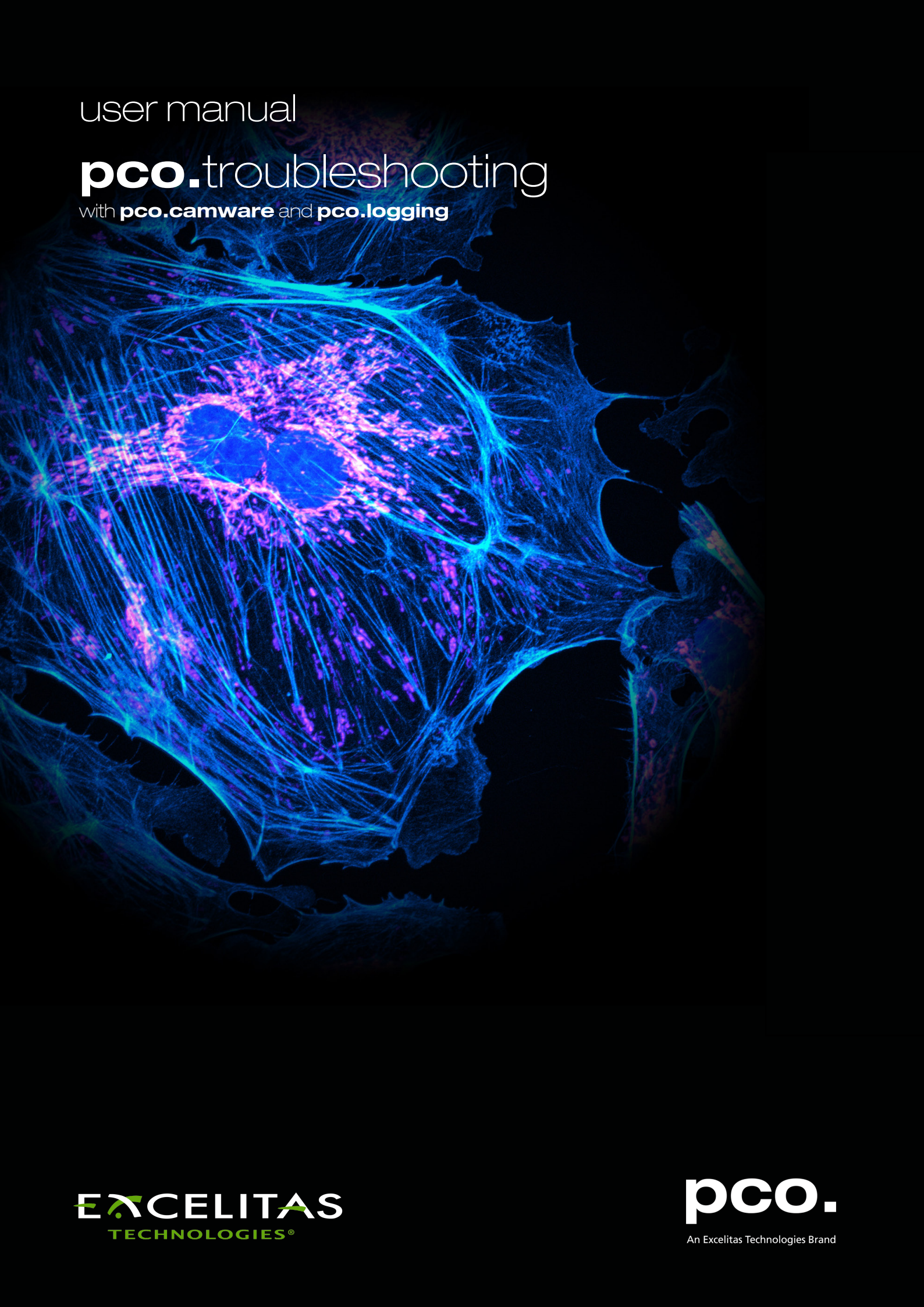


user manual

pco.troubleshooting

with **pco.camware** and **pco.logging**



Excelitas PCO GmbH asks you to carefully read and follow the instructions in this document.
For any questions or comments, please feel free to contact us at any time.



