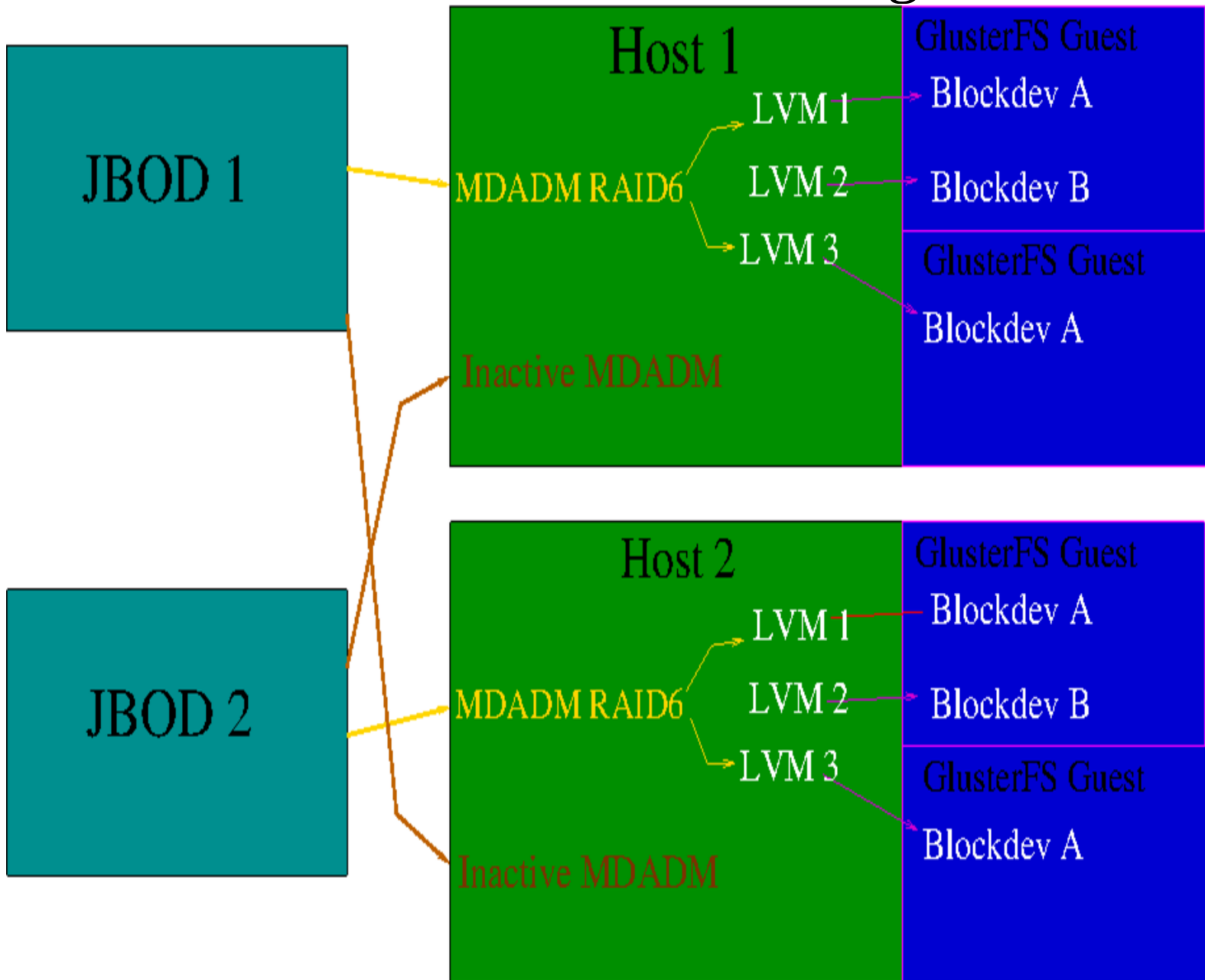


Virtualized Scalable Storage Unit



- Why virtualize file servers?
 - Availability : Permits failover of Gluster peers via migration.
 - Security : Fileserver guests exist on the same VLAN as the client nodes they serve, providing network level segregation.
 - Better to crash a VM than a physical server.

GlusterFS Peer Guests

- Each Logical BlockDev used as Zpool
- RAID1-backed SSD split amongst pools
- FDR Virtualized Infiniband Connected
- 3.18 kernel
 - Paravirt Spinlocks Enabled
 - Preempt RCU disabled
 - Voluntary Preempt enabled
- Gluster Friendly ZFS options
 - acltype=posixacl ; Absence creates NFS issues
 - xattr = sa ; Drastically improves handling of Gluster extended attributes
- LZ4 compression utilized to yield \approx 4.5X compression with select products (LANDSAT)
- ZVOL's not used – consumption under Gluster too unpredictable
- Puppet templates automatically configure ZFS module options based on system resources, prevents ARC Cache issues.

