

ShutdownHelper

Manual

English

(ShutdownHelper-package v.1.10)

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ShutdownHelper • Introduction

For the history of this AppleScript-app resp. the complete package:

The demand for a way to let Apple computers shut down unattended after a selectable duration has been around for a long time, especially from the video crew.

Since the only two programs, known to me at that time, are no longer supported resp. are no longer compatible, I have decided to develop something like that myself.

Since I was pointed to the fact that there is another software called "**Shutdown Helper**", I changed the name of this package and all contained components to "**ShutdownHelper**".

All apps included in this package are licensed under the GNU General Public License ([GPLv3](#)). This manual accordingly to the GNU Free Documentation License ([FDLv1.3](#)).

The source code, not always up-to-date, is available at:

<<http://Maik-Waschfeld.de/source/s-sh.zip>>

And as it's stated in all apps, developed by me:

--- Just for in-house-use and by those, who know what they are doing!
--- Use at your own risk.

If you encounter problems or have suggestions, please contact me.

Please enclose a log file, if necessary.

... Maik Waschfeld

Email: Maik.Waschfeld@Maik-Waschfeld.de.

Notes:

- The manual is continually corrected (formulations / errors etc.) and corresponds in content always to the current app versions.
- Not every screenshots of the manual is up to date with the app versions. However, if the relevant function changes, I will also update the screenshots.
- No screenshot of the manual is localised to resp. from macOS's english at the moment.
- The "**Notes**", which appear in various parts of this manual, should be read (and observed)!

Disclaimer:

- All product and company names mentioned here are trade marks™ or registered® trade marks of their respective trade mark holders. Their use is for identification of the products only and does not imply any affiliation with or endorsement by said companies.

ShutdownHelper • Overview

- When **ShutdownHelper** is referred to in the following, it means the entire package.
- **ShutdownHelper** is intended to give the user the ability to either
 - sleep [Sleep] or
 - shut down [Shutdown] or
 - restart [Restart]

the Apple computer unattended after a selectable duration.

- Specifically responsible for querying the parameters and performing the desired action is **ShutdownHelper.app**. It also takes care of the user-specific creation and display of the screenshot of the main monitor, which is taken shortly before the actual execution of the action and saved as png, and the log file, saved as txt. The actual display of the screenshot resp. log file is done by the applications, which are locked in the **Finder** to the extensions „png" resp. "txt".
- In order to be able to display the last screenshot and the last log file user-specific, but independently of **ShutdownHelper.app**, there is **ShutdownHelper Log.app**. Here, too, the concrete display of the screenshot resp. log file is done by the applications, which are locked in the **Finder** to the extensions „png" resp. "txt".
- **ShutdownHelper Installer.app** takes care of the installation of the **ShutdownHelper** package and the manual and also sets up all required directory structures.
- Timings within **ShutdownHelper.app** and the sent messages should not be considered absolute time. AppleScripts are not processed with high priority on macOS. "Real" applications have a higher priority. Thus, if an application like **Final Cut Pro.app** or **Adobe Premiere Pro.app**, is busy rendering a movie, the time loops within the AppleScripts, which **ShutdownHelper.app** relies on, are running definitely slower.

Notes:

