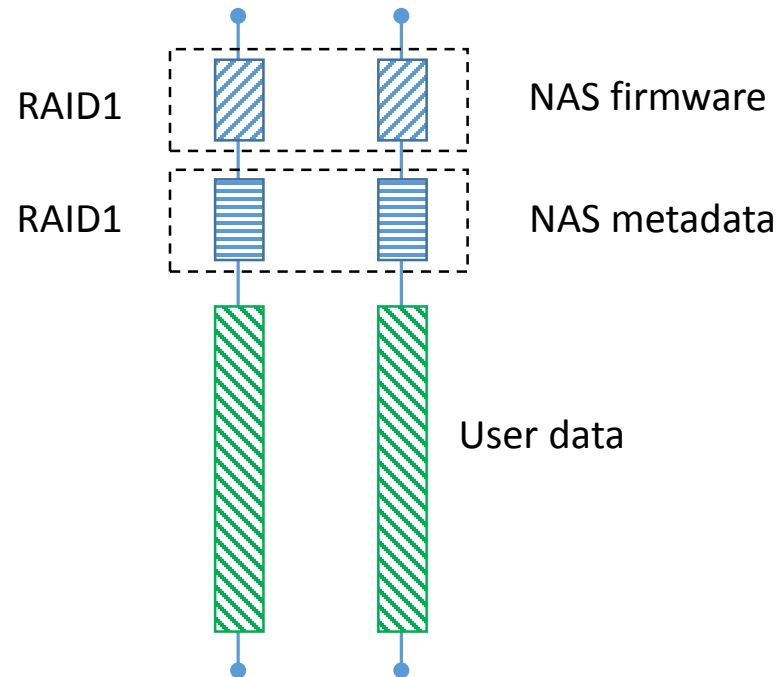


Partitions in NASes

Typical NAS layout

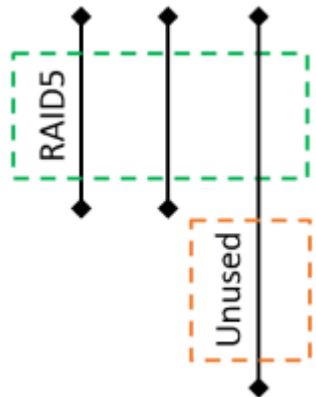


- RAID1 stores NAS firmware and metadata
- RAID1 includes all NAS disks
- Large partitions store user data with different RAID levels depending on configuration

Partitions in NASes

Old NASes

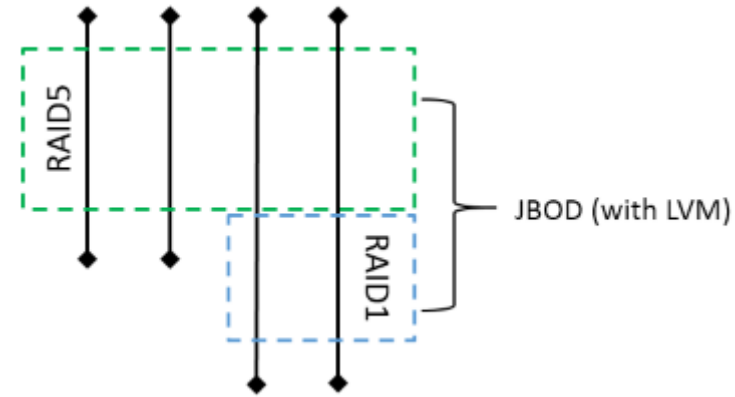
- used only md
- only the same size disks were allowed
- when upgrading, excess space was unused



