PEAK-Drivers 4.x

(PeakOemDrv.exe)

Command Line User Manual for Windows 11/10

Document version 1.3.1 (2022-04-08)

PEAK System

PCAN® is a registered trademark of PEAK-System Technik GmbH.
Other product names in this document may be the trademarks or registered trademarks of their respective companies. They are not explicitly marked by ™ or ®.

Copyright © 2022 PEAK-System Technik GmbH
Duplication (copying, printing, or other forms) and the electronic distribution of this document is only allowed with explicit permission of PEAK-System Technik GmbH. PEAK-System Technik GmbH reserves the right to change technical data without prior announcement. The general business conditions and the regulations of the license agreement apply. All rights are reserved.

PEAK-System Technik GmbH
Otto-Röhm-Straße 69
64293 Darmstadt
Germany

Phone: +49 6151 8173-20
Fax: +49 6151 8173-29

www.peak-system.com
info@peak-system.com

Document version 1.3.1 (2022-04-08)

Contents

1 Introduction 5

2 Bootstrapper 5

2.1 Languages 5
2.2 Operating System and Platform 6
2.3 Command Line Switches 6
2.4 Command Line Switches Order 7
2.5 Return Code 7

3 MSI Switches 8

3.1 Display Switches 8
3.2 Public Properties 9

4 MSI Features 10

4.1 Available Features 10

5 Installation with the User Interface (UI) 11

5.1 Standard / Custom 11
5.2 Adjusted 12

6 Installation with Unattended Installation 14

6.1 Standard Installation 14
6.2 Full Installation 14
6.3 Custom Installation 15

7 Examples 17

7.1 Background Default Installation 17
7.2 Background Custom Installation with Success/Failure Message at the End 17

7.3 Background Custom Installation of Device Driver only 18
7.4 Foreground Full Installation 18
7.5 Preselected Features Installation 18
7.6 Features Preselection 19

1 Introduction

The PEAK-Drivers is a setup application used for installing device drivers and other components from PEAK-System. It allows an installation showing a user interface or silent installation so that it can be called or used from other background applications.

2 Bootstrapper

`PeakOemDrv.exe` is an executable setup file (also known as bootstrapper), which includes several installation files (`*.msi`) and other resources, used for the correct installation of device drivers from PEAK-System.

It can also receive command line options and forward MSI command options. It takes care of selecting the right files to be installed, according to the operating system platform being used, and of installing any third-party requisite needed by the selected features.

2.1 Languages

The installation can run in two different languages, English (language ID: 1033), and German (language ID: 1031). If it is not specified, the setup uses the current OS language for the installation. If the current language is not supported, then English is used.

2.2 Operating System and Platform

`PeakOemSetup.exe` allows installing drivers for following Windows operating systems:

- Windows 11 (64-bit)
- Windows 10 (32/64-bit)

2.3 Command Line Switches

Following commands affect only the language selection dialog and the dialogs in the bootstrapper's user interface (UI). In order to also affect the MSI package please refer to the MSIEXEC command line parameters section.

Note: The MSI parameters must come after the bootstrapper parameters.

`/exenoui`: Launches the EXE setup without UI.

Example: `PeakOemDrv.exe /exenoui`

`/exebasicui`: Launches the EXE setup with basic UI.

Example: `PeakOemDrv.exe /exebasicui`

`/listlangs`: Lists the languages supported by the EXE setup.

Example: `PeakOemDrv.exe /listlangs`

`/exelang <langId>`: Launches the bootstrapper using the specified language.

Example: `PeakOemDrv.exe /exelang 1033`

/exelog <path_to_log_file>: Creates a log file at the specified path with the specified name. If path and name are not specified, then the log file will be created next to the `PeakOemDrv.exe` installer having the name `PeakOemDrv.log`.

Example: `PeakOemDrv.exe /exelog "C:\Temp\PEAK-Drivers.log"`

2.4 Command Line Switches Order

When passing bootstrapper command line parameters to `PeakOemDrv.exe` you cannot mix them with the standard MSI ones. The correct order is to first specify the bootstrapper switches and then the standard MSI switches.

