

Troubleshooting the Volume Shadow Copy Service

Backup4all uses the Volume Shadow Copy Service (VSS) to back up open/locked files. Under certain circumstances the VSS service fails to run properly and Backup4all will not be able to backup some locked files (log file will show “*The process cannot access the file because another process has locked a portion of the file.*” or “*The process cannot access the file because it is being used by another process*”).

In case of such errors please read carefully and follow the solutions given below to try and fix the VSS service problem.

1. Requirements for open files backup

These are the requirements for backing up files in use:

- you have Backup4all version 3 (or higher) installed
- user running Backup4all needs administrator access rights to copy open files
- you are using Windows XP or Windows 2003 Server
- the files reside on local NTFS partitions (will not work on shared network drives)
- the Volume Shadow Copy service is running

Here is how you can verify that the VSC service (and others required by it) is running properly:

- Go to the Control Panel (**Start -> Control Panel**)
- Double-click the **Administrative Tools** icon
- Double-click the **Services** icon
- Scroll down to the item **COM+ Event System** and double-click the line
- Change the startup type to **Manual**, click **Start** to check if it can start properly, then click OK
- Scroll down to the item **COM+ System Application** and double-click the line
- Change the startup type to **Manual**, click **Start** to check if it can start properly, then click OK
- Scroll down to the item **Remote Procedure Call (RPC)** and double-click the line
- Change the startup type to **Automatic**, click **Start** to check if it can start properly, then click OK
- Scroll down to the item **System Event Notification** and double-click the line
- Change the startup type to **Automatic**, click **Start** to check if it can start properly, then click OK
- Scroll to the item **MS Software Shadow Copy Provider** and double-click the line
- Change the startup type to **Automatic**, click **Start** to check if it can start properly, then click OK
- Scroll down to the item **Volume Shadow Copy** and double-click the line
- Change the startup type to **Manual** or **Automatic**, click **Start** to check if it can start properly, then click OK
- Reboot and run your the backup job again to see if open files are backed up correctly

2. Latest Updates

Make sure that you are using the latest version of Backup4all. You can download and install it from: <http://www.backup4all.com/download/setup/b4asetup.exe>

You can install it on top of the version you already use, no need to uninstall.

Check to see if you have the latest Windows updates & patches installed by clicking on **Start->Windows Update** or directly by visiting <http://windowsupdate.microsoft.com>

Note that if you are using Windows 2003 there is a VSS update package available that is

necessary to be installed in order to have open files backup support on Windows 2003:
<http://support.microsoft.com/kb/833167>

3. Re-register VSC writers and providers

Go to the command prompt (click Start->Run type **cmd** and press OK), and type the following:
vssadmin list writers

This should output a list of writers and their status. They should all be reported as **stable** (you may need to scroll up to see the entire list). If some aren't listed as stable then there is a problem with your Windows installation and you will need to re-register the VSC dll's.

Now type the following command: **vssadmin list providers**

It should list at least one item (MS Software Shadow Copy provider). If none are listed then there is a problem with your Windows installation and you need to re-register the VSC providers.

To re-register VSC dll's and providers, follow these instructions:

CD to Windows\System32 and run the following commands (sequential):

```
Net stop vss
Net stop swprv
regsvr32 ole32.dll
regsvr32 oleaut32.dll
regsvr32 vss_ps.dll
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
```

Reboot your computer and type the commands list writers/list providers again - if everything is ok all your writers/providers should be displayed w/o errors. Run your backup job again to see if the open files are backed up correctly.

4. VSS error, event ID 5013, 12302

In some situations, installing Visio 2003 will corrupt the Content Indexing catalogs and you'll receive a 5013 event ID error. If this is the case you should see the following entry in your **Event Viewer>Application log** (to see the Application log go to **Start->Settings->Control Panel->Administrative Tools->Event Viewer** and select **Application** – errors will have a red icon in front)

Event Type: Error
Event Source: VSS
Event Category: None

VSS troubleshooting – Copyright © 2002-2006 Softland – <http://www.backup4all.com>

Event ID: 5013
Date: 9/13/2006
Time: 10:38:14 PM
User: N/A
Computer: *ComputerName*
Description: Volume Shadow Copy Service error: Shadow Copy writer ContentIndexingService called routine RegQueryValueExW which failed with status 0x80070002 (converted to 0x800423f4). For more information, see Help and Support Center at <http://go.microsoft.com/fwlink/events.asp>.
Data: 0000: 57 53 48 43 4f 4d 4e 43 WSHCOMNC 0008: 32 32 39 32 00 00 00 00 2292....
0010: 57 53 48 43 49 43 00 00 WSHCIC.. 0018: 32 38 37 00 00 00 00 00 287.....