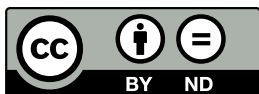
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1 Introduction

This manual introduces you to the different options of troubleshooting with **pco.software** products.

Following these instructions will allow for optimal support from PCO and therefore benefit the solution of your individual case.

2 Logging with pco.camware 4

The **pco.camware** software is equipped with its own logging functions. The **pco.logging** tool is not necessary here.

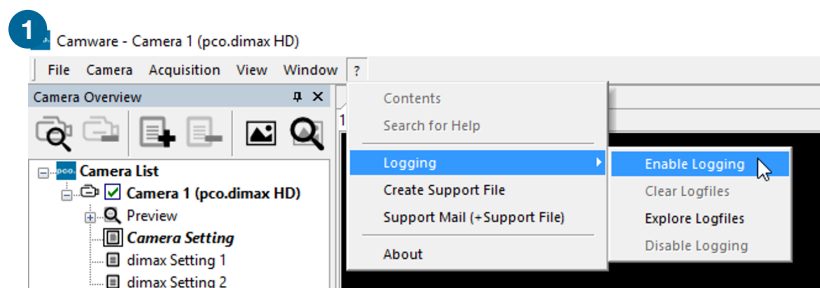
However, you may use the **pco.logging** tool for troubleshooting in case **pco.camware** crashes or freezes during startup.

Follow these instructions to provide the PCO support with information about your individual case in **pco.camware**.

2.1 Activate Log Files

As a first step, open pco.camware.

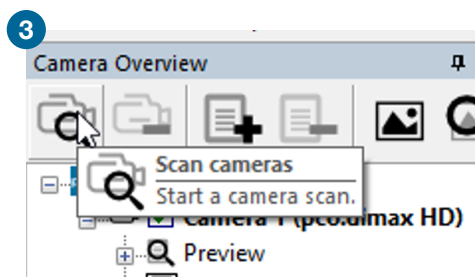
- 1 You can **Enable Logging** via the **?** (help menu) in the menu bar. Logging can be enabled while the camera is connected.



- 2 **Log files** will be created during the next start of **pco.camware** or when a 'Scan Camera' is started.

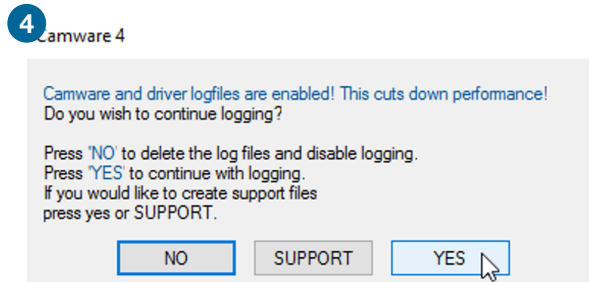


- 3 Save your image data before starting a rescan. Now select **Scan cameras**.



- 4

pco.camware will ask whether you want to **continue logging**.
Confirm with **YES**.

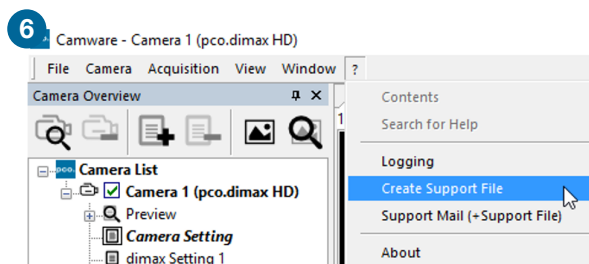


- 5 Repeat the steps that produce the errors.
In case the camera is not recognized and pco.camware starts in demo mode, the logging already documents possible communication problems.

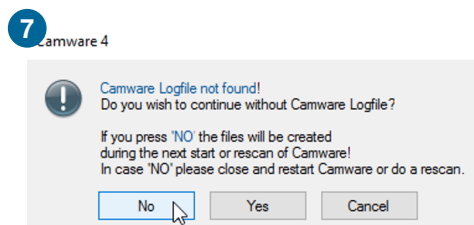
2.2 Create Support File

After having reproduced the steps, create the **support file** and send it to PCO.
The following steps explain how this is done optimally.

- 6 Select **Create Support File** via the ? (help menu) in the menu bar.