2.5 Return Code

The `PeakOemDrv.exe` bootstrapper will return - 1 if the user presses the Cancel button while installing the prerequisites (for example, .NET Framework installation, if the feature for LIN is being installed). Otherwise, it will return the code returned by `MSIExec.exe` after running the main MSI.

3 MSI Switches

The following commands affect only the actual installer (MSI file, i.e., commands for the `MSIEXEC.exe` application), not the bootstrapper.

Note: The MSI parameters must come after the bootstrapper parameters within the command line. The MSI commands are divided in 2 groups: display switches and public properties.

3.1 Display Switches

These commands are used to control the behavior of the user interface of the MSI installer. Following possibilities are offered:

- **`/quiet`:** Quiet display option.
  The installer runs an installation without displaying a user interface to the user. No prompts, messages, or dialog boxes are displayed. The user cannot cancel the installation. If no reboot options are specified, the installer restarts the computer whenever necessary without displaying any prompt or warning to the user.
- **`/passive`:** Passive display option.
  The installer displays a progress bar to the user that indicates that an installation is in progress, but no prompts or error messages are displayed to the user. The user cannot cancel the installation. If no reboot option is specified, the installer restarts the computer whenever necessary without displaying any prompt or warning to the user.
- **`/q`**: Sets the user interface level:
- **`q`, `qn`**: No UI

- **qb**: Basic UI. Use **qb!** To hide the Cancel button.
- **qr**: Reduced UI, with no modal dialog box is displayed at the end of the installation.
- **qf**: Full UI. Any authored FatalError, UserExit, or Exit modal dialog boxes are displayed at the end.
- **qn+**: No UI except for a modal dialog box is displayed at the end.
- **qb+**: Basic UI with a modal dialog box is displayed at the end. The modal box is not displayed if the user cancels the installation. Use **qb+!** or **qb!**+ to hide the Cancel button.
- **qb-**: Basic UI with no modal dialog boxes. Please note that **/qb+-** is not a supported UI level. Use **qb-!** or **qb!-** to hide the Cancel button.

3.2 Public Properties

These are values that can be modified over command line to cause different behaviors within an installation. The following properties are relevant for the `PeakOemDrv.exe` setup:

- **ADDLOCAL**: The value of the ADDLOCAL property is a list of features that are delimited by commas and are to be installed locally. The possible features are listed in the section *Installation with the User Interface* (see section 5.2) and in *Installation with Unattended Installation* (see section 6.3) installation.

4 MSI Features

The `PeakOemDrv.exe` includes MSI files for the installation of the actual features. Note that some features may be available according to the platform on which the installation is being executed.

4.1 Available Features

The following features can be currently selected for install:

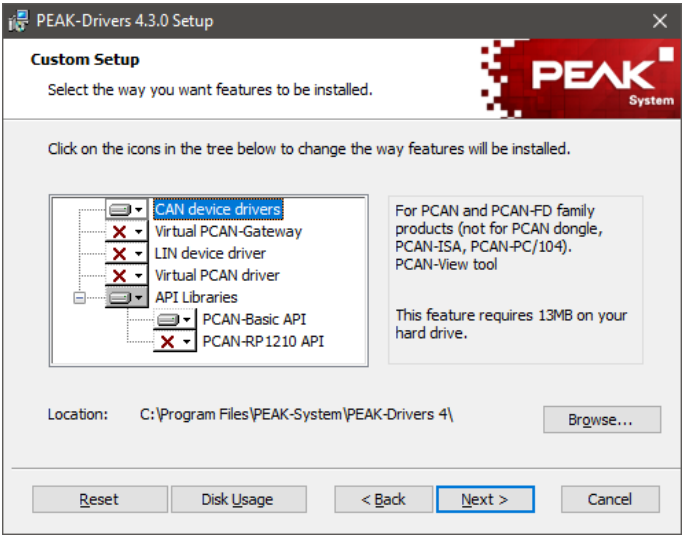
- **CAN device drivers**: Installs drivers for all PCAN devices based on USB and PCI interfaces. These drivers are available for 32-bit and 64-bit systems.
- **Virtual PCAN-Gateway**: Installs driver and tools for the virtual PCAN-Gateway device (CAN over IP). The driver is available for 32-bit and 64-bit systems.
- **LIN device driver**: Installs driver and tools for the PCAN-USB Pro, PCAN-USB Pro FD (LIN), and PLIN-USB interfaces. The driver is available for 32-bit and 64-bit systems.
- **Virtual PCAN driver**: Installs driver for the virtual PCAN device (internal device). The driver is available for 32-bit and 64-bit systems.
- **PCAN-Basic**: Installs the application programming interface PCAN-Basic (API library), for interfacing with all device drivers of PEAK-System. This library is available for 32-bit and 64-bit systems.
- **PCAN-RP1210**: Installs the application programming interface PCAN-RP1210 C (API library), to allow existing RP1210 applications to use devices of PEAK-System. This library is available for 32-bit and 64-bit systems.

