Redesigning chkdsk and the new NTFS health model



Steven Sinofsky Published Wednesday, May 9, 2012 6:00 PM

101 comments

We've written about tons of improvements in the OS kernel, networking, and file system. While for most client PCs, the tried and true chkdsk utility is one we rarely use anymore except in very rare circumstances, we are using Window 8 as an opportunity to improve this utility. We wanted to focus on rethinking how the utility works to increase availability and reduce downtime due to chkdsk operations. In looking at the real world usage of chkdsk, we note that corruptions are exceedingly rare though running chkdsk is not. While we've worked hard to reduce the manual invocation of disk tools (like defrag) we know many prefer to run them manually "just in case" and so we worked to improve the overall throughput of chkdsk, since running it reduces availability of the machine. With disk capacities becoming extremely large and multi-disk systems more common, we wanted to improve the utility. Kiran Bangalore, a program manager on our core system team, authored this post. --Steven

In this blog post, I'll talk about the new NTFS health model for Windows 8 and our redesigned tool for disk corruption detection and fixing, the chkdsk utility.

We've all experienced the frustration that can be caused by an unexpected chkdsk that pops up while restarting a computer at home or a server at the office. Beyond the surprise, there's the interruption while waiting for the process to complete and Windows to be available. With Windows 8, we provide quick resolution to these problems when they arise, putting the user in control and making systems more available and more scalable.

One of our key design goals for Windows 8 was to increase availability and reduce the overall down-time of systems; this feature, along with other storage features such as <u>Storage Spaces</u> and the new <u>ReFS</u> file system, helps reduce the complexity of fixing corruptions and increases the overall availability of the entire system.

The previous chkdsk and NTFS health model

While exceedingly rare, there are a variety of unique causes for disk corruption today. Whether they are caused by media errors from the hard disk or transient memory errors, corruptions can happen in file system metadata (the information used to map physical blocks to that vacation photo you took last year). To maintain access to your data, Windows must isolate and correct these errors, and the way to do this is by running the chkdsk utility.

In past versions, NTFS implemented a simpler health model, where the file system volume was either healthy or not. In that model, the volume was taken offline for as long as necessary to fix the file system corruptions and bring the volume back to a healthy state. Downtime was directly proportional to the number of files in the volume.

Reliable telemetry data from systems all over the world have shown us that, although corruptions are quite rare, when chkdsk is needed, it can take between a few seconds to a few hours to run, depending on the number of files in the drive-and even longer for larger storage servers.

In Windows Vista and Windows 7, we made significant optimizations to the speed of chkdsk but, as hard disk capacities have continued to double every 18 months and the number of files per volume is increasing at an equal rate, chkdsk has taken longer and longer to complete (even with speed improvements).

So in Windows 8, we've changed the way we approach the health model of NTFS and changed the way we fix corruptions so as to minimize the downtime due to chkdsk. We've also introduced a new file system for the future, ReFS, which does not require an offline chkdsk to repair corruptions.

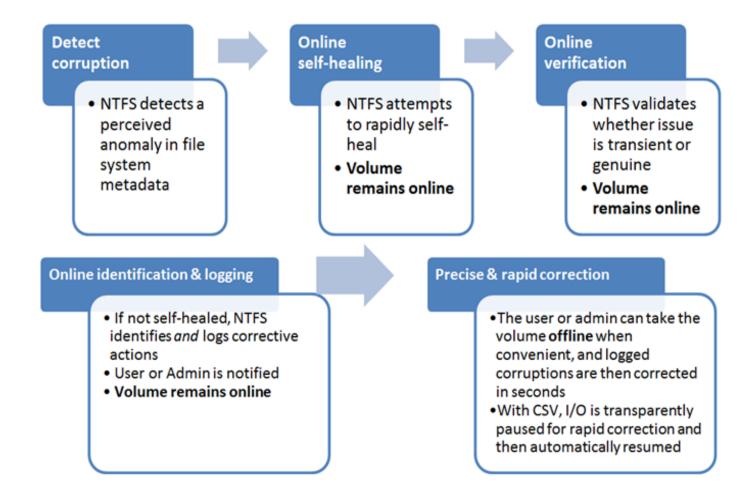
File system health redone

The incredible growth in storage capacity and user data files has necessitated the redesign of the NTFS health model and chkdsk.

There were three important requirements for file system health that our customers made clear:

- 1. Downtime caused by file system corruptions must be zero in continuously available configurations and nearly zero in all other configurations.
- 2. A User or Administrator must be made aware of the file system health at all times.
- 3. A User or Administrator should be able to easily fix their file system when a corruption occurs in a scheduled manner.

Our design included changes both in the file system and the chkdsk utility to ensure the best availability. The new design splits the process into the following phases to ensure a coordinated, rapid, and transparent resolution to the corruption.

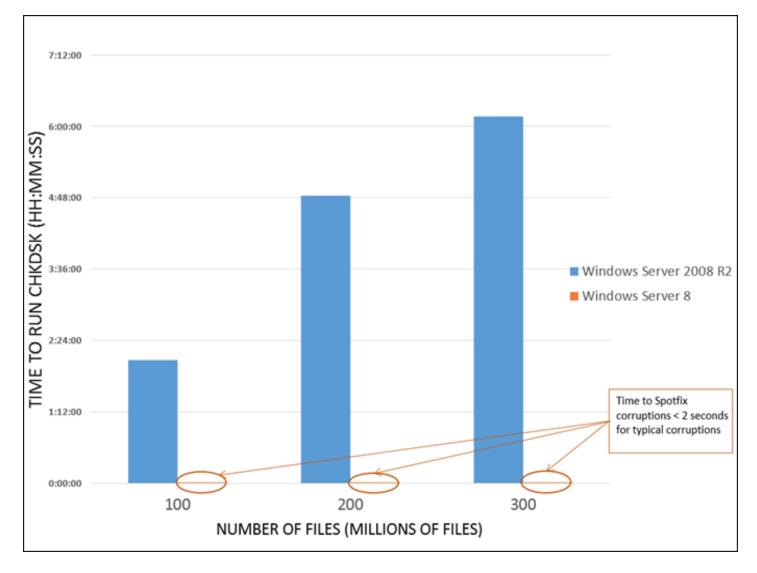


We developed a new method of communication that describes types of corruptions as "verbs" that act upon the key components and points of the design – the file system driver (NTFS), the self-healing module, the spot-verification service, and the chkdsk utility. All file system corruptions are classified as needing one of 18 different "verbs" that we've defined in Windows 8. We have also left room for possible new verb definitions that can help us diagnose issues even better in the future.

Key design changes to help improve availability:

a. Online self-healing: The NTFS self-healing feature was introduced in Windows Vista (and in Windows Server 2008) to reduce the need to run chkdsk. Self-healing is a feature built into NTFS that fixes certain classes of corruptions encountered during normal operation, and can make these fixes while still online. If all issues that are detected are self-healed online, there is no need for an *offline* repair.

- In Windows 8 we increased the number of issues that can be handled online and hence reduced any further need for chkdsk.
- b. Online verification: Some corruptions are intermittent due to memory issues and may not be a result of an actual corruption on the disk; so we added a new service to Windows 8, called the spot verification service. It is triggered by the file system driver and it verifies that there is actual corruption on the disk before moving the file system along in the health model. This new service runs in the background and does not affect the normal functioning of the system; it does nothing unless the file system driver triggers it to verify a corruption.
- c. Online identification and logging: When an issue is verified, this triggers an online scan of the file system, which runs as a maintenance task in the file system. In Windows 8, scheduled tasks that are for the maintenance of the computer run only when appropriate (during idle time, etc.). This scan can run as a background task while other programs continue to run in the foreground. As the file system is scanned, all issues that are found are logged for later correction.
- d. Precise and rapid correction At the user or administrator's convenience, the volume can be taken offline, and the corruptions logged in the previous step can be fixed. The downtime from this operation, called "Spotfix," takes only seconds, and on Windows Server 8 systems with cluster shared volumes, we've eliminated this downtime completely. With this new model, chkdsk *offline* run time is now directly proportional to the number of corruptions, rather than being proportional to the number of files as in the old model.



