

## Instruction manual for "Diver\_SysFol.bat" (diversification of system folders)

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Important: - this instruction manual describes the operation of the "full" version of "Diver\_SysFol.bat". The key difference between "full" and LE versions is the following: "full" version provides for the creation of "internal junctions" (the term "internal" has been introduced by the author, see Chapter 4. – here, the term „junction“ itself can be understood as a link, connection, routing to the data of diversified folders). "External junctions" are processed by either version quite commonly, but only the "full" version will search for original objects of the "junctions" inside diversified folder using a special algorithm of the author and will

change, rename and place them as new "junctions".

In addition, it is able to reconstruct them, if needed.

## 1. introduction

The instruction manual for SW "Diver\_SysFol.bat" does not belong among typical manuals that could be expected in case of a "batch" mostly used to distribute the commands for local networks or for controlling the ActiveDirectory environment.

The core of the instruction manual consists of texts originated from SW "Diver\_SysFol.bat" that does not comply with the environment of a typical OS because it performs some operations which are excluded from such environment, or which are difficult to perform.

"Diver\_SysFol.bat" is an efficient software to diversify system folders to a partition that differs from the system partition, which greatly limits the quantity and intensity of writing to the system partition, and

significantly increases the OS security and immunity against failure

and frees up the space of such system partition, as well (naturally, at the expense of another space needed).

".bat" is able to cope with the following issues:

- to search for local existing partitions and identify their letters and names,
- to determine their suitability (the partitions, where FS = NTFS does not apply, cannot be used),
- to take care of checks related with the existence and suitability of given OS,
- to diversify many systems folders to other partitions, including Users, ProgramData, "Program Files (x86)" and, for example, sru, winevt or WDI; this is its main task, while creating "junctions" for such diversified folders,
- to work with common folders, as well,
- to perform a back process, i.e. "back" mode, as well,
- to take thorough care of handling with Registers,
- to create clear and detailed logs (with the "all" parameter, it represents a robust and solid means),
- to use a sophisticated module to treat incoming parameters,
- to process all "junctions" of system folders in the "full" version using the original algorithm of the author, even though these objects cannot be copied in any manner whatsoever. Special command "robocops" without the "/ XJ " parameter will only copy the target. When the "/ XJ " parameter is used, the "junction" object will always be omitted (property "robocopy").

So, the copied target will not correspond to the pattern in any case.

However, it is absolutely necessary to use the "robocopy" command, because no other command will be able to cope with the demanding work with the data (the data have exceptional properties; they are frequently hidden, system and protected with the highest system rights).

Without "junction" the copied data do not correspond to the pattern either, but OS will be running quite satisfactorily. However, it may fail, when an older SW containing fixed paths to some folders, e.g. to "Documents and Settings" folder, is started or when such SW contains other "fixed" paths (actually, "junctions" are a back door by Microsoft to allow for starting SW with fixed paths without failure).

- in order to ensure that the new OS by Microsoft are compatible with older SW, the new OS contain several tens of "junctions" (more than fifty; their number depends on the number of created accounts)
- the "full" version is able to find, process and place all "junctions" in diversified folders
- in "Sm" mode with operation "c" and with "all" parameter, the defragmentation is performed as a side effect
- to open another window, i.e. "waiting loop", with information on the time-demanding operation that is just running

Well, why was this SW type selected? It was absolutely necessary to ensure the procedures that are very closely related to the OS functionality to be as far as possible independent of the frequent updates mechanisms and poorly controlled changes in the OS and proved ensuring flawless functionality.

Manual in detail describes the process applicable to the installed OS Windows 7, 8 (8.1) and 10 and which can be applied also for the Windows XP needs, even if, a WXP command prompt environment does not allow "robocopy" or "mklink" instructions. Even in this OS applies

the mechanisms which produced the effect of these commands, prepared in different environments is properly processed.

Cost for procedures, easily solvable in all high-level programming tools that would also came quickly and relatively primitive implement, was indeed quite high, but the result was the priority.

The result, which is minimally dependent not only on the type of OS, but especially for his behavior during and after the changes.

In some SW reports (announced by the SW work conclusions, on errors and communication with the user) are dynamic typing on the run, e.g. paths and names of the input/output folders, partition identification, operation, mode etc. For better orientation in listings author brings equivalents used designation:

"t h e q u i c k f o x l z y g s p j n m w r v d"	- allowed characters in the partition names
"nam_f"	- folder name
"nam_f_ t h e q u i c k ..."	- name of the renamed folder
"?", "?":\, "vol_?"	- unknown value (number parameters, description, etc.)
p1 ... p7	- parameter value
"all"	- parameter "all"
"mode"	- mode
"ope"	- operation
"i:"	- input partition character for "robocopy"
"o:"	- output partition character for "robocopy"
"X:"	- output partition character for "mklink"
"vol_I"	- input partition name
"vol_O"	- output partition name
"vol_X"	- output partition name (for "mklink")
"path"	- path
"Data_jun\F_?"	- storage

## 2. defining SW operation "Diver\_SysFol.bat"

Main operation definitions of "Diver\_SysFol.bat":

SW in a "boot" environment installing means (beginning W7 OS) or in ABD,

REPLACE

using the command "robocopy" diversified folder of the system partition "I\_r" to output partition "O\_r", different from the input folder (important FS = "NTFS"), which may contain data too:

- hidden, system, or having both properties
- owned by any owner, including systems,
- tied the supreme law, including system,

CONNECTION - "JUNCTION"

original and its new location in the repository "Data\_jun\F\_?" by help further order "mklink".  
Performance of each incorrect operation will be 1x repeteted without delay and failure stops its processing.

### 3. other details and "Diver\_SysFol.bat" starting

SW type ".bat" is almost independent of the OS configuration, its changes and updates. For system folder diversified by using a command "robocopy" (it is often even tens of gigabytes of data) exist another special command "mklink" created "junction" of the original and current folders locations in the repository, selected by the user.

This software, under certain assumptions, prove OS returning to the original state before diversification (but not on the re clone OS - the method is different).

First start "Diver\_SysFol.bat" is necessary - and repeatedly - to perform without a parameter. It is highly recommended to lunch this software from an external flash-media.

Important: flawless service will be provided only starting in the "boot" installation environment minimum that level, which will then have a working OS (starting with Windows 7) or in an Active Boot Disk (ABD) and it is not the mistake of previous disk clone. At the same PC SW can handle more OS, for example. W7, W10 (even WXP), partition(s) for storage have to be formatted (s) as NTFS and SW "dangerous" like as another disk cloning SW.

"Diver\_SysFol.bat" launching options:

Diver\_SysFol[.bat] [I\_r O\_r X\_m I\_mod Nam\_Fol Ope\_fol [all]]

A local output partition for diversified folders, user-selected beforehand, should have enough free space (tens of GB).

No options "Diver\_SysFol.bat" run, calls a module typing important information: letters corresponding to the partitions names, which are otherwise in a "boot" installations (ABD) environment are detected difficult enough (the exact procedure found letters and partition name, see note).

Search ends error list "Error: the number of parameters is ....".

SW flawless functionality is guaranteed in installation environment or in ABD only.

#### 4. about SW modes

"Diver\_Sysfol.bat" operates in three modes: - normal,  
- special and  
- "back".

In "normal" mode, as instructed by the user, is for diversified system folders assured repository, they are transferred, they are created "junction" and from their original location these folders are removed or renamed and left.

Mode "special" diversifies any folder or partition anywhere and any folder or partition content can be removed.

And finally - the "back" mode, can return everything to its original state.

This mighty and thorough SW in the "full" release contains the original author algorithm to operate the object "junction", which can not be copied using the OS means (see details in the Manual, Chapter 1. and 4.).

There grew a challenging situation. With respect to enormous complexity of system folders, which are often hidden and system secured against access, it is necessary to copy them use only mighty order "robocopy". But using the "/ XJ " parameter omit copying targets of all the "junction" (what is quite alright because these targets do not belong, of course, to the original folder), but does not copy its "junction" objects, and this is the problem. Without the "/ XJ " parameter otherwise copies only targets of all object "junction" and again not own "junction" objects - again a problem.