5 Installation with the User Interface (UI)

5.1 Standard / Custom

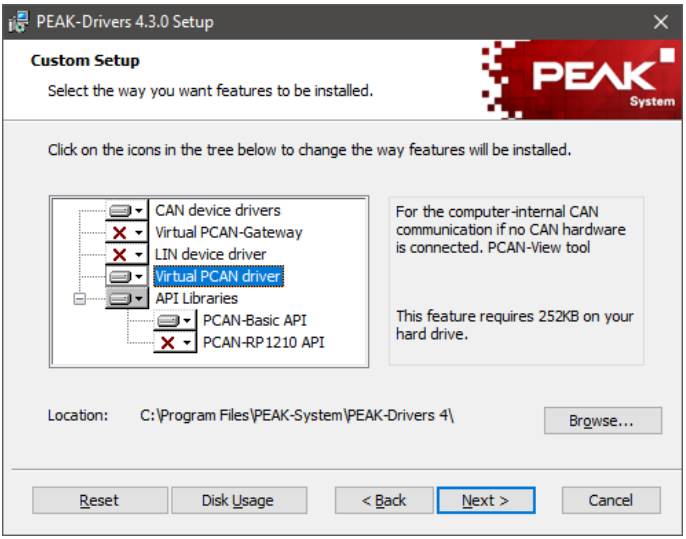
The custom installation of `PeakOemDrv.exe`, using the user UI, allows selecting the features to be installed from a list of features. The list is first shown with only one feature selected, CAN device drivers and the PEAK-Tools, which denotes the standard installation.

Note: The control panel applet PEAK Settings is always installed when using the UI, i.e. it cannot be selected or deselected from the feature list (hidden feature).



To customize the installation, any additional feature for the installation has to be selected from the list (customized).

Note: There is no possibility to select or unselect all features with a single click.



5.2 Adjusted

It is possible to preselect the features to be installed, i.e., that the desired features appear checked in the list of features to be installed. For this, the `PeakOemDrv.exe` must be called from the command line and must use the `ADDLOCAL MSI property` to set the features.

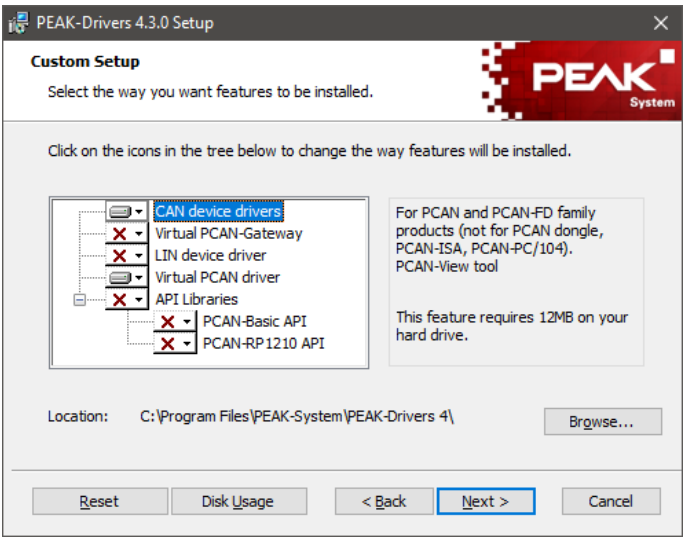
Note: Specifying all of features listed below within the ADDLOCAL property is analogous of making an Install All operation.