Comparison of Windows Server: chkdsk /f vs chkdsk /spotfix

1. Better manageability – To enable better transparency into the new health model, Windows now exposes the

state of the file system via the following interfaces:

- Action Center The health of the drive is most visible in the Action Center as the "Drive Status" (see figure below), which tells you when you need to take an action to bring the volume to a healthy state.
- Explorer: The health state is also exposed in Explorer, under Drive properties.
- PowerShell: You can also invoke the chkdsk functionality using a new cmdlet in PowerShell, REPAIR-VOLUME, which can be helpful for remote management of file system health.
- Server Manager: In Windows Server, you can also manage the volume health states directly from the server manager utility.

The new file system health model

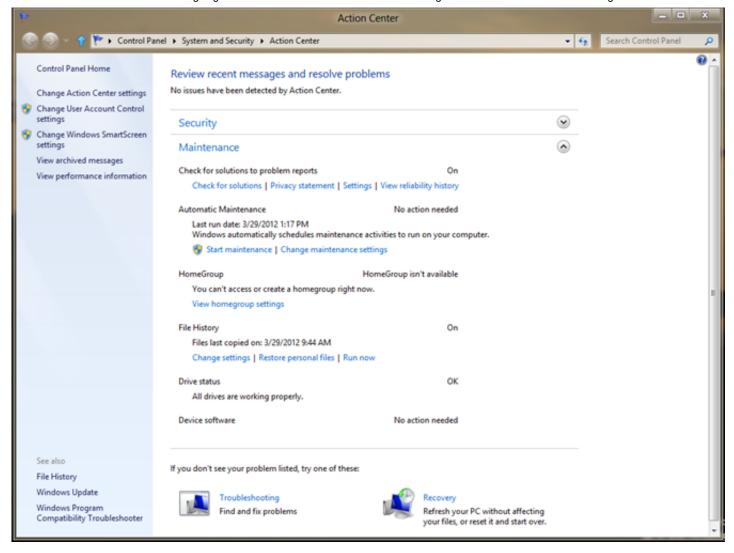
In the new health model, the file system health status transitions through four states – some that are simply informational, and others that require you to act. The health states are:

- 1. Online and healthy
- 2. Online spot verification needed
- 3. Online scan needed
- 4. Spot fix needed

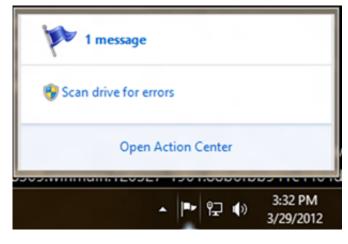


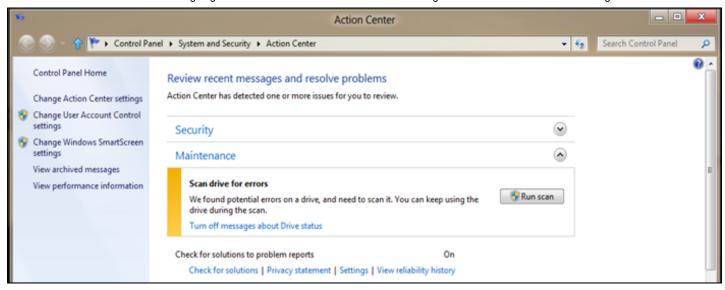
Windows 8 file system health states

a. Online and healthy – In this state there are no detected file system corruptions and there is no action required of you. The file system remains in this state most of the time.

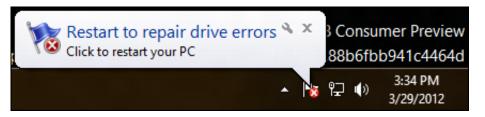


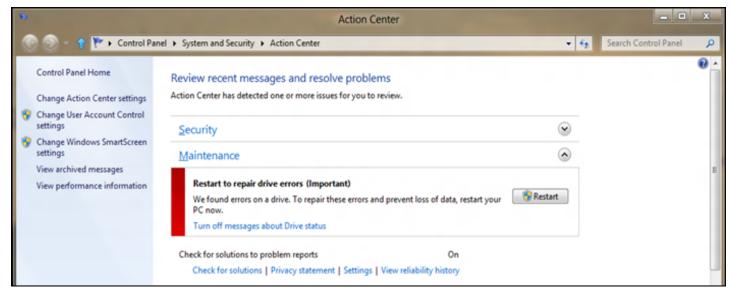
- a. Online spot verification needed The file system stays in this transient state only for a brief instant after the file system finds a corruption that it cannot self-heal; it puts the volume in this state until the spot verification service verifies the corruption. Again, there is no user action required.
- b. Online scan needed— When the spot-verification service confirms the corruption, it puts the file system in the "online scan needed" state. In the next maintenance window, an online scan is performed; there is no user action required. This state is reflected in the Action Center, so you can run the scan manually if you want to do that before the next maintenance window. The scan is run as a background operation, which means that you can continue using the computer while the scan is performed. During this online scan, all verified issues and fixes are logged for later repair. On Windows Server 8 systems, idle time is determined by monitoring the CPU and storage idle times.



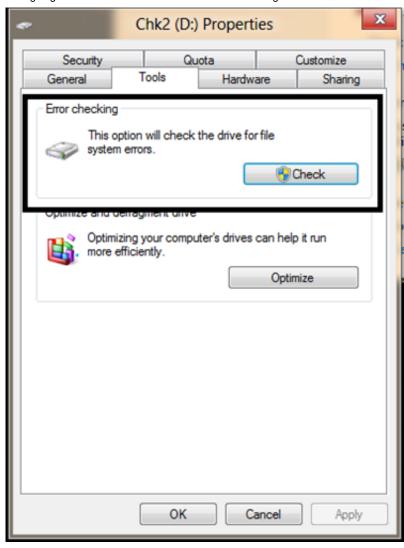


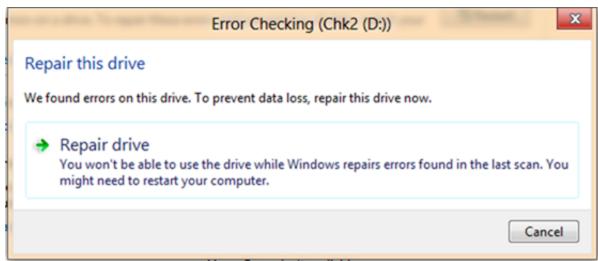
1. Spot fix needed— The file system puts the volume in this state after the online scan is completed, if required, and this state is reflected in the Action Center. On client systems, you can restart the PC to fix all the file system issues logged in the previous step. The restart is quick (adding just a few additional seconds) and the PC is returned to a healthy state. For Windows Server 8 systems, a restart is unnecessary to fix corruptions on data volumes. Administrators can simply schedule a spot fix during the next maintenance window.





For more advanced users who want to avoid restarting their system to fix a non-system volume corruption, they can open the Properties dialog for the affected volume, and on the Tools tab, they'll see an option to check the drive for file system errors. Corruption on drives that are not currently in use can be fixed without needing a full restart of the computer.





Conclusion

In Windows 8, we have made the detection and correction of file system errors more transparent and less intrusive. We believe these changes will be a welcome enhancement for you and we look forward to hearing your feedback.

-- Kiran Bangalore Senior Program Manager, Windows Core Storage and File Systems



Download this video to view it in your favorite media player:

High quality MP4 | Lower quality MP4

FAQ

- Q) Will the new health model work on removable drives? Yes, this works on removable drives that report fixed media, like most external hard drives.
- Q) How do I enable the new file system health model? You don't need to do a thing—the new file system health model is enabled by default.
- Q) Will the new file system health model apply to Windows Server? Yes, the health model is identical for both server and client. One thing that will be different by default is that the data drives will not be checked or fixed during boot of the system this maintenance will be left to the administrator when time permits.
- Q) Can I move between Windows 8 and Windows 7 and not affect the file system health model? Yes, the file system health model will adapt to whichever operating system version it is mounted on.
- Q) Will ReFS need to run chkdsk? ReFS follows a different model for resiliency and does not need to run the traditional chkdsk utility.
- Q) Will I ever need to run the old chkdsk /f?

There are cases where failing hardware can produce such severe corruption as to make the file system unmountable; in these cases, you should perform a full, offline chkdsk to fix the file system. If for some reason this fails, we recommend that you restore from a backup.

- Q) Is a reboot absolutely required to fix non-system volumes?