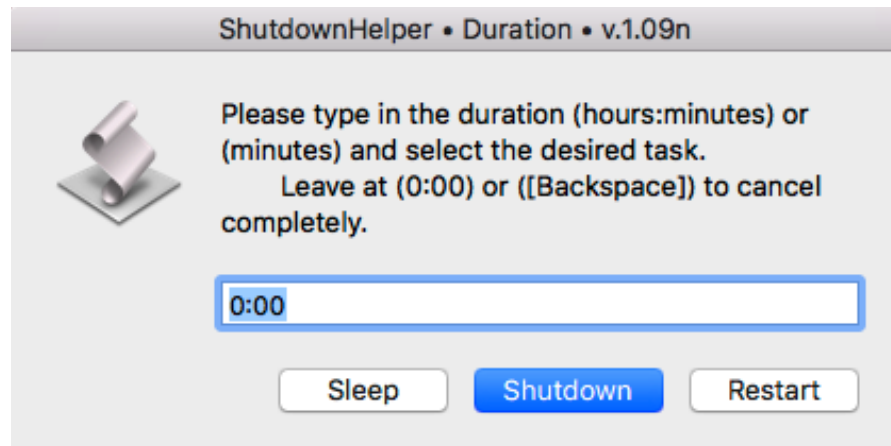
- ➔ I've tried to make the **ShutdownHelper** apps as "safe" (in the meaning of operation errors) as possible.
- ➔ The default buttons have been selected so that the most likely "route" can be used directly by pressing the [Return/Enter] key.
- ➔ **ShutdownHelper.app** shows a detailed report ("**ShutdownHelper Log**") at the next login. The report, as well as the screenshot that is displayed, refers to the last **ShutdownHelper.app**-run of the currently logged in user.
- ➔ In the first dialog box of each of the **ShutdownHelper** apps that are displayed, the concrete version number of the respective app is displayed in the title.
- ➔ Dialog boxes within an AppleScript open **always** in the screen center. Unfortunately, I have no influence on this, so that e.g. the [Progress] box must be manually moved to a location, where it does not obscure important window areas of the main application, as it appears on the screenshot as well.

ShutdownHelper.app • Manual

ShutdownHelper.app gets started by double-clicking.

• 1. Dialog-Box • Duration and action selection

The first dialog box contains the actual query of the duration, after which the computer will get to sleep [Sleep], to shut down [Shutdown] or to restart [Restart], as well as the selection of the concrete action.



The input must be in the format "h:mm" (hours : minutes) or "mm" (minutes). For a number without ":", it is therefore assumed, that minutes are meant. Thus, from the input of e.g. "90", "1:30" is used automatically. This conversion is not displayed!

If the entry is "0:00" or nothing (use [Backspace]), **ShutdownHelper.app** can be terminated immediately, no matter which action ([Sleep], [Shutdown] or [Restart]) is selected.

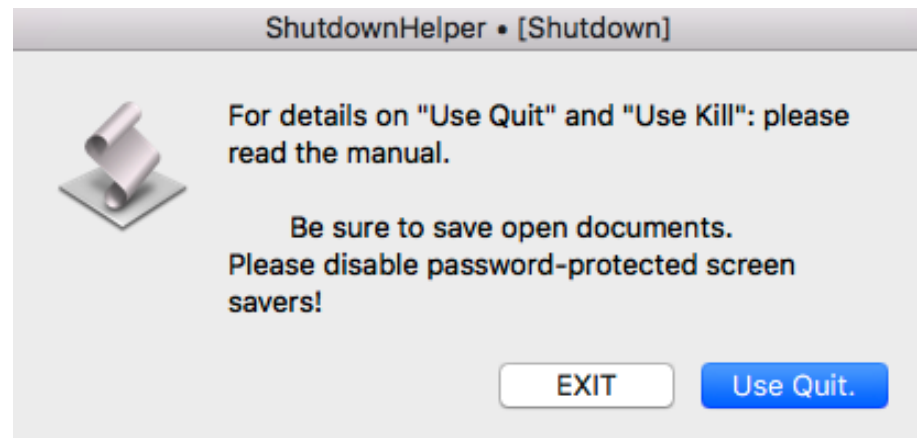
Without user action, here **ShutdownHelper.app** is automatically terminated after 30 seconds without any action.

Caution: **first** enter the required duration and **second** select the required action!

• 2. Dialog-Box • method selection

The second dialog box contains the selection whether [Use Quit] or [Use Kill] should be used when terminating the running processes resp. applications.

→ The [Use Kill] action is not implemented yet!



