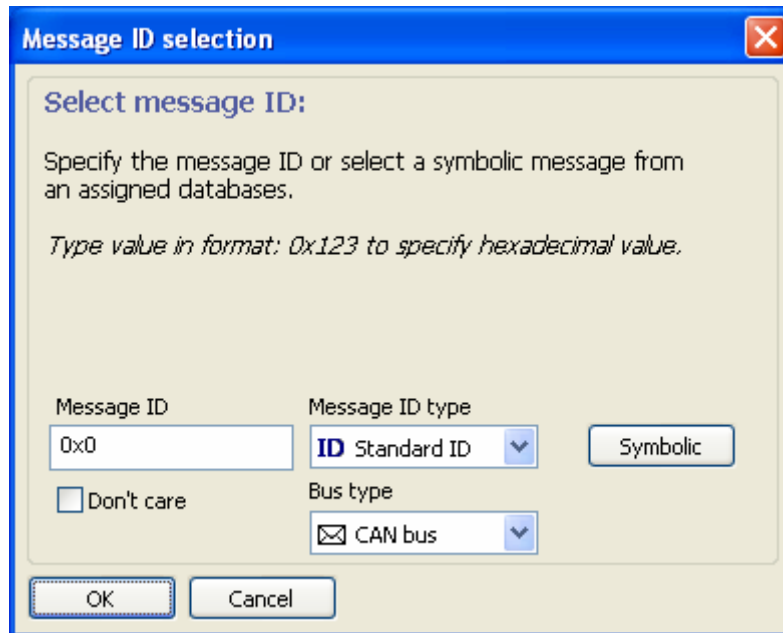
This trigger action is only available in the context menu (right-click on the list view **Modify action | CCP/XCP command...**).

Available commands:

- **None**  
No command is sent.
- **CONNECT**  
If the trigger occurs, the CANcaseXL log tries to connect to the specified (database) ECU.
- **DISCONNECT**  
If the trigger occurs, the CANcaseXL log disconnects from specified (database) ECU, if possible.
- **START**  
If the trigger occurs, the CANcaseXL log starts measurement (DAQ list must be configured and initialized before).
- **STOP**  
If the trigger occurs, the CANcaseXL log stops measurement, if possible.
- **INIT**  
Re-Initialization of DAQ list for CCP/XCP measurement.



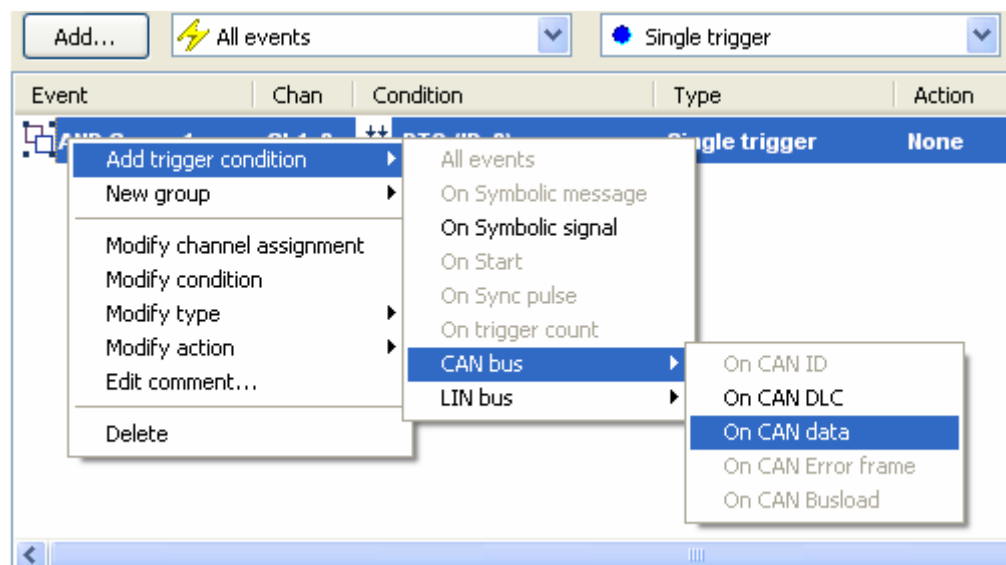
**Trigger AND Groups** Trigger AND groups can be used to combine several trigger conditions. The group is created by a click on the Triggers list view with the right mouse button **New group...** | **AND group**. The following dialog appears.



