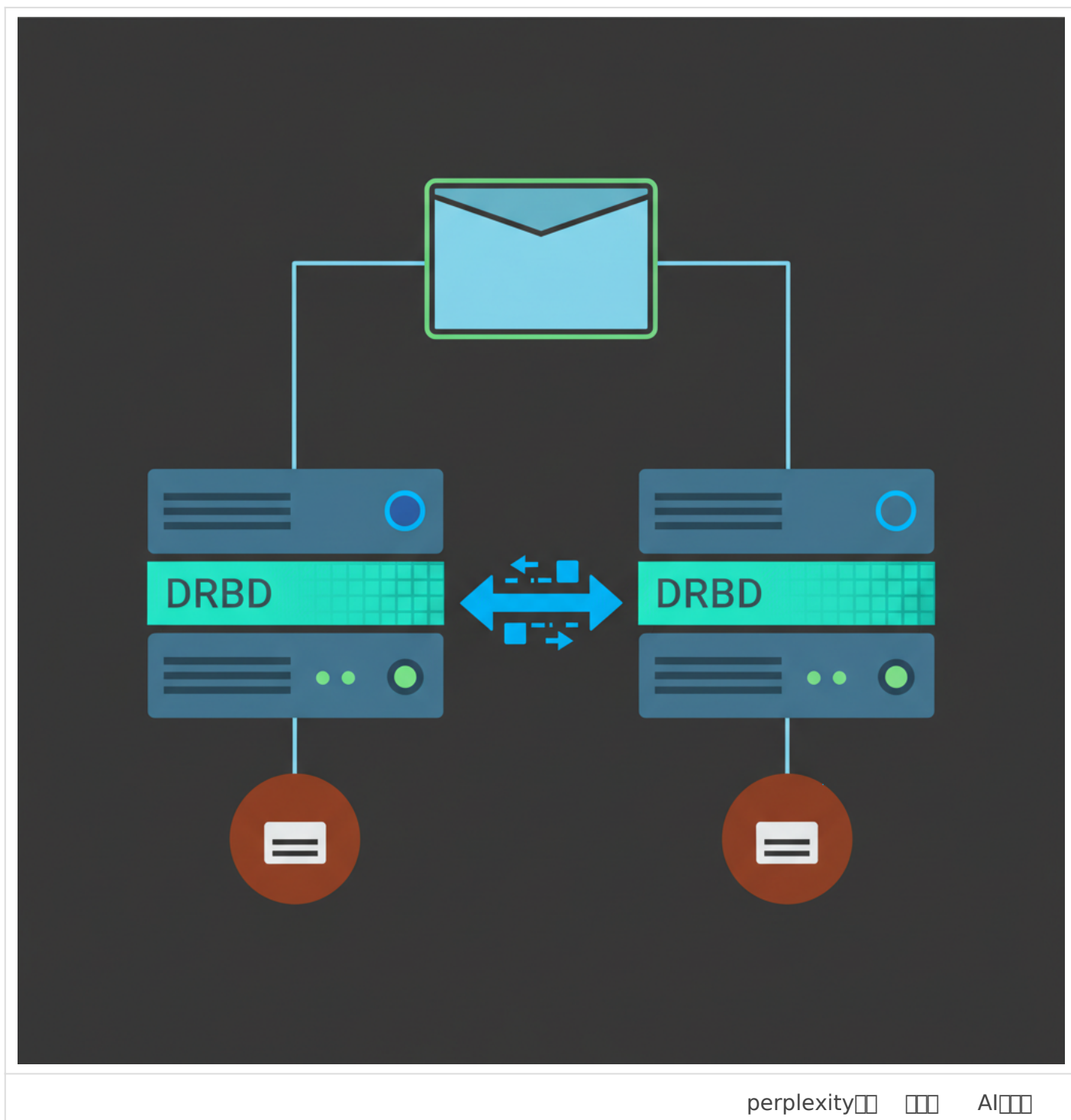


DRBD 四角



1. Opensource 文章 : DRBD / DRBDUtils (<https://www.linbit.com/en/drbd-oss-distribution/>)

2. DRBD Stack (Active / Passive ☐ ☐)
3. ☐ ☐ ☐ ☐ Mantec ☐ ☐ ☐ :
<https://mantech.jira.com/wiki/spaces/WDRBDV9/pages/170098908/1>.
4. Mantech ☐ MCCS ☐ ☐ DRBD ☐ ☐ ☐
5. DRBD Data Flow
[image.png](#)

DRBD ☐ ☐ ☐ ☐

1. DRBD ☐ ☐ (8.x, 9.x ☐ ☐ ☐)

```
> tar -zxvf drbd-8.4.5.tar.gz
> cd drbd-8.4.5
> make;make install
> echo "modprobe drbd" > /etc/sysconfig/modules/drbd.modules
> chmod +x /etc/sysconfig/modules/drbd.modules
> modprobe drbd
> lsmod | grep drbd
drbd                    568788  0
libcrc32c               12644  4 xfs,drbd,nf_nat,nf_contrack
```