On the difference between [Use Quit] and [Use Kill], "open documents", "screen savers" and other important topics, see the section "[Further Notes](#)". **These "Notes" should be read, at least after the installation, resp. before the first use!**

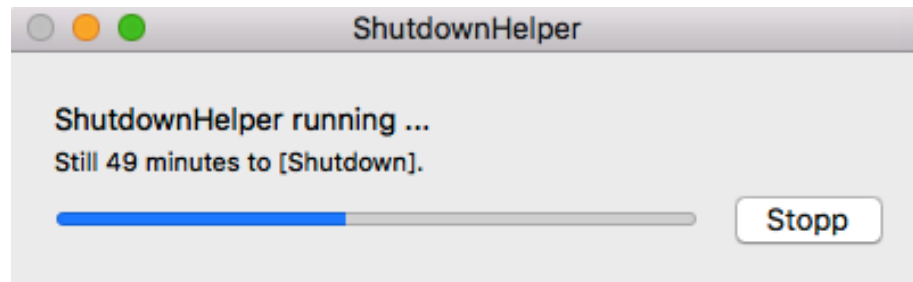
[EXIT] terminates the script immediately.

Without user action, here **ShutdownHelper**.app will use the [Use Quit] action after 30 seconds.

➔ [Use Quit] means: the action [Use Quit] is used, not the function [EXIT] = "**ShutdownHelper**.app" is terminated!

• Progress-Box (Countdown)

After you start the "Stopwatch" process with [Use Quit] or [Use Kill], the AppleScript progress box appears.



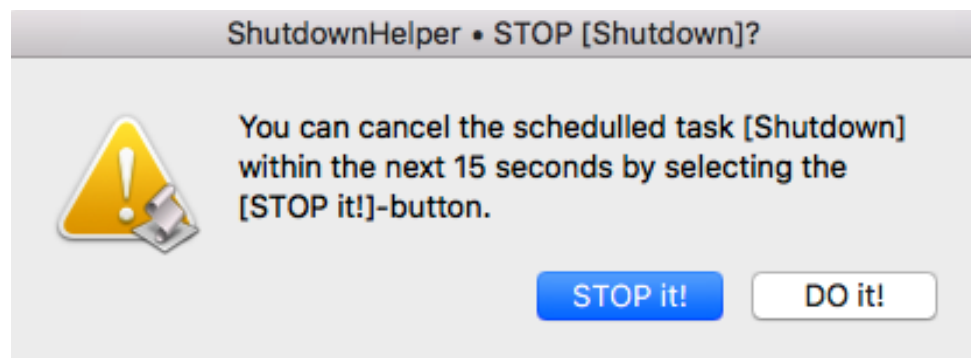
It shows the specific minute steps up to the selected **ShutdownHelper**.app action. The complete process can be terminated with the [Stopp] button.

Since the button is only queried once a minute, here ample patience is asked!

The "Progress" function still seems to be quite "beta"! So, the Progress-Box stays on screen, even when the time has elapsed.

• 3. Dialog-Box • abortion

A few seconds before the computer executes the action selected in the first dialog box, here: [Shutdown], the "STOP it?" dialog box will appear for 15 seconds with the possibility to abort the entire action ([STOP it!]), or [DO it!] Immediately.



After these 15 seconds or after selecting [DO it!], the following will happen:

- with the selection of [Sleep] in the first dialog box:
 - the computer gets put to sleep-mode after trying to save screenshot and log file without any further actions.
- with the selection of [Shutdown] in the first dialog box:
 - the computer gets shut down after trying to terminate all running processes resp. applications as well as save screenshot and log file.

- with the selection of [Restart] in the first dialog box:

the computer gets shut down after trying to terminate all running processes resp. applications as well as save screenshot and log file and then restart it.

• Log-file • naming

- Log files are named according to the following scheme:

[ShutdownHelper Log "YYMMDD hhmmss" "short name of the user".txt].

[ShutdownHelper Installer Log "YYMMDD hhmmss" "short name of the user".txt].

- Screenshots are named according to the following scheme:

[ShutdownHelper Screenshot "YYMMDD hhmmss" "short name of the user".png]

- The time stamp "YYMMDD hhmmss" corresponds to the start time of **ShutdownHelper.app** resp. **ShutdownHelper Installer.app**.