In both cases, the input and output data will never be equal.

OS with diversified folders without a transferred "junction" object works just as well as if it is contained, but it is a deficiency, which can be very painful.

That's why the author took a different way.

Special algorithm created in the final SW release "Diver\_SysFol.bat" handle "junction" objects to not only create, but also name, place and route as we can confidentially say, that the OS not only successfully manage the difficult process of diversification of the system folders, as well as copies of any retrospective OS will be one hundred percent successful of what the command "robocopy" never make it.

The author also established the terms "external/internal junction", which means:

- "external junction" is that one which is directed from its original location on the diversified folder (physically actually shows to the original, now relocating, diversified data) and where the creation of such "junction" (location, name and directions) is trivial
- "Internal junction" is one that already existed within the original folder, was not with her relocation (it is not physically possible) moved and which was later created and placed in this diversified folder and directed so, that in the event that the original folder directs anywhere "inside partition" in which the host, will now in pointing again to this diversified partition (which may also have other letter, because generally the partition letter in the "boot" OS environment and in the "boot" command line environment or in ABD are unequal)  
or  
if the original partition directs on other partition other than where the host, now will be directed again to this "other" partition.

Between the meanings of "external/internal junction", and its method of operation is the diametrical difference and processing of operation "internal junction" is provide only in "full" SW release "Diver\_SysFol.bat".

Performance of SW "Diver\_Sysfol.bat" is multiplied using the parameter "all".

The time-consuming situation (e.g. in diversification, removing the contents of the partition or large folder), can be opened next window/s, giving details on the ongoing activities and highlighting the ongoing time loop/s SW "Diver\_SysFol.bat".

5. description of the SW parameter "Diver\_SysFol.bat"

Parameter Description:

I\_r: input partition letter (which usually contains the OS), found in a "boot" command prompt line environment or in the ABD  
O\_r: drive letter for the diversified folders storage of the OS in the same environment as the parameter "I\_r"  
X\_m: the same repository letter, VALID in a usual working OS environment (generally unequal to "O\_r"! - very important parameter)  
I\_mod: "Nm|Sm|Bm": "normal", "special" and "back" mode  
Nam\_fol: - the name "normal" folder  
    - path with the name of a folder (ie. the "full" path that must be in quotes if it contains at least one space)  
Ope\_fol: c - "Nm|Sm|Bm": input system folder diversification (in "Nm" mode with its renaming)  
    r - "Nm": input system folder diversification and its removal  
    d - "Sm": removal the output folder  
    r - "Sm": "d: Sm" (removal...) + "c: Sm" (diversification...)  
all: "Nm|Bm": automatic processing of all "normal" folders  
    "Sm": c - diversification of the contents of the input partition  
    d - removal of entire content output partition  
    r - "d" (removal...) + "c" (diversification...)

## 6. notes to parameters "Diver\_SysFol.bat"

- order of the parameters is necessary to maintain
- drive letters: "c|d|e|f|g|h|i|j|k|l|m|n|o|p|q|r|s|t|u|v|w|x|y|z"
- direction of the processing: "Nm|Sm": c - "I\_r => O\_r"
  - d - working with "O\_r" ("I\_r" is not taken into account, by analogy with the "r" operation)
- "Bm": - c "I\_r <= O\_r"!
- characters in the parameters:
- common: lowercase/uppercase letters, numbers, "\_"
- special: eg. ":", "0", " " and "space", which are from the par. 1-4, 6/7 withdrawing; from Nam\_fol (par. 5) are always removing redundant " ", the first character must be not " " or "\" and with the character " " is wrapped, if it contains at least one " "
- if there is an empty parameter after cleaning, it is replaced by "?"
- total string characters have to be "<256" and "exotic" characters might cause a syntax error
- existence of folder the "config" is tested at diversification and if not found, it is created including backup (see scenarios in mode "Nm|Bm" where Nam\_fol = "config", "config\_new" or "config\_old")
- list of "normal" folders (the name must be exactly specified):  
Users, "Program Files", "Program Files (x86)", "ProgramData", "WDI", "Documents and Settings", "Logs", "Temp", "Prefetch", "oobe", "sru", "wbem", "SoftwareDistribution", "ServiceProfiles", "winevt" and special config (possibly even "config\_new" and "config\_old")
- "full" path (eg. in the form: "Fol\_1\Fol\_2\Fol\_x\Fol\_n ...")
- "Nm": c - after diversification "normal" folder will remain and will be renamed by adding the following text: "\_t h e q u i c f o x y g l a s p j n m w r v d"
  - r - do the same and "normal" folders will be removed
- "Sm": c - diversification any folder
  - d - removal any folder
  - r - "d" (removal...) + "c" (diversification...)
- "Bm": c - "normal" folders will be rediversified
- folders diversifies into storage "Data\_Jun\F\_?" (? = Partition\_name), so in the "Data\_Jun\" can appear the folders "F\_W7" or "F\_My\_OS" with the folders e.g. Users, "Program Files"
- in the mode "Sm" diversifies by "full" path in Nam\_fol
- "robocopy" makes log-files "Log\_[\_jun][\_N|B|S|E].txt" (to folder with "Diver\_SysFol.bat"), where "[\_]" = "[name\_partition]name\_folder|\_all", "name\_partition\_name\_folder" (when added "jun", it is always about a file containing a "junction", "\_N|B|S|E" - "\_Normal|Back|Special|Error")
- special importance is the parameter "all", that triggers the "automatic" mode (when you enter the content Nam\_fol not taken into account):
  - "Nm": c - diversification of all the "normal" folders (direction "I\_r => O\_r") and in its original location the folders remains unnamed
    - r - do the same and "normal" folders will be removed
  - "Sm": c - diversification of all the partition (direction "I\_r => O\_r")
    - d - removing of entire content output partition "O\_r"!
    - r - "d" (removing...) + "c" (diversification...)
  - "Bm": return of diversified folders from storage "Data\_Jun\F\_?" on the appropriate position in the OS and setting all "junction" (direction "I\_r <= O\_r" and the input partitions "O\_r" will be unchanged)
- if "all" in "Nm|Sm|Bm" modes is not used, one folder will be perform:
  - "Nm|Bm": the name "normal" folder is parameter Nam\_fol (folder "ProgramData" always causes folder processing "Users" and vice versa, if they have not already)
  - "Sm": the Nam\_fol is the name of a "full" path (to be able to handle any partition folder)



Resuming in information to the mode "Sm":

- existence OS, "Data\_jun\" or parameter "X\_m" are not checked
- mode of operation "d" (not to mention the operation "r") is dangerous and with "all" parameter is literally "demolition" tools (it is used by a time "endless" not only system folders removing)
- operation "c" on the output (preferably previously empty) partition "O\_r" makes diversify defragmentation (as a side effect)
- processes only internal "junction" diversified folders

General information to the SW operation:

- some operations requires the user agreement (eg. in automatic mode - parameter "all")
- e.g. In the conclusion mode "Bm" the user can enable return of initial folder "config" with the "Registry" if in normal mode was used "c" operation with "all" (what have created favorable conditions for return "Registry") - if enabled comeback, return to the original state of the OS will be made and in every case OS is "waiting" for confirmation this "back-clone" OS

End notes:

- the letters "O\_r" (for "robocopy") from the "boot" or ABD deployment environment and "X\_m" (for "mklink") from the ORDINARY OS work environment, namely indicates the SAME partition, but generally they are in both environments different! Identify as the first "X\_m"
- internal parameter "/XJ" operation "robocopy" (absolutely necessary) ensures, that will not be diversifikovane no existing folders, which is "junction" in the OS pointing (the object itself can not be diversified by any way - is excluded). "Junction" are therefore creating by the author the original algorithm and only in the "full" version
- diversification can be successfully performed only in command-line installation or ABD environment (run the software under OS can be done at any time)
- SW can also be used to diversify the folders of the OS WXP. This OS command "robocopy" or "mklink" do not know, but their effects, adjusted sometimes elsewhere, worked without problems
- in OS working environments W7 (10, etc.) behave folder names sometimes "interesting". But they are renamed correctly - you can ensure in the environment command prompt (mysteriously easygoing property)

The procedure for letters identifying:

1. "boot" into the operating environment of the OS. The partition letter, where user want to place the repository ("Data\_Jun\F\_?"), will be parameter "X\_m" (it is the only parameter that MUST BE NOW KNOWN before starting work in environment command line the installation or in ABD)
2. after pressing the "Shift + F10" "boot" into one of these environments, using the command "dir" and "cd" finding "Diver\_SysFol.bat" its run without arguments and findings of letters input "I\_r" and output "O\_r" partition, along with their names
3. incorrect input parameter can in OS with a diversified folders destroy his the "Registry" and of whole partitions!