 No, but the Action Center generally provides the simplest experience. If you're an advanced user, you can fix non-system volumes by opening the properties of the drive, or by running chkdsk \scan <volume>: and chkdsk \spotfix <volume>: from the command line.
- Q) I run chkdsk /f often to check the status of our drives, is that needed anymore? No, the system will inform you when a corruption is found, and you can then choose to run the chkdsk /scan to detect all the issues. An online chkdsk /scan will not take away from the availability of the drive or system.
- Q) I run read-only chkdsk today to check the status of our drives; do I still need to do this? No, we recommend you run chkdsk/scan instead, since this will also perform all possible online repairs and will also prepare for a spotfix, if needed.

Comments



<u>bartsipes</u>

Wednesday, May 9, 2012 6:08 PM

#

Sweet changes! Keep up the good work.



<u>JLaForge</u>

Wednesday, May 9, 2012 6:25 PM

#

The comparison of repair times between the old and new health should be a log-linear plot to properly show the difference between the two series.



HandNF

Wednesday, May 9, 2012 7:26 PM

#

This is an impressive fix. I'm sure admins will be happy about this.



Mark

Wednesday, May 9, 2012 7:40 PM

#

This is really great news. It looks terrific. Any early indicators on performance hits due to the increased processing? or potential compability problems with 3rd party driver and utilities?



amnesia

Wednesday, May 9, 2012 7:45 PM

#

Awesome.



<u>rseiler</u>

Wednesday, May 9, 2012 8:10 PM

#

These features sound great, though I disabled the "Chkdsk" (ProactiveScan) scheduled task in the Consumer Preview to avoid seeing numerous "Event 50, NTFS: {Delayed Write Failed}" messages in my System log which only started happening after I upgraded from Win7. Running chkdsk manually returns no errors. Are these messages, issued for what I think is no reason, a problem with the Consumer Preview? I'll re-enable the task in the Release Preview to see how it goes.

social.technet.microsoft.com/.../eb1a9d74-dd31-4195-9e60-5be6d8a19cf9



AZJack

Wednesday, May 9, 2012 8:19 PM

#

OK, this looks like a real computing improvement. I knew you guys could do it if you quit obsessing over brightly colored rectangles.



Amit

Wednesday, May 9, 2012 8:34 PM

#

Wow, Way to go....no more running chkdsk for a week on 1 TB disk.



Mark

Wednesday, May 9, 2012 8:47 PM

#

No kidding it was nightmare to run chkdsk on large volume, Looking forward for Windows Server 2012 :-) Can't wait!



<u>Bydia</u>

Wednesday, May 9, 2012 8:47 PM

#

Tip: For video demo.... use "Mouse without Borders", hit the control key 3 times. Then you can click and/or type on one computer and it happens on the other computer for you.



Fred

Wednesday, May 9, 2012 9:04 PM

#

Very cool!

So bad you decide to kill Windows 8 the Metro UI.



nowuniverse

Wednesday, May 9, 2012 9:23 PM

#

@Steven Sinofsky

M.r Sinofsky Can you ask your team to change the color of side panel in the control panel? It has Windows 7 theme (mix of blue and white) while Windows 8 has its own color.

This is what I mean by side panel...the blue panel on the left...please change its color to adapt new Windows 8 color scheme.

blogs.msdn.com/.../8037.picture3 5F00 thumb 5F00 7B12D2DF.png



GreenCat

Wednesday, May 9, 2012 10:26 PM

<u>#</u>

There is typo from which /scan and /spotfix are \scan and \spotfix.



srresiv

Wednesday, May 9, 2012 11:31 PM

#

Awesome, there is no other word to describe it... And it makes Windows Systems, Server and Client world class in terms of resiliency and reliability.

Me.Name



Wednesday, May 9, 2012 11:35 PM



this is cool.

But why did you decide to kill the Aero style in favour of the Metro style?

Aero look cooler IMHO.

BTW, how long until the desktop gets a metro look as well?



<u>jader3rd</u>

Thursday, May 10, 2012 12:38 AM



Does it provide events that would allow a distributed file replication solution to know if a file/sector is corrupt beyond repair, and that replication solution could re-add the file/sector back to the drive from another location?



The Joshua TS mith

Thursday, May 10, 2012 1:02 AM

#

Very nice. Good work, folks!



<u>xpclient</u>

Thursday, May 10, 2012 3:03 AM



Wow such brilliant improvements and the integration of status display into Action Center is excellent. Great job. Now some guestions and suggestions:

- 1. Why did you dumb down the Chkdsk screen at boot to just a % indicator instead of displaying scanning and correction details? (www.askdrtech.com/.../image.axd) Microsoft did the same thing to the bug check/Blue Screen. Please keep options in the OS to display more technical screens if you want to dumb them down! Similarly, in the Action Center, instead of just displaying "Running maintenance tasks", it would be better if it shows which operation it is performing defragmenting, chkdsk, disk cleanup etc.
- 2. For non-system volumes, it should display a window with two simple options when we click the balloon: 1. Restart and repair 2. Force dismount and repair.
- 3. Chkdsk runs incredibly slow if the MFT is fragmented. Do some performance optimizations for that please.
- 4. Back in the days of FAT32 and an NT-based OS, if an improper shutdown occurred or system became unresponsive requiring a hard reset, Chkdsk would automatically run. But Chkdsk doesn't run automatically on NTFS volumes upon an improper shutdown or hard reset. Although there may be no immediate corruption due to the more resilient design of NTFS, when I manually run Chkdsk /F, it always finds some errors on the disk. Just the other day, a Windows 7 PC I saw wasn't booting after an improper shutdown because of some registry related error, and even System Restore to restore the registry was failing. Running Chkdsk /F repaired it. In the new NTFS health model, is this scenario covered? At least, Chkdsk /scan should occur in such scenarios.
- 5. What are the effects of 'fsutil repair set C: 1' Enable general repair in the new health model?
- 6. Can you explain the other new switches, /sdcleanup? What is the difference between /offlinescanandfix and combination of /forceofflinefix + /scan?
- 7. As soon as a removable disk is attached, Windows runs the ReadyBoost check on it with no way to disable running this check. In many cases, even if write caching is turned off, when we remove it and

insert it the next time again, we get prompted to "Scan and fix any errors on the disk". Are these errors happening because of some write activity happening on the removable disk as we removed it? MS should provide a way to complete disable the ReadyBoost check in that case.



David Overton

Thursday, May 10, 2012 3:10 AM



Will the new Chkdsk spot read errors that SMART picks up and repair them (i.e. try writing over the sectors) so the sector is relocated by the hard disk technology? Today, if I look at SMART errors it is waiting for a write to relocate the sector to the "spare" region of the disk. It would be great if Chkdsk worked with SMART to deliver this.

Thanks



Ryan

Thursday, May 10, 2012 3:13 AM



This is awesome, and couldn't be more timely in my case. I apologize in advance for the length of this post, but I think it is very relevant--let me tell you what I spent all night doing on Tuesday this week (May 8th):

One volume for one of our DFS file servers (Windows Server 2008 R2) is a single 8 TB volume on our SAN (Coraid)--we need a single contiguous space for the content, and unfortunately there is no feasible, efficient way long-term to break it into smaller chunks and reassemble it via DFS. (**See separate point at the end about this**) We had a problem recently where a folder was still showing even after it was successfully deleted (no error reported) according to Windows Explorer. Thinking it may just be a Windows Explorer issue, I tried a logout/login, but the issue persisted. Even after a reboot, the folder would not delete. I suspected MFT corruption, so I decided CHKDSK was in order.

Here's a big question, though--the 8 TB volume is a pass-through disk to a VM on Hyper-V, so what is the correct way to run it? Logically, it should be done from the VM, which is what I did. First time I ran it, I did it from CMD. Eventually, it exhausted the RAM for the VM and the server became unusable. We had no choice but to kill the process, since it seemed to make little progress and work needed to be done. The second time I ran it, I did it from the properties for the drive in Windows Explorer--an even worse idea, since not only did it once again exhaust all the RAM for the VM and render it unusable, there was also no way of knowing how far along it was in the process or any way to stop it other than to reboot the machine. We were once again in the position of having to reboot the server in order to get critical work out the door.

