SEPTEMBER

## B.S.O.D - Blue Screen Of Death

The **BSOD** is an error which many of us have heard of. Some people have even been so unfortunate as to experience 1 or 2 already. These types of errors are classified as critical system errors, which can cause the system to shut down. This is done to prevent further damage.

Because these types of errors are often associated with hardware failure (ie. Mainboard failure, Memory Failure, Power Supply Failure, etc), they have gained a reputation as 'one of those errors that you don't want to get'.

All that aside, the BSOD error isn't all that it is cracked up to be, and can often be remedied without having to reformat your drive or replace your computer like so many people think.

First of all, the BSOD shouldn't be scary. The BSOD screen is full of valuable information that can not only lead you in the right direction, but sometimes tell you flat out what the problem is.

Typically you find a BSOD error in the following format.
0x00000000 (0x00000000, 0x00000000, 0x00000000, 0x00000000)

**On April 20, 1998, Bill Gates famously helped demonstrate the features of the then-upcoming Windows 98 OS in front of a live audience at Comdex -- only to be interrupted mid-demo by the infamous Blue Screen of Death.**

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Each of these numbers is representative of something.

- The first number (outside the brackets) indicates: what kind of error it is
- The second number (1st inside brackets) indicates: the block of memory referenced
- The third number (2nd inside brackets) indicates: IRQL at time of referenece
- The fouth number (3rd inside brackets) indicates: the type of access (0x00000000 indicates reading from memory, and 0x00000001 indicates writing to memory).
- The fifith number (4th inside brackets) indicates: the address of the referenced memory.

The definitions of the actual error code positions are not all that important. What is important though, is the values assigned to each of these positions.

Often times, you won't even notice the BSOD at first. The computer will just continue to restart on its own. This is because the computer is set to do this when a critical non-recoverable error has occurred. To actually see the BSOD, you must first disable the system restart via the startup menu. The startup menu is achieved by pressed F8 repeatedly at startup. Once you have the startup menu on your screen, select "disable automatic restart on system failure".

This will display the BSOD with the error code. Remember to document these numbers.

Perform a google search on the first number (ie. stop code 0x00000000). This will reveal a host of sites that will give you information on what the stop codes mean.

Another great thing that Windows offers is its ability to create memory dump files after a BSOD error. These files are veiwed using a dmpfile viewer such as dumpchk.exe.
Windows Debugging tools are also available at http://www.microsoft.com/whdc/DevTools/Debugging/default.mspx

Dumpchk.exe allows one to view the content of the memory dump. The contents of the memory dump can be a lifesaver in terms of having to reformat your drive or not.

Recently, I repaired a BSOD after reviewing the contents of the dmp file. The dmp file revealed that a certain DLL file was the root of the error. The DLL was from a 3rd party software provider. Simply put, by uninstalling, and then reinstalling the application, the error was fixed.

**Recapping:**

**BSOD** or **B**lue **S**creens **O**f **D**eath errors aren't always a terminal sentence for your computer. Often times, by using the Internet as well as tools available to you, the errors can be fixed.

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