



logAnalyzer

Manual

Copyright: smartHOME Profi e.K.
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smartHOME Profis is Control4 Diamond Dealer 2018, Control4 Dealer of the Year 2018, Control4 Top Volume Dealer 2018, winner of Best MDU Project Europe Award 2018, as well as Control4 ISE Award Winner 2018





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 Service-Hotline: 0800 5894715

Note:

Any problems, questions or change requests must be reported with a detailed description exclusively via <https://www.smarthomeprofis.de/support>.

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Changes and errors reserved!





1. Welcome

This tool is for searching a folder of log files for specific entries within these log files, which are written as results into a newly created log file. It is possible to search for entries with specific terms and (related to Control4 controllers) for entries of specific drivers by device IDs and for entries related to the last accesses to the controller project, the last changes to all drivers in the controller project and the last changes to specific drivers in the controller project. You can choose to search in a specific folder or directly on a Control4 controller using its IP address. You define the name of the log file to be generated and the path where the log file should be saved.

NOTE: This software is protected and can only be used with a USB stick, which you can purchase exclusively and directly from the company smarHOME Profi e.K. For the license USB stick to work correctly, the file "SglW32.dll" must be located in the same folder as the .exe file of this software.

2. Requirements

a) common

This software has been developed exclusively for use on Windows systems (tested under Windows 8.1 and higher). The requirements are so low that any system running Windows 7 and higher should be able to run this software. Only 1 MB of disk space is required for this software, as well as sufficient space on the "C:" hard disk to store all log files to be searched.

The source code of this software was written in compliance with the guidelines of the standard C++17 and uses the library "filesystem" and STL containers as well as the boost libraries and various Windows functions.

This software should not be started from a compressed archive (e.g. .zip) or an email attachment.

b) Software protection

This software is protected against unauthorized use by SG-Lock mechanisms. To run the software a valid SG-Lock USB stick is required, which has been configured by smarHOME Profi e.K.

If you need such a USB stick to use this software, please contact smarHOME Profi e.K. using the contact information found above in this document.

To run this software, the SglW32.dll file must be located in the same folder as the .exe file of this software, and a valid SG-Lock USB key must be inserted into the computer running this software.



c) Access rights

To use this software, you need at least the read rights for the log files that are to be searched by this software. This includes either (I) the read rights for the folder with the log files specified by you or (II) the access to the controller over IP where the log files to be searched are located.

In both cases this software will copy all available files to a local and temporary folder, so you also need write permissions for this local folder (usually "C:/User/Public/logAnalyzer_tmp/", by default the Windows standards provide the necessary write permissions here).

This software DOES NOT WORK with or in the original files!

This software generates a log file with the results of the search. This requires write permissions for the folder you specify for the output or for the default folder where the resulting log file is saved = the folder where the .exe file of this software is located.

In the case (II) of direct access to the Control4 controller via a remote connection (i.e. the controller is not on the local network), the Composer Pro software with all necessary user accounts, access rights etc. is additionally required.

d) Required skills and additional tools

The software is self-explanatory.

Experience with folder paths and the format of directories is helpful.

In relation to case (II) of the "access rights":

- As already mentioned, to access a Control4 controller via a remote connection, in addition to user accounts and access rights, the Composer Pro software in a version compatible with the operating system of the Control4 controller is required.
- If the log files of the "extended logs" are to be considered when browsing through this software, the user must execute a few commands in the Composer Pro terminal. For this purpose, in addition to user accounts and access rights, the Composer Pro software in a version compatible with the operating system of the Control4 controller is required. In addition, the user must be able to copy commands to the Composer Pro terminal and execute them as described when running this software.

For operating systems of Control4 controllers up to version v3.1.0 and lower and access to the controller over the local network, another SSH console (e.g. PuTTY) can be used instead of the Composer Pro terminal using the controller's IP address, username "root" and password "t0talC0ntr0l4!" ("extended logs" (= extended logging) must be activated by Control4 support before, for (further) information please contact Control4 support directly)



If you want to search for log entries of a specific Control4 driver related to a specific Control4 controller, you must be able to find out its associated driver ID ("device ID").

3. Installation

This software does not need to be installed.

Simply start this software by double clicking on the .exe file after the "requirements" are met as described above and use this software as described below in "User Manual".