**Message ID** When an AND group is inserted, it can be either message ID dependent or ID independent. Instead of specifying a message ID a symbolic name can be chosen with the button [**Symbolic**]. Ensure, that at least one database is listed in **Log Configuration | Databases**.

**ID independent AND group** In certain cases it might be not needed to check for a specified message ID. For this purpose change the trigger condition of the AND group (first AND group item) to **Don't care**.

**Additional conditions** For further conditions click with the right mouse button onto the new created AND group and select **Add trigger condition** followed by your desired condition.



**AND group validation** An AND group contains one or more additional conditions which are checked sequential for their truth, started with the condition of the AND group main item (first item), followed by all inserted items in the AND group. If one of the items is invalid no trigger will be fired.




---

**Example 1:** AND group with **ID 0x100** and

- On CAN data[0] == 255
- Symbolic Signal 1 (ID 0x200) > 20
- Symbolic Signal 2 (ID 0x100) == 32

The whole AND group is checked only, when a CAN message with **ID 0x100** is received. Afterwards the first data byte is checked for value 255, and then the last known value of **Symbolic Signal 1** (ID 0x200) is checked for greater 20. Please note: Values are stored internally for this purpose. If no known value is available the AND group validation will abort and no trigger will be fired. Otherwise if the last known value of **Signal 1** is greater 20, finally the **Signal 2** (with 0x100) is checked. In this case the value to be checked is the CAN message itself (ID 0x100). If **Signal 2** of this message is exactly 32 a trigger will be fired here, else not.

---




---

**Example 2:** AND group with **Don't care** and

- DLC == 5
- Symbolic Signal 1 (ID 0x200) > 20
- Symbolic Signal 2 (ID 0x100) == 32

The whole AND group is checked only, when a message with **ID 0x100** or **ID 0x200** is received. Afterwards the DLC is checked for value 5, and then the last known (or just received) value of **Symbolic Signal 1** (ID 0x200) and **Symbolic Signal 2** (ID 0x100) are checked. If the current message signal and the last known value respectively are not valid, the AND group validation aborts.

---




---

**Example 3:** AND group with **Don't care** and

- DLC == 5
- On CAN data[0] == 255

The whole AND group is checked when any message is received. Afterwards the DLC is checked for value 5 and then the first data byte is checked for value 255.

---




---

**Example 4:** AND group with **ID 0x300** and

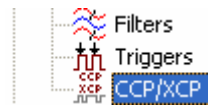
- DLC == 5
- Symbolic Signal 1 (ID 0x200) > 20
- Symbolic Signal 2 (ID 0x100) == 32

The whole AND group is checked only, when a message with **ID 0x300** was received. Afterwards the DLC is checked for value 5, and then the last known value of **Symbolic Signal 1** (ID 0x200) is checked for greater 20. Please note: Values are stored internally for this purpose. If no known value is available the AND group validation will abort and no trigger will be fired. Otherwise if the last known value of **Signal 1** is greater 20, finally the **Symbolic Signal 2** (0x100) is checked. If **Signal 2** is exactly 32 a trigger will be fired here, else not.

---

## 6.3.4 CCP/XCP

### CCP/XCP



The CANcaseXL log is able to measure ECU related data over the CCP or XCP. In order to do this, a database must be created and supplemented with CCP/XCP commands. This supplement can be done in CANape only. After the database has been created, it has to be added in the CCP/XCP list view.



**Note:** In order to generate a database containing CCP/XCP commands, check the following requirements please:

- An existing CANape configuration must exist
- A working ECU must be available in CANape (online measurements)
- Select the desired ECU measurement signals in CANape
- Check the ECU settings in CANape  
**Tools | Device configuration... | Edit,**  
 click **[Next]** followed by **[Driver settings]**.  
 Open tab **Other** and activate **Generate a CANalyzer database**.  
 Open tab **General** and click **[Extended driver settings...]**.  
 Scroll down to **CANDB\_CCP\_CONF** and set it to **Yes**.
- Start and stop the measurement to generate the database.



**Info:** Polling of measurement signals is not supported.



**Info:** A database can also be generated using an A2L file (ASAP2). Detailed information can be found in **Tools | Generate CCP Database** (see chapter **Tools** on page 30).