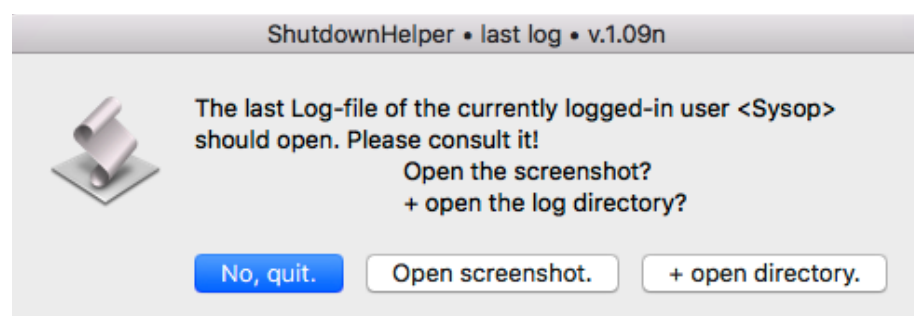
• Succession • Wake up

Since there is no (re-) starting of the computer after [Sleep], the procedure of **ShutdownHelper.app** is:

- just before the [Sleep] action is actually executed, **ShutdownHelper Log.app** is started. It will then open the last log file of the currently logged-in user and remains active as a running process during [Sleep].

• Succession • (Re-) Start

When restarting the computer and logging in, **ShutdownHelper.app** is restarted and the last log file of the currently logged-in user is displayed, additionally the possibility is offered to open the last screenshot and the directory <ShutdownHelper Logs />.



Notes:

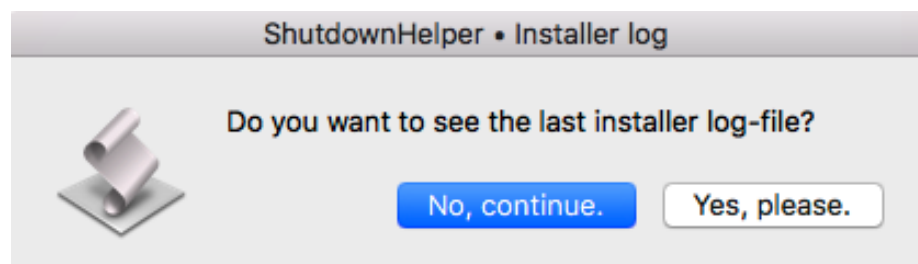
- An automated mechanism for deleting older log files and screenshots is implemented. The last five log files and screenshots of each user are retained. The last five installer log files are always retained.

Specifically, this means that a maximum of the last five installer logs and per standard users a maximum of 10 additional files are retained in the log directory. This is only possible, if [Shutdown] and [Restart] of a user are executed

immediately (in the meaning of "asap.") and no further **ShutdownHelper.app**-runs of other users take place in the meantime, since each user can only delete his own files.

These deleted files are moved to the macOS-Trash, so the Trash has to be emptied **manually**.

- In order for **ShutdownHelper.app** to be restarted after (re-) starting the computer without using the „Resume"-mechanism of the macOS (see below), **ShutdownHelper.app** will register itself into the login items [System Preferences <Users & Groups<"user"<Login Items] of the respective user.
- After the computer has been restarted, **ShutdownHelper.app** will remove itself from [System Preferences <Users & Groups<"user"<Login Items] of the respective user.
- If the „Resume"-mechanism of the macOS is active, meaning the box of "Close windows when quitting an app" is **not** selected in [System Preferences<General], **ShutdownHelper.app** may be restarted after the above mentioned process ("Succession • (Re-) Start") has already been traversed.
 - ➔ In this case simply press [Return/Enter] and **ShutdownHelper.app** will immediately terminate.
- If the currently logged-in user is an **administrator**, it's also offered to display the last installer log.



• Terminating and Automation • Summary

ShutdownHelper.app will quit under the following conditions:

- after 30 seconds, if there is no user activity in the first dialog box • Duration and action selection.
- if "0:00" or nothing is entered in the text field of the first dialog box and the dialog box • Duration and action selection, is closed with **any** button.
- if selecting the [EXIT] button in the second dialog box • method selection.
 - ➔ Without user activity: the action [Use Quit] is automatically executed after 30 seconds.
- if selecting the [Stopp] button in the Progress-Box. (See "**Notes**" below.)
- if selecting the [STOP it!] button in the third dialog box • abortion.
 - ➔ Without user activity: the action [DO it!] is automatically executed after 15 seconds.
- when the computer is shut down.
- If **ShutdownHelper**.app has to be terminated after the second dialog box has already started the "stopwatch", this only works, aside from the [Stopp] button of the progress box, and before the third dialog box appears with the option to terminate **ShutdownHelper**.app with [STOP it!], with the function [⌘<Force Quit...] (⌘⌘⌘) of the macOS. (See "**Notes**" below.)



