



**We keep your
Mission Critical Systems
Up and Running**

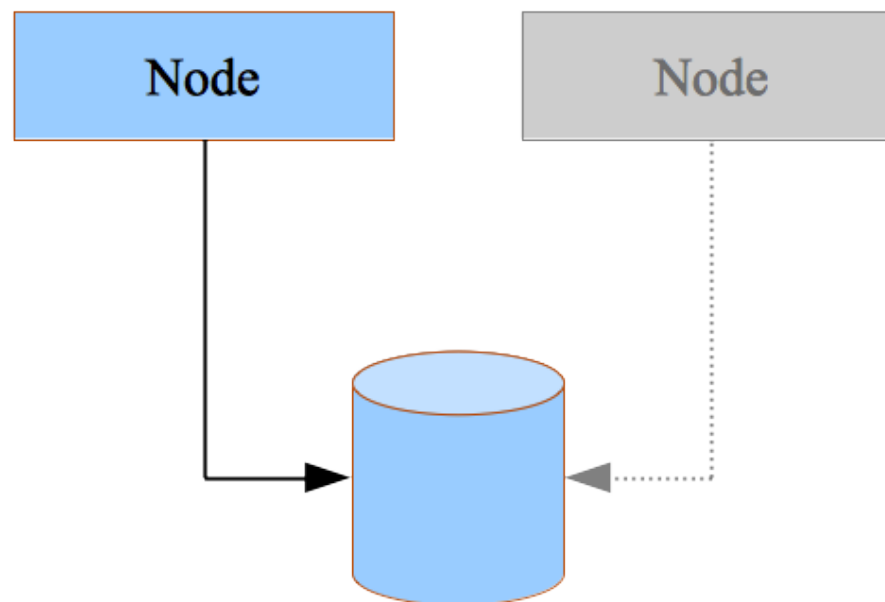
**We specialize in Open-Source High Availability
and Disaster Recovery software**



