

Activate Enhanced Write Filter

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Introduction

The KEB IPCs are prepared for the use of the Microsoft Enhanced Write Filter software. The EWF prevents the internal CompactFlash card from avoidable and/or accidental write operations and secures the data system in the event of an unprepared power loss.

Once the EWF is activated, any changes made to the file system will be protocolled in a dedicated Ramdisc and only then be written to the CF card on the next system shutdown, if explicitly requested by the appropriate EWF commands.

EWF condition at system delivery

After receiving your IPC, the EWF is prepared, but not yet active. Any changes you will do to the file system will cause an immediate modification of the CF content. This is usually handy for preparing your machinery (create PLC boot application, deploy additional data, etc.)

After the IPC is completely ready, KEB recommends activating the EWF in order to reach the best system security.

On EWF capable systems, there is a second partition D:\ available ("DATA"). This partition is intended to store data on the CF card while the system partition C:\ is protected with the EWF.

EWF Commands and where to find them.

Main EWF commands and comfortable use on a KEB IPC system

For the basic use of the EWF there are three commands prepared on the KEB IPC system:

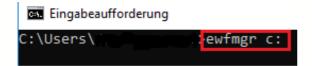
- Enable: Activates the EWF on drive C:\ after the next reboot. While EWF is enabled, no changes can occur to drive C:\ , unless they are explicitly overtaken with the suitable EWF function. (see 'Commit')
- Overtake (Commit): While EWF is active, this option will overtake all changes done to the drive C:\ since the last reboot to the drive on the next system shutdown. It is recommended to use this command right before shutting down or restarting the device. (The shutdown procedure will take longer because of the data to written.)
- Disable: Like commit, but also disable the EWF protection on drive C:\ on the next boot. The drive will not be protected at all until the EWF is enabled and a restart is performed.

These functions are accessible in the new image via a set of batch scripts in the runtime directory, subfolder "EWF". ("DisableEWF.bat", "EnableEWF.bat" and "OvertakeEWF.bat") Running the respective batch file will perform the described EWF command on drive C:\ on the next shutdown respectively boot.



Checking the current status of the EWF

To check the current EWF status of drive C:\, simply open a command prompt (Start -> Run -> 'cmd' [Enter]) and enter the command



Complete overview of EWF commands

For a complete overview over the available EWF commands, see the complete command description at Microsoft Developers Network (MSDN):

http://msdn.microsoft.com/en-US/library/ms940853(v=winembedded.5).aspx



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