[^-clicking + "Quit"] on the icon in the Dock will not work here. Just alike as to quit **ShutdownHelper**.app with the menu bar resp. [⌘ + Q].

Notes:

- Both the use of the [Stopp] button in the Progress-Box and the function [⌘<Force Quit...] of the macOS "bypasses" the „**ShutdownHelper**.app“'s "Exit" procedures. As a result, the already initiated processes, that should be un-done by the above mentioned "Exit" procedures, can't be un-done. This includes, inter alia, the registration of **ShutdownHelper**.app into the login items of the respective user.

Additional Notes

- **Minimum requirements**

for **ShutdownHelper** are AppleScript v.2.4 resp. macOS from v.10.10.x. Therefore, for all macOS versions before v.10.10.x: no support!

- **GateKeeper**

Depending on the **GateKeeper** settings, both installed apps **have** to be started once by double-clicking or ^-clicking + „Open" **by an administrator** so that non-administrator users can use these apps without the hassle of macOS requests because **GateKeeper** may otherwise block these apps (without signature). The apps do not have to run through completely, but can be terminated immediately after the start:

- **ShutdownHelper.app**: press [Return/Enter].
- **ShutdownHelper Log.app**: the installer log is loaded, then press [Return/Enter] in **ShutdownHelper Log.app**.

- **„System Events error -600“ („Application isn't running“)**

To prevent **ShutdownHelper.app** from shutting down with an "SystemEvents error -600" ("Application is not running") after **ShutdownHelper.app** has been started, **ShutdownHelper.app** must be installed as an administrator **manually** at [System Preferences<Security & Privacy<Privacy<Accessibility] via drag'n'drop or with the [+]-button after entering the administrator password.

Important: after an update installation, the checkbox in the Accessibility control panel must be removed and set again **manually**.

For unknown reason, **Finder**, after the (re-) start, nevertheless sometimes brings the above mentioned error message, although **ShutdownHelper.app** has already, at least partially, completed its tasks at this time.

- **„Please disable password-protected screen savers!“**

It is no problem to use screen savers based on macOS-ScreenSaver. An active screen saver is terminated before the third dialog box appears ("STOP it?"). What the problem is, is the option to secure the screen saver with a password. In this case, the script can't continue working when the screen saver is active, but instead reports a "timeout" error.

In [System Preferences<Security & Privacy<General], please remove the "Require password ..." checkbox and confirm the „Turn Off Screen Lock" prompt. This requires the password of the logged-in user!

- „Be sure to save open documents.“

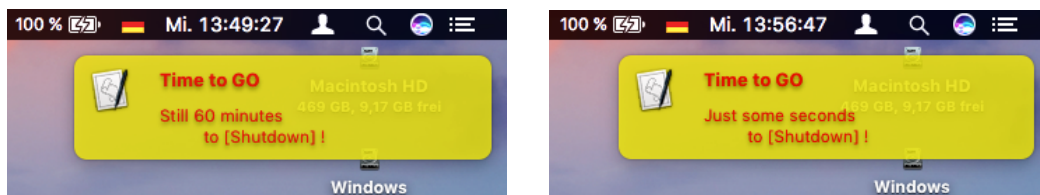
If [Use Quit] is selected in the second dialog box, "open" documents, which are not yet saved, can prevent a shutdown or restart.

Please ensure that these documents are securely saved, or, best practice, that they stay not open in a window.

If the selection is [Use Kill] (→ not implemented yet!) in the second dialog box, it will happen that "open" documents, which have not yet been saved, are lost because the respective process, gets "shot down", "colloquially" speaking.

- **Growl**

If **Growl** is installed, it will be used to submit **ShutdownHelper.app** messages.



The [Applications] settings in **Growl** are user-specific, so they have to be set by each user.