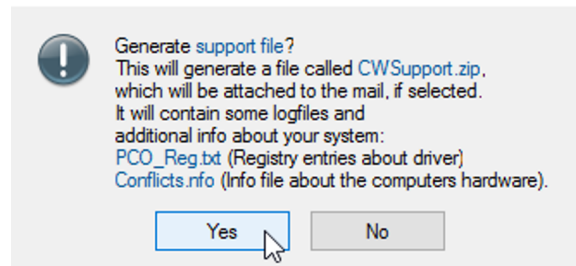


- 7 **Camware Logfile not found**
If this window appears, **log files** are not found or have not been created yet. In this case, **Scan cameras** again (3)



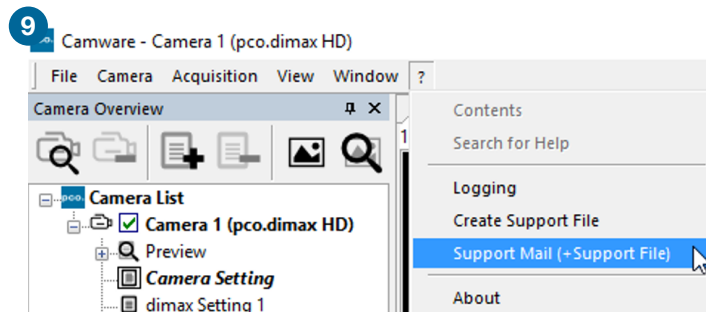
- 8 Click **Yes** to generate the support file that contains the log files and system information.
Send it to **PCO support** (support@pco.de)

8 Camware 4

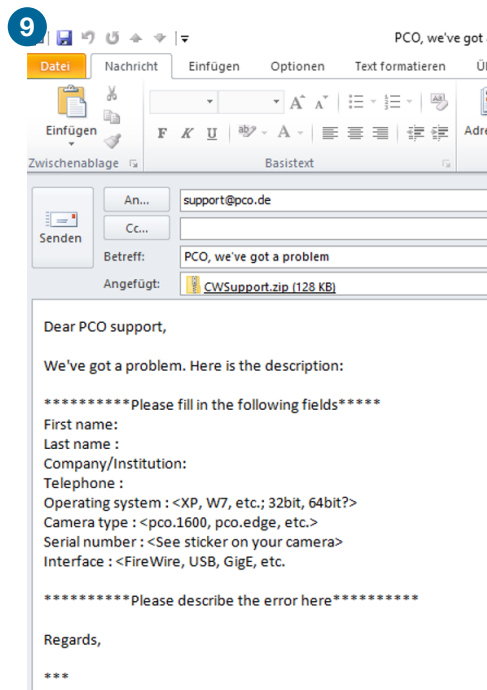


9 Support Mail

pco.camware can also create an email with the support file attached (standard email software must be installed on your computer).



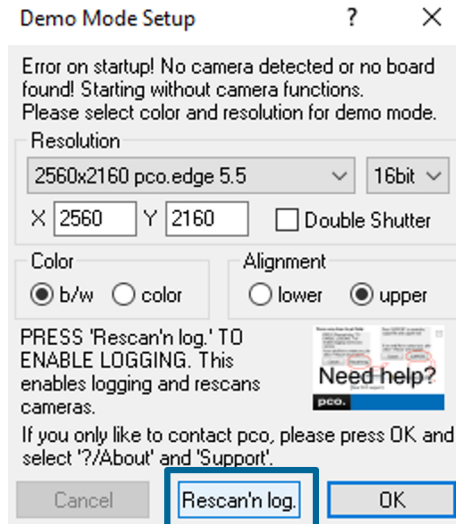
Please fill out the form with as much relevant information as possible to facilitate support:



Alternatively, you can visit the [PCO website](#) and upload the support file via our support ticket.

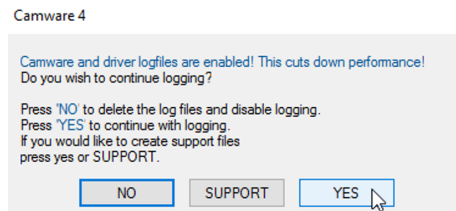
2.3 Demo Mode

If **pco.camware** cannot detect any connected camera, it will start in **demo mode**. It is also possible to **activate log files** in **demo mode**.

