

Introduction

What is RAID?

- RAID stands for Redundant array of independent disks.
- Means for storing the same data in different locations across multiple disks(HDD/SSD) to secure data in event of disk failure.
- Gives you a high transfer rate as compared to a single disk.

Striping:

Striping is a method of splitting an individual file and writing to more than one disk. This is the way by which RAID gets around the performance limitation of mechanical storage. Ex: In the case of a 4 disk array 1/4th of a file will be stored in each disk. So the file can be read simultaneously leading to high speed.

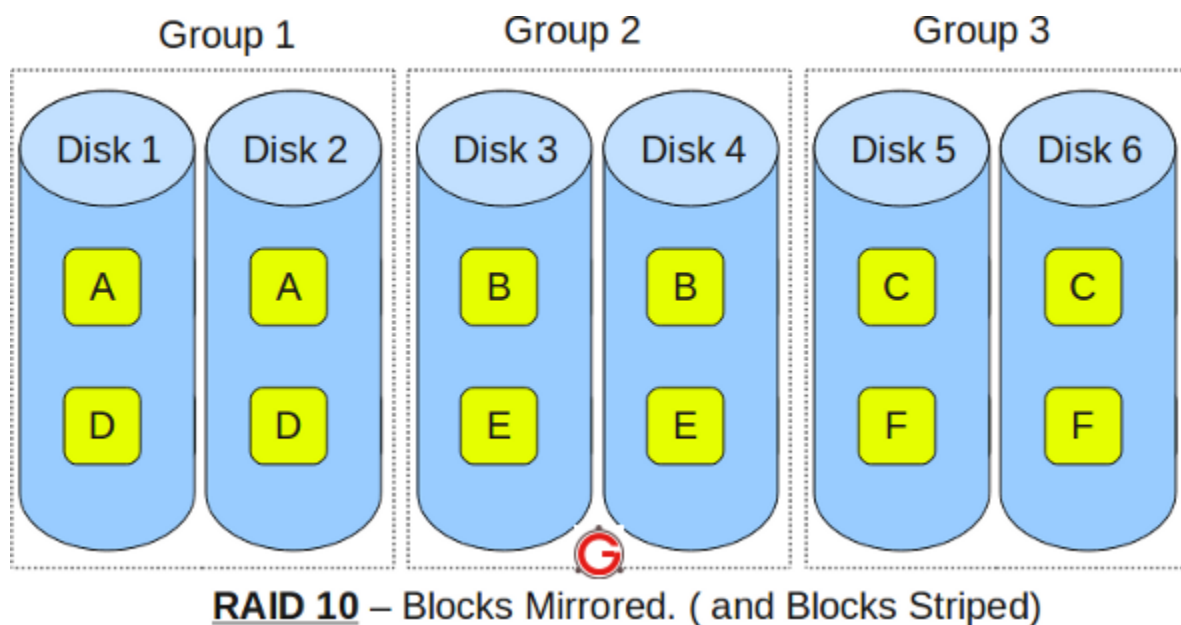
Striping can be of 2 types:

1. Bit level striping: Splits each bit of byte across multiple disks.
2. Block level striping: BLock of files(usually 512B) are stored across multiple disks.

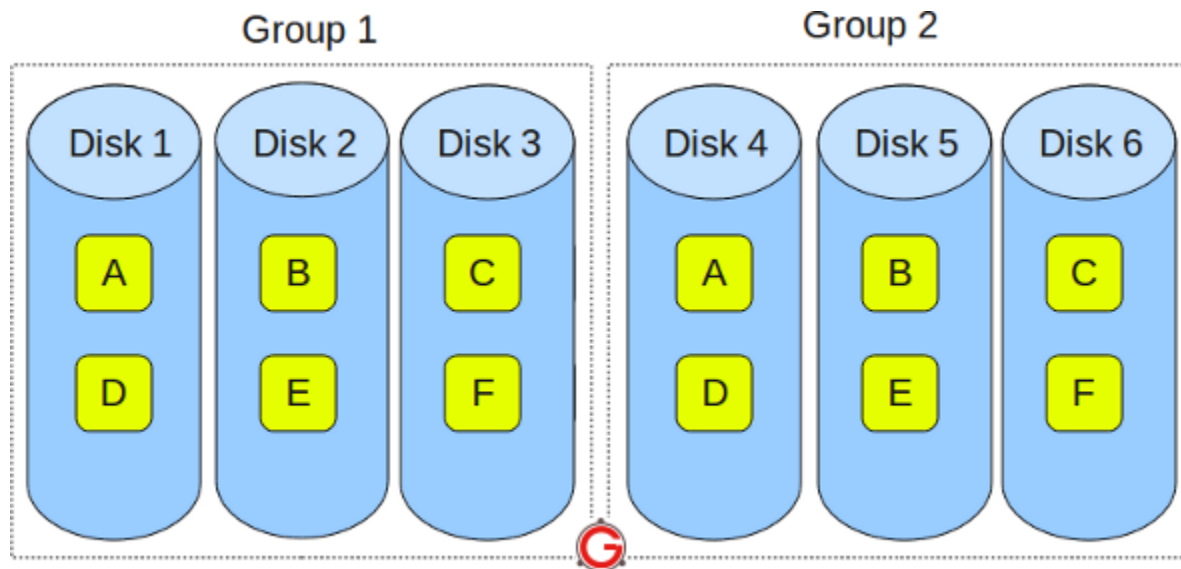
Levels in RAID:

//do it from here

Raid 10



Raid 01



RAID 01 – Blocks Striped. (and Blocks Mirrored)