

Use the WinDBG debugger to fix the blue screen error

The WinDBG utility from Microsoft will help you troubleshoot and diagnose the problem, then lead you to the root cause to fix the blue screen error.

Network Administration - Have you ever wondered how to get more information from the blue screen of death when this error appears and give you a *Stop: 0 × 00000000 message* , before it hangs . This error message shows you a fairly serious operating system error that may be caused by some problems.

The Microsoft WinDBG utility will help you troubleshoot and diagnose the problem, then lead you to the root cause so you can fix the error.

Steps in a nutshell

1. Create and capture *memory dump* related to the blue screen error you are trying to fix.
2. Install, configure WinDBG and the path to the right Symbols folder.
3. Use WinDBG to debug and analyze the screen dump, then find the root cause of the problem.

Create memory dump

Please note that, if you have not had a blue screen error, then you will not be able to capture memory dump.

1. Click **WinKey + Pause** .
2. Click **Advanced** , under **Start Up and Recovery** , select **Settings** .
3. Cancel **Automatically Restart**
4. Click the drop-down arrow under **Write Debugging Information**.
5. Select **Small Memory Dump (64 KB)** and make sure the output is *% SystemRoot% Minidump* .
6. Restart the computer, this will cause the system to fail and the blue screen appears, then create a Minidump.

Location of Minidump files can be found here:

C: \WINDOWS\Minidump\Mini000000-01.dmp

To download and install Windows troubleshooting tools for your current version of Windows, visit the Microsoft tools website here.

Follow the prompts, when installing, take note of the Symbols location if you accept the default settings. We will create a directory and then direct the installation to that folder because we use WinDBG for two operating systems XP and Vista and want them to be separated and sorted separately.

Readers can refer to the Microsoft article here to learn how to read the memory dump files that Windows created for troubleshooting processes.

Set up and use WinDBG

1. Click **Start | All Programs | Debugging Tools for Windows** , and open **WinDBG** . Select **File | Symbol file path** and change it to suit your situation, then copy and paste it into the dialog box, as shown in Figure A, click **OK** . We suggest:

*SRV * c: symbols * http://msdl.microsoft.com/download/symbols*

Or if you are using other Symbol:

*SRV * c: Vistasymbols * http://msdl.microsoft.com/download/symbols*

*SRV * c: XPsymbols * http://msdl.microsoft.com/download/symbols*

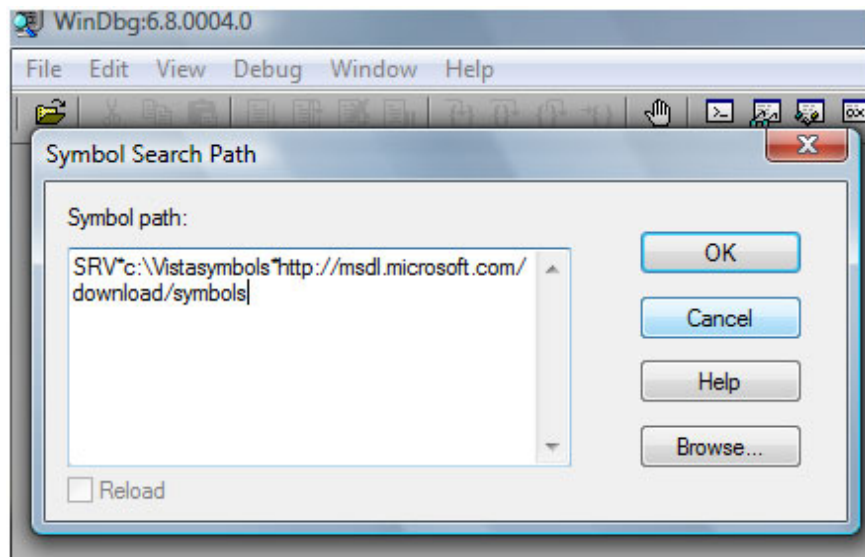


Figure A: Symbol path

2. Close the workspace and save the workspace information, as shown in Figure B.

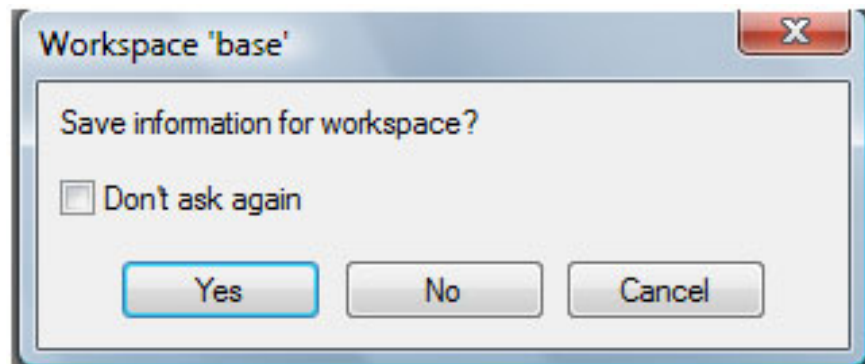


Figure B: Workspace


```
Command - Dump D:\Dump\Mini071709-01.dmp - WinDbg 6.8.0004.0
FOLLOWUP_IP:
fldevice+c5c5
b4a9f5c5 ??      ???
SYMBOL_STACK_INDEX: 2
SYMBOL_NAME: fldevice+c5c5
FOLLOWUP_NAME: MachineOwner
MODULE_NAME: fldevice
IMAGE_NAME: fldevice.sys
DEBUG_FLR_IMAGE_TIMESTAMP: 3aef5d08
FAILURE_BUCKET_ID: 0x44_fldevice+c5c5
BUCKET_ID: 0x44_fldevice+c5c5
Followup: MachineOwner
-----
1: kd>
```

Figure E: Stack trace

Conclude

The issue of a blue screen error is caused by the dial-up software installed from the USB modem. However, uninstalling this software will not solve the problem.

The problem here can be solved by using the WinDBG tool to debug and analyze the *memory dump* file. The fix is to rename *C: WindowsSystemfldevice.sys* to *C: WindowsSystemfldevice.sys.old*. The cause of the error here is that Windows still refers to this file even though the software has been uninstalled.

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