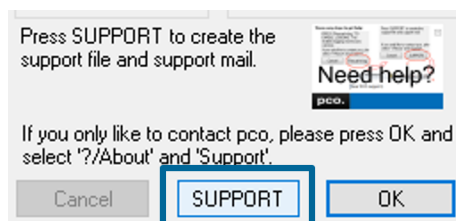


Demo mode will ask whether you want to **Rescan'n log**. After pressing this button, **pco.camware** will start a rescan and activate log files.

pco.camware will ask if you want to continue logging. Select **YES**.



Now select **SUPPORT** to create a support file.



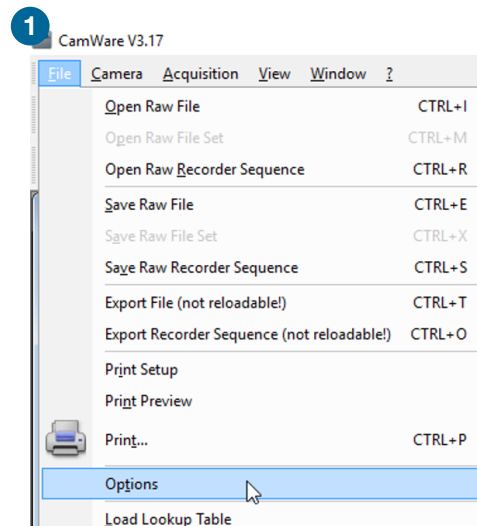
pco.camware can also create an email with the support file attached (standard email software must be installed on your computer).

For this option, see step **9** of chapter **2.2**.

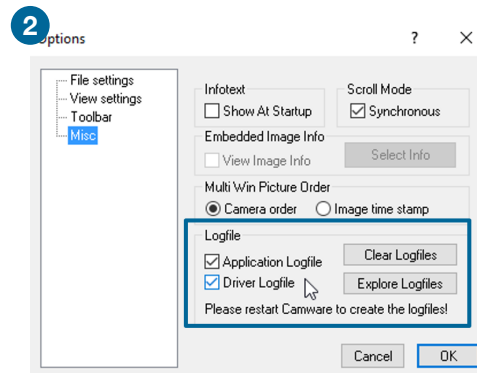
3 Logging with pco.camware 3

3.1 Activate Log Files

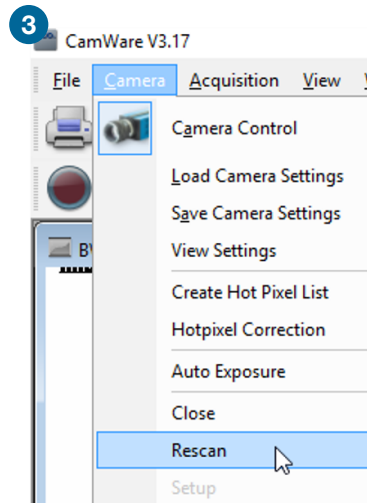
- 1 Open **pco.camware**, select the **File** tab, and then select **Options**.



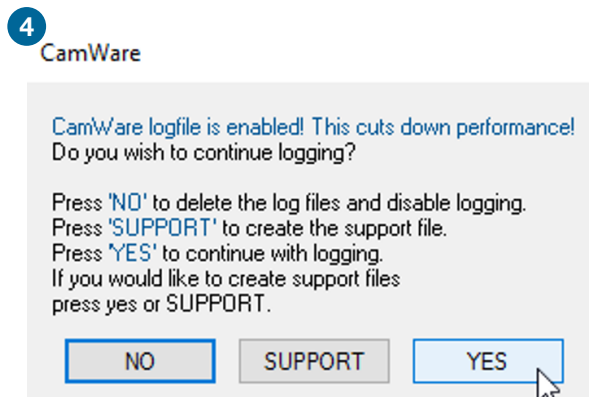
- 2 You have to enable the **Application Logfile** and **Diver Logfile** in the **Misc** menu.



- 3 Select the **Camera** tab and click **Rescan**. **pco.camware** will rescan for connected cameras and log files can consequently be enabled.



- 4 **pco.camware** will ask whether you want to **enable log files**. Select **YES**.

