

**Key Words:**

VSS Troubleshooting Guide – VSS\_E\_BAD\_STATE

**Situation:**

How to trouble shoot VSS errors

**Solution:**

This indicates that Microsoft's VSS framework and/or perhaps some of the VSS writers are in a bad state. You need to clean things up before your backups will start working.

First, stop and delete any existing backup jobs you have in ShadowProtect.

Next, make sure that the necessary services are enabled. We've had users in the past that experienced VSS issues simply because they took it upon themselves to disable critical VSS services.

Run services.msc and:

Make sure that the "MS Software Shadow Copy Provider" service's Startup type is set to Manual.

Make sure that the "Volume Shadow Copy" service's Start-up type is set to Manual.

Make sure that the "ShadowProtect Service" is set to Automatic.

Make sure that the "StorageCraft Shadow Copy Provider" is set to Automatic.

Next, using the Hidden Devices KB articles delete all "Generic volume shadow copies" under Storage Volume Shadow Copies.

Next, run cmd.exe and from the command line run the following command:

```
vssadmin list writers
```

This will show you the state of any VSS-aware applications. If any of them are in a bad state (a state other than Stable) then you will need to manually reset the writers' states. To reset VSS writer states, run these commands on the command line:

```
net stop vss
cd %SystemRoot%\system32
regsvr32 ole32.dll
regsvr32 vss_ps.dll
Vssvc /Register
regsvr32 /i swprv.dll
regsvr32 /i eventcls.dll
regsvr32 es.dll
regsvr32 stdprov.dll
regsvr32 msxml.dll
regsvr32 msxml2.dll
regsvr32 msxml3.dll
regsvr32 msxml4.dll
```

If you are missing msxml4.dll or msxml4r.dll (they should be in your system32 directory) then you need to run Windows Update and update Explorer. and then re-run the regsvr32 command for these DLLs after they are in your system32 directory

On 2003 server also run this command:

```
regsvr32 vssui.dll
```

Now reboot. After reboot you should run these commands and all states should be good/stable:

```
C:\> vssadmin list writers
```

And this command should show no existing shadow copies:

```
C:\> vssadmin list shadows
```

At this point things should be cleaned up enough for you to start using ShadowProtect. Please let me know if you still have any more issues after you've cleaned up everything. I must also warn you that proper VSS interaction is a very complex affair and many backup products (including, amazingly, Microsoft's own NTBackup.exe) leave various components, especially VSS writers, in bad states, which can cause problems for other backup products. So if you are using any other backup products, it's very possible that they are messing up the states of various VSS components.

## **Related Knowledgebase articles**