### Global settings

The property panel has two options as follows:

- **CONNECT on power-up**  
 If set to yes, the CANcaseXL log tries to connect to the specified (database) ECU when it is switched on.
- **On communication error**  
 If the communication to the ECU is broken, the logging can be either stopped or continued.

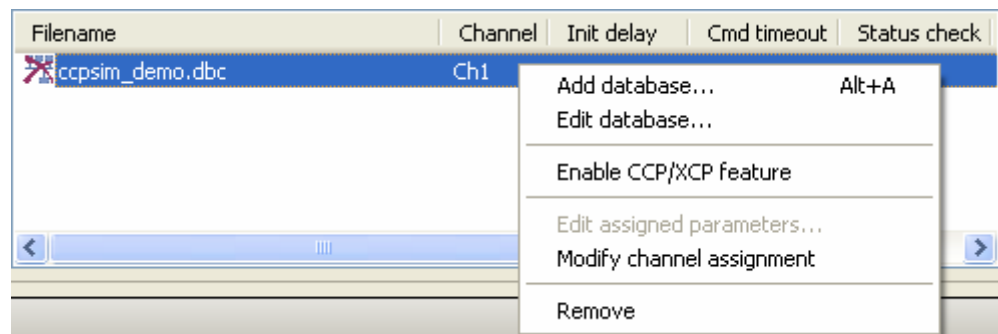
### List view column

Filename	Channel	Init d...	Cmd ti...	Status check	Execute cfg	Path
ccpsim_demo.dbc	Ch1	2 s	20 s	GET_STATUS every 2 s	Yes (CCP)	C:\Dokume

<b>Filename</b>	Filename of the database.
<b>Channel</b>	Channel where the database is assigned to.
<b>Init delay</b>	Delay in ms after the CANcaseXL log has been switched to logger mode. Afterwards the CCP/XCP commands are sent.
<b>Cmd timeout</b>	Time segment in which the ECU has to respond to a CCP/XCP command.
<b>Status check</b>	Enables the cyclically CCP/XCP check of the configured ECU.
<b>Execute cfg</b>	Enables/disables the transmission of the CCP/XCP commands from the database.
<b>Path</b>	Location of the database.

List view  
context menu

The list view is right click sensitive and offers a context menu as follows:



<b>Add database...</b>	Adds a new database. Ensure that this database contains CCP/XCP commands.
<b>Edit database...</b>	Opens CANdb++ editor for editing. Ensure that CANdb++ was installed previously. An installation file is found on the installation CD.
<b>Disable/Enable CCP/XCP feature</b>	Disables or enables the CCP/XCP feature of the added database. The database itself is still accessible.
<b>Edit assigned parameters...</b>	Opens the dialog for CCP/XCP configuration.
<b>Modify channel assignment...</b>	Modifies the channel assignment where the database is assigned to.
<b>Remove</b>	Removed the database from the list view.