4. Operation

I. General procedure

To use this software in general you must do the following:

- a) Save the .exe file of this software and the file "SglW32.dll" together in one folder on your computer. Make sure that all "requirements" as described in point 1 of this document are met.
- b) Collect all information you need to use this software. This includes:
 - Driver ID ("device-ID") OR term to search for
 - path of the folder containing the log files to be searched OR the IP address of the Control4 controller where the log files to be searched are located
 - [optional] the name for the log file to be generated by this software with the results
 - [optional] the path where the log file generated by this software should be stored
 - [optional, if you want to search directly on a Control4 controller] the information whether "extended logs" are activated
- c) Double click on the .exe file to start this software
- d) A console window should open. Follow the instructions in this window. Read all instructions carefully, everything should be described in detail.
- e) The process of this software guides you through the following steps:
 1. Select one of the functions:
 - (1) Search for a specific term
 - (2) Search for a specific driver ID ("device ID")
 - (3) Search for the last accesses to the controller project
 - (4) Search for the latest changes to all drivers of the controller
 - (5) Search for the latest changes to a specific driver of the controllerNo input and "0" end the software.
 2. Specify the details required for the desired function:
 - (1) enter the term you want to search for
 - (2) enter the driver ID ("device-ID") to search for



- (3) enter the number of entries to be extracted
 - (4) enter the number of entries to be extracted
 - (5) enter Driver ID ("device ID") whose changes should be searched, then enter the number of entries to be extracted
- No input and "0" end the software.
3. Choose whether to search in a specific folder (1) OR directly on a Control4 controller over IP (2), no input and "0" ends the software.
 4. EITHER (Step 3 selection = 1): Enter the folder path where you want to search, no input will use the default folder = folder where the .exe file of this software is located.
OR (Step 3 selection = 2): Enter the IP address of the controller to be searched, no entry will exit the software. You will then be asked whether "extended logs" (= extended logging) should be considered. If they are not activated, you do not want to consider them or you just do not know what this means, enter "n" for no or nothing at all and press ENTER. Otherwise, type "j" for yes, press ENTER and follow the displayed instructions.
 5. Enter a name for the log file generated by this software and containing the search results. If no entry is made, the default name will be used = "generatedLog_[search details]" where [search details] consists of the data you have entered so far, e.g. selected function.
 6. Enter the folder path where the generated log file should be saved. If no entry is made, the default folder is used = folder "output", which contains the .exe file of this software. Wrong entries are detected and you will be prompted to enter them again.
- f) Now the software will summarize the entries you have made and starts to copy all log files to be considered (original files) into a local temporary folder with the path "C:/User/Public/logAnalyzer_tmp/". This software DOES NOT WORK with or in the original files!
If you search directly on a Control4 controller, this may take some time.
 - g) Then the software works through the copy of the original files and generates a log file with the results of the search.
 - h) When all files have been processed, a summary of the results is displayed. This includes the number of records found that match your search criteria, the number of files in which these records were found, the number of all log files found and the number of all files found. If compressed files were found (.zip, .rar, .gz) which could not be extracted, the number of these files and a list of these files will also be displayed. Otherwise, the number of successfully decompressed files is indicated.
If "extended logs" were taken into account directly on a Control4 controller during the search, follow the displayed instructions to undo the adjustments made for the consideration.
 - i) After generating the log file with the search results and before the software quits, it cleans the local temporary folder "C:/Users/Public/logAnalyzer_tmp/" and its used resources. Press ENTER and the console window will close.

Now the desired search results should be available in the file with the name you specified (step e-5) in the folder you specified (step e-6).



II. especially for searching directly on a Control4 controller

In this case, before performing the "general procedure" (I), you should start the Composer Pro software, log on to the controller and load the controller project. This is not mandatory (but usually makes the whole procedure easier) if the controller is on the local network and "extended logs" are not enabled, or if the operating system version of the Control4 controller is v3.1.0 and lower.

To search directly on a Control4 controller the IP address of the controller is required (IPv4: x.x.x.x with x = [0..255]). If you are not sure which IPv4 address the controller has, you can find the IPv4 address after loading the controller project into Composer Pro in the status bar at the bottom of the Composer Pro window on the right side between "Connected to" and "(SSL)".

