

Byte Back!

Understanding File Sizes — Kilobytes, Megabytes, Gigabytes, Terabytes. Huh?

By John Lotze

They're just units of measurement that tell us how large a computer file is or how much data a hard or floppy disk will hold. Here's a simple guide to what they mean in everyday computing terms.

Kilobyte

A Kilobyte (or K for short) is 1000 (actually 1024, but who's counting?) Bytes

What takes up one Kilobyte?

- A text file about one page long

Megabyte

A Megabyte (Meg or MB for short) is 1000 Kilobytes

What takes up one Megabyte?

- A floppy disk (holds about 1.5 Megabytes (or about 1,500 K)
- A Microsoft Word file the size of a short novel would take up about 1 Megabyte of space on a disk.
- A single fairly high resolution image from a digital camera in a compressed JPEG format would take up about 1 Megabyte,
- A medium length Powerpoint presentation with a few graphics could take up about 1 megabyte.
- Zip disks come in 100, 250 and 750 Megabyte sizes

Gigabyte

A Gigabyte (Gig) is 1000 Megabytes

What takes up one Gigabyte?

- A few seconds of high-quality video can take up a gigabyte of space on a disk.

Hard drives for today's personal computers range in size from 20 to 200 Gigabytes. Usually 20-30 gigabytes is enough for most people.

Terabyte

A Terabyte is 1000 Gigabytes

- People with this much storage are usually working with lots of video and multimedia, or are technology professionals who are backing up many other computers.

Common Storage Devices and Sizes

Floppy Disk

1.4 Megabytes

Big enough to hold a novel.

Zip Disk

100 Megabytes

As much space as about 70 floppy disks

(Zip disks also come in 250 and 750 Megabyte sizes!)

CD

600 Megabytes.

Enough to hold an encyclopedia.

DVD

4.7 Gigabytes (or 4,700 Megabytes)

Enough to hold a full length movie.

Computer Hard Drive in an average new computer

30 Gigabytes (some computers have larger drives, up to 80 Gigabytes or more)

Review

1 Kilobyte x 1,000 = 1 Megabyte

1 Megabyte x 1,000 = 1 Gigabyte

1 Gibabyte x 1,000 = 1 Terabyte

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