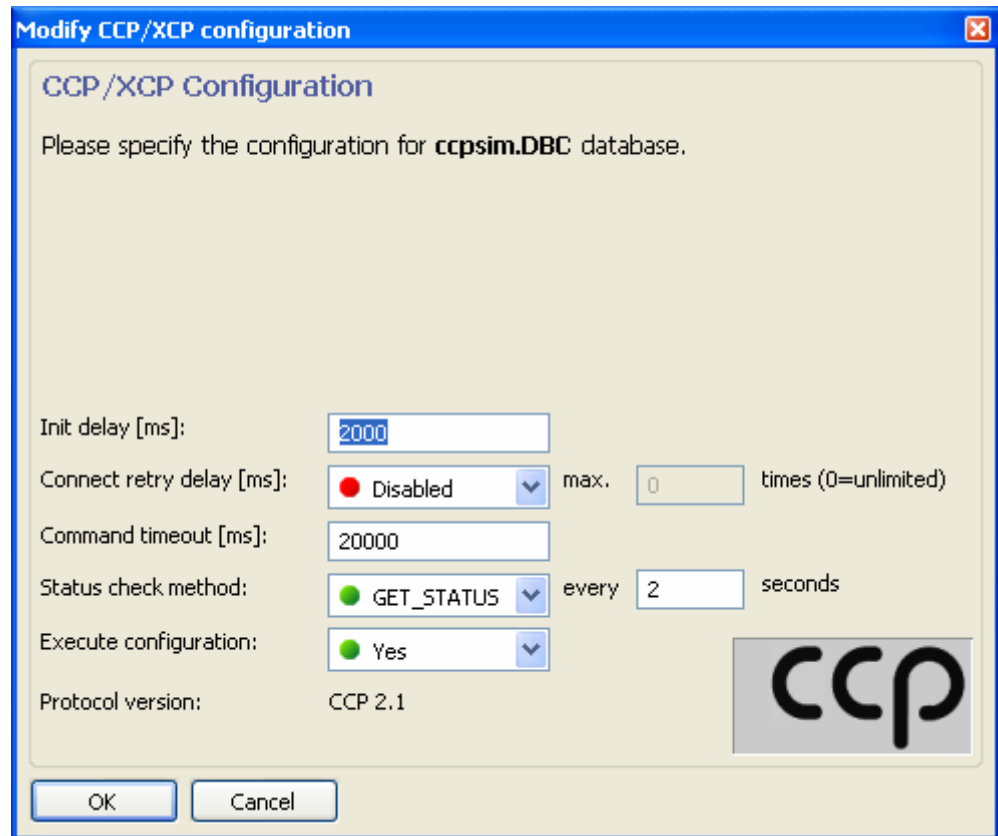
**Note:** The menu entries depend on the selected item/column in the list view.

## Modify CCP/XCP configuration

This dialog can be opened by a right-click on the list view **Edit assignment parameters...** or by a double-click on an item:

- Init delay
- Cmd timeout
- Status check

## Dialog



<b>Init delay [ms]</b>	Delay in ms after the CANcaseXL log has been switched to logger mode. Afterwards the CCP/XCP commands are sent.
<b>Connection retry delay [ms]</b>	Time between a failed connection and next retry.
<b>Command timeout</b>	Time segment in which the ECU has to respond to a CCP/XCP command.
<b>Status check method</b>	Enables the cyclically CCP/XCP check of the configured ECU device.
<b>Execute configuration</b>	Enables/Disables the transmission of the CCP/XCP commands from the database.



## 7 File Manager

In this chapter you find the following information:

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7.1	Device Flash Drive	page 62
7.2	Local Drive	page 69

---

## 7.1 Device Flash Drive

### Description




If this tree node is selected, files on the SD card can be accessed and converted into different file formats. The list view on the right part of the window looks like this:



**Info:** J1708 message can be converted to BLF format only.

### List view columns

Filename	Size	Type	Modified	Note
 70425000.xlg	16.38 kB	Log data	25.04.07 12:39	

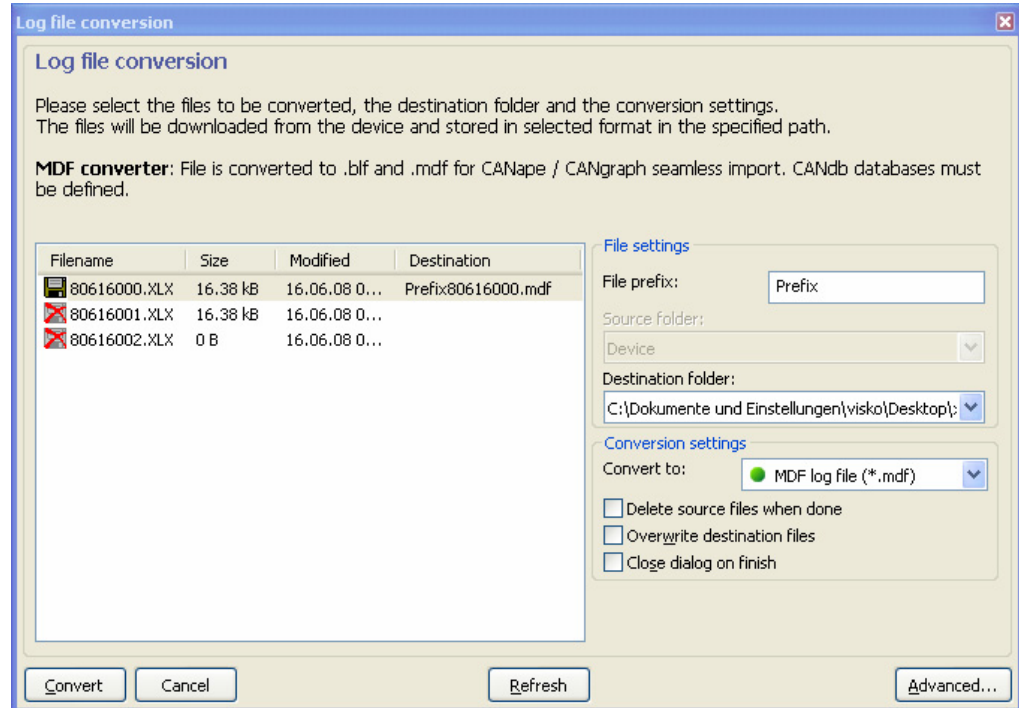
<b>Filename</b>	Name of stored file.
<b>Size</b>	Size of the file.
<b>Type</b>	Type of file, e.g. <b>Log data</b> .
<b>Modified</b>	Date of last modification.
<b>Note</b>	Comment of logging session (see chapter Overview on page 39).