This is where things took a turn for the worse. The drive came back as "Online (errors)", and since there is no volume mounted, there's no way to run CHKDSK. I thought I lost the volume and would have to restore from backup (which I started to do, but our DPM backup server also started acting up--a separate story, but a perfect storm of issues to be sure!!). Reactivate, etc. were greyed out--only Online/Offline and Properties were available, and Online/Offline did nothing. I thought perhaps it was an issue related the fact that it was a pass-through disk in a VM, so I disconnected it and tried to mount it from the physical host. The physical host reported "Online (foreign)", which online help suggests that the volume isn't NTFS or FAT (!). Likewise, all the other commands were greyed out, and several Online/Offline attempts did nothing. Reboots also did nothing.

After troubleshooting the DPM server hardware issues for about 3 hours, I thought I'd give the Offline/Online command another shot. To my relief, the "Import foreign disks" command was no longer greyed out, and I was able to bring the disk online on the physical host. I was able to reattach it to the VM, and after a few more steps, the volume was online and reporting a (Healthy) status. Whew!!!

The whole ordeal raises several questions:

- 1) What is the correct way to run CHKDSK in this scenario?
- 2) Why does CHKDSK exhaust all the physical memory and bring the server to a halt? Is there a way to change this behavior via the registry, CHKDSK switch, or some other option?
- 3) What should I have done in that scenario where CHKDSK eats up all the memory and renders the server unusable from a performance standpoint? I felt I had no choice but to reboot the machine, but this created a situation where, ironically, the utility designed to fix the disk actually put it in an unusable state.
- 4) If the disk had continued to display "Online (errors)" or "Online (foreign)", were there any other options besides doing a restore? The "online" part gives more hope for a recovery than "offline" or some other status.
- 5) How should contiguous, >2 TB file share volumes be constructed today? (**see below)
- 6) How are all of these questions affected by Windows Server 8?

**Separate point about >2 TB volumes: currently, I cannot find *any* definitive guidance about building >2 TB volumes in Windows for a VM. Piecing things together: the DPM team currently recommends not creating NTFS volumes larger than 1.5 TB due to issues they've seen with volumes around 2 TB or larger. Other sources suggest using even smaller volumes (~500 GB) and then spanning them together, primarily because of the potential downtime caused by a long CHKDSK run. However, for a clustered VM in Hyper-V, I've found nothing to suggest that spanning volumes inside the VM is supported or not supported (especially whether or not Live migration is supported). You cannot create a VHD larger than 2 TB. You *can* use a pass-through disk >2 TB, but it would be better to span smaller volumes--if you knew that it was supported to do so. And how do you manage disk maintenance (CHKDSK, defrag, etc.) on a pass-through disk?

Again, though, many kudos on the CHKDSK and general storage improvements! I agree, NTFS is already quite resilient to corruption (plus ReFS looks amazing and is precisely what is needed from a modern-day resiliency perspective, though I really had hoped for modern FS performance improvements as well). When you need CHKDSK, though, you are often desperate for it to work. It looks like it should not only be needed less than before, but when it is needed, it will also be nowhere near the imposition it often was. Awesome!



Darren

Thursday, May 10, 2012 3:25 AM



Honestly Windows 8 would be a great Win7 Sp2. You could have added Metro as a incubator add on for desktop while releasing it as base os for tablets. User would try it on tablets and install the Metro if they like it additionally on their desktops.

Desktop as application would be a cool idea if there was differnent desktop apps to choose from the same way like there are different desktops for Linux.

Windows 8 could have been really cool.



FremyCompany

Thursday, May 10, 2012 4:07 AM



I always asked myself: instead of reloading a backup, wouldn't it be possible to analyse a backup filesystem metadata to restore the broken one?



pen

Thursday, May 10, 2012 4:20 AM

<u>#</u>

You work good in somethings. but destroy these works with some other works.

Start menu in windows is heart of windows for desktop users, please back to sobriety.

afadsf

alaus

Thursday, May 10, 2012 4:25 AM

#

faf



arbmu

Thursday, May 10, 2012 4:54 AM

#

Sounds good. But could you please make the gui version (accessible through drive->properties->tools) equal to the command line version?

Because last week some sectors on my secondary drive got corrupted. From the symptoms I knew what was going on, so I run the gui version of chkdsk and selected checking for bad sectors. However after 10 minutes, when the test finished, it said there were no errors. So I run it again with, with th same result. But I was sure there was an error so I tried to run it from a command line. And the result - after several hours of testing (not just 10 minutes!!) it found some damaged sectors and relocated the affected cluster.

So my request: either remove the option to scan for bad sectors from gui (since it doesn't work), or fix it, because right now, it's useless and misleading.



Windows 7

Thursday, May 10, 2012 5:35 AM

#

Another great feature for Windows 7 SP2.

Such a shame Windows 8/Metro OS is dead before it starts.



costinel1

Thursday, May 10, 2012 5:52 AM

#

"Spot fix needed— The file system puts the volume in this state after the online scan is completed, if required, and this state is reflected in the Action Center. On client systems, you can restart the PC to fix all the file system issues logged in the previous step." - my test install of w8cp went into loop asking me this. i restarted, then it popped again and again and again.

got rid of it only after checking event log, discovered the /spotfix option (thanks for the more descriptive event log!) and ran chkdsk manually. the loop prompt restart went away.

however, diagnosing/rebuilding data integrity should not be limited JUST to the filesystem!

PLEASE perform this task consistently along with RAM testing and HDD SMART testing/querying, or your FILESYSTEM work will be IN VAIN!

it is such a pity you have done AWESOME work on the NON-VISIBLE, internal parts of windows but have managed to screw up the VISIBLE UI so badly!

Bring me back all desktop and explorer features I was able to use on XP*, - EVEN AS AN OPTION - DO WHAT DEFAULTS YOU WANT BUT LET ME CHOOSE - and I'll buy it.

Stick your fingers in your heads and sing "la-la-la" and I'm going to move my 1000+ userbase to Linux or ReactOS (and thinking even mac, as a last resort) when the first remote vulnerability goes unpatched on XP after April 2014.

* social.technet.microsoft.com/.../dd48a100-bee8-49f8-a20c-e09f6df92c65



Dan

Thursday, May 10, 2012 6:16 AM



About bloody time!! As an IT consultant, I can't count the amount of times I've been stuck watching a chkdsk scan for several hours. These improvements should make my life a lot easier and less boring!

One thing, though. This really needs to be included in SP2 for Win7/2008 R2 - or, at least, just for Server. Servers don't get replaced or upgraded very often, yet this technology would save so many headaches You know that us in IT would love to upgrade all our hardware and software every couple of years, but the finance departments never let us! That means it will be a long time for many of us to get this wonderful improvement into our datacentres - particularly as we only recently upgraded many old servers to 2008 R2.



pickmeindia

Thursday, May 10, 2012 6:28 AM



Your thought processing is wonderful. The way you tell the thing is awesome. You are really a master. Great Blog!! That was amazing.

http://www.pickmeindia.com/



Fleet Command

Thursday, May 10, 2012 6:29 AM



Great improvements indeed, though I must say these improvements are still crudely implemented and need some refinements. (Here, I skip repeating what other comments explained at length.) I have faith that Microsoft can do the necessary refinements.

Still, I feel I might have to miss out on these improvements and ignore Windows 8 altogether, since the so-called Metro-style changes in Windows 8 are certainly unwelcome.



ReMark

Thursday, May 10, 2012 6:46 AM



Good!

What about fragmentation issue? Can you post some benchmark about fragmentation in old NTFS, this NTFS and reFS?

Could you put a HDDSmart checker in the disk property dialog? I'm annoyed to using 3rd-party software to do that thing.



<u>Impar</u>

Thursday, May 10, 2012 7:05 AM



Some good improvements.

Too bad about the Start Screen and Metro UI, though.



Win5000

Thursday, May 10, 2012 7:26 AM

#

Good good good - Can you now start talking about Win RC and its features / changes over and above Win8 CP?



someone

Thursday, May 10, 2012 8:00 AM

#

it will probably be the best OS microsoft has ever created..

its a pity that the UI lakes a basic attention and thought..

i dont have a problem with the metro UI in general. but seems like so many things weren't executed properly..

still, Architecture wise im sure this OS is probably as good as OS X...

but who knows.. maybe the Final Version will surprise us all...



bdaniel7

Thursday, May 10, 2012 8:28 AM

#

What about improving defrag so that it detects the most used files and arrange them in such a way that improves the access speed?