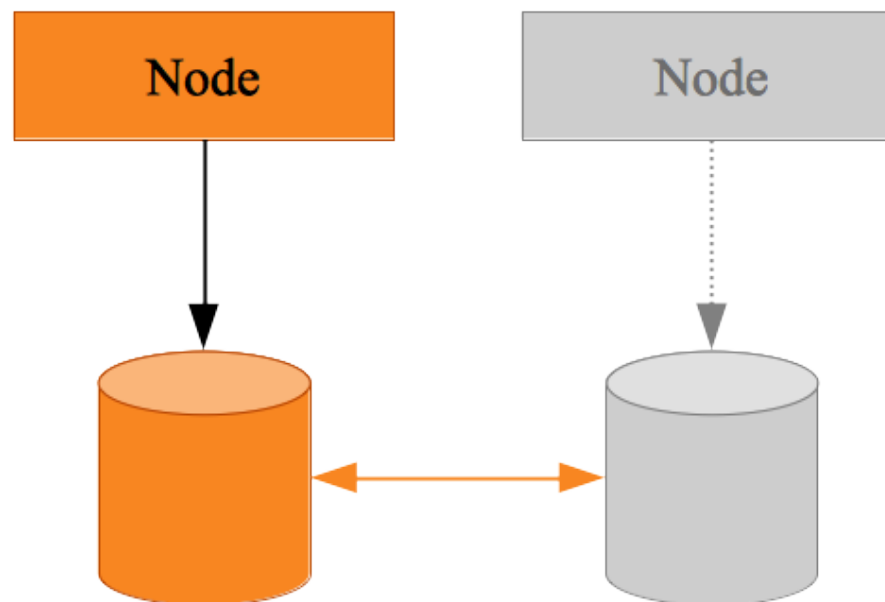
DRBD9 and drbdmanage

YOUR WAY TO HIGH AVAILABILITY

Shared everything



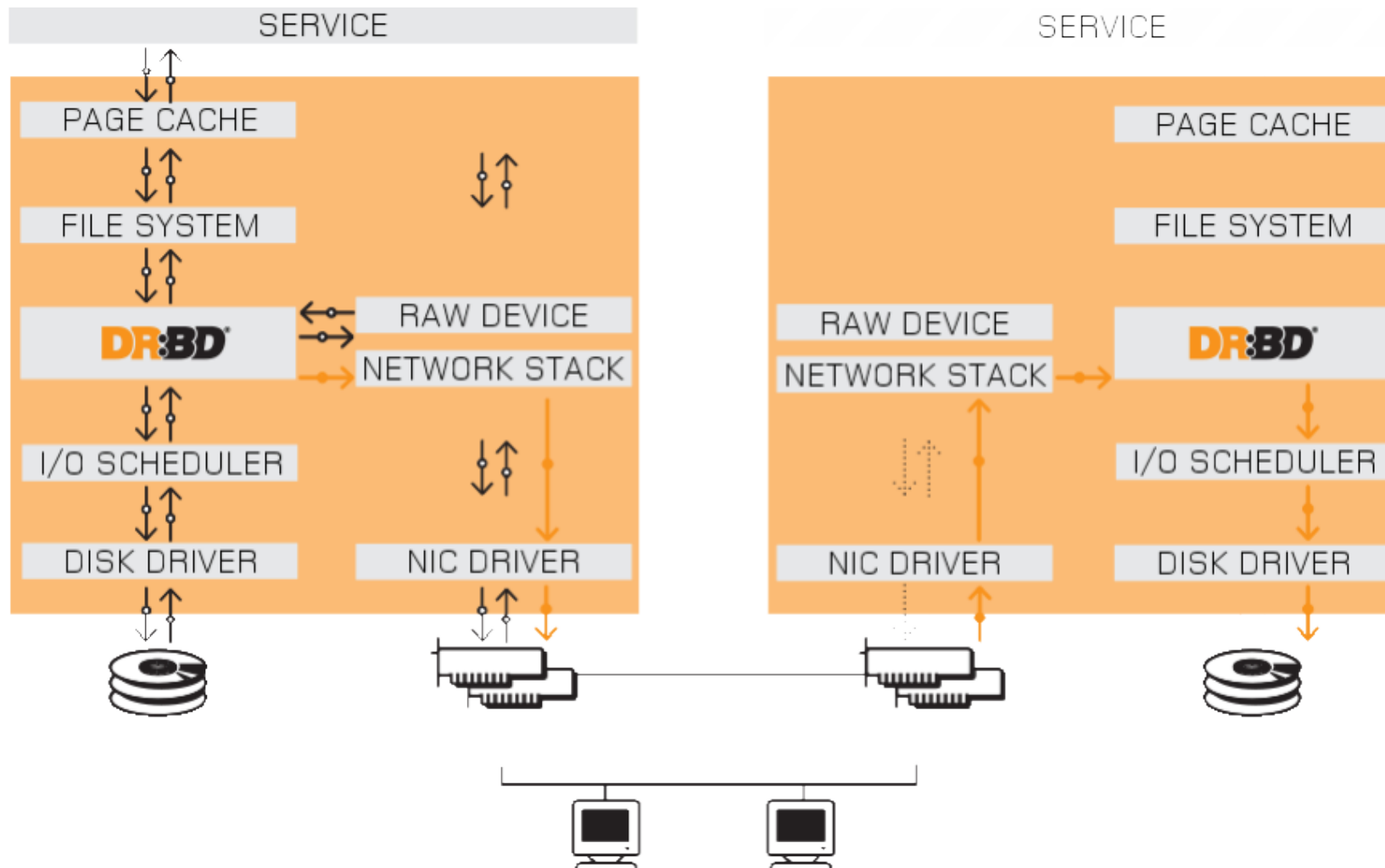
Shared nothing



DRBD key features

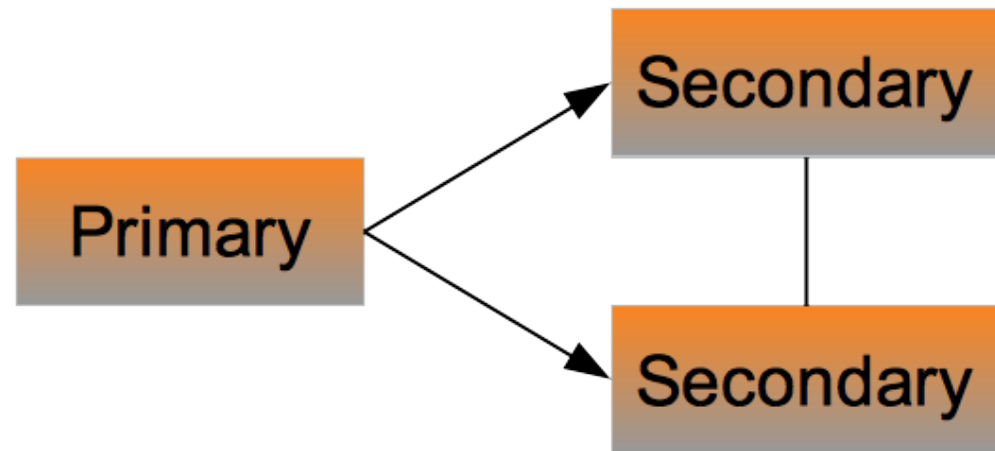
- Fully synchronous replicated storage
- All commercial off the shelf (COTS) components
- Application neutral, Cluster Manager neutral
- No special hardware required
- No vendor lock-in
- High performance implementation
 - 160k IOPs measured (using SSDs)

DRBD 8.x



New features of DRBD9

- :Up to 31 connections per Resource
 - Fixes the drawbacks of *stacking*
- :Auto promote
- :Transport abstraction (TCP, SCTP, RDMA)
- :drbdmanage



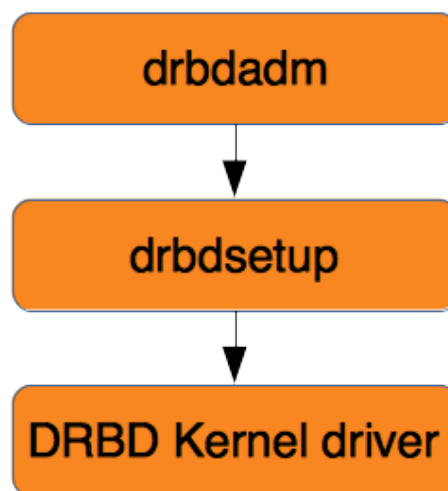
DRBD control plane 8.4

- : You have to create/provide block devices for DRBD
- : You have to distribute DRBD config files among your nodes

Config file, replication pair/triple/...

