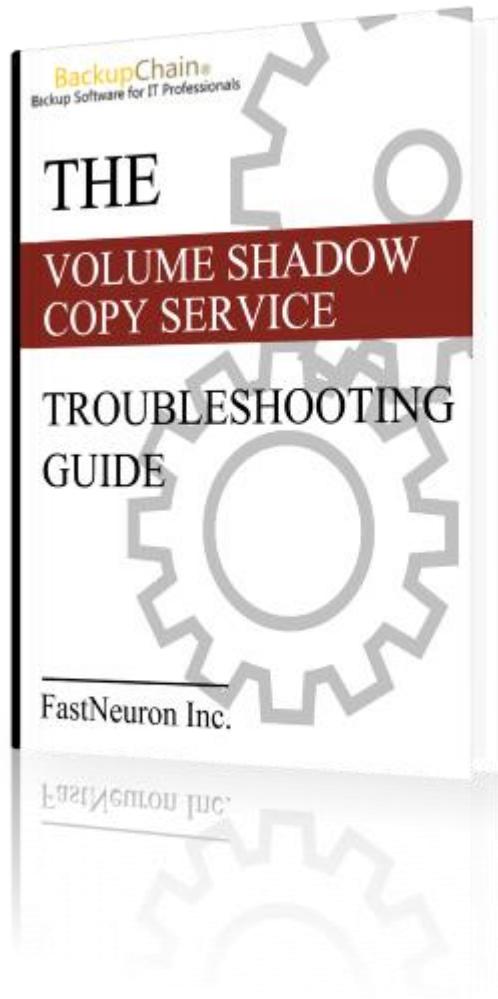


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BackupChain®

Volume Shadow Copy Service (VSS) Troubleshooting Guide

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How to Fix Volume Shadow Copy Service: 11 Strategies

[BackupChain](#) contains a Volume Shadow Copy Service test feature to test the VSS function on your drive C:. Simply hold Ctrl and press T once in order to run a test. Note: it may take several minutes to complete.

The First Thing to Do

Before trying anything else, check Windows Event Viewer logs and several sub-logs, as shown [here](#).

Alternatively, download our [VssDiag](#) tool which helps you find and fix VSS errors.

When using VssDiag, be sure to enter the exact date and time AM/PM when the backup application reported the error (see log files if necessary).

VSS Repair Strategy #1 of 11

Reboot. For some reason, servers that haven't been rebooted in a while cause VSS to malfunction. As all Microsoft veterans know, you need to reboot regularly as a preventive and cleanup measure for your system. Rebooting will eliminate VSS problems caused by transient VSS errors.

VSS Repair Strategy #2 of 11

Open **vssadmin** from the command line (run cmd as **administrator**).

Enter **vssadmin delete shadows /all** to clean up any dead VSS snapshots. Some defect systems accumulate hundreds of VSS snapshots that persist in the system and cause Windows to become unresponsive.

Enter **vssadmin list writers** and check for errors. If you receive any errors for one VSS writer, you may need to fix that particular VSS writer. It is common to receive writer errors caused by Microsoft's Virtual Server 2005 VSS writer.

If you see a VSS writer error, try the following:

August 11, 2014

Restart the services: **COM+ System Application Service, Distributed Transaction Coordinator Service, and Volume Shadow Copy Service**

and also restart the affected VSS writer service, for example Virtual Server 2005 VSS writer or Hyper-V VSS writer.

Check the Event Viewer for any additional error information logged by that VSS writer.

Run again **vssadmin list writers** to check if the above resolved the problem. If it didn't follow with the next strategy below:

VSS Repair Strategy #3 of 11

Uninstall all backup utilities on your computer, including Windows Backup if it's installed. You don't need to uninstall BackupChain because BackupChain doesn't contain or install any VSS writers; however, we have seen VSS writers of other backup solution developers cause system instability and errors.

After all other backup tools have been uninstalled, open the Registry Editor (regedit) as administrator and check the following branch:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\VSS\Providers

Underneath that key you should only find Microsoft Software Shadow Copy Provider 1.0 and no other VSS writer. If you do find another, it may be a residue registry entry of a previous software installation. You can save the entry by exporting the entire registry to a file (right click and select Export) and then it's safe to delete the entire branch entry underneath

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\VSS\Provider.

Then reboot and try again running **vssadmin list writers** to confirm the problem has been resolved.

Note: If you are using specialized attached storage that requires its own VSS provider then you'll be seeing a driver reference in the above registry key. Please leave those kinds of entries intact. In addition, on Windows Server 2012 you may find additional system related VSS providers there, which should also remain referenced.

A Note to Ex-Acronis Users (or Other Backup Tools)

The following article describes a common error caused by "Acronis" software and other backup tools that install VSS providers: [The error returned from CoCreateInstance on class with CLSID {5fc845eb-f299-40f0-9725-34045f7ea8ba} and Name HWPRV is \[0x80004002, No such interface supported](#)

VSS Repair Strategy #4 of 11

On some systems, the command **vssadmin delete shadows** isn't available. In Windows XP that's okay because VSS snapshots can't be persistent on XP (a reboot will get rid of them); however, on Vista you need to delete old shadows using:

```
vssadmin Resize ShadowStorage /For=C: /On=C: /MaxSize=300MB
```

300MB is usually the smallest amount you can specify and will effectively delete any existing VSS snapshots on your system.

If you don't get any VSS writer errors when using **vssadmin list writers** but the system isn't able to create a new VSS snapshot (and you have deleted all existing snapshots), then you may have to actually increase the max shadow storage size on your system. Use the previous command with a greater number, such as 10GB:

```
vssadmin Resize ShadowStorage /For=C: /On=C: /MaxSize=10GB
```

Note that it is also possible to allocate shadow copy storage space on a different drive, as long as it's local:

```
vssadmin Resize ShadowStorage /For=C: /On=X: /MaxSize=200GB
```

Also check this article discussing the VSS error "[Cannot find anymore diff area candidates](#)" for instructions on how to set the diff area using the Windows user interface on Server operating systems.

