What is capacity? How is Terabyte used in practice?

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All of us have heard the phrase 'capacity', right, especially when learning about the technical specifications of smartphones and laptops. However, not everyone can analyze the concept of capacity. Let's take a look at the article below with TipsMake to help you learn this concept, follow along.

What is capacity?

In the computer world, **capacity** is defined by the word **Terabyte** . This is a term used to measure the storage capacity of a device. The value of 1 Terabyte is determined on a decimal basis and is defined as one trillion (1,000,000,000,000) bytes or 1000 gigabytes.

1 Terabyte = 1099 x 109 bytes . This is determined to originate from the conflict between binary and base 2 prefixes in the computer world along with the decimal standard from past to present.

Picture 1 of What is capacity? How is Terabyte used in practice?

Earlier standards organizations such as IEC, IEEE and ISO proposed the alternative term tebibyte instead of the traditional measurements of 10244 bytes or gibibyte. Accordingly:

1. Based on the SI standard, 1 terabyte containing 1 billion bytes is equal to 10004 or 1012 bytes.
2. Based on binary arithmetic, 1 terabyte containing 1,099,511,627,776 will be equivalent to 10244 or 240 bytes.

In computers, capacity has always been measured based on SI standards.

Terabytes used in practice?

In fact, Terabyte that the Library of Congress Web Capture team in May 2007 said:

The library has collected more than **70 terabytes** of different data.

Picture 2 of What is capacity? How is Terabyte used in practice?

In addition, there are many other numbers about Terabyte as follows:

1. In 1 hour, high-resolution video can consume up to **11.5 terabytes** of data.

2. A versatile 3-dimensional optical disc can accommodate up to **3.9 terabytes** .
3. Personal computers as well as many related devices possess a storage capacity of 1 terabyte. However, in reality, this number may be even larger. Because based on Hitachi's 2007 statistics, the drives sold to users have hard drive capacities of up to 200GB.
4. **Rapidshare** provides 4000 terabytes of storage space.
5. Ancestry.com statistics that there are about **600 terabytes** of genealogical data from 1790 to 1930.
6. The Do BitTorrent – ??IsoHunt program also confirmed that they accessed **191.09 TBs** of Torrent addresses.
7. The human nervous system has an average storage capacity of **1.25 Terabytes** . This number was recorded by Raymond Kurzweil's research. However, to date, this has not actually been approved.
8. The average Protein-coated disk can store up to **50 terabytes** of data.
9. **Seagate has a 1 Terabyte** drive . This may be the first TB hard drive that receives the most information from the media. However, at this time, Hitachi is known as the first company to sell TB hard drives out.

Epilogue

Capacity is essentially a term used to measure a computer's storage capacity. If understood simply, this is the phrase that tells you how much memory the device has and whether it can store a lot of data or not. Hope this article has helped you understand what capacity is. Thank you for reading the article.