Computing Devices

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Sfetcu, Nicolae, "Computing Devices", URL = https://www.telework.ro/en/e-books/computing-devices/

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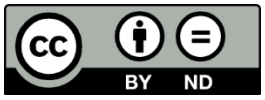

Online text: https://www.telework.ro/en/computing-devices/
Extract from:
Sfetcu, Nicolae, "*Beginner's Guide for Cybercrime Investigators*", pg. 1-3, MultiMedia Publishing (2014), ISBN 978-606-033-093-6, URL = https://www.telework.ro/en/e-books/beginners-guide-cybercrime-investigators/

The computer itself is the main source of information for the investigator. In the computer, information is stored on the hard disk. A hard disk drive is a device that can record magnetic data, consisting of one or more rigid discs, read / write heads and mechanical mechanisms protected by a metal casing, hermetically sealed. The storage capacity of a hard disk is normal nowadays tens or hundreds of gigabytes. A computer may have one or more hard disks of different types and capacities.

Laptop computers are computers designed to be easily moved. Because of performance reached, some users may be used as permanent workstation.

Types of portable computers are:

* transportable / smartphone

* laptop

* ultra-light

* hand (also called Pocket PCs, Palm or PDAs , personal digital assistants)

Even if they are not used permanently, portable computers are an important source of information, because they can be used for storing data, confidential as possible, to be carried off locations where security is ensured.

Lately due to technical possibilities to miniaturize computing devices, they have been integrated into small portable equipment. The best example of this is the mobile phone which has got features mini-computer. Besides the recent calls log, a modern phone can contain lists of addresses, schedules meetings, documents and notes etc. with even higher capacities than PCs a few years ago.

Peripheral devices

* the *keyboard* is not intended for information storage, being only an input device. However, there are some devices that can attach keyboards and can record keystroke sequences users. Although very little spread, these devices are very easily available.

* *monitors* are capable of storing information. in the past, due to technical limitations could cause images or text that remained on the screen for a long time, the impressions produced on CRT phosphor. Modern monitors do not show this effect.

* *printers* can be sources of important information. For example, laser printers allow revealing image type prints last. This technique should be used before disconnecting the printer from the mains electricity supply, which requires the presence of an expert at search. Some laser printers have a disk buffer that stores information to be printed. The capacity of such a disc is from 2 to 10 Mb. Data stored on these disks can be objectified according to a relatively simple procedure. For older models of printers that use cartridges Band (ribbon) can be reconstructed by examining the print ribbon. Assimilation analysis method is printed ribbon typewriter.

External drives for media storage

External drives for media storage are:

CD- ROM (acronym for Compact Disc -Read Only Memory) are data storage devices on optical disks using compact – disc technology. The data is read with a laser -based system and not on magnetic media used for other data storage methods. Some CD- ROM drives (CD recorders) can be used for recording data on optical media.

Diskettes. Floppy disks with 3.5 inches in size. Floppy disk is a data storage medium selective for the user. Saving data on disk is performed by users for various reasons, such as creating backups of important files recording data that the user wishes to store the computer company, copying files to transfer to another computer, etc.

Backup disks. Information from backups created to avoid loss of information in case of a power outage are an important source for investigators. Same time with the lifting of backup discs must be recorded as much information on how are achieved the backups, especially the types of equipment, software and procedures used. Safety information is usually stored in large-capacity optical discs, for this purpose, such as the type Zip or Jazz disks, Iomega products, but may exist on any storage medium. Lately became very popular flash memories, very small in size, with large enough capacity.

Optical discs (most popular being the CDs) are high capacity storage media for digital data. The capacity of these discs is 650 Mb (CDs) to 4 GB (DVDs). Optical discs can be either normal (read only without the possibility of data recording), recordable (possible reading and writing data to disk without deleting data) , or with the possibility of rewriting (it is possible to read, writing and erasing data on the disc).

Removable hard drives are also information storage mediums. They have capabilities similar to the fixed hard drives, and are generally used to transfer large files.