### Log file conversion

The conversion is done in the logging file conversion dialog which can be opened with click on the **[Convert...]** button or by a right-click in the list view, followed by **Logging file conversion....**

The log file conversion can be accessed also by **Tool | Convert files from....**

## Dialog



<b>Filename</b>	Name of stored file.
<b>Size</b>	Size of the file.
<b>Modified</b>	Date of last modification.
<b>Destiniation</b>	Filename preview of the converted log file.
<b>File prefix</b>	Prefix of the converted log file.
<b>Source folder</b>	Location of the log file to be converted.
<b>Destination folder</b>	Location for converted log files.
<b>Convert to</b>	Desired conversion.
<b>Delete source files when done</b>	If checked the source file will be deleted.
<b>Overwrite destination files</b>	If checked, existing files will be overwritten.
<b>Close dialog on finish</b>	Closes the dialog, after conversion has been finished.
<b>[Advanced...]</b>	Enables advanced converting settings. See next below for further details. The context depends on the selected output format (setting <b>Convert to</b> ).

## Advanced converter settings

The following tables shows the available settings depending in the selected output format:

XL Log native	<b>Multiple files mode</b>	<p>Enables the splitting of one log file into multiples by:</p> <ul style="list-style-type: none"> <li>→ No splitting</li> <li>→ By trigger</li> <li>→ By channel</li> <li>→ By size</li> <li>→ By event count</li> </ul>
	<b>Trigger reason always written</b>	A comment will appear in the split file with the reason of splitting (trigger or channel).
	<b>Time-stamp 0 reference</b>	<p>This option enables the resetting of the events' time stamps.</p> <ul style="list-style-type: none"> <li>→ <b>Start of the logging (file)</b> First event of the log file will get time stamp 0.</li> <li>→ <b>Specific time</b> All time stamps will be offset to the specified time.</li> <li>→ <b>Start each split file from zero</b> First event of the log files will get time stamp 0.</li> </ul>
Vector binary log file	-	No advanced settings available.
MDF log file	<b>Multiple output files</b>	Allows to merge multiple log files to a single one (gap 1µs).
XL Log text file	<b>Time columns</b>	<ul style="list-style-type: none"> <li>→ <b>Append units</b> Setting for the time format for the first and second column. If this checkbox is enabled, the unit (related to the selected time format) is appended to the value.</li> <li>→ <b>Absolute</b> Switches between relative and absolute time stamps.</li> </ul>
	<b>Content display</b>	<ul style="list-style-type: none"> <li>→ <b>Hexadecimal view</b> The log file contents can be displayed as decimal or hexadecimal values by enabling/disabling this checkbox.</li> <li>→ <b>Byte order</b> The byte order of the messages can be chosen in the list box.</li> <li>→ <b>Separated columns</b> This checkbox allows splitting each value into separate columns, instead grouping them in one column.</li> </ul>