Like booting Windows or starting applications.



<u>pip25</u>

Thursday, May 10, 2012 8:30 AM

#

These features do sound very promising.



Pratyush Nalam

Thursday, May 10, 2012 8:43 AM

#

Windows 8 not Window 8 in the intro para by Steven



ReMark

Thursday, May 10, 2012 9:10 AM

#

"Action Center – The health of the drive is most visible in the Action Center as the "Drive Status" (see figure below), which tells you when you need to take an action to bring the volume to a healthy state."

Ok, but S.M.A.R.T. tags provide other usefull information that a user can read in a easy way:

0xC2 > temperature

0xE7 > ssd life

Why not put them on disk property dialog? Or create a general internal tool for temps/fans? Or add an event in the Action Center for high temperatures on disks etc (configurable!!)

I like your work for W8! Continue please to inform us... and remember that users want choices, an OS

built around them (aka configurable)



Meth head



Thursday, May 10, 2012 10:42 AM



@Mark, its already named "Windows Server 8"!

(fart!) excuse me..



minesweeper





can u just keep minesweeper please? :D or make it downloadable in the desktop, its the best game ever



Me

Thursday, May 10, 2012 11:50 AM



Please put some work in the diskcleanup tool as well. in the m1 builds there was a redesigned diskcleanup tool, which looked very well.

also the property for harddrives, which shows how much space you use, looks still from colour site, like in Win95.



Hariharan

Thursday, May 10, 2012 1:09 PM



@StevenSinofsky

Can we have an option to view the demo video in this blog post (and others too) in full screen mode.? Specially the video in this post is too small to see whats going on. I understand that we can download the video locally and view, but there are limitations like mine when I read this post from my mobile I do not have the option to download, my office networks do not allow to download videos, etc. Would it be that involved to add full screen view mode to the videos?



byronw

Thursday, May 10, 2012 1:27 PM



Awsome work, we this welcome enhancement. this might be not related but, You must have IE on other platforms too (iOS, OSX, Linux etc), why? The reasons companies like google have been successful online is because they have a presence on many platforms. MSFT has an internet division but it's only conformed to windows OS, the internet means content is available any where no matter the device you use, this what companies like Google, facebook did an made them win a lot advertising money. To increase IE market share including Bing, IE has to spread or grow tentacles to other competing platforms rather than spending millions on market this products have them in any platform the users are so they try them and enjoy them on what ever platform. The future is in Windows Azure (one MSFT VP said Windows Azure is the future of operating systems and he was right), the back end products of MSFT must have presence in all PC platforms, including Windows, Apples OS and Linux one way of doing this is through IE besides native apps of those platforms. There is one major advantage here, if IE was able to process both HTML5, Silverlight/xaml and others on any platform including windows then developers wont have to learn new languages just to deploy to the web like HTML/javascript, this way they can truly 'right once

and run any where '(but windows PC OS remains home to them). This also reduces friction in this industry too. Just try it once, and see what happens to IE's market share including bing, Azure and other MSFT web services.

MSFT has three divisions (web services like bing, hotmail etc, windows PC OS, Windows Azure) that can hedge against each other and also help accelerate each other, the problem is you using other products like IE to accelerate one of them windows PC OS, but you not using other products like IE to accelerate other products and services like Azure and Bing.



Lance

Thursday, May 10, 2012 3:17 PM



@Me.Name

I really hope they NEVER put the metro look on the desktop. If that happens, I'll never upgrade and move my family over to Linux. My company is discussing that as a better alternative to metro. The marketing guys don't like it but a few other de[departments are open to it (after we demo Metro).



simptomi rs - Vas vodic do zdravlje

Thursday, May 10, 2012 3:53 PM



I agree with me.name

Never, ever METRO



Kiran Bangalore [MSFT]

Thursday, May 10, 2012 4:36 PM



@rseiler - Thank you for trying Windows 8. The Proactive Scan task will not run unless NTFS has found an issue with your volume. It is intended to run on volumes that have a detected, verified corruption that Windows could not fix immediately. The Event 50's being logged indicate that you are encountering hardware issues that should be investigated. We have improved on our detection of this error case in Windows 8 which is why you may be seeing more of these events than Windows 7.



Kiran Bangalore [MSFT]

Thursday, May 10, 2012 4:37 PM



@jader3rd - Yes, we do log which files were affected by a corruption. Check out Events 26226, 26227, 26228, and 26214 in Event Viewer or the PowerShell commandlet Get-volumecorruptioncount.



The Martian

Thursday, May 10, 2012 4:50 PM



CHKDSK is run very frequently on most desktop PCs mainly because of power outages (from a malfunctioning UPS that trips off suddenly/unexpectedly). This tends to corrupt system and personal files most of the time. So am wondering what could possibly be done to prevent this problem.

Could OEMs be required to include in their desktop systems, a small Li-ion battery that could 'hold' the power for about 30 mins. or so, to allow the OS to notify the user that the power from the UPS is out? This is a preventive approach; while running CHKDSK is a remedial approach.

Is prevention still better than cure?

Also, about preventing personal files from getting corrupted or damaged, while being run, please try this: Make it madatory for every PC to have two disk drives. A primary [SSD], which hosts ONLY the OS and Applications, and a secondary drive [any type], which hosts personal files (Libraries). So that when the user tries to open a file, Windows will first copy the file from the Libraries, paste it somewhere on the Primary Drive before running it (the copy). The original file stays on the secondary drive untouched.

After the user saves the running file, Windows will then sync the saved file (the copy) to the original file in the Libraries to update it. In this way, should either the OS or Application running that file crashes, only the [active] copy gets corrupted or damaged -- the original file in the Libraries (on the secondary drive) will remain unaffected.

This is just an idea. :-)



Kiran Bangalore [MSFT]

Thursday, May 10, 2012 4:53 PM



@xpclient – Thank you for trying Windows 8, and we appreciate your feedback. Regarding a few of your points, (1) you can still get this information from logs and events in Windows. (2) The new model will only trigger an online scan if NTFS encounters corrupted metadata. (3) ' fsutil repair set' is used to enable and disable self-healing on NTFS volumes, it is set to '1' by default and we recommend leaving it as-is. (6) /sdcleanup is a new switch added in Windows 8 to allow for Administrators to clean up unused ACL's from the security descriptor file.



Kiran Bangalore [MSFT]

Thursday, May 10, 2012 4:53 PM



@David Overton – A hard drive's SMART logic monitors issues with the drive to predict future failures. Generally, it cannot be used to determine where future corruption may occur.



Kiran Bangalore [MSFT]

Thursday, May 10, 2012 4:54 PM



@Ryan – Thank you for the indepth post! Regarding your questions, (1) & (5) you should run chkdsk and other file system tools from wherever the file system is mounted. In your case, that's within the VM. (2) In Windows 8, memory consumption for chkdsk is limited to 25% by default, although this is changeable via a registry key. (4) Were you seeing this through the Disk Management UI and are you using Dynamic Disks? Can you describe your storage configuration?



The Martian

Thursday, May 10, 2012 5:28 PM



About the second point in my comment just above, somebody will say: Is that not why we have backup files in some applications? I am aware of that. I use CorelDraw that saves the original file and creates a backup file concurrently. And when it crashes, sometimes both the original and backup files cannot be opened -- DAMAGED!



@The Martian

Thursday, May 10, 2012 6:05 PM



DAMAGE inc. by Metallica

M for Metallica, Microsoft and nothing else matters! \m/ _ \m/



hamakaze japan

Thursday, May 10, 2012 6:29 PM

#

Mozilla and Google blast IE-only Windows on ARM

www.theregister.co.uk/.../mozilla google win8 arm browser dark ages

Although there is also such a report, how is it?

Since Windows8 has various opinions, please refer to it.



John Nelson

Thursday, May 10, 2012 6:47 PM

#

Does Fat32/ Exfat get this or is it only just to HFS+?



