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## **No Clouds, No Problems**

Nowadays, almost everyone has computers, smart phones, tablets and others different gadgets. Of course, it is very useful, because these gadgets have big capacities that make our life easier and more comfortable. Usually we have different files on our computers and tablets or smart phones. However, we have a cable to transfer files from computers to gadgets and backwards. So, do we need to take that cable with us all of the time?

No. For that case we have "clouds" on the Internet. It is like a storage for information. You can upload and download files from your "cloud" anywhere, in case you have a connection to the Internet. It is very useful, and you don't need any flesh drives or cables to transmit files from one device to another one.

"Clouds" are of great importance when you are in a hurry or far from your computer and you need some files immediately. Anyway, we depend on the Internet. Otherwise, what will happen, if a company that provides our "clouds" has any problems, for example, the system will be crashed?

You have a chance to lose some of your files forever. To secure our files we need to find a solution. This is a BitTorrent Sync. The principle of operation is very simple. There are no "clouds", just direct transmission from one device to another. The Bittorrent software, instead, has devices that connect one to another directly over the Internet to update files as they are added or changed. That difference in design means that people using Bittorrent Sync do not have to worry about whether the cloud company hosting their data is properly securing it against rogue employees or other threats.

Besides, there are more advantages to consider. For example, the transfer speed is very high, up to 90 Mb/sec. It means that you can download the 10 GB file less than for 2 minutes.

Another example is that the files are downloaded automatically, but you need to be connected to the Internet and the main requirement is that both of your devices have to be on.

As for security, BitTorrent Sync encrypts all traffic between devices using the AES algorithm with 256-bit encryption key. The key is created on the basis of the so-called "secret". It is a random set of characters, which is generated using Crypto API (on Windows) and dev / random (on Mac and Linux) to protect each synchronized folder. Keys which provide access to folders can be changed at any time. Data is encrypted even in the course of their local network.