## XL Log text file

<b>Time columns</b>	<ul style="list-style-type: none"><li>→ <b>Append units</b> Setting for the time format for the first and second column. If this checkbox is enabled, the unit (related to the selected time format) is appended to the value.</li><li>→ <b>Absolute</b> Switches between relative and absolute time stamps.</li></ul>
<b>Other options</b>	<ul style="list-style-type: none"><li>→ <b>Add header</b> This setting includes the header for each column on the first line of the converted file.</li><li>→ <b>Include only data messages</b> The converted file will contain only CAN or LIN messages, if this checkbox is enabled. Errors, sync pulses are not displayed.</li><li>→ <b>Column separator</b> With this option the separator between the columns can be selected.</li></ul>

## Signal text file

<b>File header and footer</b>	<ul style="list-style-type: none"> <li>→ <b>Date/Time</b> The date and the clock time of the log file are entered in the first line.</li> <li>→ <b>Comment</b> Appends the comment of the log file session.</li> </ul>
<b>Table</b>	<ul style="list-style-type: none"> <li>→ <b>First data line</b> The first line with measurement values is output at the earliest at the line entered here. Blank lines may be inserted before this line.</li> <li>→ <b>Decimal delimiter</b> The decimal point character (.) is used for outputting measurement values. A comma is used for outputting measurement values.</li> <li>→ <b>Type of values</b> PHY values: The raw values of the log file are converted according the conversion rules and entered into the ASCII file.  HEX values: The raw values of the log file are entered as hexadecimal values into the ASCII file.  DEC values: The raw values of the log file are entered as decimal values into the ASCII file.</li> <li>→ <b>String separator</b> Apostrophe: Strings (e.g. comments, Write window outputs or calibration operations) are enclosed by apostrophes.  Quotation mark: Strings are enclosed by quotation marks. <b>Info:</b> When an exported file is to be loaded into Excel, these string separators can be removed via the option Text qualifier in step 2 of the Text Import Wizard.</li> </ul>
<b>Column separator</b>	<ul style="list-style-type: none"> <li>→ <b>with fixed width/column with</b> The columns of the ASCII file are all of the same width. Minimum width of a column of measurement values in number of characters. If the column width entered here is not enough, the output is not truncated. <b>Info:</b> To create an optimally configured file for the export to MS Excel (minimal file size), please select 0 (zero) for the column width and the semicolon as column separator.</li> <li>→ <b>with column separator/column separator</b> The columns of the ASCII file are separated from each other by a specific separator symbol, i.e. they are of different widths. Delimiter symbol between measurement value columns. Here the user inputs the character to be used, e.g. of a spreadsheet calculation, to separate the individual columns. Multiple characters can also be entered.</li> </ul>

<b>Number format</b>	<ul style="list-style-type: none"> <li>→ <b>Precision</b> This setting defines the number of digits after the decimal point in both decimal and exponential notation. If the option Dec./Exp. is selected this setting defines the number of all digits, before and after the decimal point. Possible values are 0 15.</li> <li>→ <b>Decimal representation</b> All the values are represented in decimal format.</li> <li>→ <b>Dec./Exp. Representation</b> All values which could be represented with the defined precision are displayed in decimal format. All other values are displayed with the exponential notation. If the value is an integer no digits after the decimal point are displayed.</li> <li>→ <b>Exponential representation</b> The values are displayed as exponential numbers.</li> </ul>
<b>Signal names</b>	<ul style="list-style-type: none"> <li>→ <b>Extended names</b> When this option is activated, the name of the ECU will be added to the name of the signal as a prefix, separated by a dot (e.g. ecu1.signal1, ecu2.signal1). This option is useful in case you measure signals of the same name from different ECUs.</li> <li>→ <b>Standard names</b> The name of the measurement signal is the variable name.</li> <li>→ <b>Display names</b> The Display Name is an alternative name for a database object that is used in the display windows. This name does not need to be unique, since it is not referenced. The display name can be set in the Database Editor in the field Display name. The name is optional; if no name is entered here, the variable name is used for all displays. <b>Info:</b> Since the Display name does not need to be unique the same name can appear for different signals. <b>Caution:</b> In this case the log file created via a re-import by the ASCII import converter contains some signals with the same signal name. If these signals are saved in a configuration they cannot be restored uniquely the next time the configuration is loaded.</li> </ul>