@mabastN

Thursday, May 10, 2012 7:48 PM

#

i lovee ittttt i do my best microsoft !!!! some people know what i do !!1 loveee yeeehhh hp))))



rseiler

Thursday, May 10, 2012 8:32 PM

#

@Kiran Bangalore, OK, so which specific log can I find details of these "Event 50, NTFS: {Delayed Write Failed}" messages beyond the non-specific information presented in the System log? Since I'm not seeing any visible problems related to saving data, I continue to think that the error is in, well, error. Perhaps it's objecting to something about the drive policy in Device Manager ("Enable write caching on the device" checked, "Turn off write-cache buffer flushing..." unchecked) and/or the version of Intel RST I'm running in support of my SSD.



random dude

Thursday, May 10, 2012 11:14 PM

#

what is going to happen with aero?

Does windows 8 still use a compositor? Why are they removing all the blurs and glows?

Just look at the new visual studio...

I just hope windows 8 doesn't look like a full screen web browser...



hamakaze japan

Friday, May 11, 2012 12:09 AM

#

A postscript is added to the comment like the point. I am very sorry only at the contents which are not related to a report.

Doesn't desktop mode need the ARM version?

If even a third party browser cannot be used, there may also be such a hand.

Then, as for a few, Google and Mozilla are also likely to settle down.

Otherwise, that the lawsuit of Anti-Monopoly Law of several years ago may start again, since the hand of the lawsuit got bored, please already do your best in it.



<u>xpclient</u>

Friday, May 11, 2012 12:57 AM



@Kiran Bangalore, please restore the screen at boot to show scanning and correction details like Windows 7/Vista did. MS doesn't want to make troubleshooting more difficult, do they? I know the Event Log shows this but why is it buried now?? It means now I have to open Event Viewer to know that Chkdsk made corrections to the file system which I would have known easily as the system booted. MS doesn't understand how support people use such features.

How does NTFS determine corrupted metadata? From the log journal? The scan should be triggered and the dirty bit set for the OS volume upon an improper shutdown.



Someone

Friday, May 11, 2012 1:01 AM



@The Martian

Get a Ups. If you have already one, get a better one. Your suggestion will never come true.



Victoria's Secret Swimsuits Sale

Friday, May 11, 2012 4:43 AM



It is a fact that Victoria's Secret Swimsuit
 is a very popular brand, the items from this brand are very amazing, they are very attractive to seize your attention, you should come to have a selection quickly, all of them sure to never let you down. Come to have your ideal Victoria's Secret Swimsuits as soon as possible, the whole of them are quite sure to make you have a stylish dressing, you are sure to be much more outstanding with your ideal wearing, so that you should never miss to choose your suitable items. The matter of fact would prove that Victoria's Secret Swimsuits are fashionable and sexy to wear every minute. Cheap Victoria's Secret Swimsuits
 sure to be your wise choice, you should come to have a selection, so that you would get your expected wearing, do you think so?



geo

Friday, May 11, 2012 9:00 AM



Off topic: Windows Defender Service from Windows CP 8 drives me crazy, i can't work because of it. Every day at 3PM starts scanning my pc and consumes all my pc's resources. It's practically making my pc unusable. I couldn't find a way to stop it. If i stop it from task manager my pc reboots after 1 minute. My pc config: Intel Core 2 Duo E7200, 4 GB of RAM DDR2, Windows 8 CP 64 bit, fresh install. Hope this issue will get resolved in next version of win8.



you need to re-imagine your re-imagination

Friday, May 11, 2012 9:23 AM



MS really have lost their way.



Meitzi

Friday, May 11, 2012 10:46 AM

#

so still no S.M.A.R.T support?

There is NO POINT of try fixing corruptions forever if your HDD is broken. Now many people wil try to do that.

You need to do SMART short test to check is you HDD okay? If its not, not software can fix it. (we can do memory test already, so why not smart test)

So, read SMART status and show it in Action Center.



Windows 7

Friday, May 11, 2012 10:48 AM

#

@ geo

The only solution to your problem is a 2 step process:

- 1. Format C:\
- 2. Install Windows 7

Job done.



Alvaro

Friday, May 11, 2012 11:20 AM

#

Nice work under the hood... some suggestions

- 1. Add the a 'Check drive' button to the 'Drive' tab in the explore ribbon...
- 2. Add an 'advanced view' or 'show details' to the Chekdisk, Defrag and friends (like in the taskbar and copy dialog), so those who want more info wont need to hunt down events and logs...
- 3. Add an small yellow warning or something similar non-intrusive information to the drive icon in the My computer window in explorer (when a chkdisk or spotfix is needed)....



Alex Kven

Friday, May 11, 2012 12:42 PM

#

@minesweeper - It's a little off topic, but I hope they keep minesweeper as well; it's better than solitaire. I want Chess Titans to stay as well. :-)



Games

Friday, May 11, 2012 12:51 PM

#

You will get all games throught the store later, also only the Microsoft apps might be installed in the final version by default, if you buy a retail version.

R Potter



Friday, May 11, 2012 1:17 PM

#

@geo

Control Panel -> Administrative Tools -> Task Scheduler

There you can edit the settings for all of the Windows Defender tasks.



Ruby Tuesday

Friday, May 11, 2012 3:31 PM

#

@Geo:

Disable Windows Defender in Windows 8:

www.guidingtech.com/.../disable-windows-8-defender-before-installing-antivirus

@Everybody: disable Windows 8 completely. Better.



bydwin

Friday, May 11, 2012 5:10 PM

#

Windows 8 is a very good OS, no doubt, as developer myself after using it for a awhile I keep asking myself how you achieved to do some the things with the OS, Awesome work!

But I do have some concerns; I know this might not be relevant: 1. It seems full screen Metro apps has the potential of affecting photo epileptic people negatively. The app switching, full screen mode and non 3d effects can endanger some users, even for me am not epileptic but after using it for a while I was not feeling comfortable with the full-on immersive environment at close range with the screen, might work on TVs, but not PC's. Solution: the top right corner must have the ordinary close (X), Maximise, Minimise and Auto snap, this will give the user power to choose if he or she wants to totally immerse themselves or not. The windowing ability of apps reduces the immerse effect to both photo epileptic users and those who might just feel uncomfortable after heavy use in Metro, because of the relative background (metro wallpaper, other open apps, metro start screen) that dilutes the effect when windowing is enabled . 2. The app switch bar must be like the classic task bar (option to hide or not to hide, but using icons not previews to reduce space), to create a reference point when switching apps to avoid or dilute negative photo ecliptic effects and also make easier to switch apps because information is given to the user at a glance without have to disturb them from what they are doing to get that information. 3. 3D effects help the users eye and mind not have to adjust from the real world to the PC environment, yes you might have assumed the light is coming from the user, which is a good idea but the idea must help the user to interact with the PC. Solution: add some subtle shadows and some subtle 3D effects, not chrome reflections, imagine the UI object is made of material that does not reflect but has shadows to show that it is an active UI object and adds to the 3D environment. Metro is a lovely UI concept but needs subtle changes to make it even more wonderful.

One of our main concern is oversimplifying of the UI, not pure simplicity which we care about but over simplification. If the users are using a lot of communication apps like today it does not mean that you should design OS or Device through OEM dedicated to communication only, what about productvity. If your telemetry seem to affirm the fact that users are using a few apps in full screen at a time does not mean there enter OS must adjust entirely to accommodate this majority use or trend, the thing is the telemetry wont tell you why user tend to use fewer apps, some the reasons involve hardware, OS, what they are doing and the kind of app and its purpose. User have realised that when they open too many apps at a time the PC freezes or starts lowing doing, so they resolve to opening fewer apps at time compromising the work they have to do in that time period, you can verify this through logic and experiments if you have too, but we recommend you inform the user what the system (OS and hardware)

is capable of doing at a time or just design it to be that flexible to run as many apps as humanly possible relative to the hardware that has been acquired by the user.

There are rumours going around concerning windows phone 8, but we would like to recommend that windows phone 8 has the 'windows to go' feature or something like it, yes it might be pricey to the user, but plugging the phone in to bigger screen and it automatically running a full function OS will be a big plus for windows phone 8, just like what ubuntu is doing with 'ubuntu for andriod' (http://www.ubuntu.com/devices, news.cnet.com/.../androids-new-ally-against-the-iphone-ubuntu)

One more application that your OEM partners must licence is Bluestack (http://bluestacks.com/) this allows android apps to run on windows, this will force users not to choose any other OS accept widnows OS because it offers no compromises to the user.

