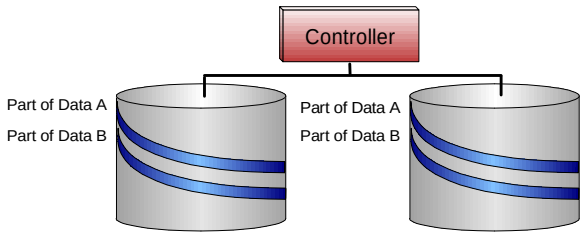
RAID Levels

RAID 0 - disk striping w/ out parity

(Minimum 2 HDs)

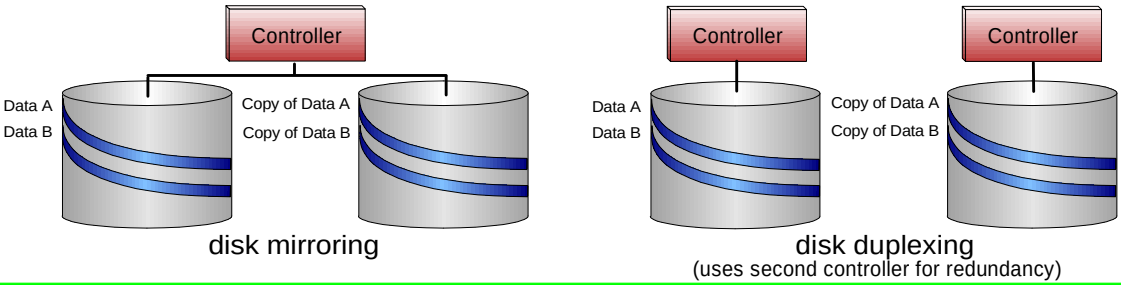
Data split (striped) across drives, but offers no redundancy. Failure of any disk in array results in data loss.



RAID 1 - disk mirroring /disk duplexing

(Minimum 2 HDs)

Data duplicated on separate drive. Disk duplexing possible when second drive controller is used.



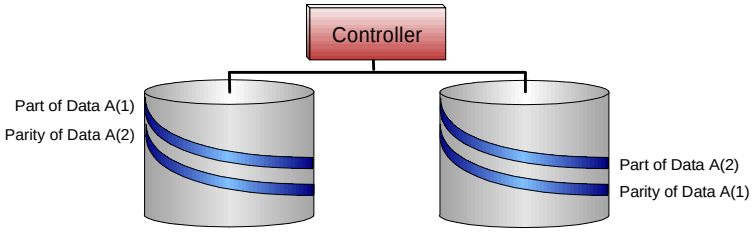
disk mirroring

disk duplexing
(uses second controller for redundancy)

RAID 2 - disk striping w/ error correction

(Minimum 2 HDs - rarely used)

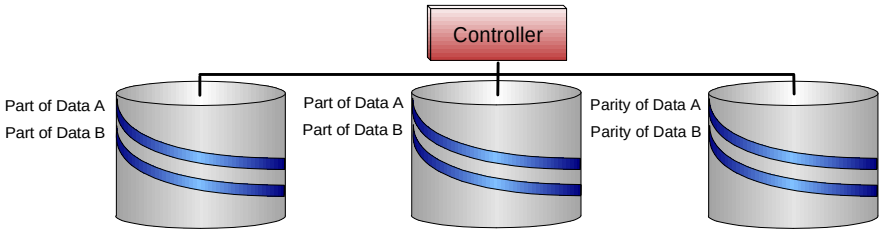
Data striped across alternate drive, using Hammond error correction (intended for drives lacking built-in error detection, hence little use when using SCSI drives).



RAID 3 - disk striping w/ single-disk parity

(Minimum 3 HDs)

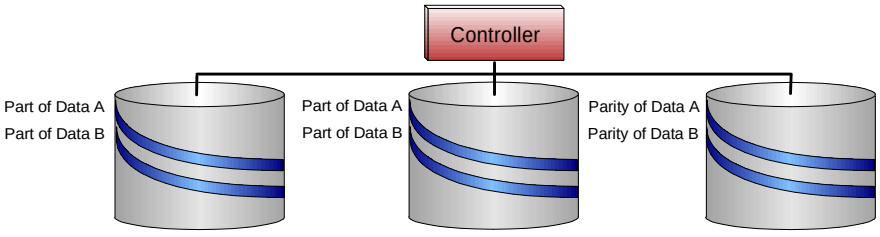
Data striped at byte level across 3 or more drives, with parity stored on one drive. Byte level striping requires hardware support for efficient use.



RAID 4 - disk striping w/ single-disk parity in blocks

(Minimum 3 HDs - rarely used)

Data striped at block level across 3 or more drives, with parity stored on one drive.



same as RAID 3 but saves data in blocks versus bytes

RAID 5 - disk striping w/ distributed parity in blocks

(Minimum 3 HDs)

Data striped at block level across 3 or more drives, with parity distributed across drives in array.