RAID 0 Defined
Redundant Array of Independent Disks

Definition: ***RAID-0, or Redundant Array of Independent Disks, Level 0 - also called striping - is a method of storing data on multiple computer storage devices - usually hard disks or disk partitions - by interleaving the data and spreading it across the devices usually achieving faster read and write speeds.***

Reads and writes sectors of data is interleaved between multiple drives. Downside: It takes only one drive to fail and the entire array is affected.

Performance on RAID 0 is better than having a single drive as the work is split between the array drives. Identical drives are recommended for performance as well as data storage efficiency so it is recommended that you use not just the same make and size but even the same model number.

You need a minimum of two drives to form a RAID 0. The disk array data capacity is equal to the number of drive members times the smallest member capacity. For example, one 1GB and three 1.2GB drives will form a 4GB (4 x 1GB) disk array.

Stripe Size - a value can be set from 1KB to 1024KB sector size. The size can directly affect performance. If you are dealing mainly with small files you may want to use an 8KB sector size whilst for Server and Audio/Video Editing – which typically use large files – recommended sector size is 64KB.

RAID 0 implements a striped disk array, the data is broken down into blocks and each block is written to a separate disk drive

I/O performance is greatly improved by spreading the I/O load across many channels and drives

RAID 0 can be used together with RAID 1 to provide RAID 0 + 1 giving the advantages of both striping and mirroring.

An interesting concept is that RAID 0+1 is not the same as RAID 1+0. This technical article explains the difference and makes a case for why RAID 1+0 is better than RAID 0+1.