SW work ends by the listing date, time and URL: [www.nemohouci.cz](http://www.nemohouci.cz)

7. announced errors and messages (some waits for user response - major errors usually lead to an immediate termination of processing, after other, less serious, announced by example in automatic mode with parameter "all", process will not terminate)

Unsuitable version "cmd.exe", SW "Diver\_SysFol.bat" is ending job!

"Delayed expansion" in the installation environment or in ABD could not be allowed,  
SW "Diver\_SysFol.bat" is ending job!

"Test cmd.exe => setting language | nastaveni jazyka"  
press any letter ... | stiskni libovolne pismeno ...

Unknown version cmd.exe, SW "Diver\_SysFol.bat" is ending job!

The letters and partition names:

- "i:\ " => "vol\_I"

Input parameters (possibly after editing):

p1 p2 p3 p4 "nam\_f" p6

Input parameters (possibly after editing):

p1 p2 p3 p4 "nam\_f" p6 p7

Error: conformity input and output partition "?":\ for "robocopy" is not allowed

Error: letter equality the selected partition "?":\ and boot partition containing  
SW "Diver\_SysFol.bat" in mode "Nm" is not allowed

Basic (important) approval of the selected input output partitions, which with  
will be implementation elected and allowed operations:

I\_r: "i:" - "vol\_I"

O\_r: "o:" - "vol\_O"

X\_m: "X:" - "vol\_O" (at the moment "vol\_X")

Error: output system partition processing "vol\_O" in mode "Sm" permitted  
in installation or in ABD environment only (in the OS environment  
with operation "c" and without "all" only)

Error: input folder from "o:" "path" not belong to the OS installed on the partition "vol\_I"

Error: in output partition "vol\_I" either does not exist installed proper OS or is major corrupted

"Normal" mode "mode":

- automatic system folders diversification finished
- all system folders were removed and the space on the partition with the OS was released
- "junction" which can not be copied was restored with original algorithm of author, see "log-files"

"Normal" mode "mode":

- automatic system folders diversification finished
- folders in the original location remained, but were renamed (necessary preconditions for success mastering the reverse clone in mode "Bm" if the user so chooses in the future).  
Reverse clone can be done whenever if diversified folders exists unnamed (original) and their number is equal to the number of folders diversified.
- Otherwise, it is almost certain, that there was an desynchronization OS with the "Registry" and a return of diversified components in fact is always possible not with certainty determine, how and whether the OS will operate
- "junction", which can not be copied, was restored with original algorithm of author, see "log-files"

Mode "back" "mode":

- ended diversify backward copying folders from the repository "Data\_jun\F\_?" partition "vol\_O" to partition "vol\_I" or was made their retroactively renaming only
- conditionally was returned even the folder "config" with the "Registry"
- this statement exists only, if in "normal" mode the folders were preserved to rename (to stay original) and its renaming and its creation made a favorable condition for the possible return of these renamed system folder partitions (and right now not spared the space on the partition with the OS)
- if restoration "config" (original folder "config\_old") is enabled, the OS will be restored to the state before the diversify (this is actually a callback function clone and all "junction" will be re set by the original algorithm author, see "log-files")

Mode "back" "mode":

- ended diversify backward copying folders from the repository "Data\_jun\F\_?" partition "vol\_O" to partition "vol\_I" or was made their retroactively renaming only
- conditionally was returned even the folder "config" with the "Registry"
- OS not in the original state, because in the course of work certainly there are substantial OS changes and desynchronized "Registry" with the OS. That does not mean that the OS will not work properly, see "log-files"

Folder "nam\_f" - "normal" mode:

- in the repository "Data\_jun\F\_?", for OS different from WXP, was establishing a "junction" with the name "nam\_f", pointing to the partition "vol\_X" ("X:")

Warning: input folder "i: ""path""nam\_f", in the OS different from WXP had been processed, see folder "o: ""path""nam\_f"

Folder "nam\_f" - "normal" mode:

- to folder "nam\_f" which was diversified into storage "Data\_jun\F\_?", was in the folder "i: ""path""nam\_f" created "junction" with the same name "nam\_f", pointing to the partition "vol\_X" ("X\_m: X")
- system Folder "i: ""path""nam\_f" then was renamed to "nam\_f\_t h e q u i c ..."

Folder "nam\_f" - "normal" mode:

- to folder "nam\_f" which was diversified into storage "Data\_jun\F\_?", was in the folder "i: ""path""nam\_f" created "junction" with the same name "nam\_f", pointing to the partition "vol\_X"
- system folder "i: ""path""nam\_f" then was removed

Warning: folder "o: ""path""nam\_f" - his return was not in the OS different from the "WXP" processed (folder "i: ""nam\_f" in the OS "vol\_X" has not changed)

Folder "nam\_f" - "back" mode:

- the folder was backward "diversified" simply renaming the original name

Error: - severe error in "back" mode - there does not exist the original renamed or input folder, so the folder "i: ""path""nam\_f" ("vol\_I") it was not possible to reinstate

- "Diver\_SysFol.bat" is ending job!

Warning: - although there is no input folder "o: ""path""nam\_f" ("vol\_O") (severe problem), but there is available original one, so retroactively renaming may save the state

- may/may not occur intrusion OS synchronization with the "Registry" (desynchronization occurred with high probability), it's just about saving

Folder "config" - "back" mode:

- regressive diversification folder "config\_old" from the storage "Data\_jun\F\_?""nam\_f" ("vol\_O") on the partition "vol\_O" with OS
- authorization requires the user's responsibility:
  - this statement exists only, if the "normal" mode used the operation "c" and the parameter "all".  
Keeping all folders and renaming them in fact created favorable conditions for the eventual return of all these renamed system folders partitions (and currently did not spare space on a partition with the OS)
- if restoration "config" (original folder "config\_old") allows, it returns to the state before the OS diversification (this is actually a callback function clone and all "junction" will be re set by the original algorithm author)
- in all other cases it is virtually certain, that the "Registry" with the OS are not synchronized and whatever folder "config" restoration will/will not (under the mode "Bm" this possibility exists always), OS does/does not work properly (as one of the last rescues may return of the "Registry" be done always)

Error: character "?" in the parameter number "?" is not allowed

Error: total number of characters in the string is greater than "255", which is not allowed

Continue?