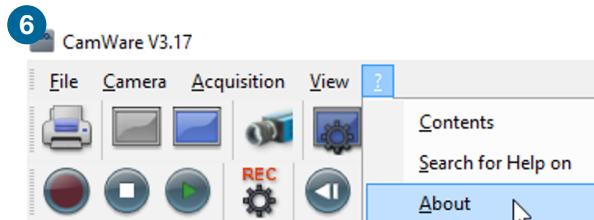


- 5 **Repeat the steps that produce the errors.**
In case the camera is not recognized and **pco.camware** starts in demo mode, the logging already documents possible communication problems.

3.2 Create Support File

After having reproduced the workflow, please **create the support file package (CWsupport.zip)** and send it to PCO.

- 6 Select the **?** (Help) menu and then select **About**.



- 7 The **About CamWare** window will appear, indicating **three different support options**:

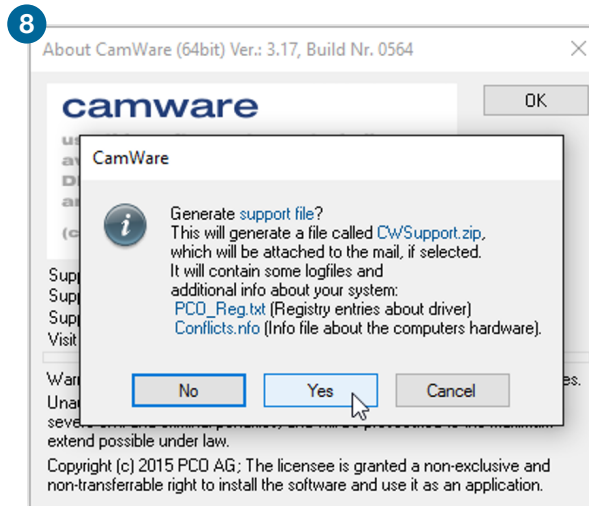
Support (Mail only): opens a mail template that can be filled and sent to PCO support.

Support (Mail with support files): Same as above, but with the CWsupport.zip attached.

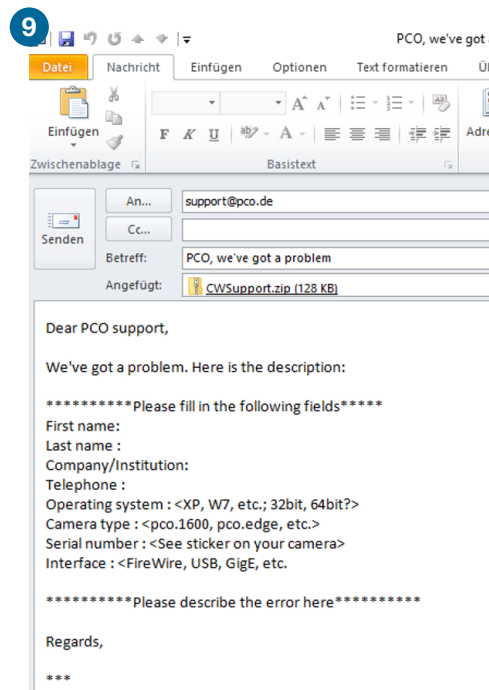
Support (Support files only): Generates the CWsupport.zip



- 8 **pco.camware** will ask whether you want to **Generate support file? (CWsupport.zip)**. Also generated are the **PCO_Reg.txt** with entries about drives, and **Conflicts.nfo**, a file that contains information about the computer hardware.



- 9 Please fill out the form with as much relevant information as possible to facilitate support:

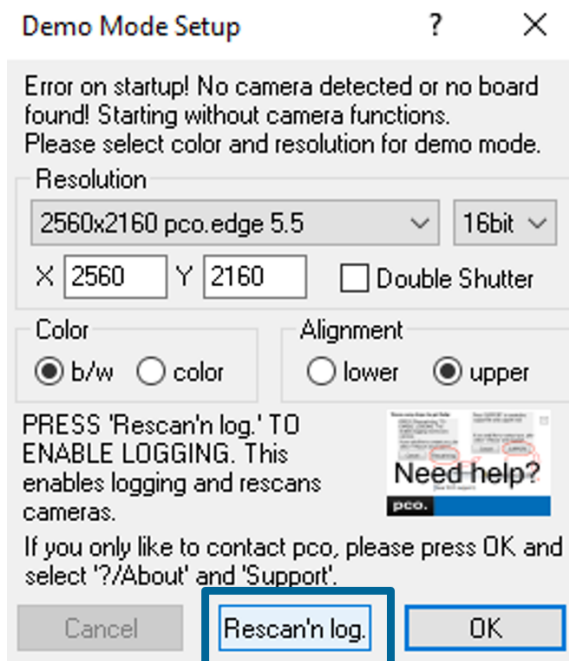


Alternatively, you can visit the [PCO website](#) and upload the support file via our support ticket.

3.3 Demo Mode

If **pco.camware** cannot detect any connected camera, it will start in **demo mode**. It is also possible to **activate log files** in **demo mode**.

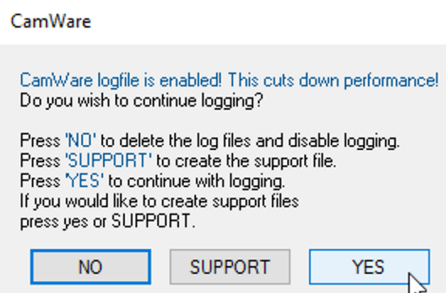
In **pco.camware 3**, this tool tip describes the steps for creating log files and the support file.



Demo mode will ask whether you want to **Rescan'n log**. After pressing this button, **pco.camware** will start a rescan and activate log files.



pco.camware will ask if you want to continue logging. Select **YES**.



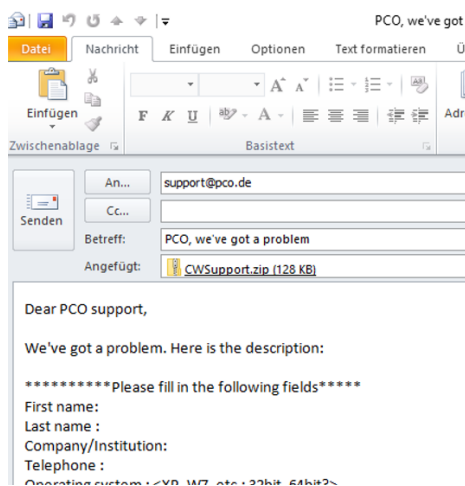
Now select **SUPPORT** to create a support file.



pco.camware can also create an email with the support file attached (standard email software must be installed on your computer).



Please fill out the form with as much relevant information as possible to facilitate support:



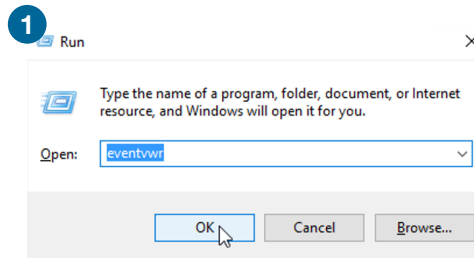
3.4 Potential Error

Using **pco.camware 3** with Windows might cause a common error:

If the creation of the **CWsupport.zip** takes very long, the Windows log files must be deleted in the event viewer.

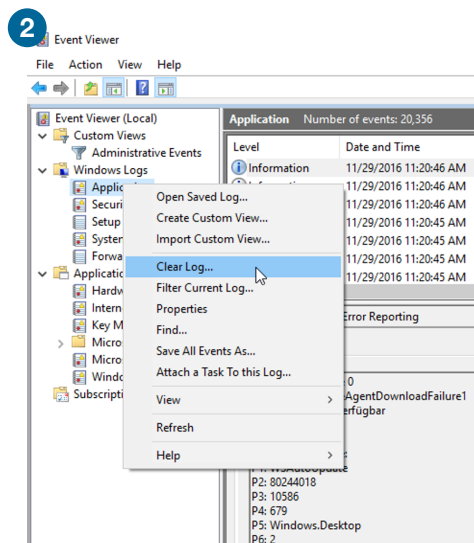
1 Clear the Windows log files

Open the event viewer: **Win + R** → **eventvwr** → **OK**



2 Clear all Windows logs and Application Logs

CWsupport.zip can then be generated much quicker.