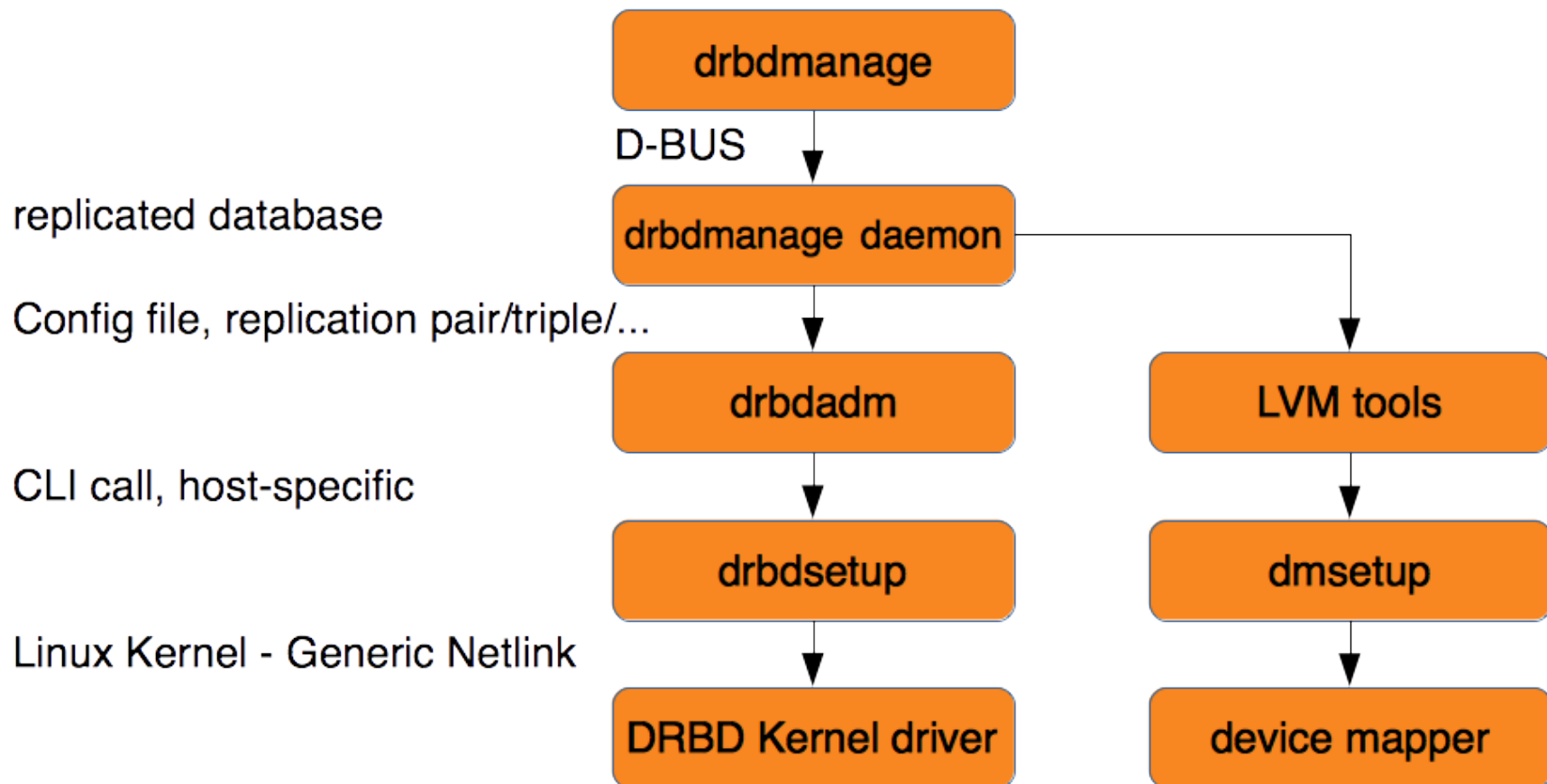
CLI call, host-specific

Linux Kernel - Generic Netlink

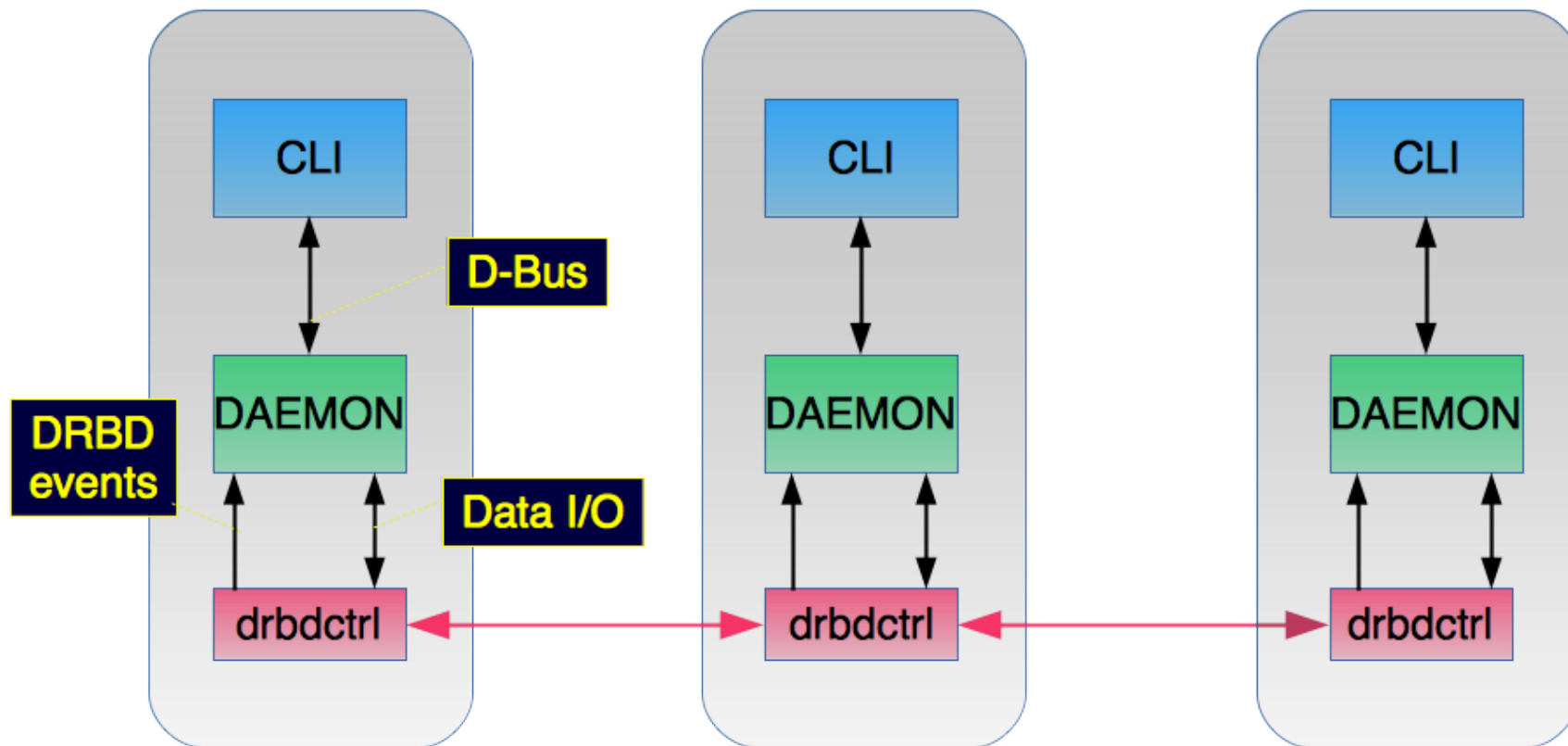