<p><b>Time</b></p>	<ul style="list-style-type: none"> <li>→ <b>Time column</b> The first column contains the point in time when the measurement was made (in seconds) for all successive values in the line.</li> <li>→ <b>From</b> Entry in seconds of the time beginning from which the measurement values are to be output. The measurement time is known when each value was measured. Conversion is only made for values whose measurement time is greater than or equal to the start time. The start time can be entered with a resolution of one millisecond.</li> <li>→ <b>To</b> Point in time in seconds up to which measurement values should be output. <b>Info:</b> The default setting "0.000 - 0.000" indicates that the entire measurement time will be converted. Only the point is accepted as decimal separator.</li> <li>→ <b>Display</b> Relative: The time column starts with zero.  Absolute time: The time column starts with the current system time. <b>Info:</b> When a fixed column width is set, this value must be at least 15 characters for this display option.  Absolute date: The time column starts with the current system time and current date. <b>Info:</b> When a fixed column width is set, this value must be at least 25 characters for this display option.</li> </ul>
<p><b>Time grid</b></p>	<ul style="list-style-type: none"> <li>→ <b>Without time grid</b> Repeat values: The log file can contain measurement values of multiple signals recorded at different time intervals. If this flag is set, the previous value is repeated in place of a missing measurement value. Otherwise, blank characters are output.</li> <li>→ <b>With time grid</b> Width in s: Value of the time grid (in seconds). Interpolation: If this flag is set, a signal value whose new time due to resampling lies between 2 original times will be calculated using linear interpolation. <b>Info:</b> Digital signals are generally not interpolated</li> </ul>

<b>Output file</b>	<p>→ <b>Column title</b> print: Prints the column title.</p> <p>in header file: The title line with the column captions is saved in a separate header file.</p> <p>with phys. unit: The physical unit of the signal is output in the title line in each case with the column captions. (Only when the title is activated).</p> <p>→ <b>Extension of the output file</b> Enter the file extension here.</p>
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## 7.2 Local Drive

### Local Drive



This displays all logged files on the local drive and allows the conversion into different file formats. See chapter [Device Flash Drive](#) on page 62 for further information.



## 8 Property panel

In this chapter you find the following information:

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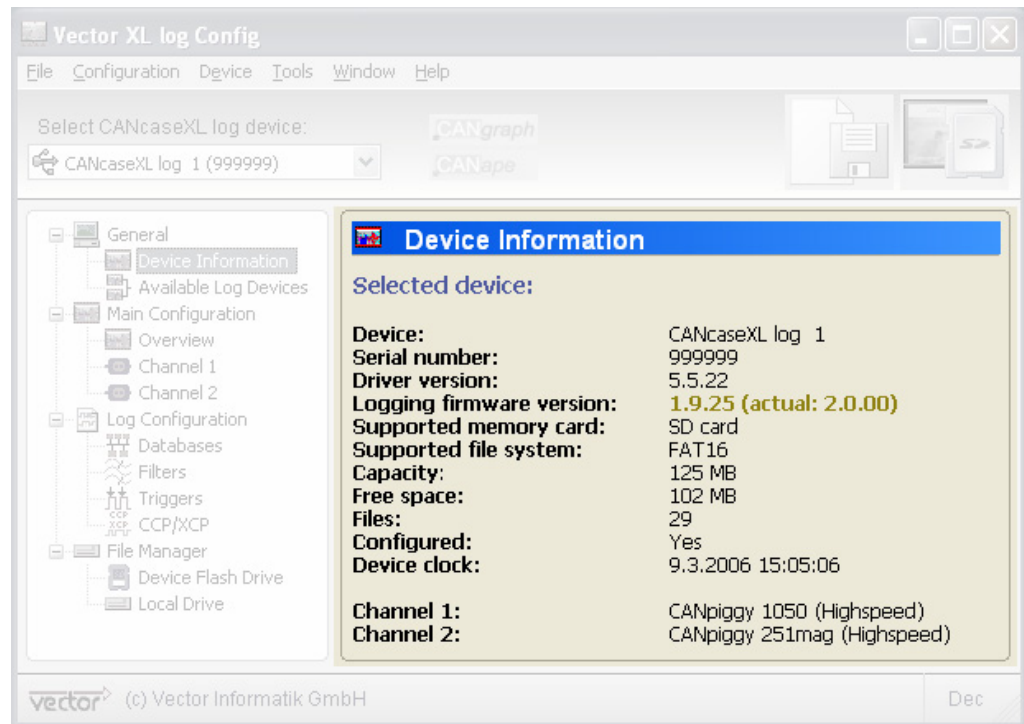
8.1 Miscellaneous information

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## 8.1 Miscellaneous information

### Displayed details



The property panel displays miscellaneous information and details and allows several settings depending on the selection in the tree view.