QNAP circa 2008

Modern NASes

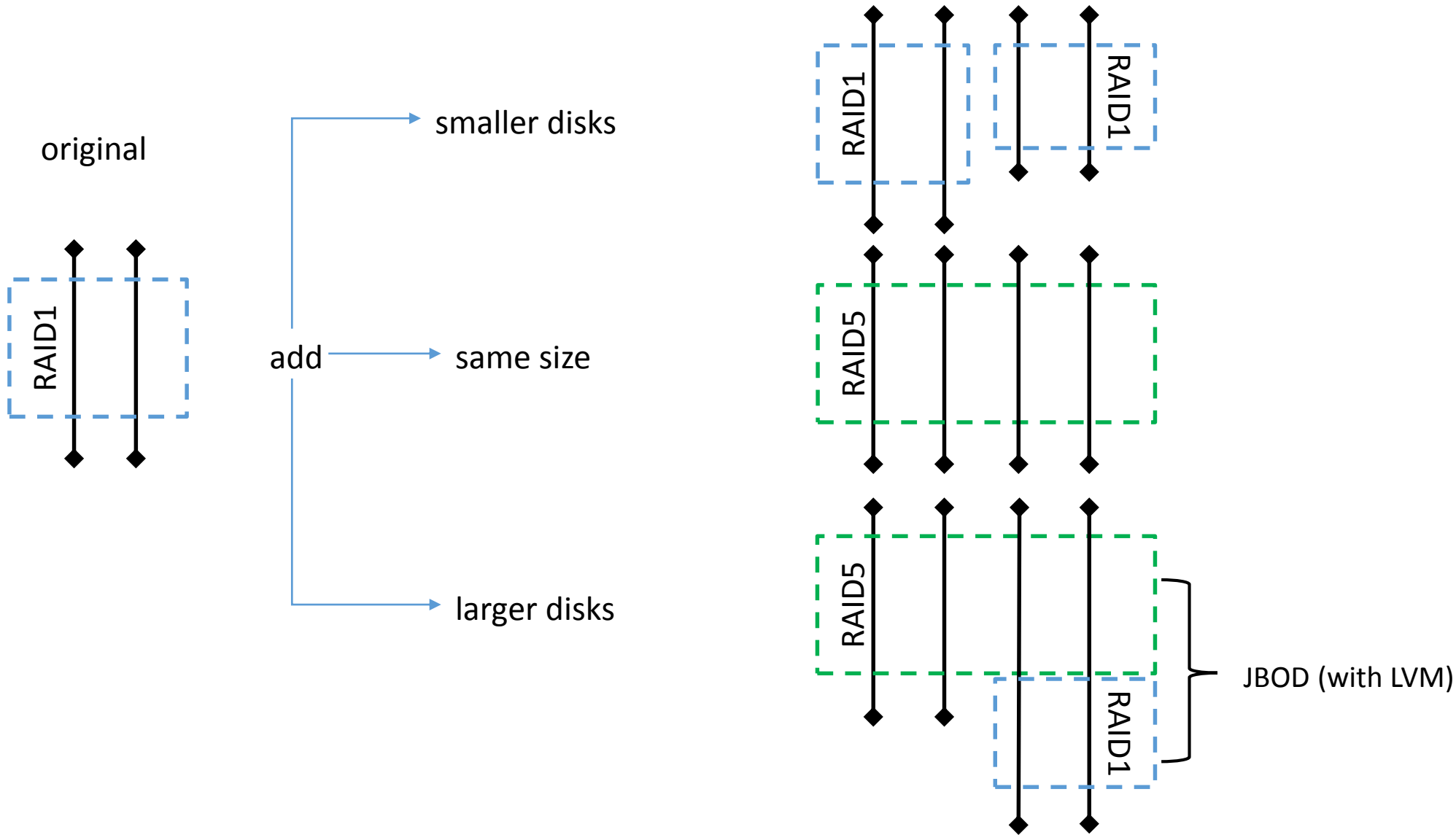
- use LVM and md
- different RAID levels may be mixed



NetGear X-RAID2

Adding disks to a NAS

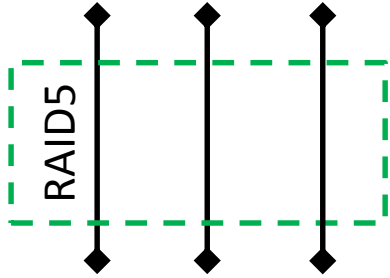
(NetGear X-RAID2)



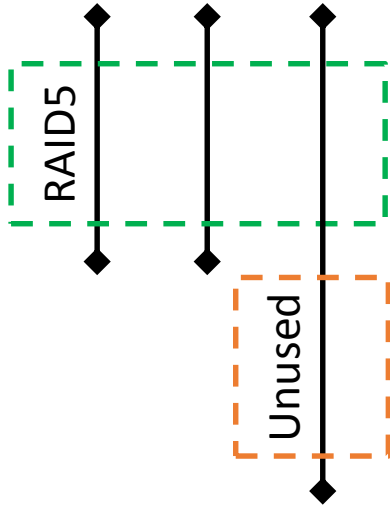
Rolling upgrade

replacing drives in turn

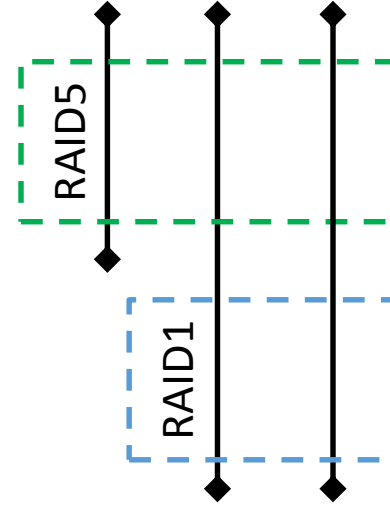
1



2



3



4