No: "Ctrl C", letter "Y|y | N|n" and "Enter"

Yes: "Enter" or any letter

Error: input partition "i:" to "robocopy" does not exist  
or insufficient space on the partition

Error: output partition "o:" to "robocopy" does not exist  
or insufficient space on the partition

Error: output partition "X:" to "mklmk" does not exist  
or insufficient space on the partition:

- problem is labeled accurately, partition this letter "X:" in this environment really does not exist. But undoubtedly, it rather mislabeled partition exists physically
- it is not a paradox
- a letter of probably comes from a working OS environments, which commonly indicates the partition, who kept the user has selected for the folder "Data\_jun\" (and to which the folders will be diversified) and since letters is undoubtedly one of the letters from the rear of the alphabet, there appears the fact, that the characters in this environment was not found and the SW would thus not correctly work
- the solution is simple - in the operating environment OS change a letter in this partition so, subsequently to have existed in this installation environment (and rarely solvable problem)

Error: input partition "i:\ to "robocopy" although it is equal to one partition from the list  
"t|h|e|q|u|i|c|k|f|o|x|i|z|y|g|s|p|j|n|m|w|r|v|d:\"  
and exists on PC disks, but is not allowed, because the FS is is unequal "NTFS"

Error: output partition "o:\ to "robocopy" although it is equal to one partition from the list  
"t|h|e|q|u|i|c|k|f|o|x|i|z|y|g|s|p|j|n|m|w|r|v|d:\"  
and exists on PC disks, but is not allowed, because the FS is is unequal "NTFS"

Error: output partition "X:\ to "mklmk" although it is equal to one partition from the list  
"t|h|e|q|u|i|c|k|f|o|x|i|z|y|g|s|p|j|n|m|w|r|v|d:\"  
and exists on PC disks, but is not allowed, because the FS is is unequal "NTFS"

Error: mode "mode" in the OS environment is not allowed

Error: in the input "i:"\ does not exist:

- folder "config"
- OS or storage "Data\_jun\F\_?\Windows\System32\config\systemprofile"
- or be found there blunders in FS

Error: in the output "o:"\ does not exist:

- folder "config"
- OS or storage "Data\_jun\F\_?\Windows\System32\config\systemprofile"
- or be found there blunders in FS

Folder "config" - "normal" mode:

- very responsible work with folders "config"
- allowed decides users, who "knows what to do"!

Folder "config" - "back" mode:

- very responsible work with folders "config"
- allowed decides users, who "knows what to do"!

Error: the folder "config" has not been in OS repository or  
"Data\_jun\F\_?\Windows\System32\" found

Error: there's not even the first backup folder "config\_1" included the "Registry"

Folder "config" - "mode" mode:

- current folder "i:"\Windows\System32\config" ("vol\_I") was diversified
- this diversification was required (initial preparatory work), took place once time, has been placed in storage "Data\_jun\F\_?\Windows\System32\" ("vol\_O") and after renaming the "config" to "config\_old" diversification was retried (Folder "config\_old" is the backup and will not be rewriting)
- there are max 3 versions of the folder "config\_1-3"
- other operations with the folder was not done

Folder "config" - "mode" mode:

- folders "config\_x" have been cascaded renamed as follows:  
If, for example, does not exist "config\_2" folder was "config\_1" was renamed "config\_2" and "config" to "config\_1" (if there was a folder "config\_3" would be removed first)
- current folder partition "i:"\Windows\System32\config" ("vol\_I") has been diversified into storage "Data\_jun\F\_?\Windows\System32\" ("vol\_O")
- other operations with the folder was not done

Folder "config" - "mode" mode:

- "config" with the highest index was from the store "Data\_jun\F\_?\Windows\System32\", ("vol\_O") with the name "config" returned to the "i:"\Windows\System32\" in the OS ("vol\_I")
- diversification did not "touch" the existing version
- other operations with the folder was not done

Folder "config" - "mode" mode:

- folders "config" were removed:
  - from the storage "Data\_jun\F\_?\Windows\System32\" ("vol\_O")
  - from folder "i:"\Windows\System32\" in the OS ("vol\_I")
- and the subsequent cascaded renamed as follows:  
If, for example, there was a maximum folder "config\_2" was folder "config\_1" renamed to "Config", "config\_2" to "config\_1" and finally the folder "o:"\Windows\System32\config\_2" "vol\_O" was removed (if does not exist folder "config\_x" will only drawback)
- from the storage "Data\_jun\F\_?\Windows\System32\" was the folder "config" returned to the folder "i:"\Windows\System32\" in OS
- other operations with the folder was not done

Folder "config" - "mode" mode:

- folders "config" were removed:
  - from the storage "Data\_jun\F\_?\Windows\System32\" ("vol\_O")
  - from folder "i:\"\Windows\System32\" in the OS ("vol\_I")
- folder "config\_old" has been renamed to "config" and returned to the folder "i: \"Windows\System32\" in OS
- folder "config" has been renamed "config\_old"
- folder "i:\"\Windows\System32\" in the OS ("vol\_I") has been diversified into storage "Data\_jun\F\_?\Windows\System32\" ("vol\_O")
- all possible versions "config\_1-3" were removed
- other operations with the folder was not done

Error: insufficient space on the partition "vol\_O (vol\_I)",  
"Diver\_SysFol.bat" is ending job!

Error: - some directories (files) can not diversify, occurred diversification error  
( "ERRORLEVEL" ) and was exhausted retry limit  
- you can be a severe fault operations "robocopy" (eg. bad path, created in mode  
"Sm" by the user, insufficient space on the partition, pwermission etc.),  
"Diver\_SysFol.bat" is ending job!

Warning: - "\" character in the last position of the folder target "path""nam\_f"?  
- if the folder target was created already before you use SW "Diver\_SysFol.bat"  
and the path to it "\" character contained/contained not (normal/UNC path),  
it is possible, that the direction "junction" on the folder will not  
work - absolutely exceptional situation, see "log-files"

Warning/error: problem with attributes - "i: \"path""nam\_f"

Warning/error: "junction" "nam\_f" located in "o: \"path" can not be created - "target"  
does not exist or "junction" exist already

Warning/error: "junction" "nam\_f" with target "o: \"path" can not be created - "target"  
does not exist or "junction" exist already

Error: failed to take ownership of "object" "i: \"path""nam\_f"

Error: failed to take ownership of "object" "i: \"path""nam\_f"  
"Diver\_SysFol.bat" is ending job!

Warning/error: - the output folder ("normal") "o: \"path""nam\_f" was not found  
- it is about a "normal" folder, "Diver\_SysFol.bat" therefore used  
a diversified folder from the storage "o: \"Data\_jun\F\_?" and all  
its "junction" restored so that if this folder has not been damaged,  
it is virtually certain that the OS will work properly

Warning/error: the output folder ("normal") "o: \"path""nam\_f" was not found

Warning/error: the output folder ("junction") "o: \"path""nam\_f" was not found

Warning/error: the output folder ("common") "o: \"path""nam\_f" already exist

Error: processing has been already done, see the folder "o: \"path""nam\_f"

Error/warning: input folder "i: \"path""nam\_f" was not found

Error/warning: input folder "o: \"path""nam\_f" was not found

Error: folder "i: \"path""nam\_f" ("vol\_I") is not the "repairs point" - a severe mistake,  
"Diver\_SysFol.bat" is ending job!

Error: working with folder "Diver\_SysFol" (the output partition) is not allowed

Folder "nam\_f" - "special" mode:

- allow removal of the folder "o:"path""nam\_f"

Folder "nam\_f" - "special" mode:

- allow deletion of the folder "o:"path""nam\_f"  
and its subsequent diversification to the "vol\_O"

Folder "nam\_f" - "special" mode:

- output Folder "o:"path""nam\_f" has been removed

Folder "nam\_f" - "special" mode:

- output Folder "o:"path""nam\_f" has been removed  
and the input "i:"path""nam\_f" will be diversified

Working with partitions - "special" mode:

- enable diversification the contents of the partition "vol\_I" ("i:") on the partition "vol\_O" ("o:")

Working with partitions - "special" mode:

- enable removing the contents of the partition "vol\_O" ("o:")

Working with partitions - "special" mode:

- enable restoring the contents of the partition "vol\_O" ("o:") on the partition "vol\_I" ("i:")

Folder "nam\_f" - "special" mode:

- folder "i:"path""nam\_f" was diversified and saved  
as a "o:"path""nam\_f" to partition "vol\_O"  
- other operations with the input folder was not made

"Special" mode "mode":

- complete partition content " vol\_O " has been remove

"Special" mode "mode":

