

Killer2000 Specifications (Version 1.0)

Objective:

To delete old files from specified patterned folders matching specified patterns.

Requirements:

1. Multiple folders can be specified with separate rules for deletion.
2. Folder inclusions by masks (pattern) can be supplied.
3. Folder exclusions by masks can be supplied.
4. File inclusions by masks can be supplied.
5. File exclusions by masks can be supplied.
6. File inclusion and exclusion masks can be overridden for separate folders.
7. Killer2000 (**kill2k.exe**) should be a command line program with no GUI interface.
8. Must support UNC file naming convention.
9. Must support long file names and file names with spaces in it.

Design:

1. Program requires a parameter file.

2. Command line switches:

/l:Log file name; When this switch is used, the messages should be logged into the log file. More on log file messages later. Without /l switch the program will run in silent mode with no logging.

/d - Dry run. Don't delete the files, just log the messages.

/p:parameter file

3. The parameter file will be kill2k.ini in the EXE folder. If /p option is used then the program should look for that specific parameter file.

4. Multiple switches can be used as long as they are not in conflict with each other.

5. Any error with the switches or parameter file not being found should be displayed on stdout.

6. If /l option points to a log file which is currently being used by another copy of kill2k.exe then display a message on stderr ("Log file <log file name> is being used by another process") and exit.

7. Parameter File Layout: The layout is similar to Windows initialization (INI) files.

```
[kill2k.exe]
Parameter=Value
Parameter=Value
```

```
[kill2k.exe_Group1]
Parameter=Value
Parameter=Value
```

```
[kill2k.exe_Group2]
Parameter=Value
Parameter=Value
```

Comments can be added with lines starting with a ";".

Section "kill2k.exe" is used for common (global) parameters. Sections "kill2k.exe_Group1" to "kill2k.exe_Groupnmmn" are used for providing different root folders and override any global parameter. Program should look for sections group1, group2 etc. until no section is found. It will be user's responsibility to make sure groups are sequential and are present.

Global Parameters:

Some parameters are optional. If missing, their default values should be used. Mandatory parameters are clearly mentioned.

RetentionPeriod - Time in minutes. Any file or folder older than retention period will be deleted. If this parameter is missing, exit with a message on stderr ("No retention period supplied"). **This parameter is mandatory.**

Example:

```
RetentionPeriod=60
```

DeleteFolderIfEmpty - If Yes or 1 then folders where no files are left will be deleted. **Default=No**

FolderMask - Tells the program which folders to delete.

Retention period does not apply to folders. Multiple masks can be supplied on the same line separated by "|". Default is "*", which means all folders are eligible to be scanned.

Example:

```
FolderMask=TEMP|TMP|*Temp Files*
```

ExcludeFolderMask - Tells the program which folders to not delete (If somehow included through the include option). Multiple masks can be supplied on the same line separated by "|". Default is "", which means none is excluded.

Example:

```
ExcludeFolderMask=TEMP|TMP|*Temp Files*
```

FileMask - Tells the program which files to delete. Retention period applies to files. Multiple masks can be supplied on the same line separated by "|". Default is "*", which means all files are included for retention period scanning.

Example:

```
FileMask=*.tmp|TMP|*Temp Files*
```

ExcludeFileMask - Tells the program which files to not delete (If somehow included through the include option). Multiple masks can be supplied on the same line separated by "|". Default is "", which means no files are excluded from being scanned for retention period.

Example:

ExcludeFileMask=*.tmp|TMP|*Temp Files*

DeleteFilesFromRootFolder - If yes or 1 then the files matching file pattern from the root folder (See RootFolder parameter below) will be deleted. Default=Yes

TraverseSubfolderUponExclusion - If yes or 1 then the program traverse through subfolders even when exclusion is found for a folder. Default=No

Individual Group Parameters:

The following globl parameters can be specified in individual sections and if specified, will override the global parameters: RetentionPeriod, DeleteFolderIfEmpty, FolderMask, ExcludeFolderMask, FileMask, DeleteFileMask, DeleteFilesFromRootFolder, TraverseSubfolderUponExclusion.

