

## RAID 0, RAID 1, RAID 5, RAID 10

RAID stands for Redundant Array of Inexpensive (Independent) Disks.

On most situations you will be using one of the following four levels of RAID's.

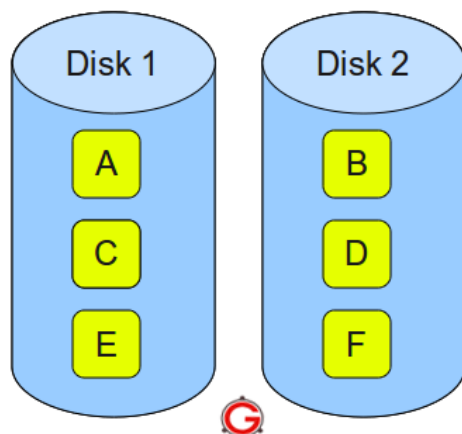
- RAID 0
- RAID 1
- RAID 5
- RAID 10 (also known as RAID 1+0)

This article explains the main difference between these raid levels along with an easy to understand diagram.

In all the diagrams mentioned below:

- A, B, C, D, E and F – represents blocks
- p1, p2, and p3 – represents parity

### RAID LEVEL 0

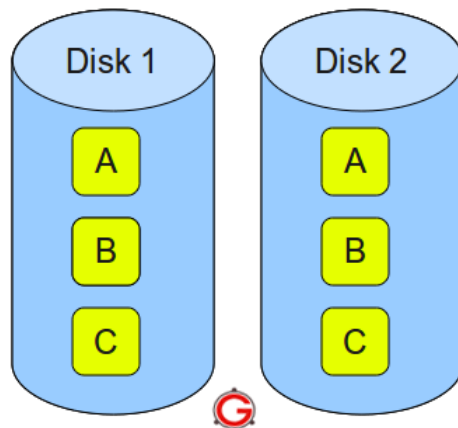


**RAID 0** – Blocks Striped. No Mirror. No Parity.

Following are the key points to remember for RAID level 0.

- Minimum 2 disks.
- Excellent performance ( as blocks are striped ).
- No redundancy ( no mirror, no parity ).
- Don't use this for any critical system.

## RAID LEVEL 1

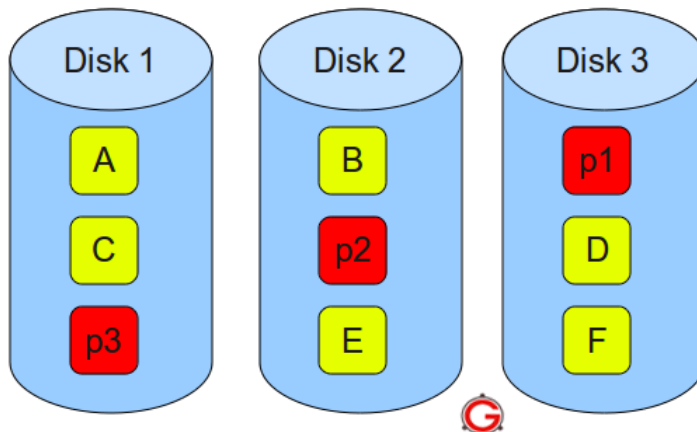


**RAID 1** – Blocks Mirrored. No Stripe. No parity.

Following are the key points to remember for RAID level 1.

- Minimum 2 disks.
- Good performance ( no striping. no parity ).
- Excellent redundancy ( as blocks are mirrored ).

## RAID LEVEL 5

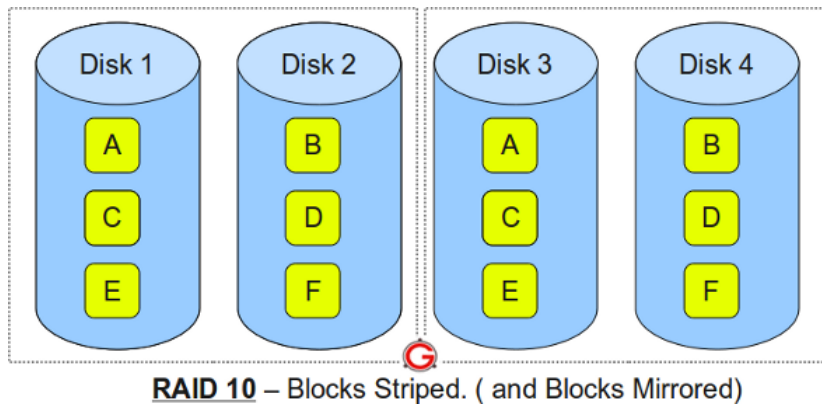


**RAID 5** – Blocks Striped. Distributed Parity.

Following are the key points to remember for RAID level 5.

- Minimum 3 disks.
- Good performance ( as blocks are striped ).
- Good redundancy ( distributed parity ).
- Best cost effective option providing both performance and redundancy. Use this for DB that is heavily read oriented. Write operations will be slow.

## RAID LEVEL 10



Following are the key points to remember for RAID level 10.

- Minimum 4 disks.
- Excellent performance ( as blocks are striped )
- Excellent redundancy ( as blocks are mirrored )
- If you can afford the dollar, this is the BEST option for any mission critical applications (especially databases).