And yes with good marketing this product will be a hit for sure. (marketing idea: windows 8-No compromise- true productivity and mobility, or something like that)

Good luck team!&GBY



Kiran Bangalore [MSFT]

Friday, May 11, 2012 5:46 PM

#

@John Nelson

These changes apply to NTFS only.



Kiran Bangalore [MSFT]

Friday, May 11, 2012 5:46 PM

#

@rseiler – NTFS typically logs an Event 50 when it sees a device being removed from the system unexpectedly. This usually occurs due to a disk that is failing and temporarily disappearing from the system.



Kiran Bangalore [MSFT]

Friday, May 11, 2012 5:47 PM

#

@xpclient – The new health model is triggered when NTFS encounters corrupted metadata while accessing a file in the file system. If the structures describing the file seem corrupted, NTFS will start the correction steps outlined in the blog entry.



Japanese

Friday, May 11, 2012 6:24 PM

#

Please let Google and Mozilla settle down early.

Otherwise, it is likely to argue as EU of several years ago again.

Moreover, since Mr. N has also told as "It uses Internet Explorer of the Metro version also in the time of a fixed program", I need your help also there well.

I think if all can be improved by a release version.

Although there are many negative news and user opinions, as it is, they are expected individually.

www.gizmodo.com.au/.../is-microsoft-planning-to-limit-your-browser-choice-on-windows-8-tablets



@Japanese

Friday, May 11, 2012 6:41 PM



Apple does not allow you to use other browser than Safari on iOS, why should Microsoft?

Maybe its time for Mozilla to reinvent themselves and do what Opera did for Opera mobile...

Also, Microsoft does not explicitly disallow other browsers, Mozilla is complaining because their browser would have to be rewritten using WinRT since they can't use the Win32 libs on Windows RT.

Get over it.



TechDud

Friday, May 11, 2012 10:05 PM



I second what XPClient so eloquently said.

@darren: Windows8 Metro UI in Win7SP2 was "my idea" :D



Ryan

Saturday, May 12, 2012 1:33 AM



@Kiran Bangalore:

Regarding (2)--that memory can be limited via a registry key--does that apply to Windows 8 only, or can it likewise be applied to Windows Server 2008 R2?

Regarding (4)--yes, I was seeing the "Online (errors)" and "Online (foreign)" messages in the Disk Management UI, and also when using Diskpart. Dynamic disks are used (the volume was created initially by software-mirroring a 2 TB volume, then breaking the mirror after synchronization was complete). Also, the error is actually still present--there is a folder on the volume that will not delete.

The storage configuration: the SAN is a Coraid SRX2800 and VSX3500. There are two physical Hyper-V hosts connected by dual-port Coraid HBAs. They are clustered and contain CSVs to another SAN, but the 8 TB volume is not a CSV (since it is a pass-through volume). The 8 TB volume is NTFS on a GPT, dynamic disk. Let me know if there is any further information you would like.

If you have any thoughts about questions (3) and particularly (5), please let me know. Finding advice about (5) has been quite difficult.



Yoqi Bubu

Saturday, May 12, 2012 8:37 AM



Redesigning dir and the new MS-DOS mode.

Windows 95 ruined everything. A Windows 4 based on Windows 3.1 would have been better.

Dos was better, I miss the good old DOS days.

C:\byebyemicrosoft

dir

Apple.com

Enter

Enjoys the fantastic Apple world.



Mike

Saturday, May 12, 2012 5:34 PM



Why do I, as a user, ever want to have to deal with this kind of b.s.? I expect my files to be there and work reliably and every time. And if there is a hardware problem, I don't want to be bugged by dozens of dialog boxes or "chkdsk". Just make it work; is that too much to ask?



@Mike

Saturday, May 12, 2012 7:15 PM



You obviously don't know what you are talking about.

Please get lost.



Stefan

Saturday, May 12, 2012 9:53 PM



Windows 8 could have been a great desktop OS without the Metro. Many nice features, but i won't open the wallet thanks to the Metro BS. Metro is a waste of resources, and more.... Too bad, but that is how it is.



shahin

Saturday, May 12, 2012 11:25 PM



@Stefan

whether you like it or not metro is here to stay, so why are you posting these BS?get over it and be productive for once in your life.



shahin

Saturday, May 12, 2012 11:26 PM



@Stefan

whether you like it or not metro is here to stay, so why are you posting these BS?get over it and be productive for once in your life.



W R Graham

Sunday, May 13, 2012 3:06 PM



Hey, interesting blog!

Write to me:

info@scots-titles.com

wordpress@scots-titles.com



Metro Phone

Sunday, May 13, 2012 4:51 PM



Doh. Steve Ballmer should sing: "tablets tablets tablets tablets tablets tablets tablets tablets!". I see him singing like this instead of developers developers developers developers.

Tablets is the new Microsoft.



<u>Flashfearless</u>

Sunday, May 13, 2012 11:20 PM



Don't we think that it might be time for a new file system layout? NTFS is like 12 years old. And when drives were like 30 GB. Something faster and more efficient would be nice.



Ron

Monday, May 14, 2012 1:56 AM



Why cant it be simple and silly like Mac? Why go thru so much trouble with chkdsk and what not?



Bryan

Monday, May 14, 2012 2:15 AM



Microsoft needs to know things like these www.youtube.com/watch please make a coment with this video os something, and pray for they to know about what we THE CONSUMERS want in their OS.... because I have w8 installed on another pc, and i loved, but it need some important changes, or its gonna be a big mistake for most of the consumers:/



nanashi nihon

Monday, May 14, 2012 3:09 AM



A certain person's opinion ... I think that Windows 8 should just put on themoreover, it is not related to a report -- it can write in -- I am sorry.

A certain person's opinion ... I think that Windows 8 should just put on the market what carried out the development stop and improved 7 for no charge or about thousands of yen if it can do since it is hard to use.

It is whether it is kinder for a user.

It is whether swerve and a code and UI should remake completely Windows which will be blown from zero.



Andrew

Monday, May 14, 2012 10:23 AM



unless you want UI taskforce attacking, outdated and legacy dialogs suck as the terrible msconfig should be updated.



Xero

Monday, May 14, 2012 11:00 AM



Using chcksum, it would be great if Windows 8 offers the native option to find duplicate files in Windows Explorer ribbon and system-maintenance/disk-cleaning tools. Not only during copy or move files but

also a standalone option to find duplicates and then delete or keep them.

PS Mr. Steven, please provide the Text control in Snipping Tool for Windows 8 and Windows 7 (SP2). Most people use it for taking screenshot and labeling/tagging.



Wasting time with blogs

Monday, May 14, 2012 11:29 AM



About the removed DVD codecs...

Wasn't it once Microsoft's goal to reduce the amount of pre-installed bloatware? And now you need again pre-installed crapola to play a DVD? Just don't forget, we're talking about frigging DVDs here!

I am pretty sure OEMs will load up their crapware to play DVDs.. but you know,THIS ISN'T AN IMPROVEMENT compared to Win7! What's really retarded is that WMP lost the ability to play DVDs even if the codecs are installed (just why?). So even "good" OEMs can't just load up the codecs, no they are basically forced to shovel a craplet player on the PC.

Speaking about schizophrenic company messages:

signature.microsoft.com

"Many new PCs come filled with lots of trialware and sample software that slows your computer down—removing all that is a pain, so we do it for you! Every PC the Microsoft Store sells is put on a software diet and performance is tuned to run the best it can. We call this process Microsoft Signature."

And another one:

signature.microsoft.com/video.aspx

Hear what the guy with the orange sweater is saying (20 seconds into the video).



Newsoft

Monday, May 14, 2012 11:55 AM



@Steven Sinofsky

Hi Mr Sinofsky.

In windows 8 metro style we see only flat objects.it will be good if exist 3D objects ond photos.

Like this:

link1: <u>uploadkon.ir/.../3dea90f978116087351b600abcd4e4b2.rar</u>

link2: www.up.98ia.com/.../b0u3w565stsujtdwvk51.rar

link3: faupload.com/.../Windows8-3D-Metro.rar



byd

Monday, May 14, 2012 1:12 PM



goodstuff Team! new distribution idea: sell windows 8 preloaded into thumb/flash drives too, like the one given out during the developer preview. Have this across regions globally (allow super active resellers too in those regions), allowing easy acess and speedy adaptions, some regions in world have slow internt and downloading large files is not recomended and painful, some regions dont have good credit cards populations partically emerging markets like Africa, Asia, South America etc, so better to sell them boottable flash/thumb drives to upgrade, since DVD is no longer the way to distribute sofware or media.