Please note: If the corresponding controller is not located in the local network, you need the IP address of the remote connection to the controller.

If a window opens while this software is trying to copy the log files from the controller and asks you for login information, enter "root" as user, leave the password field blank and press ENTER.

The credentials via SSH (e.g. with PuTTY) for operating system versions of the Control4 controllers from v3.1.0 and lower are for the user "root" and for the password "t0talc0ntr0l4! For versions higher than v3.1.0 this password has been removed and logging in via SSH is no longer possible or only via the Composer Pro terminal.

For extended logs to be considered, they must be activated by Control4 support. For (further) information contact and ask the Control4 support directly. In addition, the user must execute a few commands in the Composer Pro terminal.

The instructions for considering the "extended logs" are displayed in the software when they are needed.

If the "extended logs" were taken into account, but you forgot to undo the necessary adjustments, you can undo them afterwards using the following instructions:

1. Open the controller project in Composer Pro and select "System Design
2. Find the controller by the devices, click on it with the right mouse button and select the item "Terminal" in the appearing menu
3. A console window opens, enter the following command:
"rm /var/log/extended_logs/"
4. Close the console window again



III. Possibilities and limits

This software is only able to find log entries that are in the existing and available log files. If the generated log file does not contain the expected information and results, then this information cannot be found in the specified log files either. If you still think that the expected information should be included, restart this software and change your search specifications accordingly.

To find entries related to a specific driver ID ("device-ID"), this software searches for specific combinations with that driver ID, e.g. "[device-ID]" where [device-ID] is the specified driver ID. This can lead to the fact that the results in the generated log file may contain entries that are not directly related to the searched driver ID (or the desired driver) but contain one of the combinations.

To find entries regarding changes to drivers of a Control4 controller this software searches for entries with terms like " Removed:". This can lead to the fact that among the results in the generated log file there are entries which have no direct reference to driver IDs but contain one of these terms.

5. Best Practice

- Folder paths can be relative or absolute. Relative paths can be specified with "./[...]" if they are real to the path of the .exe file of this software. Folders that are located in the same folder as the .exe file of this software can also simply be specified with the folder name "[name of the folder]" without further additions.
- Using the default values (no input at steps e-5 and e-6) for the name and location of the log file to be generated can significantly speed up the use of this software.
- If you want to repeat an entry you have already made once since the start of this software, you can use the up and down arrow keys. This can be especially helpful if the file to be generated is to be saved in the same folder path (step e-6) as the log files to be searched (step e-4).
- If you want to search in a specific folder, the easiest way is to copy the .exe file of this software and the associated file "SglW32.dll" to the folder where the log files to be searched are stored, or one level above. By specifying relative folder paths, this can significantly reduce the effort of entering folders (step e-4 and step e-6).
- If you want to search directly on a Control4 controller over IP, it is recommended to open Composer Pro and load the controller project before starting this software.



6. Troubleshooting

- If this software gives an error while copying or editing log files, especially when searching directly on a Control4 controller over IP, restart this software and enter the exact same search criteria. Occasionally there may be temporary access errors (e.g. for cloud data -> file is in process / usage) or temporary network interruption (e.g. for slow connections or high network load -> "Timeout") which will disappear within a few seconds.
- If you want to browse directly on a Control4 controller over IP and this software keeps giving connection errors even though Composer Pro shows a connection, try opening the folder "\\[IP of controller]" manually in a Windows Explorer and restart this software.
- If a window opens while the folder "\\[IP of the controller]" is opened manually or while this software tries to copy the log files from the controller to the local folder and asks for login data, enter "root" as user, leave the password field empty and press ENTER.

7. Notes

This product documentation should give you an overview of the functions, the equipment and the possibilities of your product from smartHOME professionals. It does not claim to be absolutely complete regarding all functions of your product. If you have any questions or comments, wishes or errors, please feel free to call us on the hotline listed below or send us an e-mail with a detailed description.

8. Contact

For inquiries and to order a license USB stick, please contact info@smarthomeprofis.de.



For technical questions, errors or malfunctions, requests or comments please contact support@smarthomeprofis.de with a detailed description of your request.

For (further) information about Control4 and its products, please contact Control4 support directly!



0800 5894715 (freecall)

The terms and conditions of smartHOME Profi e.K. apply.

smartHOME Profi e.K.

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