4 pco.logging: Logging with Third Party Applications

In this chapter, you will learn how to provide the PCO support with information via the **pco.logging** tool.

The aim of this tool is to simplify the control and creation of log files for the PCO software tools that are integrated into or used by custom application software.

If you are only using **pco.camware** to control PCO cameras, please use the in-built logging functionality (see chapter 2).

In case **pco.camware** crashes or freezes during startup, you can use **pco.logging** instead.

The application has been designed to be simple and as small as possible so that it can be kept open during your entire testing/development process. You will always have an overview of the activated log files. This is especially relevant as logging affects the performance.

For any questions or comments, please feel free to contact us at any time.

4.1 Components

The **pco.logging** ZIP file contains the following components:

pco.logging.exe The actual application. It is a standalone with no further dependencies.

license.txt Contains the licence information. By using the application, you agree on these licence terms.

releaseNotes.txt Contains the version information.

readme.txt A readme file that also contains the information of this chapter.

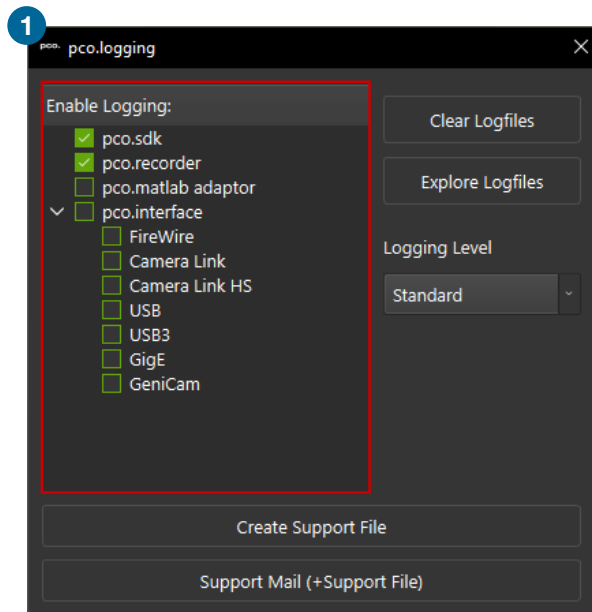
4.2 Procedure

First, download the latest software via the [PCO website](#).

LabView If you use **pco.logging** with **LabVIEW**, close all windows and processes before and after you start the logging process.
Otherwise, the logging process cannot be completed successfully.

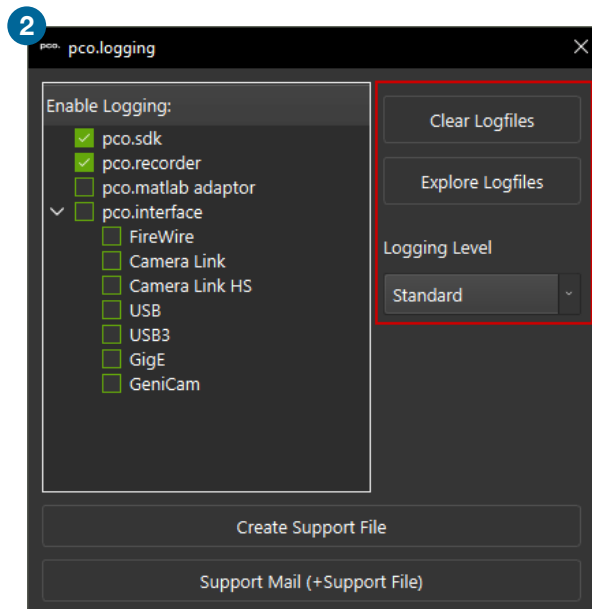
Python Restart the **Python** kernel whenever you activate or deactivate **pco.logging**, otherwise the log files are not considered.