VSS Repair Strategy #5

You can try to re-register all VSS and COM+ components by running the following commands from the command prompt as administrator:

These instructions for 32-bit **AND** 64-bit systems:

```
cd /d %windir%\system32  
Net stop vss  
Net stop swprv  
regsvr32 ole32.dll  
regsvr32 vss_ps.dll
```

August 11, 2014

```
Vssvc /Register
regsvr32 /i swprv.dll
regsvr32 /i eventcls.dll
regsvr32 es.dll
regsvr32 stdprov.dll
regsvr32 vssui.dll
regsvr32 msxml.dll
regsvr32 msxml3.dll
regsvr32 msxml4.dll
regsvr32 Vssapi.dll
regsvr32 Vssui.dll

net start vss
net start swprv
```

Execute these instructions only on 64-bit systems *in addition* to the above:

```
Net stop vss
Net stop swprv
regsvr32.exe /i %windir%\system32\eventcls.dll
regsvr32.exe /i %windir%\system32\swprv.dll
regsvr32.exe %windir%\system32\vssui.dll
regsvr32.exe %windir%\SysWOW64\vss_ps.dll
regsvr32.exe %windir%\SysWOW64\msxml.dll
regsvr32.exe %windir%\SysWOW64\msxml2.dll
regsvr32.exe %windir%\SysWOW64\msxml3.dll
regsvr32.exe %windir%\SysWOW64\msxml4.dll
regsvr32.exe %windir%\SysWOW64\ole32.dll
regsvr32.exe %windir%\SysWOW64\oleaut32.dll
regsvr32.exe %windir%\SysWOW64\es.dll
regsvr32.exe %windir%\SysWOW64\comsvcs.dll
vssvc /register
net start swprv
net start vss

net stop winmgmt
regsvr32 wmiutils.dll
net start winmgmt
```

VSS Repair Strategy #6 of 11

If the PC or server you are using is a virtual machine host, you need to install the latest VMware Tools (for VMware), Virtual Machine Additions (Virtual Server), or Hyper-V Integration Services (for Hyper-V and Windows Server 2008) on *each virtual machine*. Try updating them if you have them installed already. Outdated integration services can cause various VSS errors.

VSS Repair Strategy #7 of 11

Your computer may have a corrupt COM+ subscription information. Open the registry editor (regedit) and navigate to:

```
HKLM\Software\Microsoft\EventSystem\{26c409cc-ae86-11d1-b616-00805fc79216}
```

Then delete the Subscriptions key and reboot the machine.

A subsequent call in the command prompt should show no more errors: vssadmin list writers

This VSS repair strategy appears to work well when the System Writer is reporting an error. The Event Viewer may be reporting this or a similar error:

```
Writer Class Id: {e8132975-6f93-4464-a53e-1050253ae220}
```

```
Writer Name: System Writer
```

```
Writer Instance ID: {34162f4c-59ff-468e-848d-cb4b3d8dd7dc}
```

VSS Repair Strategy #8

Remove or uninstall all backup tools on your computer. BackupChain doesn't need to be removed because it doesn't add a VSS writer to your system. Other products, however, do add a VSS writer which may be causing the problem. You may receive this error:

```
Volume Shadow Copy Service error: A critical component required by the Volume Shadow Copy service is not registered. This might happened if an error occurred during Windows setup or during installation of a Shadow Copy provider. The error returned from CoCreateInstance on class with CLSID {faf53cc4-bd73-4e36-83f1-2b23f46e513e} and Name VSSEvent is [0x80040154]
```

Several users reported that after uninstalling Acronis this error message disappeared.

VSS Repair Strategy #9

Try uninstalling the virtualization tool you're using (Microsoft Virtual Server, Hyper-V, VMware, etc.) one-by-one, then run BackupChain's VSS test to see if the problem persists. Try rebooting after uninstalling it before running the test. On some machines, this strategy worked when everything else failed.

Once you get VSS working again properly, install the virtualization platform again from scratch and retest VSS.

VSS Repair Strategy #10

Install the latest Service Packs and Updates through Windows Update.

Check [Microsoft's Support](#) for hot fixes and other updates to repair VSS.

VSS Repair Strategy #11 (VSS Error Code 800423f3)

If the VSS error code 0x800423f3 is reported, the reason is a corrupt state of WMI (wmiutils.dll). This may happen if a registry cleaner was used or a third-party application was uninstalled incorrectly. What you need to do is re-register wmiutils.dll and then restart the WMI service.

In the command prompt, execute the following three lines (note that stopping the WMI service does NOT stop VMs, it only stops the management service):

```
net stop winmgmt
regsvr32 wmiutils.dll
net start winmgmt
```

After that you should start up the Hyper-V Management Service again if needed.

Another cause for this error: You may need to update your Hyper-V virtual machine integration services inside of each VM when you come across this error. See

[http://technet.microsoft.com/en-us/library/dd582376\(v=WS.10\).aspx](http://technet.microsoft.com/en-us/library/dd582376(v=WS.10).aspx). Check the vmguest.iso date / time you have in your system folder. You may have different versions of the Hyper-V Integration Services CD on your system. There have been bug reports indicating that Hyper-V uses the wrong ISO file when the VM Action menu is used to install the Integration Services. Try attaching the ISO manually and use the latest vmguest.iso in your system folder.

August 11, 2014

On Windows Server 2008 (not R2), also check this hotfix:

<http://support.microsoft.com/kb/971394>