RootFolder - This is the starting folder where the file deletions will start. **This parameter is mandatory.**

Other Rules:

1. Exclusion takes precedence over inclusion.
2. The later group takes over precedence if two groups refer to the same root folders.
3. Group parameters take precedence over global parameters.
4. Folder names can be supplied with a "\" at the end of it. Program must strip the ending backslash.

Parameter File Samples

Sample 1: This will be the most commonly used parameter file. Objective is to delete all files which are more than 30 days old in c:\temp and c:\temp1 folders and their sub-folders.

```
[kill2k.exe]
RetentionPeriod=43200
[kill2k.exe_Group1]
RootFolder=c:\temp
[kill2k.exe_Group2]
RootFolder=c:\temp1\
```

Sample 2: Delete all text and tmp files which are more than 30 days old in c:\temp and c:\temp1 folders and their sub-folders.

```
[kill2k.exe]
RetentionPeriod=43200
FileMask=*.txt|*.tmp
[kill2k.exe_Group1]
RootFolder=c:\temp
[kill2k.exe_Group2]
RootFolder=c:\temp1
```

Sample 3: Delete all text and tmp files which are more than 30 days old in c:\temp and c:\temp1 folders and their sub-folders. Delete files only from the folders which have the words inbox or outbox in it.

```
[kill2k.exe]
RetentionPeriod=43200
FileMask=*.txt|*.tmp
FolderMask=*inbox*|*outbox*
[kill2k.exe_Group1]
RootFolder=c:\temp
[kill2k.exe_Group2]
RootFolder=c:\templ
```

Sample 4: Delete all text and tmp files which are more than 30 days old in c:\temp and c:\templ folders and their sub-folders. Delete files only from the folders which have the words inbox or outbox in it. Exclude deletion if the file name contains word special in it.

```
[kill2k.exe]
RetentionPeriod=43200
FileMask=*.txt|*.tmp
ExcludeFileMask=*special*
FolderMask=*inbox*|*outbox*
[kill2k.exe_Group1]
RootFolder=c:\temp
[kill2k.exe_Group2]
RootFolder=c:\templ
```

Sample 5: Delete all text and tmp files which are more than 30 days old in c:\temp and c:\templ folders and their sub-folders. Delete files only from the folders which have the words inbox or outbox in it. Exclude deletion if the file name contains word special in it. Delete files from the subfolders of c:\temp and c:\templ only.

```
[kill2k.exe]
RetentionPeriod=43200
FileMask=*.txt|*.tmp
ExcludeFileMask=*special*
FolderMask=*inbox*|*outbox*
DeleteFilesFromRootFolder=No
[kill2k.exe_Group1]
RootFolder=c:\temp
[kill2k.exe_Group2]
RootFolder=c:\templ
```

Sample 6: Delete all text and tmp files which are more than 30 days old in c:\temp and 60 days old in c:\templ folders and their sub-folders. Delete files only from the folders which have the words inbox or outbox in it. Exclude deletion if the file name contains word special in it. Delete files from the subfolders of c:\temp and c:\templ only.

```
[kill2k.exe]
RetentionPeriod=43200
FileMask=*.txt|*.tmp
ExcludeFileMask=*special*
FolderMask=*inbox*|*outbox*
DeleteFilesFromRootFolder=No
[kill2k.exe_Group1]
RootFolder=c:\temp
[kill2k.exe_Group2]
```

RootFolder=c:\templ
;Changing retention period to 60 days
RetentionPeriod=86400

Log File Format

yyyymmdd HH:MM:SS <Message>

Messages:

Killer2000 Version n.n.n started.
Killer2000 Version n.n.n started in dry run mode. No physical deletion will occur.
Total files deleted in this run nnnnnnn.
Total folders deleted in this run nnnnnnn.
Killer2000 Version n.n.n ended normally.
File <Fully qualified filename> deleted. (More than nnnnnn minutes old)
File <Fully qualified filename> skipped deletion due to exclusion.
Folder <Fully qualified folder> skipped due to exclusion.
Folder <Fully qualified folder> deleted. (No more files present)

In the dry run mode, all messages will be logged as if program was running in normal mode.