They can be found in [System Preferences<Growl<Applications <ShutdownHelper<Configure...] after the first run of **ShutdownHelper.app**.

They should be adjusted according to individual requirements, with two exceptions.

These exceptions are:

- [<Application Settings<Inform ShutdownHelper when a notification is clicked] should **not** be selected.
- [<Notifications<Stay On Screen] should be set to "Never" for both "Notifications", ("ShutdownHelper" + „STOP").

• Notifications

In addition to **Growl**, **Notifications** of the macOS is also used to transmit **ShutdownHelper.app** messages. This has, inter alia, the advantage, that the time of the next scheduled **ShutdownHelper.app** action, can be read in **Notification Center**.



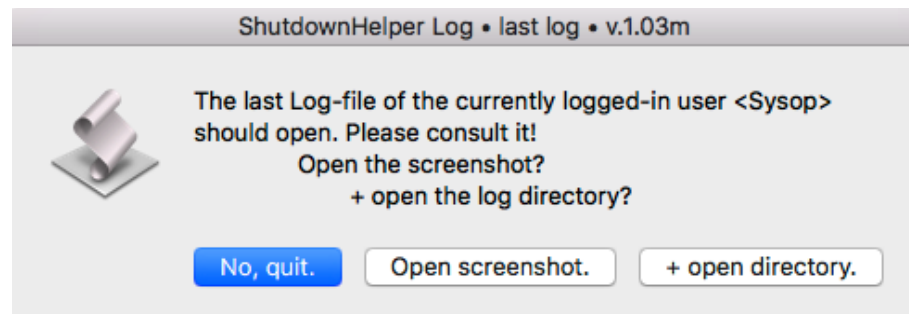
The displayed time does **not** include any wait-times from not-closed dialog boxes!

Notes:

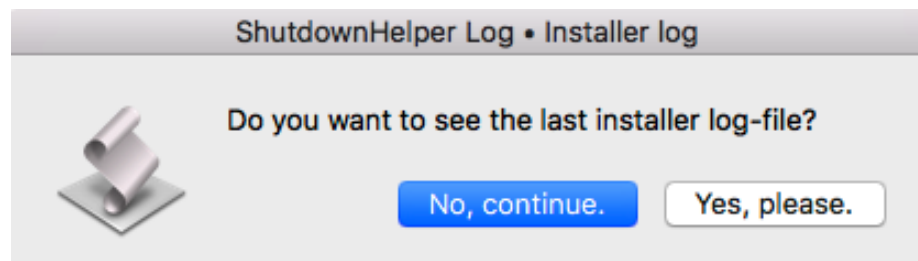
- For the **Notifications** settings:
 - These are user-specific, so they have to be set by **each** user.
 - They can be found in [System Preferences<Notifications<ShutdownHelper] after the first run of **ShutdownHelper.app**. I recommend setting the alert style to [Banners] or [None] because [Alerts] stay on screen until dismissed manually. This does not affect whether **Notifications** appear in **Notification Center**.
- For the **Notification Center** settings:
 - **Attention:** Clicking on a **ShutdownHelper.app** message in **Notification Center** causes **ShutdownHelper.app** to restart. Unfortunately, it's not possible to prevent this!

ShutdownHelper Log.app • Manual

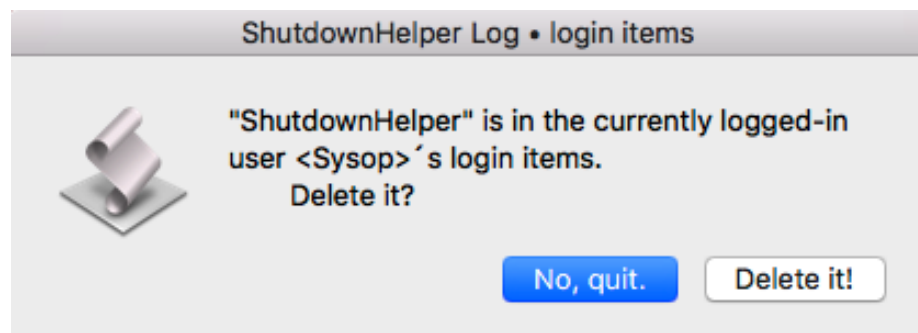
ShutdownHelper Log.app is only used to display the last log file and the last screenshot of the currently logged-in user independently of **ShutdownHelper.app** and, if necessary, to open the directory <ShutdownHelper Logs />.



