

The RIP is Crashing

Xitron Navigator Technical Note

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Many things can cause a computer or a software program to “crash,” and there is no way that we can cover all of them here. However, this tech note will attempt to address the most common causes of the RIP software crashing (RIP locks up or “disappears” from the screen) and of the Windows operating system crashing (usually ending in a “blue screen” or an automatic restart).

Check the Event Viewer

Windows includes a program called the Event Viewer. It can be found under the Start Button, under Programs group “Administrative Tools.” If there is a problem in your system that can be detected before the actual crash, the event viewer will report the problem. An example of the Event Viewer screen can be seen below.

Date	Time	Source	Category	Event
5/24/99	8:41:18 AM	EventLog	None	6005
5/24/99	8:41:18 AM	EventLog	None	6009
5/21/99	10:31:10 AM	EventLog	None	6006
5/21/99	10:31:10 AM	BROWSER	None	8033
5/21/99	8:39:54 AM	EventLog	None	6005
5/21/99	8:39:54 AM	EventLog	None	6009
5/20/99	4:49:49 PM	EventLog	None	6006
5/20/99	4:49:48 PM	BROWSER	None	8033
5/20/99	8:03:35 AM	EventLog	None	6005
5/20/99	8:03:35 AM	EventLog	None	6009
5/19/99	4:34:57 PM	EventLog	None	6006
5/19/99	8:09:12 AM	EventLog	None	6005
5/19/99	8:09:12 AM	EventLog	None	6009
5/18/99	5:18:43 PM	EventLog	None	6006
5/18/99	5:18:43 PM	BROWSER	None	8033
5/18/99	4:53:39 PM	EventLog	None	6005
5/18/99	4:53:39 PM	EventLog	None	6009
5/18/99	4:51:34 PM	EventLog	None	6006
5/18/99	4:51:33 PM	BROWSER	None	8033

Errors in the Event Viewer will be Preceded by a Red or Yellow Icon. Double clicking on the event will open a window with more information about the error. Before trying the solutions below, it is a good idea to check the event viewer and see if it can give any clues to the cause of the problem.

“The Blue Screen of Death”

The blue screen (the result of a physical RAM dump, named for the blue background of the screen) or a simple automatic reboot of the systems means that the Windows operating system has crashed. If this is happening on your system, check the following items. In most cases, one of them will solve the problem.

Overheating

If your system has been running for some time (a few weeks is more than enough time, or even a couple days in some environments) and has just started crashing, it is possible that it needs a good physical inspection. This will involve removing the cover of the computer and should be done by someone familiar with the inner workings of a computer.

Unplug the computer, remove the computers cover and inspect the components for a buildup of dust. Use canned air to gently blow off any dust that has accumulated. Pay special attention to the memory and processor chips. Often, dust can coat components and prevent them from cooling properly. When they overheat the system will crash.

Make sure that all of the cards and all of the ram chips in the computer are correctly seated. It is particularly important to insure that none of the interface cards are crooked. This can be caused by a incorrect mounting bracket slowly working the card partially out of its slot.

Next, with the cover still off, turn the computer on. (Care should be taken when running the machine with the cover off. Touching internal components could cause severe electrical shock.) With the machine running, check to make sure that all of the cooling fans are functional. Pay special attention to the cooling fan for the processor chip. If any of the fans are defective, have them repaired immediately. Some cases may not have fans installed in all available fan slots, you may want to add a fan.

You may also wish to check the temperature and location of the hard drives. If there is not enough air flow around the hard drives, or if they are placed too close to other sources of heat (say the power supply or another hard drive) they may be overheating and malfunctioning, causing a crash.

Corrupted Page Buffers

The following solution assumes that the system only crashes while the RIP is running or when the RIP software is first started. If this is not the case with your system, skip on to the next section.

On rare occasions, one of the RIP's Page Buffer files can become corrupted. Usually this will result in the RIP software refusing to launch properly (closing down as soon as it starts), or in the RIP crashing when the Page Buffer attempts to image. Under very exceptional circumstances it can cause Windows to lock up or go to blue screen.

To eliminate corrupted page buffers as the possible cause of crashing, it is easiest to eliminate all of the page buffers. This means that any jobs that were in the active or held queues will be deleted and you will have to print them to the RIP again. However, this minor inconvenience is better than having a dysfunctional RIP.