## 9 Status bar

In this chapter you find the following information:

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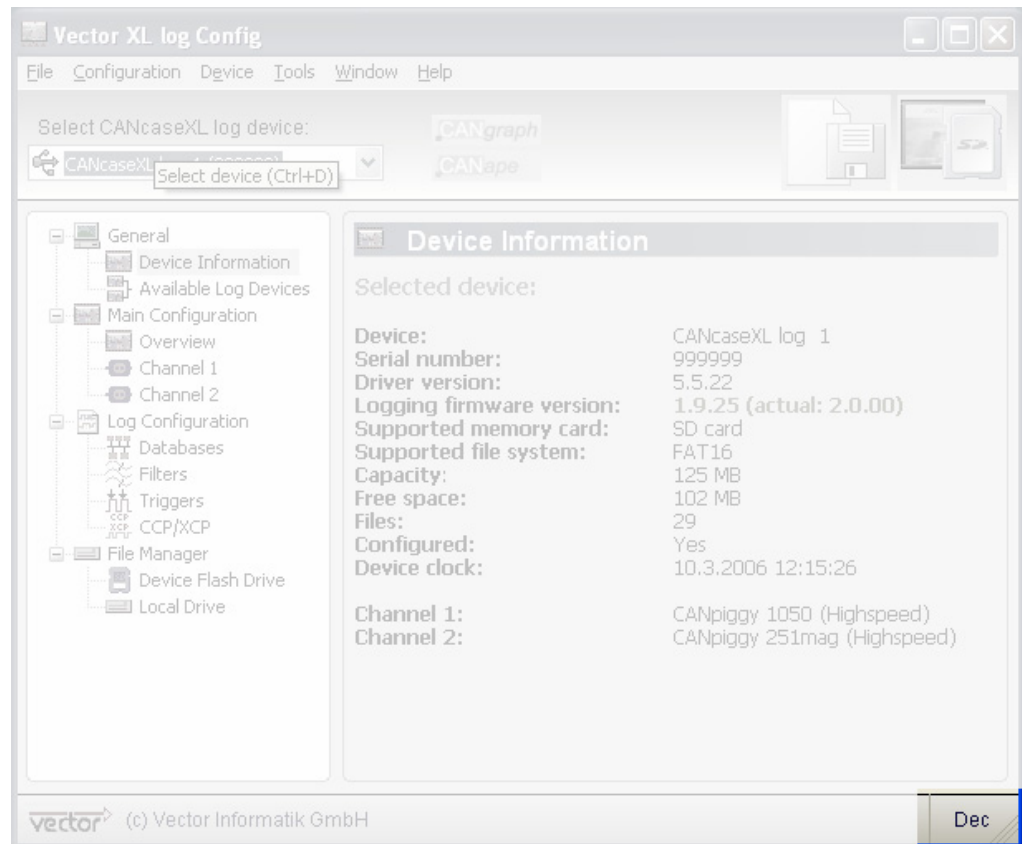
9.1 Value display format

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## 9.1 Value display format

### Hex/Dec switch



The right part of the status bar contains the entry Dec (or Hex) which can be switched by a click. This changes the value representation in the list views.



**Note:** The Hex/Dec switch does not affect all list view items, since partly HEX and DEC are displayed simultaneously. Physical values are always displayed in DEC.

## 10 Hints

In this chapter you find the following information:

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10.1 Hexa decimal values

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## 10.1 Hexa decimal values



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**Note:** Decimal values can be typed as usual. Hex decimal values can be specified like **0x123** or **0x1A**.

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**Note:** Standard ID values can be typed as usual. Extended IDs can be specified like **100x** (dec) or **0x492x** (hex).

---

## 11 Appendix A: Address table

Vector Informatik GmbH	Vector Informatik GmbH Ingersheimer Straße 24 D-70499 Stuttgart Phone : +49 (711) 80670-0 Fax : +49 (711) 80670-110 info@vector-informatik.de http://www.vector-informatik.de
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