The **pco.logging** interface contains the following components:



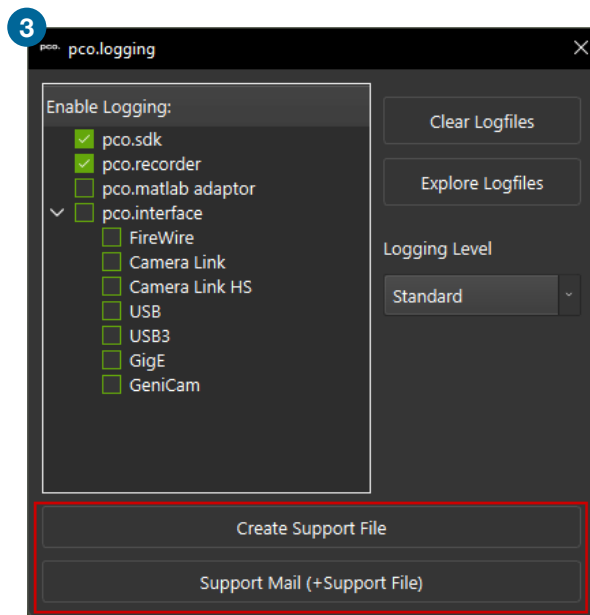
1 shows **all possible log files** and if they are currently enabled.

- With this you can dynamically activate or deactivate the log files.
- Please make sure to always do this before you start the application that should be logged.
- The tool automatically checks the logging every few seconds and updates the tree.
- It will also notice if log files are activated or deactivated by other applications.



2 shows two buttons and a drop down menu (on the top right) to **interact with the log files**.

- The **Clear Log Files** button deletes the content of all log files to make sure you only log the relevant session.
- The **Explore Log Files** button opens the folder where the log files are placed.
- The **Log Level** drop down controls the level of detail in the log files. In most applications/errors, the *standard* log level is sufficient. As the levels **high** or **full** create a great amount of data (and cut down your PC performance), it is recommended to only use this level when PCO staff advises you to do so.

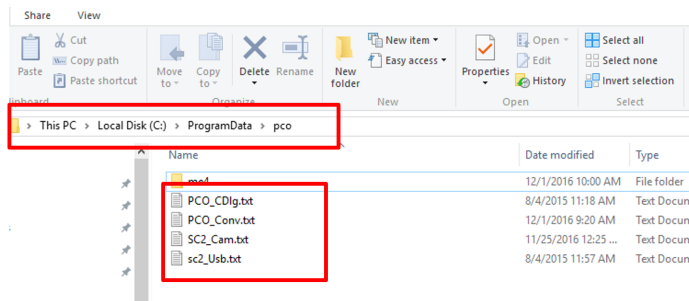


3 shows two buttons (on the bottom) to create a PCO support file equivalent to the file that can be created in pco.camware.

- The **Create Support File** button will create and zip the file.
- The **Support Mail (+Support File)** button will do the same and additionally generates an e-mail to PCO with the file attached.

5 Enable Logging Manually

Applicable for **pco.camware** or third party software.



If **pco.camware** is started (or SDK is addressed during a third party software session) with the default configuration, the folder **pco** is always automatically created within **C:\ProgramData** (this folder is hidden and must be unhidden manually).

Within this folder, several **.txt files** are created.

Each .txt file contains a short description on how to manually enable the logging.

Logging consumes time and should not be enabled permanently. **SC2_Cam.log** will be overwritten at the start of a new session.

If you want to have more than one session logged, rename this file to **SC2_Cam_a.log**.

If both files exist, **SC2_Cam_a.log** will be used.

To enable logging for the interface, you have to create the log file and a parameter file. Each interface has its own log file and thus its own filename. To enable logging for the corresponding interface, please create the appropriate log file.

Log files	
Firewire	sc2_1394.log
GigE	sc2_gige.log
GigE2	sc2_gige2.log
Camera Link Matrox	sc2_cl_mtx.log
Camera Link National Instruments	sc2_cl_nat.log
Cameralink Silicon Software Me4	sc2_cl_me4.log
USB 2.0	sc2_usb.log
USB 3.0	sc2_usb3.log
Camera Link HS	sc2_clhs.log

Parameter ini files	
Firewire	sc2_fw_param.ini
GigE	sc2_gige_param.ini
All Camera Link interfaces	sc2_cl_param.ini
USB 2.0	sc2_usb_param.ini
USB 3.0	sc2_usb3_param.ini
Camera Link HS	sc2_clhs_param.ini

Note This entry must be added to the parameter file:

```
[LOGGING]  
LOGGING=0x0000FFFF
```

pco.

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