The following Keys are used to select the available features using the ADDLOCAL property:

- `F_PNP_DVRS`: Selects the CAN device drivers feature for install.
- `F_EVPOI`: Selects the Virtual PCAN-Gateway feature for installation.
- `F_EPLIN`: Selects the LIN device driver feature for installation.
- `F_VCAN`: Selects the Virtual PCAN drivers feature for installation.
- `F_PCANBASIC`: Selects the PCAN-Basic feature for installation.
- `F_PCANRP1210`: Selects the PCAN-RP1210 feature for installation.

Example: The following command line starts the setup in English and preselects the CAN device drivers and Virtual PCAN driver for the installation.

```
PeakOemDrv.exe /exelang 1033
ADDLOCAL=F_PNP_DVRS,F_VCAN
```



6 Installation with Unattended Installation

To make an unattended installation, the MSI property ADDLOCAL must be always used. This is because the user cannot interact with the setup application. Using this property allows a full installation, standard, or custom installation.

6.1 Standard Installation

To command a standard installation, i.e. installing the feature CAN device drivers and the PEAK-Tools, just call the `PeakOemDrv.exe` with any flag(s) that provoke an unattended installation.

Note: The installer selects automatically the features corresponding to the system platform where the installation is taking place (32 or 64-bit).

Example: The following command line commands the installation of the standard features, hiding the bootstrapper UI, and showing the basic UI of the MSI installer.

```
PeakOemDrv.exe /exenoui /qb
```

6.2 Full Installation

To command a full installation, i.e. installing all available features, use `ADDLOCAL=ALL` on the command line.

Note: The installer automatically selects the features corresponding to the system platform where the installation is taking place (32/64-bit).

Example: The following command line commands the installation of all features in silent mode, i.e. hiding the bootstrapper UI as well as the UI of the MSI installer.
`PeakOemDrv.exe /exenoui /qn ADDLOCAL=ALL`

6.3 Custom Installation

To customize the installation, any desired feature must be included in the ADDLOCAL value, using its Key and separated by comma (‘,’).

Note: The Keys used in an unattended installation differ from those used when the user interaction is allowed (when the user can change the features to be installed).

Following Keys are used to select the available features using the property ADDLOCAL:

- `F_SETTINGS_32BITS`: Installs the PEAK Settings feature on 32-bit systems. Note that the installation will fail if this feature is used on 64-bit systems.
- `F_SETTINGS_64BITS`: Installs the PEAK Settings feature on 64-bit systems. Note that the installation will fail if this feature is used on 32-bit systems.
- `F_PNP_32BITS`: Installs the CAN device drivers feature, and the CAN monitor PCAN-View on 32-bit systems. Note that the installation will fail if this feature is used on 64-bit systems.
- `F_PNP_64BITS`: Installs the CAN device drivers feature, and the CAN monitor PCAN-View on 64-bit systems. Note that the installation will fail if this feature is used on 32-bit systems.
- `F_VPOI_32BITS`: Installs the Virtual PCAN-Gateway feature on 32-bit systems. Note that the installation will fail if this feature is used on 64-bit systems.