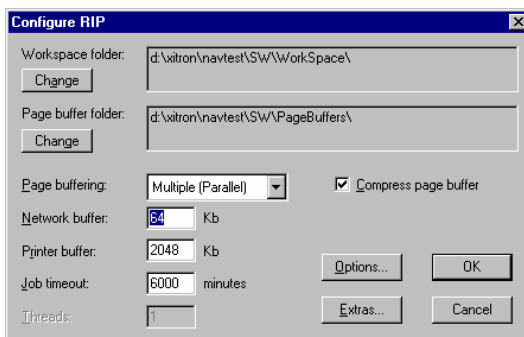
The page buffers (ripped and rasterized files stored by the RIP) are normally kept in a sub directory of the RIP named "Page Buffers." Assuming that the RIP was loaded using defaults the path to the "Page Buffers" directory would be:

C:\Xitron\NavigatorX.XrX\SW\PageBuffers
(where X is the Rip version number)

or

DRIVE LETTER:\LOCATION OF RIP PROGRAM\SW\PAGEBUFFERS

If you cannot locate the Page Buffers folder for your RIP, the directory and path can be found in the RIP's configuration dialog window. Unfortunately, the RIP must be running to check in this location. If you can run the RIP, choose "Configure RIP" from the Xitron RIP pull down menu. The following window will appear:



The path in the second field, titled “Page buffer folder” will be the location of your page buffers.

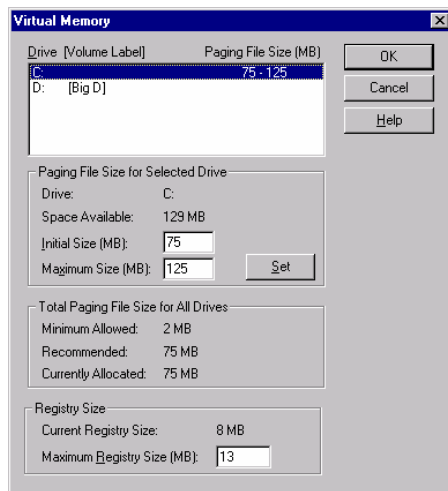
Close the RIP software if it is running, locate and open the Page Buffers folder. Select the entire contents of the Page Buffers folder (files and subfolders) and delete these items. Be very careful not to accidentally delete the Page buffers folder itself, or any other files or folders that are not contained within the Page Buffers folder. If you cannot delete these files, make sure that the RIP is not running. If it is, close the RIP and try to delete the contents of the Page Buffers folder again.

If the Page Buffers were creating the problem, the RIP should run normally after they have been deleted.

Paging File too Small or Scratch Disk Full

Without going too far into detail, Windows requires a portion of hard drive space for storing information that it cannot or does not want to have in RAM (active memory – for lack of a clearer term). This is called a Paging File, or Virtual Memory. This file must be the proper size and must reside on a disk, or disks that have enough capacity (they can not be close to filling up).

You may want to have someone familiar with Windows and its functions perform the following tasks. Begin by determining the total amount of RAM in your system. Next, locate the virtual Memory settings in Windows. These can be found in the System Properties settings located in the Control Panel. Choose the “Performance” tab in the System Properties window and click on the Change button in the “Virtual Memory” section. The virtual memory window looks like the example below.



Highlighting the Drive for your Paging file, adjusting the Initial Size and the Maximum size and using the Set button will allow you to change your Paging file sized. We recommend 1.5 to 2 times the amount of physical RAM in your machine as a good setting. If your Paging file is on a drive that is close to full, you can create a new paging file on another drive and eliminate the original paging file by setting it to zero.

After you have adjusted the Paging File, it would be a good idea to check your RIP’s memory configurations (see the Xitron Technical Note entitled “Memory Configuration”).

Windows Service Packs

Microsoft has made a number of corrections to its Windows operating systems since its initial release. These are distributed as “Service Packs.” Different issues are addressed in each Service Pack, but they are cumulative. That is, problems fixed in one Service Pack are also fixed when a later version Service Pack is loaded. For Windows NT 4.0 users the most current Service Pack, as of this writing, is Service Pack 6a.

For Windows 2000 Server or Professional or XP we recommend using the most current updates available from Windows Update.

A Bad PostScript File

On very rare occasions the RIP can lock or close down, and the operating system can even be driven to a blue screen by a bad PostScript file. This is very improbable, however, before going in to a number of other, much more complex causes for crashing, it would be a good idea to eliminate this possibility. First, make sure that you are not trying to RIP the same PostScript file every time you test and crash the RIP. Try sending files from other computers. Use the Print File selection from the Xitron RIP menu to locate a test file. These can be found in the Jobs sub-directory of the RIP.

Be methodical, eliminating possible causes by creating test that isolate different machines and files. Step through different tests slowly, one at a time. Try an determine if the problem is caused by a specific file, a specific machine or a specific action (say, printing from the Mac. but not the IBM and not when ripping a sample file from the Jobs directory).

If it is a particular file - try printing it again, look for bad graphics or placed EPS files that may be causing the problem. Remove graphic files one at a time and print the file again. If it is printing doesn't work from a specific machine, compare it to a machine that is working, check the LaserWriter version, INITs, Software versions, etc. In many cases an unnoticed different in the configuration of the two machines can be the clue to the problem.