Windows 888

Tuesday, May 15, 2012 6:02 AM

#

Windows 8 Best 30

- 1. Interactive tiles
- 2. Task Manager
- 3. Native support of ISO and VHD image
- 4. Hardware requests are no longer
- 5. Airplane mode
- 6. The strengthening of measures to SkyDrive
- 7. Windows Store
- 8. Screen lock to the interactive
- 9. Screen Division function
- 10. Touch keyboard of a split design
- 11. Strengthen the application
- 12. It became less abrupt forced reboot
- 13. Unification of the various informationImproved support for
- 14. 3G
- 15. Built-in anti-virus
- 16. Pictures password feature
- 17. Start button no longer have Windows Search front
- 18. Windows To Go
- 19. Secure boot
- 20. Improvement of Windows Explorer
- 21. Easy to reinstall the PC
- 22. Thumbnail preview feature
- 23. Metro Group
- 24. Windows version of Kinect
- 25. The AppLocker
- 26. Initialization of the PC easier
- 27. The improvement of the file copy
- 28. For faster boot
- 29. USB3 support W sorting
- 30. Lovely wallpaper

Windows 8 to feature 10

- 1. Return the Start button
- 2. I want to support Blu-ray
- 3. One-click Sharing optical drive you
- 4. After you drag files to the taskbar icon you want open the app

- 5. Virtual desktop (still no?)
- 6. Want easy development languages such as VB (... NET on the eve of long)
- 7. Font management software
- 8.2 Windows Explorer pane
- 9.Tutorial
- 10. Shut down button



<u>pmbAustin</u>

Tuesday, May 15, 2012 2:30 PM



"PS Mr. Steven, please provide the Text control in Snipping Tool for Windows 8 and Windows 7 (SP2). Most people use it for taking screenshot and labeling/tagging."

I just want to second this, even though it's completely off topic.

The Snipping Tool is one of the most used tools in my office... and it would be so easy to make better. Adding a text tool, a rectangle (outline and filled) and elipse (outline and filled) tool ... which can be constrained to squaer/circle by holding down ctrl or something... would make it amazingly useful.

It would also be nice if it could be enhanced to allow capturing the mouse (or not), and things like drop-down menus or tool-tips (or not), but that might be asking too much. Still, this is an amazingly useful utility and I don't feel it's gotten any attention since its initial release.



<u>pmbAustin</u>

Tuesday, May 15, 2012 2:36 PM



As for the list of "Most desired features in Windows 8 that aren't there" ... one-click sharing of optical drives is a MUST. This MUST be easy. With ultrabooks taking over, and with the sometimes NEED to have an optical disk loaded, making it super easy to share your old desktops optical drive and mount it as if it were native on your ultra-book (or tablet) would be a serious winner.

And I still want virtual desktops... whatever happened to TopDesk, anyway?

And "Play To..." needs to be easier to use. Like Air-Play.

And there needs to be some solution for multi-monitor folks to be able to areo-snap with a mouse (currently can only do it with keyboard), and to be able to easily hit the charms corners (upper and lower right corners) with the mouse. Right now it's almost impossible.



JimboC

Tuesday, May 15, 2012 3:58 PM



@Kiran Bangalore:

I wanted to ask would the idle time online scan of the file system run if the CPU is at 100% usage even when the computer is idle?

One of my Windows 7 PCs spends all of its time with its CPU at 100% usage dedicated to Stanford University's Folding@Home project. The CPU in question is a 4.7 GHz overclocked Intel Core i7 2600K. All 8 threads are at maximum usage.

My security software does perform background scans of the system. The Folding client detects if a program needs to consume CPU time and "backs off" when appropriate. E.g. if program A wishes to use 20% of the CPU time, the Folding client will then only use 80% of the CPU time until program A has

completed what it was to process. The Folding client then automatically returns to 100% CPU usage.

The Folding client also automatically does the above to accommodate the processing needs of the 2 GPU folding clients that this PC also runs (they each need about 5% of the CPU i.e. 10% total). The GPUs are 2x Nvidia Geforce GTX 580.

The only downtime the PC experiences are when I manually run chkdsk every 2 months or when an automatically installed Windows Update requires a restart (I use the idle time defragmentation feature of Raxco PerfectDisk Professional 12.5 to keep the PC fragmentation free). I use a reminder in my Hotmail calendar to tell me when I should run chkdsk.

Not having to manually run chkdsk any longer with Windows 8 would be awesome and I would buy Windows 8 just for that reason. This will also benefit my other 2 PCs. There are many others features of Windows 8 that I like too.

I would appreciate if anyone could provide some clarification if the background maintenance tasks would run if the CPU is at 100% usage.

Thanks for your time.



reinobasyo

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@Microsoft Windows Team

Under the present circumstances, I will fail in the touch which touched Windows 8 although iPad, Android, and Windows 8 and each OS for tablets were touched certainly probably.

First, I raise some as the reason.

Tile UI made for tablets first of all is not refined at all.

iOS is an interface also with the first intuitive user to use. What kind of thing can it do first at sight?

It is intelligible arrangement only by seeing a screen.

Although an Android tablet is not refined like iOS, either

Since it was made aiming at the intuitive screen design of iOS, it is the similar interface.

as [disregarded / however, / the opinion of the user who tile-interfaces / of Windows 8 / and uses]

The user interface for the same tablets as Windows Phone which one made (following UI)

since it made, I would try to like "to use" -- the design which cannot deny a feeling of a steamroller of Microsft.

Because a desktop unites with tablet UI as something to say of Microsoft and it also has the compatibility of application

Although it will be recognition of being satisfactory, to put it bluntly, the employee of Microsoft is so user-unfriendly that he can regard iPad and an Android tablet as not touching at all.

When he recommends to tablet beginners, they are iPad, an Android tablet, and Windows8 tablet.

If he is asked which is recommended, I will recommend iPad rightly.

To put it bluntly, although WIndows8 is easy-to-use also in a compliment, it does not become precocious.

It is because iPad has adopted very intelligible UI which tablet beginners can also use at sight.

And IT administrator of a company cannot but become prudent in introduction of a new thing as a following reason.

Probably, there are few merits which introduce Windows8 [new] here in the place with which a large majority of company made the shift to Windows 7 from WIndows XP finish.

Windows7 is the same desktop UI as the conventional OS.

since it is made, a support care of the people using the conventional XP is also unnecessary -- easily It seems that shift progressed.

However, WIndows 8 is even if there is compatibility of application since completely new UI is used.

To the extent that the change to Windows 7 from Windows XP is impossible and it is equal to teaching all from 1

Troublesome support is needed.

Windows8 will be rightly skipped by saying.

Except desktop operation, operation with a mouse hardly gives Windows 8 to the last for the design optimized on the touch panel by the design for tablets.

As for a desktop user, in order to make OS easy-to-use specially, a touch panel and touch operation separately

It is necessary to carry out additional introduction of the possible interface separately.

By the way, does it know that there was an OS steamrollered like Windows8 just recently? It is WIndows Vista.

Since a customer's request and an opinion were hardly reflected but released Windows Vista, it hardly spreads.

It had to stop having to release Windows 7 which reflected a user's opinion after all.

WIndows8 has not made a mistake of Windows Vista to teachings at all.

In my idea, I think that what Microsoft aims at is wrong first.

Since it does not have tablet-oriented OS, although it turns out that it is necessary to release tablet-oriented OS in a hurry

tile UI new to people who are used to desktop UI to Kon in order to release in a hurry -- forcibly

The optimal design for operating a Windows desktop by a tablet rather than pushing by steamroller You should aim.

First of all, it should improve not unnatural tablet correspondence like Windows 7 but a Windows desktop in a user friendly manner by a tablet as it is going in the direction with which Apple unites Mac OS and iOS.

For example, even though it adopts tile UI, I think that the direction which unites tile UI with a WIndows desktop and it makes permeate it gradually first of all is the best.