DRBD control plane 9 — drbdmanage

CLI calls



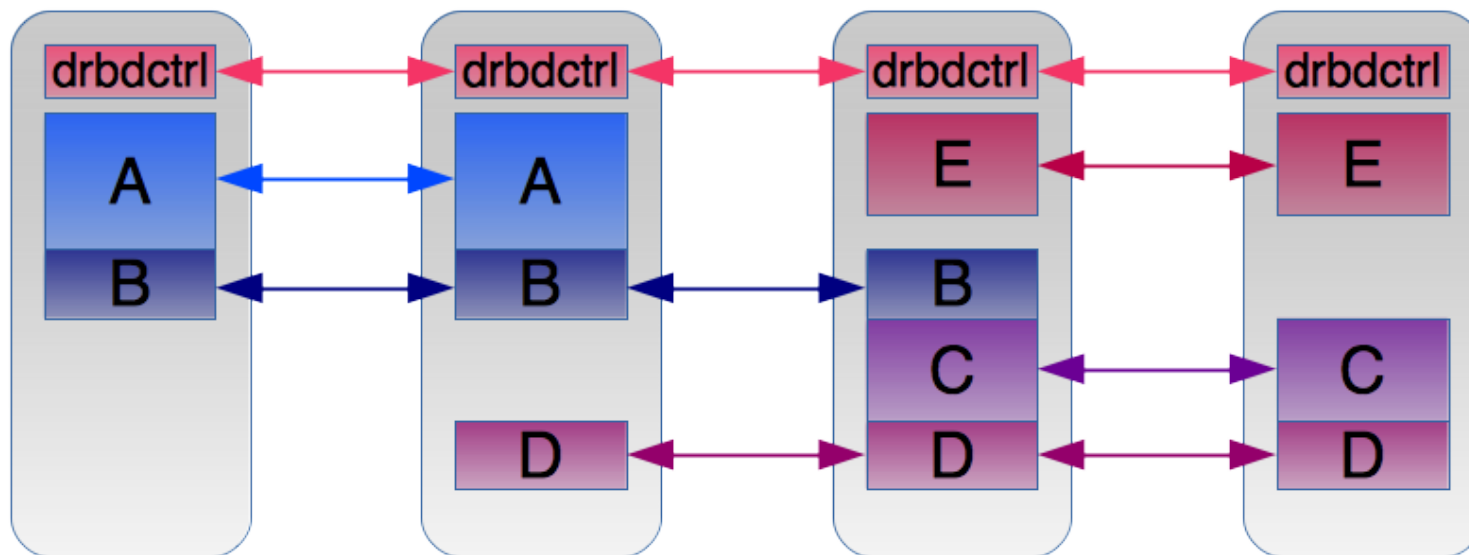
drbdmanage software architecture