- `F_VPOI_64BITS`: Installs the Virtual PCAN-Gateway feature on 64-bit systems. Note that the installation will fail if this feature is used on 32-bit systems.
- `F_PLIN_32BITS`: Installs the LIN device driver feature and the LIN monitor PLIN-View Pro on 32-bit systems. Note that the installation will fail if this feature is used on 64-bit systems.
- `F_PLIN_64BITS`: Installs the LIN device driver feature and the LIN monitor PLIN-View Pro on 64-bit systems. Note that the installation will fail if this feature is used on 32-bit systems.
- `F_VCAN_32BITS`: Installs the Virtual PCAN driver feature on 32-bit systems. Note that the installation will fail if this feature is used on 64-bit systems.
- `F_VCAN_64BITS`: Installs the Virtual PCAN driver feature on 64-bit systems. Note that the installation will fail if this feature is used on 32-bit systems.
- `F_PCANRP1210_32BITS`: Installs the PCAN-RP1210 feature on 32-bit systems. Note that the installation will fail if this feature is used on 64-bit systems.
- `F_PCANRP1210_64BITS`: Installs the PCAN-RP1210 feature on 64-bit systems. Note that the installation will fail if this feature is used on 32-bit systems.
- `F_PCANBASIC`: Installs the PCAN-Basic feature on both platforms, 32-bit, and 64-bit.

Example: The following command line commands the installation of the features represented by the keys `F_SETTINGS_64BITS`, `F_VPOI_64BITS`, and `F_PCANBASIC`, on a 64-bit system in silent mode, i.e., hiding the bootstrapper UI as well as the UI of the MSI installer.

```
PeakOemDrv.exe /exenoui /qn
ADDLOCAL=F_SETTINGS_64BITS,F_VPOI_64BITS,
F_PCANBASIC
```

7 Examples

7.1 Background Default Installation

Installs the default features in silent mode (hidden). On a 32-bit system, this will install PEAK Settings (32-bit), PCAN-View (32-bit), and the CAN device drivers (32-bit).

```
PeakOemDrv.exe /exenoui /quiet
```

7.2 Background Custom Installation with Success/Failure Message at the End

Installs preselected features in silent mode (hidden). When the installation is finished, a modal dialog box with a message indicating failure or success is shown. On a 64-bit system, this will install PEAK Settings (64-bit), and PCAN-Basic (32/64-bit). The current language is used (or English if the current language is not supported):

```
PeakOemDrv.exe /exenoui /qn+
ADDLOCAL=F_SETTINGS_64BITS,F_PCANBASIC
```

7.3 Background Custom Installation of Device Driver only

Installs the Plug & Play CAN device drivers and PCAN-View in silent mode (hidden). This will install the CAN device drivers (32-bit) and PCAN-View (32-bit) on 32-bit systems, or the CAN device drivers (64-bit) and PCAN-View (64-bit) versions on 64-bit systems.

```
wmic os get osarchitecture | findstr /C:"64"

if %ERRORLEVEL% EQU 1 (.\PeakOemDrv.exe /exenoui
/quiet ADDLOCAL=F_PNP_32BITS) ELSE
(.\PeakOemDrv.exe /exenoui /quiet
ADDLOCAL=F_PNP_64BITS)
```

7.4 Foreground Full Installation

Installs all features in a compact UI mode (unattended UI installation). On a 64-bit system, this will install the CAN device drivers (64-bit), PEAK Settings (64-bit), PCAN-View (64-bit), PCAN-Basic (32/64-bit), PCAN-RP1210 (32/64-bit), LIN device driver (64-bit), PLIN-API (32/64-bit), PLIN-View Pro, Virtual PCAN-Gateway (64-bit), and Virtual PCAN driver (64-bit). The English language is used:

```
PeakOemDrv.exe /exelang 1033 /qr ADDLOCAL=ALL
```

7.5 Preselected Features Installation

Installation features that have been preselected, not allowing the user to change the selection. On a 64-bit system, this will install PEAK Settings (64-bit), LIN device driver (64-bit), PLIN-View Pro, and PLIN-API (32/64-bit). The current language is used (or English if the current language is not supported):

```
PeakOemDrv.exe /qr
ADDLOCAL=F_SETTINGS_64BITS,F_PLIN_64BITS
```

7.6 Features Preselection

Starts the installer having some features automatically selected within the list of features. The user can still change the selection if desired. The German language is used:

```
PeakOemDrv.exe /exelang 1031
ADDLOCAL=F_PNP_DVRS,F_EVPOI,F_PCANBASIC
```