- complete partition content " vol\_O " has been remove
- partition "vol\_I" has been diversified to the partition "vol\_O", which was  
"defragmented" by this operation and in folder "Diver\_SysFol" was saved  
"log-file" all the "junction" partitions

Error: "a space" or "\" in the first position of the parameter  
"Nam\_fol" is not allowed

Error: the number of parameters is zero or unequal to "6-9", what is not allowed

Error: input parameter "?" does is unequal "all|Y|N" and is not permitted

Error: marking the input partition "i:\" for "robocopy"  
is unequal to the marking none of partition from  
"t|h|e|q|u|i|c|k|f|o|x|i|z|y|g|s|p|j|n|m|w|r|v|d:\",  
and therefore is not allowed

Error: marking the output partition "o:\" for "robocopy"  
is unequal to the marking none of partition from  
"t|h|e|q|u|i|c|k|f|o|x|i|z|y|g|s|p|j|n|m|w|r|v|d:\",  
and therefore is not allowed

Error: marking the output partition "X:\" for "mklink"  
is unequal to the marking none of partition from  
"t|h|e|q|u|i|c|k|f|o|x|i|z|y|g|s|p|j|n|m|w|r|v|d:\"  
and therefore is not allowed

Error: mode "mode" is unequal to any of the mode "Nm|Sm|Bm" should not be permitted

Error: folder name "nam\_f" in mode "mode" is not allowed

Error: operation "ope" in mode "mode" is not allowed

Error: folder "o:"Data\_jun\F\_" could not be based or was not found

Error: mode "mode" in the OS environment is not allowed



Module report, working as a "time loop" in the long-term operations:

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
diversification folder  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
diversification partition  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
removal folder  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
removal content partition  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
the environment test  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
work with folders "junction"  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
finding folders "junction"  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
list of partitions  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

wait a few minutes            hh:mm:ss - hh:mm:ss – [hh:mm:ss]  
mathematics  
immediately finished? => in the "main" window enter "Ctrl+C and "Y|y | N|n" and "Enter"

Examples launching:

Diver\_sysfol.bat (or e.g. diver\_sysfol) - information about SW, list letters and partitions  
Diver\_SysFol i j k Sm "ab d\asa s" d - will be removed folder "asa s" from folder "ab d" partition "j"  
diver\_SYsfol s t q Bm "Program Files" c - return of diversified folder "Program Files" to partition "s"  
diver\_Sysfol.bat m h g Nm "s d" r all - diversification folders from OS partition "m" to the partition "h" (list folders see manual, original folders will be deleted; with parameter "c" will be renamed)  
diver\_sysFol i j j Sm fol\_lof r all - removal content partition "j" and diversification content partition "i" to the partition "j" (with all existing "junction")

## 8. illustrations



Fig.1 - window with partition names and their letters that appear always with each startup "Diver\_SysFol.bat". There is, for example, found existing partition "e:" named "Work" or partition "m:" with the name "KING\_INS\_M"

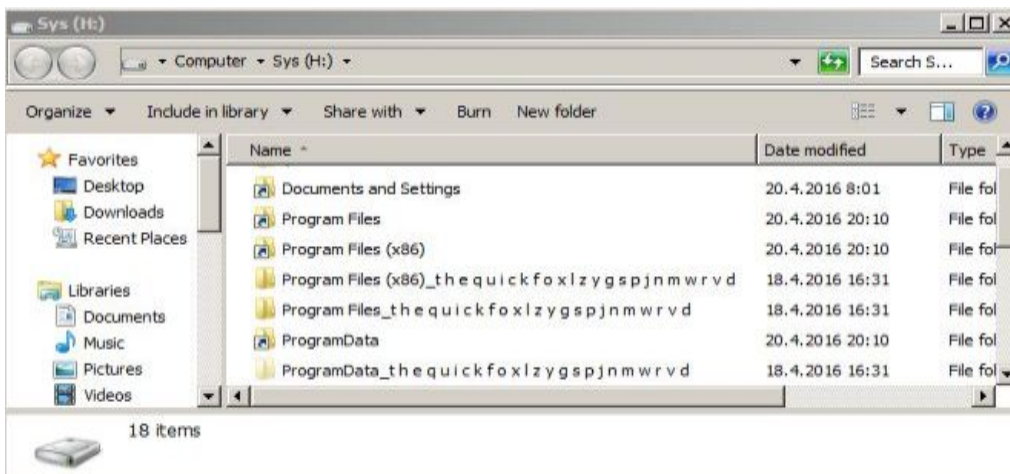


Fig. 2 - created "junction" to the relocated folders "Documents and Settings", "Program Files", "Program Files (x86)" and "ProgramData" (originally folders was renamed)

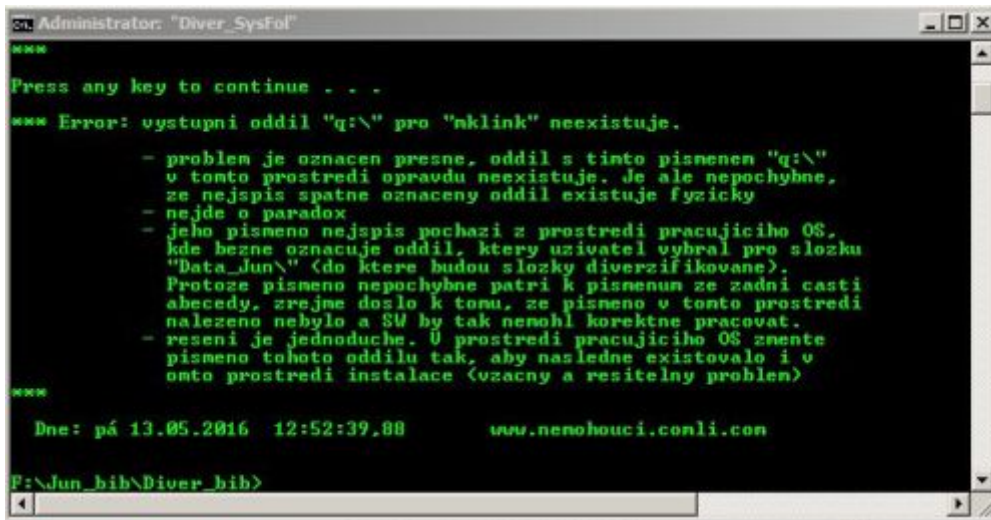


Fig. 3 - error described in detail "non-existing" partition. In fact, the installation environment (or ABD) does not exist only the letter, denoting a partition in the current environment working OS (user can easily repair it by changing the drive letter in the working environment of the OS so could be found in the installation environment)

