

Recovering Data After a Blackout

Hetman Software

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Abstract

1 Introduction

Power surges, blackouts and brownouts caused many troubles to computer users. Let's face it: not every computer in the world is equipped with a battery pack or a UPS. The consequences of a power surge or blackout can be severe for your information. Let's see what can happen to your file if the power is suddenly lost.

2 Sudden Power Loss

When your computer suddenly loses power, any write operation that was in progress is terminated midway. Any unsaved data such as currently opened Word documents, Excel spreadsheets, emails (*.pst, *.email ...) or databases may be (and most probably will be) lost.

Since Windows is a multi-tasking OS, there are chances that multiple worker threads will be writing onto the disk at the same time, meaning that you can lose more than one file if your computer suddenly lost power.

2.1 What's The Worst That Could Happen

Blackouts are often accompanied by power surges, especially at the moment the power comes back. For this reason, it's important to physically unplug your computers (and any unprotected electronic equipment for that matters) from power outlets. If you don't do that, you are risking your electronics to suffer from a power surge when the power comes back. A power surge can literally fry your computer's motherboard. In worst-case scenario, it may also affect your hard drives (although the chance of it is fairly low). As a result, from data recover standpoint, you have to worry more about the sudden loss of power rather than that power coming back. (Of course, if you don't like your computer's motherboard well-done, you should still pull the plug).

Loss of data caused by power outages mostly lies in the area of logical corruption, which means you can use one of the many software-based data recovery tools to fix the problem. Depending on what types of files you are missing, you can chose one or another such tool.

2.2 Mitigating the Damage

The first thing you should do once your system is up and running is checking if your system works and what is actually missing. Does your system boot fine? Any warnings during the boot process? Did Windows run a disk repair tool while booting? More often than not, the system will recover from a blackout unaffected. However, on those rare occasions where you have an unbootable system drive or inaccessible secondary storage devices, you may need to run a data recovery tool such as Hetman Partition Recovery to extract any usable information that's still there. Don't worry, with rare exceptions blackouts rarely cause irreversible physical damage to storage media. Your chances of successfully recovering most of the data are pretty high.

If your system successfully completed the boot cycle (and this is much more likely than the more drastic scenario we described above), check if everything is in place. Do you miss something you've been working on? Was it a document you were working on? A spreadsheet you were filling out? Can your mail client still open its email database? Most probably, any file that was NOT open at the time of blackout will be unaffected by the power loss. The opposite is true: any file that WAS open at the time of blackout will most likely become corrupted or missing.

This situation is much easier to fix than a non-bootable system drive. You won't even need a top of the line data recovery product such as Hetman Partition Recovery. Instead, you can use a simple, wizard-driven solution such as Hetman Uneraser. This tool can only recover files from working disks and partitions (and yours is working as you could boot into Windows).

Download and install the tool to some other disk, partition or storage media (such as a USB thumb drive) to avoid causing accidental damage to those files you're about to recover. Scan your disk for missing or deleted files. You can specify the type of files you're looking for. If it's a Word document, you can look for the latest copy of your file; if that's not available, you can locate and recover older saved versions of the same file. However, if you were using a fairly recent version of Microsoft Word, you may be able to recover the file from a temporary save (Hetman Uneraser will locate and recover temporary saves exactly as it recovers existing documents).

Of course, Hetman Partition Recovery is not limited to just Word documents. It can recover documents, spreadsheets, presentations, digital images, compressed archives (*.zip, *.rar and many other formats), email databases and individual messages, eBooks and many other types of data. You can download the evaluation version free of charge to verify that your missing files are actually recoverable.

Source: <https://hetmanrecovery.com/>