Is the currently logged-in user **administrator**, to display the last installer log is also offered.



If **ShutdownHelper.app** is not running in parallel, **ShutdownHelper Log.app** offers to remove **ShutdownHelper.app** from [System Preferences<Users & Groups <"user"<Login Items] of the respective user, if it is (still) registered there.



Notes:

- An automated mechanism for deleting older log files and screenshots is implemented. The last five log files and screenshots of each user are retained. The last five installer log files are always retained.

Specifically, this means that a maximum of the last five installer logs and per standard users a maximum of 10 additional files are retained in the log directory. This is only possible if [Shutdown] and [Restart] of a user are executed immediately (in the meaning of "asap.") and no further **ShutdownHelper.app**-

runs of other users take place in the meantime, since each user can only delete his own files.

These deleted files are moved to the macOS-Trash, so the Trash has to be emptied **manually**.

- To display **all ShutdownHelper** log files, macOS's **Console**.app in <Macintosh HD/ Applications/Utilities/> can be used. Navigate to </Library/Logs/ShutdownHelper Logs/> and click the required log. The screenshot-files are also displayed in **Console**.app, but only as "number salad" (this is the direct translation of the german phrase.)

ShutdownHelper Logs

Here is an example of a log file:

```

Shutdown Helper - Log

Important:
if this Log-file does not end with the term 'eof.', something went wrong!

Version:                v.0.99-SE11

macOS:                  10.12.4
System-name:           MBAir6,1-11 Maik
User:                  Sysop • sysop
Admin?                 true
---
Start Helper:          170412 124050
Timer (h:mm):          0:02
Task:                  Shutdown
Using:                 Quit
Task-Time:             170412 124325
---

macOS Screensaver:     not active.

Active processes:
TextEdit (com.apple.TextEdit)
Firefox (org.mozilla.firefox)
HardwareGrowler (com.growl.hardwaregrowler)
Vorschau (com.apple.Preview)
Bildschirmfoto (com.apple.Grab)
iTunes (com.apple.iTunes)
RockFlash (net.riedel.rockworks)
WSM (com.Sennheiser.WSM)
AudioFinder (com.icedaudio.audiofinder)

Terminated processes:
<Quit>:                TextEdit • no errors.
<Quit>:                Firefox • no errors.
<Quit>:                HardwareGrowler • no errors.
<Quit>:                Vorschau • no errors.
<Quit>:                Bildschirmfoto • no errors.
<Quit>:                iTunes • no errors.
<Quit>:                RockFlash • no errors.
<Quit>:                WSM • no errors.
<Quit>:                AudioFinder • no errors.

---
eof.

```


ShutdownHelper Installer.app • Manual

The **installation** of the **ShutdownHelper** package works as follows:

- log-in as an **Administrator**:
- double-clicking on the downloaded installation package opens a new window with the installation volume.
- Depending on GateKeeper settings (see also below), double-clicking or ^-clicking + "Open" **ShutdownHelper Installer.app**.
- Follow the instructions of **ShutdownHelper Installer.app**.
- Accept the license terms.
- During the installation process, the **administrator** password is requested **three** times for a complete new installation.
- The **first** query for a password is actually the query of the „root" password and is made for the copy-process of "myhalt" and "myreboot" to </usr/local/sbin/> as well as their customization so that they are executed as "root", so if a separate "root" password has been assigned, this must be used here.
- The **second** query is for the installation of the log directory to <Macintosh HD/Library/Logs/>, the **third** query is for the installation of the **ShutdownHelper** directory to <Macintosh HD/Programs/Utilities/>. After the installation, these two directories are equipped with user and group access rights "rw". During an update installation, the last two password queries don't happen again.
- **ShutdownHelper Installer.app** will override files and subdirectories with the same name in the **ShutdownHelper** directory. Files in the log directory are retained.
- After the installation completed, the installation volume can be ejected.
- **ShutdownHelper Installer.app** also creates an appropriate log file in the log directory, that has just been installed, which will open when the Installer app is closed. The manual will also open automatically.
- Depending on the **GateKeeper** settings, both installed apps **have** to be started once by double-clicking or ^-clicking + „Open" **by an administrator** so that non-administrator users can use these apps without the hassle of macOS requests because **GateKeeper** may otherwise block these apps (without signature). The apps do not have to run through completely, but can be terminated immediately after the start:
 - **ShutdownHelper.app**: press [Return/Enter].
 - **ShutdownHelper Log.app**: the installer log is loaded, then press [Return/Enter] in **ShutdownHelper Log.app**.
- To prevent **ShutdownHelper.app** from shutting down with an "SystemEvents error -600" ("Application is not running") after **ShutdownHelper.app** has been started, **ShutdownHelper.app** must be installed **as an administrator manually** at [System Preferences<Security & Privacy<Privacy<Accessibility] via drag'n'drop or with the [+] - button after entering the **administrator** password.