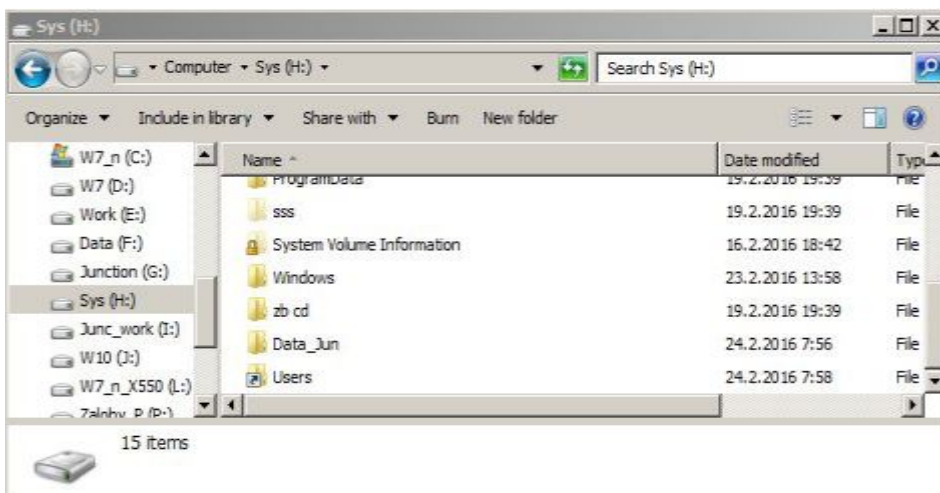


Fig. 4 - a listing where you see the "junction" folder "Users", which is physically located in the partition "I" in the "Data\_Jun\F\_Sys" (is named after the partition "Sys" (the letter "H"), from which they were diversified folders originally (then is then easy identification the OS and their diversified folders)

```

Administrator: "Diver_Sysfol"

F:\Jun_bib\Diver_bib>diver_sysfol h i h Nm ahyd c

*** Ustupni parametry (po eventualnich upravach):

      h i h Nm ahyd c

***
NO: "Ctrl C", pisneno "a/y" a "Enter"
OK: "Enter"
***

Press any key to continue . . .

*** Zakladni (dulezite) schvaleni vybranych vstupnich/vystupnich
oddilu, na kterych budou provadene zvolene a povolene operace:

I_p: h:\ - "Sys"
O_p: i:\ - "Junc_work"
X_m: h:\ - "Sys"

***
NO: "Ctrl C", pisneno "a/y" a "Enter"
OK: "Enter"
***

Press any key to continue . . .

*** Error: nazev slozky "ahyd" v rezimu "Nm" neni povolen
***

Dne: pá 13.05.2016 13:04:55,60      www.nenohouci.comli.com

```

Fig. 5 - routine reporting provided by SW "Diver\_SysFol.bat" - a repeat of the input parameter, basic partition table (letters and names) selected by the user, error in the folder name "Nm" and continuous two requests for approval

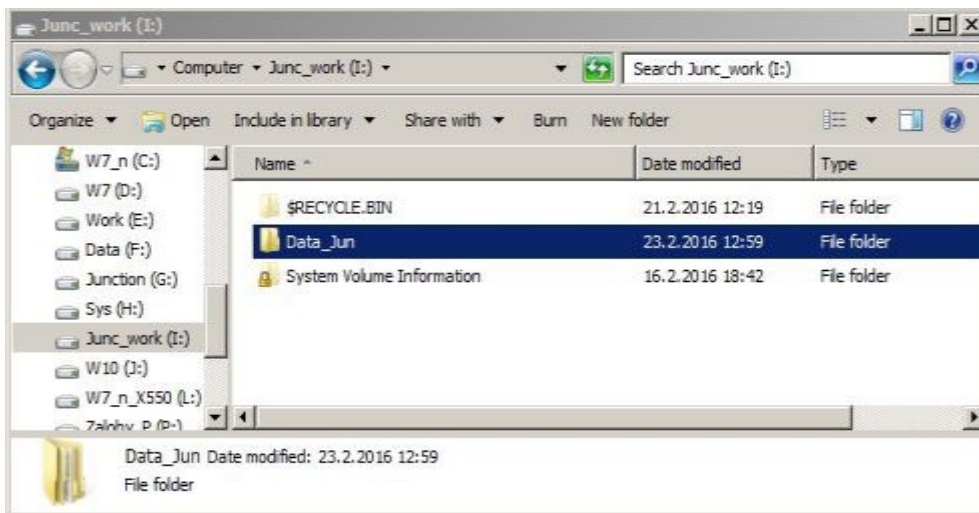


Fig. 6 - an important folder "Data\_Jun", which can contain multiple subfolders in format "F\_?" for more OS. In these folders there saved folders generally several OS (ie for example. Users, WDI or "Program Files")

```

C:\ Administrator: "Diver_SysFol"
F:\Jun_hib\Diver_hib>diver_sysfol h i g Bn ProgramData c

*** Vstupni parametry (po eventualnich upravach):
      h i g Bn ProgramData c

***
NO: "Ctrl C", pismeno "a/y" a "Enter"
OK: "Enter"
***

Press any key to continue . . .
File Not Found
File Not Found

*** Zakladni (dulezite) schvaleni vybranych vstupnich/vystupnich
oddilu, na kterych budou provadene zvolene a povoleny operace:
I_r: h:\ - "Sys"
O_r: i:\ - "Junc_work"
X_m: g:\ - "Junction"

***
NO: "Ctrl C", pismeno "a/y" a "Enter"
OK: "Enter"
***

Press any key to continue . . .

*** Error: - vystupni slozka ("normalni")
            "h:\ProgramData_t h e q u i c k f o x l z y g s p j n n u r v d"
            nebyla nalezena
            - jde o "normalni" slozku, "Diver_SysFol" proto pouzil
              diverzifikovanou slozku z uloziste i:\Data_Jun\F_Sys\
              a vsechny její "junction" obnovil tak, ze pokud tato
              slozka nebyla poskozena, je prakticky jiste, ze OS
              bude i nadale pracovat v poradku

***

Dne: po 25.04.2016 10:05:43,67      www.nemohouci.conli.con

F:\Jun_hib\Diver_hib>

```

Fig. 7 - a description of how the software solved the comeback folder "ProgramData". Because there Renaming a folder (of reason now not decisive), he used a diversified folders from the repository "Data\_Jun\F\_Sys"

```

C:\ Administrator: "Diver_SysFol"

*** Slozka "Users" - "normalni" rezim:
- na slozku "Users", která byla diverzifikovana
  do uloziste "F_Sys\", bylo ve slozce
  "h:\\" vytvoreno spojeni ("junction") s tinte nazvem
  "Users", smerujici na oddil "Junction" ("g:\")
- systemova slozka "h:\Users" pak byla prejmenovana na
  "Users_t h e q u i c k f o x l z y g s p j n n u r v d"

Press any key to continue . . .

```

Fig. 8 - one of the SW output messages announces that during "normal" mode and parameters "c" and "all" has just been diversified folder "Users", was on it created "junction" with the same name and folder itself was not deleted but was left on the original partition and renamed



```

Administrator: cmd
slozku s preinstenyni slozkani OS, na který
ukazuje písneno výstupního oddílu!
- pokud cokoli není v pořádku, stisknete "Ctrl C",
písneno "a/y" a "Enter". Jinak pouze "Enter"!
***
Press any key to continue . . .
*** Slozka "ProgramData" - "back" režim:
- výstupní složka "junction"
"h:\ProgramData"
byla odstranena
***
*** Slozka "ProgramData" - "back" režim:
- výstupní složka
"h:\ProgramData"
byla přejmenována na
"ProgramData"
***
Dne: st 24.02.2016 7:53:51,71 www.nenohouci.comli.com
H:\Junction>

```

Fig. 9 - SW report "Diver\_SysFol.bat" indicates that the deleted "junction" to the folder "ProgramData" and the folder itself has been renamed to the original name.

The implication of this has very important conclusion. If the user has available the same number (eventually all) renamed "Normal" folders like folders diversified (instead of removed, giving it but did not spare place in the partition), he can now in the "back" mode return them (including the folder "config") and receives the original OS (virtually regards the re-clone OS). If the folders are not available, see the scenario in Chapter 9.