drbdmanage, volume management example

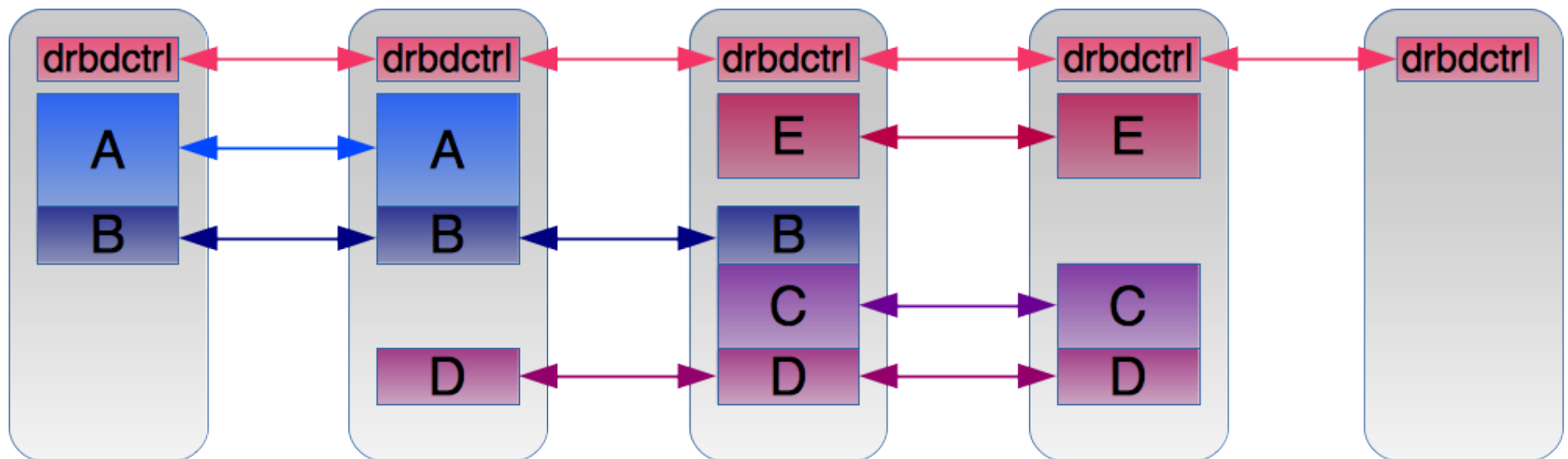
■ control volume – replicated across all nodes