This problem occurs because the **Location** registry entry in the following registry subkey is incorrect or missing:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlset\Control\ContentIndex\Catalogs\visio

Warning: Serious problems might occur if you modify the registry incorrectly by using Registry Editor or by using another method. These problems might require that you reinstall your operating system. Softland cannot guarantee that these problems can be solved. Modify the registry at your own risk and as a recommendation you should backup your registry (go to Start->Run and type in regedit – in the Registry Editor select **File->Export** and choose a location for your registry backup)

To solve this:

- Click **Start->Run** and type **regedit**
- Browse to the key:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlset\Control\ContentIndex\Catalogs\visio
- you can either delete this entire key, or modify the value called **Location** to point to a valid directory (for example on our machine it shows: **C:\Documents and Settings\All Users\Application Data\Microsoft\VISIO**)
- Exit the registry editor (**File->Exit**), restart your computer and run the backup job again.

If that doesn't work you may want to try disabling the **Indexing Service** in Windows. To do this:

- In the **Start** menu, choose **Run**
- Type **services.msc** and press **Enter**
- Scroll-down to **Indexing Service** and double-click it
- If the service status is **Running**, then stop it by pressing the **Stop** button.
- To make sure this service doesn't run again, under **Startup Type:**, choose **Disabled**
- Restart your computer and run the backup job again.

If in your **Event Viewer>Application log** (to see the Application log go to Start->Settings->Control Panel->Administrative Tools->Event Viewer and select Application – errors will have a red icon in front) you see an error with the event ID 12302:

Event Type: Error
Event Source: VSS
Event Category: None
Event ID: 12302
Date: 9/13/2006

VSS troubleshooting – Copyright © 2002-2006 Softland – <http://www.backup4all.com>

Time: 10:38:14 PM

User: N/A

Computer: *ComputerName*

Description: Volume Shadow Copy Service error: An internal inconsistency was detected in trying to contact shadow copy service writers. Please check to see that the Event Service and Volume Shadow Copy Service are operating properly. For more information, see Help and Support Center at <http://go.microsoft.com/fwlink/events.asp>.

This problem occurs because the **Location** registry entry in the following registry subkey is incorrect or missing:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlset\Control\ContentIndex\Catalogs\visio

To solve this follow the instructions from this Microsoft Knowledge Base article:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;907574&sd=rss&spid=3223>

If you see other error event ids in the Application log (event id 20, 6008, 2001, 2003, 210, 215) also check this Knowledge base article: <http://support.microsoft.com/?id=830575>

5. Repairing a damaged COM+ catalog

The COM+ catalog is a catalog of all the available COM+ applications, classes and attributes on a given system. If the catalog becomes damaged, programs that rely on COM+ won't work properly. One example of such a service that depends on COM+ is the Volume Shadow Copy Service used by Backup4all.

To repair a damaged COM+ catalog, do the following:

1. Rename the **%WinDir%\System32\Clbcatq.dll** file to **%WinDir%\System32\~Clbcatq.dll**. Make sure that you include the tilde (~) at the start of the file name
2. Restart the computer
3. Start Registry Editor (Regedt32.exe)
4. Locate and delete the following key in the registry:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\COM3
5. At a command prompt, type **cd %windir%**, and then press ENTER
6. At a command prompt, type **rmdir /s Registration**, and then press ENTER. This is the location folder of the registration database
7. Click the **Start** button, point to **Settings**, and then click **Control Panel**
8. Double-click **Add/Remove Programs**, and then click **Add/Remove Windows Components**
9. Click **Next** to go through the reinstallation process, to reinstall COM+.
10. If IIS is installed on the computer, IIS creates several COM+ applications. These applications will now be missing. To re-create these applications, run the following command at a command prompt: **rundll32 %windir%\system32\inetsrv\wamreg.dll, CreateIISPackage**

If Windows File Protection blocks the renaming and deletion, restart the computer in Safe mode, and follow these steps again.

For more information you can relate to this Microsoft support knowledge base article:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;315296>