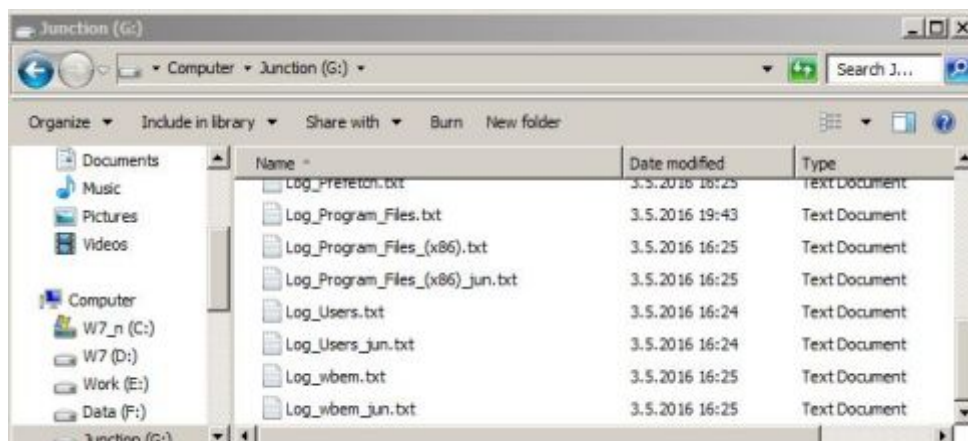


Fig. 10 - detailed copied folders logs. Part Some - for finding "junction" - created the command "robocopy" and the others SW "Diver\_SysFol.bat" (the name of the log contains "\_jun")

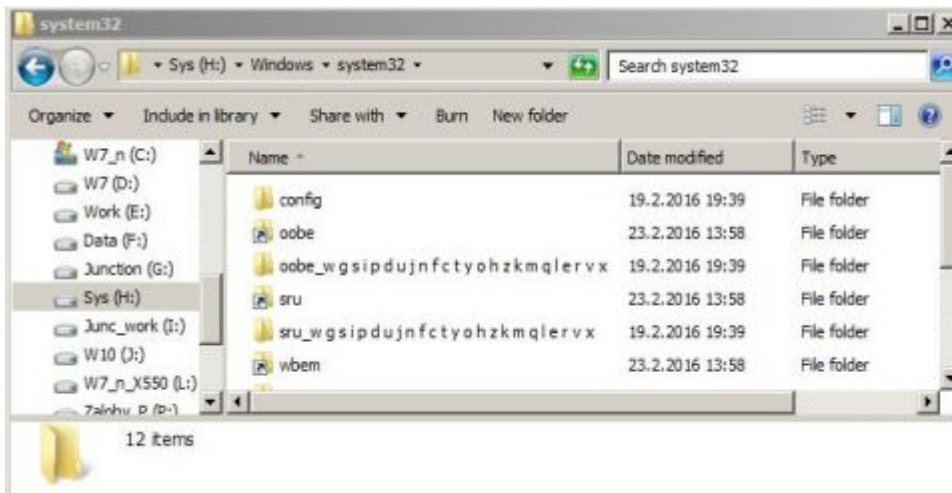


Fig. 11 - "junction" and renamed folders in the "Windows\System32\" (it is normal that some folders are in this folder, not only in the "root" OS)

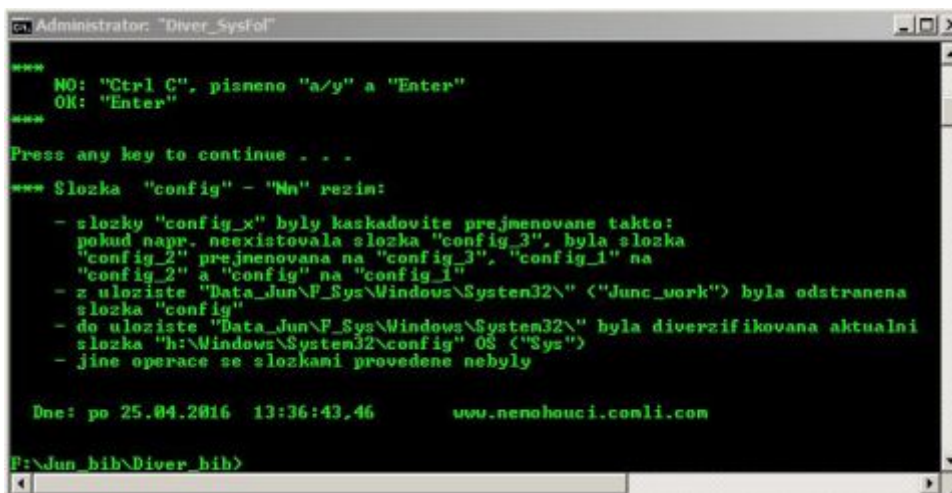


Fig. 12 - message following user requests to record a new configuration "Registry" In the folder "config" (request was made e.g. therefore, that the OS some time working stable and reliable), see scenarios in Chapter 9.



```
c:\Administrator: "Diver_SysFol"

- zpetne kopirovani puvodni slozky "config_old" z uloziste
  "i:\Data_Jun\F_Sys\Windows\System32\" "Junc_work") na oddil "Sys" s OS
- povoleni vyzaduje zodpovednost uzivatele

- tento vypis si precte jen tehdy, pokud v "normalnim" rezimu
  pouzil operaci "c" a parametr "all". Zachovanim vseh slozek
  a jejich prejmenovanim totiz vytvoril priznive podminky pro
  eventualni navrat vseh techto prejmenovanych systemovych
  slozek oddilu (a nementalne neusetril prostor na oddile s OS)
- pokud navrat "config" (puvodni slozka "config_old") povoli,
  vrati se do stavu OS pred diverzifikaci (jde vlastne o funkci
  zpetneho klonu)
- ve vseh ostatnich pripadech je prakticky jiste, ze "Registry"
  s OS synchronizovane nejsou a at uz slozka "config" navracena
  bude/nebude (v ranci rezimu "Bm" tato moznost existuje vzdy),
  OS bude/nebude pracovat v poradku (jako jedna z poslednich
  zachrannych akci muze byt navrat "Registry" uskutecnen vzdy)

***
NO: "Ctrl C", pismeno "a/y" a "Enter"
OK: "Enter"
***

Press any key to continue . . .

*** Slozka "config" - "Bm" rezim:

- z uloziste "Data_Jun\F_Sys\Windows\System32\" ("Junc_work")
  byla slozka "config_old" pod nazvem "config"
  vracena do slozek:
  - "h:\Windows\System32\" v OS ("Sys") a do uloziste
  - "i:\Data_Jun\F_Sys\Windows\System32\" ("Junc_work")
- jine operace se slozkami provedene nebyly

*****
*** Rezim "back" ("Bm" a operace "c"):
```

```
- skoncil zpetne kopirovani diverzifikovanych slozek z uloziste
  "Data_Jun\F_Sys\" oddilu "Junc_work" na oddil "Sys" nebo bylo
  provedeno pouze jejich zpetne prejmenovani
- podminky byly navraceny i slozka "config" s "Registry"

- tento vypis lze precist jen tehdy, pokud v "normalnim" rezimu
  byla pouzita operace "c" a parametr "all". Zachovanim vseh
  slozek a jejich prejmenovanim byly vytvoreny priznive podminky
  pro eventualni navrat vseh tychto prejmenovanych systemovych
  slozek oddilu (a nementalne neusetren prostor na oddile s OS)
- pokud navrat "config" (puvodni slozka "config_old") povoli, OS
  bude obnovena do stavu pred diverzifikaci (jde vlastne o funkci
  zpetneho klonu a take vsechna "junction" budou zpetne nastavena
  puvodnim specialnim algoritmem autora)
*****

Dne: po 25.04.2016 13:39:18,72      www.nenohouci.comli.com
```

