

The Data Redundancy Pattern

given:

some data

some storage device

solution:

use multiple storage devices

store multiple copies of the data redundantly (plus some parity)

keep all copies and parity in sync



The Data Redundancy Pattern

advantages:

dramatic increase of storage device reliability

may be applied to hard disks, SSDs, main memory,
any storage device, entire systems or even data centers, ...

drawbacks:

additional write effort

additional parity computation effort

additional storage required

Data Center Example

DC (1)



DC (2)

