Subject: Re: DRBD?
Posted by wfischer on Tue, 01 Aug 2006 08:24:56 GMT

cdevidal wrote on Mon, 31 July 2006 19:39Question: Why not two DRBD partitions, one on each node, and run a handful of VPSes on the first node and a handful on the second, so that the second node's CPU cycles and RAM are not sitting idle? Or were you just trying to keep things simple?

Yea, the first reason is that the setup is more simple. And the more simple the setup is, the higher the availability will be.

The second reason is that in a active-passive configuration you can get aware of performance bottlenecks soon enough. We had a for example a cluster running, that ran Apache on node1 and MySQL on node2 (without any virtualization). When we started the project, every machine had 1,5 GB RAM. Apache needed about 500 MB, and also MySQL needed about 500 MB. After some time we discovered that Apache now needs 1 GB, and also MySQL consumes 1 GB of RAM - so if a failover would have happened the remaining cluster node would have started swapping and get very slow (in fact so slow, that it would have seemed that the cluster is down)

When you run all services on only one node, you can sooner discover those performance bottlenecks (actually before a failover happens) - and enlarge e.g. RAM like in this case.

Evan Marcus and Hal Stern have a very interesting discussion about why to use active/passive and what to answer to management when they ask: "how can I use the standby server?" You can find it in their book "Blueprints for High Availability", 2nd edition, page 417 - 425 (see http://www.amazon.com/gp/product/0471430269/).

cdevidal wrote on Mon, 31 July 2006 19:39If you do such a setup, DRBD's Group parameter is very helpful when you have two DRBD devices on one hard drive. The first group synchronizes, then the second, but not in parallel (as would be the case if you had two drives). Set one DRBD device in one group and the other in a new group.

Yea, you are absolutely right! If someone really wants active/active, the DRBD group parameter is very valueable.