Fig. 13 - extensive listing, provided during and after the run of complex mode "Bm" (return of the old state OS). It is a confirmed request for re-entry "Registry" (return of the folder "config") and the detailed study results

```
Administrator: "Diver_SysFol"
File Not Found

*** Zakladni (dulezite) schvaleni vybranych vstupnich/vystupnich
oddilu, na kterych budou provadeny zvolene a povoleny operace:

I_r: h:\ - "Sys"
O_r: i:\ - "Junc_work"

X_n: g:\ - "Junction"

***
NO: "Ctrl C", pismeno "a/y" a "Enter"
OK: "Enter"
***

Press any key to continue . . .

*** Prace s oddilem - "zvlastni" rezim:

moznost odmítnuti odstranění obsahu
celeho oddilu Junc_work (i:\)

***
NO: "Ctrl C", pismeno "a/y" a "Enter"
OK: "Enter"
***

Press any key to continue . . .
i:\Data_Jun\F_Sys\Documents and Settings\Local Settings\*: The system cannot
i:\Data_Jun\F_Sys\Documents and Settings\Method\*: The system cannot find th
i:\Data_Jun\F_Sys\Program Files\s s\*: The system cannot find the path speci
i:\Data_Jun\F_Sys\Program Files (x86)\d h\assssss b b f g\*: The system cannot
i:\Data_Jun\F_Sys\Users\s s: The system cannot find the file specified.
i:\Data_Jun\F_Sys\Users\s-s: The system cannot find the file specified.
i:\Data_Jun\F_Sys\Users\l\*: The filename, directory name, or volume label sy
i:\Data_Jun\F_Sys\Users\Local Settings\*: The system cannot find the path spe
i:\Data_Jun\F_Sys\Users\Method\*: The system cannot find the path specified.
i:\Data_Jun\F_Sys\Users\s s\*: The system cannot find the path specified.
i:\Data_Jun\F_Sys\Users\s-s\*: The system cannot find the path specified.
i:\Data_Jun\F_Sys\Users\test_fol\*: The filename, directory name, or volume l
i:\Data_Jun\F_Sys\Windows\System32\when\ a a\*: The system cannot find the pat

*****
*** "Zvlastni" rezim ("Sn" a operace "d"):

- kompletne obsah oddilu "Junc_work" byl odstranen
*****

Dne: po 25.04.2016 15:01:04,01 www.nemohouci.comli.com
```

Fig. 14 - exiting the "Sm" mode, which removed all the content partition "i:" (very well as see a message from the OS about deleting folders referring to objects that do not exist (in the latest version they are not announced). Although the software was launched in OS operating environment, entire partition content has ben removed

## 9. scenarios

Here are some "scenarios", about which the author assumes that are used frequently. They are mainly Initial activities, modes "Nm" and "Bm" (not omitted little strange using the "Sm") and work with "Registry", which the author considers very important not only when using SW "Diver\_SysFol.bat".

Important: When you work with "Registry" for the folder "config" is used the name "config", "config\_new" and "config\_old" (name "config" and "config\_new" mean the same thing).

scenario\_1 - initial and routine work in "normal" mode "Nm":

- "Boot" into the common OS environment, to which we want to diversify all the "normal" folder (parameter "all") or one or more
- identifying letters (X\_m) partition, where will be placed the storage
- "Boot" to the command-line environment of OS or ABD installation
- launching "Diver\_SysFol.bat" without argument and findings of letters (and names) partition (L\_r), whose folders will be diversified into a repository in partition (O\_r)
- next run will take place with parameters the mode "Nm" and the "c" (renaming and conservation folder) or "r" (folders will be deleted) and the folder name will be uninteresting in case the parameter "all" (but otherwise folder name must be the same as in the manual, Chapter 6)
- after confirming required questions (or unconfirmed, if there are formal or system errors, e.g. non-existent partition, when SW run terminates immediately) will be made diversification a single folder (while keeping its renamed original or removing it) and will continue to work with another folder or with all (parameter "all")
- "Boot" to the OS environment and continuing normal work

scenario\_2 - work with "Registry" (folder "config") in "normal" mode "Nm":

- The user works with OS routine as always, everything is working normally and so they turn to the state "Registry" (without the detail they would understand). Muze is "clean" and restoring (to perform this automatically is not possible because the OS at a time when performs a "boot", has no means to enable it to utilize the potential of "junction", because the path to the folder "config", which "Registry" implies, has" fixed "specified)
- Then, particularly after a period certainly conflict-free time of OS (eg., After installing, updating, etc., the OS still worked without problems), will "boot" to already known environment command prompt, run SW "Diver\_SysFol.bat" and da instructed to diversified folder "config" (using the name "config", "config\_new", "config\_old")
- The following changes occur:
  - Using the "config\_new" will component "config\_x" in the repository cascaded renamed (eg. If "config\_2" does not exist, "config\_1" was renamed "config\_2" and "config" to "config\_1" and the current folder "config" will be diversified into a repository (if there were a folder "config\_3" would be removed first) - used only three versions of the components of the "config\_1-3", allowing users to actually created another "youngest" version "Registry"
  - If you can not, and the OS does not work according to his liking, so using the name of the folder "config\_old" the folder "config" removed from the repository from the current location in the OS components will be cascaded renamed (eg. If there was a folder "config\_2" the folder "config\_1" "renamed" config "folder" config\_2 "to" config\_1 'from the same repository folder will be "config" return to the current location of the OS (the actual implementation return to the previous version of the "Registry")

scenario\_3 - work with "Registry" (folder "config") in the "back" mode, "Bm":

- If prosper/fail, there are another possibilities manipulation the folder" config "
- using name "config\_new" replaces in this mode folder "config" folder with the highest index folder "config" in the current location in OS
- after selecting the "config\_old", the original folder "config\_old" will be returned from the repository with the name "config" to the current location in the OS and even will be removed all existing versions of "config\_x" from storage (practically it is return to the original state of "Registry")

#### scenarios\_2\_3:

- in both scenarios (actually always) is guarded state when already there is no copy of the "config" called "config\_1-3" – and about this situation a report submitted
- alternating each modes working with "config" you can easily achieve almost ideal state. When e.g. the OS still works properly, so from time to time by gradually updating the "config" will even the fact that even does exist original folder "config" and are available only her three different versions and, of course, there is a problem. Then is possible to use "config" diversification using the name "config\_old" (mode "Nm") and herewith go one step back (generally can return to primary version of "config" ( "config\_old") and at any time on this journey again raise the version (the possibility of no limits). Simplified there are available up to three versions of "Registry" and always stockpile in the "config\_old", which is more than good potential to sustain running OS
- it is logical that with the changes of "config" of course there are desynchronized state "Registry" with e.g. "Program Files", "Users" or "ProgramData" folders (or even with all of them). On the other side, it is important to consider simple fact. If, say, a user installs SW and that after some time (or immediately after the start) proves unreliable, it probably is done uninstalling and perhaps some time will work OS monitored more carefully just so the user is assured that there is no underlying problems. And here's the key moments:
- they OCCURRED! - Then there is great hope that by the change the current version of "Registry" for the older version of this is this annoying condition corrected
- even if this mentioned software was not uninstalled, the hope shrinks a little. Installed software will still exist but it will be in a state of "cuted" and after any folder recovery with its installation (e.g. "Program Files"), do not have trouble staying no trace
- simply user works with data that have proven successful before a problem and does nothing other than a backup of important parts of the working OS

#### scenario\_4:

- perceptive and careful user understood, that diversification performed using parameter "c" and "all" is such a somewhat "idyllic". Just everything ran automatically, system folders are no problem diversified and all - after renaming - remained available. In case of serious problems you can switch to "Bm" mode, specify the parameters "c" and "all" and the software will return to the status quo OS
- In other words - in this case was made "genuine" reverse clone (but the whole time was not released the much-needed space for the OS partition). If the user had used in the initial diversification promptly operation "r" and the "all", although he would receive an identical result, but should not have the original image of system folders. It is true that whenever it is possible any diversified folder return from the storage to the current location, but that their content generally may no longer corresponds to the original, because with the OS was in fact worked. With high probability, even under the assumption that users should be several times "upgraded" "Registry" (there and back), thje same components of the OS and "Registry" are desynchronized (as far this may not be fatal). But it is true that the original state of the OS can never go back. Or it is possible to - see still scenario\_5?

#### scenario\_5:

- you can always switch to "Sm" and folder or entire partitions in addition to "archive" into any additional storage. If this cleaning service will done when the folders "did not suffer" yet no changes (it is of course the situation when they were in "Nm" use the "r" and "all"), it is possible any further manipulation with the folders in the meaning, that in the "Sm" mode folders can be copied back to the system partition and perform a "reverse" clone mode "Nm" (a much-needed version of "Registry" still exists and is available as a folder "config\_old" - it is only necessary to keep renamed folders specific names)
- and finally: the fact that in the "Sm" mode in the "full" version can be backup entire partitions including "junction" absolutely anywhere (as well as return), the user has truly endless and limitless possibilities work with system (and common) partitions

#### scenario\_6: All the best

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