

## Re: Managing XP system space for the MFT

**Source:**

<http://www.tech-archive.net/Archive/WinXP/microsoft.public.windowsxp.general/2004-08/16052.html>

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**From:** Svend Cr (*nomail\_at\_mail.com*)

**Date:** 08/14/04

Date: Sat, 14 Aug 2004 18:36:44 +0100

Bob, you have written an interesting post.

Like you, I find that it is easier to image the whole partition although I only have space to keep the last three images.

I have never had to use XP's restore and would far prefer to just copy back an image of the whole partition.

As I understand it XP doesn't recover all file types. In fact, today I switched off system restore for my system drive (it was already off for all other drives) because I can't really see I will want to use its features. Am I missing something perhaps?

However the starneg thing is that my third party compression software (Diskeeper and Perfect Disk) report that about 12% of the whole partition is still being reserved by XP for system uses Presumably this is for the System Volume Information folder.

How can I free that valuable space up?

Svend

"Bob Harris" <rharris270[SPAM]@hotmail.com> wrote:

>  
> *You may be confusing the MFT with system restore. The MFT is like a bigger (maybe better) version of the FAT. It is used to keep track of where pieces of files are on the disk. Unlike a FAT, it also keeps track of where the files used to be, and that allows for some auto-repairs not possible with FAT. For a number of reasons it is better if the MFT is contiguous, or few pieces, instead of many fragments. Diskeeper can reduce the number of MFT fragments via its boot-time defrag, but it rarely eliminates all of them. That is OK/normal. The MFT usually has some extra space in it, maybe a lot of extra space. That space is not really wasted, just reserved. It will be the last place XP writes a file, only after all other space has been used. You do not need to do*

- > *anything about the size of the MFT. Leave it alone!*
- >
- > *If you feel that you are running out of space, buy a larger*
- > *hard drive, or install a second hard and transfer your personal*
- > *files to it.*
  
- > *As for system restore, that can eventually use several Gigs of*
- > *space. You need to decide whether having more than a few*
- > *restore points is valueable. In my case I delete all but the*
- > *last restore point, via a right-click on C: in windows*
- > *explorer, properties, disk cleanup, more option, etc.*
- > *However, I do complete backups up the C: partition to an*
- > *external USB disk before installing new software, and*
- > *periodically, even if there have been no changes to the system.*
- > *I retain these complete images for months, so I can "restore"*
- > *C: to last week, last month, or even last year in minutes. I*
- > *do this because system restore is less than 100% reliable,*
- > *and/or does not backup all important files, and/or does not*
- > *backup non-system files. Look into a good backup/restore*
- > *program. Hint: Microsoft does not make one.*
  
- > *"Svend Cr" <nomail@mail.com> wrote:*
- >>
- >> *Executive Software's Diskeeper 8 shows me two unexpected*
- >> *things about my XP Pro system:*
- >>
- >> *(1) The MFT on the system partition (called C) is in SIX*
- >> *parts.*
- >>
- >> *(2) On another NTFS partition (called D) there is a*
- >> *surprisingly large amount of space (12% of total partition*
- >> *space) reserved for system requirements. However I switched*
- >> *off XP's "system monitoring" for this drive long ago.*
- >>
- >> *Defragging with Diskeeper 8 from within XP and at boot-time*
- >> *does not get the MFT into fewer than 2 parts. And the*
- >> *defragging does not reduce the excess space allocated to the*
- >> *system.*
- >>
- >> -----
- >>
- >> *Is there a way I can see what system free space there is for*
- >> *use specifically by:*
- >>
- >> *(A) The MFT ?*
- >> *(B) System restore points in the System Volume Information*
- >> *folder ?*
- >>
- >> *Most importantly, how do I get the MFT into a single part and*
- >> *also give it enough space?*
- >>

>> *I have used a reg hack (from*  
>> *<http://www.tweakxp.com/tweak123951.aspx> to give the MFT a*  
>> *medium space allocation but it doesn't seem to have made a*  
>> *difference.*  
>>  
>> *I have never had to use XP system restore points as I back up*  
>> *whole partitions by making duplicates of them. So I don't*  
>> *mind if I have no space at all on any drive for system*  
>> *restore points.*  
>>  
>> *Svend*  
>>  
>>  
>> =====  
>> *Defragger data follows in case it helps.*  
>>  
>>  
>> *Volume 60\_WinXP (C:):*  
>> *Volume size = 6,793 MB*  
>> *Cluster size = 4 KB*  
>> *Used space = 4,663 MB*  
>> *Free space = 2,129 MB*  
>> *Percent free space = 31 %*  
>> *Defragmentation method = Max Disk Performance*  
>>  
>> *Fragmentation percentage*  
>> *Volume fragmentation = 0 %*  
>> *Data fragmentation = 0 %*  
>>  
>> *File fragmentation*  
>> *Total files = 44,872*  
>> *Average file size = 151 KB*  
>> *Total fragmented files = 0*  
>> *Total excess fragments = 0*  
>> *Average fragments per file = 1.00*  
>>  
>> *Paging file fragmentation*  
>> *Paging/Swap file size = 100 MB*  
>> *Total fragments = 1*  
>>  
>> *Directory fragmentation*  
>> *Total directories = 3,660*  
>> *Fragmented directories = 0*  
>> *Excess directory fragments = 0*  
>>  
>> *Master File Table (MFT) fragmentation*  
>> *Total MFT size = 92,523 KB*  
>> *MFT records In Use = 48,607*  
>> *Percent MFT in use = 52 %*  
>> *Total MFT fragments = 2*  
>>

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>> -----
>>
>> Volume 60_DATA [39GB] (D:):
>> Volume size = 39,942 MB
>> Cluster size = 8 KB
>> Used space = 25,030 MB
>> Free space = 14,912 MB
>> Percent free space = 37 %
>>
>> Fragmentation percentage
>> Volume fragmentation = 0 %
>> Data fragmentation = 0 %
>>
>> File fragmentation
>> Total files = 58,992
>> Average file size = 507 KB
>> Total fragmented files = 0
>> Total excess fragments = 0
>> Average fragments per file = 1.00
>>
>> Paging file fragmentation
>> Paging/Swap file size = 0 bytes
>> Total fragments = 0
>>
>> Directory fragmentation
>> Total directories = 5,018
>> Fragmented directories = 0
>> Excess directory fragments = 0
>>
>> Master File Table (MFT) fragmentation
>> Total MFT size = 125 MB
>> MFT records In Use = 64,032
>> Percent MFT in use = 49 %
>> Total MFT fragments = 2
>>
>> -----
>>
```