■ } automatically managed replicated volumes



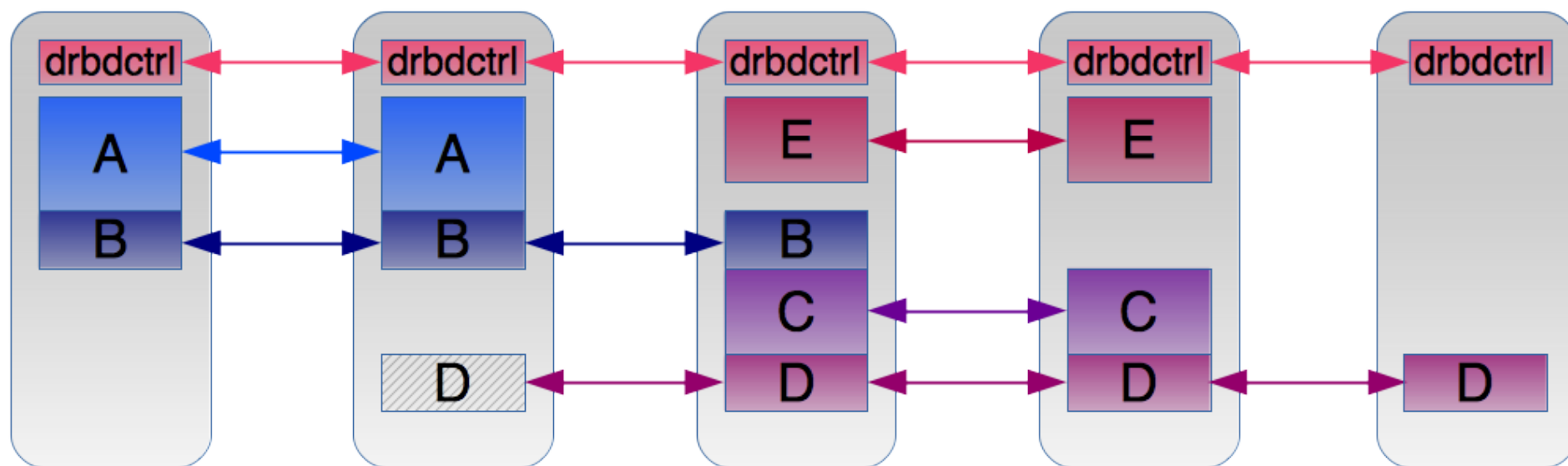
drbdmanage, volume management example

Add a node



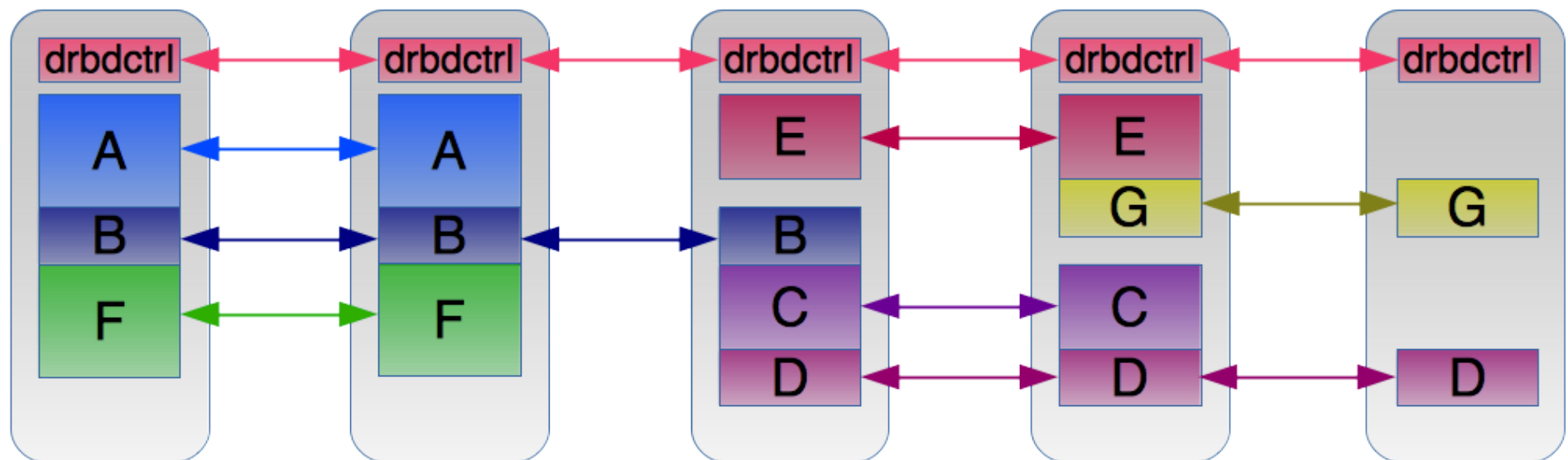
drbdmanage, volume management example

Rebalance existing volumes



drbdmanage, volume management example

Use the new space





drbdmanage

- : provisioning solution for DRBD
- : implemented in python
- : manages LVs (LUNs) with name, size, replica count
- : manages snapshots
- : may base volumes on thinly provisioned LVM LVs
- : uses DRBD9 itself for its own internal database
 - up to 32 nodes with the complete database
- : scales to 1000s of nodes (work in progress)



More information

: <http://www.linbit.com>

Source packages and repositories

:

: <http://drbd.linbit.com>

: <http://oss.linbit.com>

: <http://git.drbd.org>

: precompiled binary packages: <mailto:office@linbit.com>