Important: after an update installation, the checkbox in the **Accessibility** control panel must be removed and set again **manually**.

- For unknown reasons, **Finder**, after the (re-) start, nevertheless sometimes brings the above mentioned error message, although **ShutdownHelper.app** has already, at least partially, completed its tasks at this time.
- The settings of **Growl** and **Notifications** are user-specific, so they have to be set by each user, individually.

Notes:

- Only package components from **the same** installation package should be used together.

Installation files

The following files are getting installed:

- to <Macintosh HD/Programs/Utilities/>:
 - directory <ShutdownHelper/> with:
 - **ShutdownHelper.app**,
 - **ShutdownHelper Log.app**,
 depending to the language of the macOS:
 - **ShutdownHelper Manual de.pdf** as *Alias* to **ShutdownHelper Manual de.pdf** **or**
 - **ShutdownHelper Manual en.pdf** as *Alias* to **ShutdownHelper Manual en.pdf**,
 - GNU license information on the software and the manual.
 - within: directory <_Manuals/> with:
 - **ShutdownHelper Manual de.pdf** (german)
 - **ShutdownHelper Manual en.pdf** (english translation)
(LoRes without local links in the Table of contents for **Preview.app** ®),
 - **ShutdownHelper Manual Hi de.pdf** (german)
 - **ShutdownHelper Manual Hi en.pdf** (english translation)
(HiRes without local links in the Table of contents;
works with **Adobe Acrobat Reader DC.app** ®).
- to <Macintosh HD/Library/Logs/>:
 - directory <ShutdownHelper Logs/>.
- to </usr/local/sbin/>:
 - "myhalt" and "myreboot" as adapted copies of "halt" und "reboot" from </sbin/>.

ToDo - List

- Integration of extended analysis possibilities for the current state of active processes (probably in v.2.x!).
- Permanent: work on the "Manual".

ShutdownHelper.app • History

v.1.10 • 01.05.2017

- New: Reduced the wait-time (before the box closes without user-activity) in most dialog-boxes from 1 minute to 30 seconds unless otherwise mentioned in the manual.
- New: First translation of the manual to english (with the help of Google Translate ®).
- Note: no translation of the **ShutdownHelper.app** History before v.1.10!

ShutdownHelper Log.app • History

v.1.04 • 01.05.2017

- New: Reduced the wait-time (before the box closes without user-activity) in most dialog-boxes from 1 minute to 30 seconds unless otherwise mentioned in the manual.
- Note: no translation of the **ShutdownHelper Log.app** History before v.1.04!

ShutdownHelper Installer.app • History

v.1.06 • 01.05.2017

- New: Reduced the wait-time (before the box closes without user-activity) in most dialog-boxes from 1 minute to 30 seconds unless otherwise mentioned in the manual.
- Note: no translation of the **ShutdownHelper Installer.app** History before v.1.06!

GNU General Public License

Please see the file „[gpl-3.0.rtf](#)“ in the surrounding folder for the „GNU General Public License“.

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Please see the file „[fdl-1.3.rtf](#)“ in the surrounding folder for the „GNU Free Documentation License“.