2. DRBD Util ☐ (8.x, 9.x ☐ ☐ ☐)

```
> yum install -y libxslt libxml2
> tar -zxvf drbd-utils-8.9.1.tar.gz
> cd drbd-utils-8.9.1
> ./configure --prefix=/usr/local/drbd --sysconfdir=/etc/ --with-initscripttype=sysv
> ./configure --sysconfdir=/etc/ --with-initscripttype=systemd --with-
pacemaker (Centos7)
> make; make install
> mkdir -p /usr/local/drbd/var/run
```

DRBD ☐ ☐ ☐ ☐

1. Target ☐ ☐

```

># fdisk /dev/xvdb
Device contains neither a valid DOS partition table, nor Sun, SGI or OSF disklabel
Building a new DOS disklabel with disk identifier 0xcce44d25.
Changes will remain in memory only, until you decide to write them.
After that, of course, the previous content won't be recoverable.
\\Warning: invalid flag 0x0000 of partition table 4 will be corrected by w(rite)
\\WARNING: DOS-compatible mode is deprecated. It's strongly recommended to
        switch off the mode (command 'c') and change display units to
        sectors (command 'u').
\\Command (m for help): n
Command action
    e   extended
    p   primary partition (1-4)
p ([])
Partition number (1-4): 1 ([])
First cylinder (1-2080500, default 1):
Using default value 1 ([])
Last cylinder, +cylinders or +size{K,M,G} (1-2080500, default 2080500):
Using default value 2080500
\\Command (m for help): w ([])
The partition table has been altered!
\\Calling ioctl() to re-read partition table.
Syncing disks.

```

2. DRBD

```

># cat /etc/drbd.d/drbd.res
resource drbd0
{
    startup {
        wfc-timeout 30;
        outdated-wfc-timeout 20;
        degr-wfc-timeout 30;
    }
    \\ syncer {
        rate 1000M;
        verify-alg sha1;
    }
    \\ on web1 {

```

```

    device drbd0;
    disk /dev/xvdb1;
    address {{1IP}}:7789;
    meta-disk internal;
}
\\ on web2 {
    device drbd0;
    disk /dev/xvdb1;
    address {{2IP}}:7789;
    meta-disk internal;
}
}

```

3. DRBD 1 2 3 4 5 6

```

># drbdadm create-md drbd0
># /etc/init.d/drbd start

```

4. Disk Sync 1 (1 2 3 4 5 6) (DRBD 8.x 7 8)

```

># drbdadm -- --overwrite-data-of-peer primary drbd0

```

5. drbd 1 2 primary 3 (1 2 3 4 5 6 7 8)

```

># drbdadm invalidate drbd0
># drbdadm primary --force drbd0

```

6. 1 2 3 4 5 6 7 8 DRBD 9 10 (DRBD 8.x 11 12)

```

># cat /proc/drbd
version: 8.4.5 (api:1/proto:86-101)
GIT-hash: 1d360bde0e095d495786eaeb2a1ac76888e4db96 build by root@web2, 2015-03-
09 14:49:34
0: cs:SyncTarget ro:Secondary/Primary ds:Inconsistent/UpToDate C r-----
    ns:0 nr:491520 dw:487424 dr:0 al:0 bm:0 lo:16 pe:0 ua:16 ap:0 ep:1 wo:f oos:99869
56

    [>.....] sync'ed: 4.7% (9752/10228)M
    finish: 0:04:05 speed: 40,616 (40,616) want: 102,400 K/sec

```

7. 1 2 3 4 (DRBD 9.0)

```
$> drbdadm status drbd0
drbd0 role:Primary
      disk:UpToDate
      repotx-gitlab-dev02.tx.skp role:Secondary
      replication:SyncSource
      peer-disk:Inconsistent done:8.53
```

DRBD

1. DRBD Primary (master)

```
$> drbdadm primary drbd0
$> cat /proc/drbd      *Primary/Secondary  
version: 8.4.5 (api:1/proto:86-101)
GIT-hash: 1d360bde0e095d495786eae2a1ac76888e4db96 build by root@techtx-base-dev02, 2019-04-26 17:54:37
0: cs:Connected ro:Primary/Secondary ds:UpToDate/UpToDate C r-----
   ns:0 nr:0 dw:0 dr:664 al:0 bm:0 lo:0 pe:0 ua:0 ap:0 ep:1 wo:f oos:0
```

2. (master)

```
># mkfs.ext4 /dev/drbd0
mke2fs 1.41.12 (17-May-2010)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, Stripe width=0 blocks
327680 inodes, 1310595 blocks
65529 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=1342177280
40 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736
\\Writing inode tables: done
```

```
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done
\\This filesystem will be automatically checked every 26 mounts or
180 days, whichever comes first. Use tune2fs -c or -i to override.
```

3. `root@base-dev02:~#` (master `base-dev01`)

```
$> mount /dev/drbd0 /mnt/
$> df -h /mnt

Filesystem      Size  Used Avail Use% Mounted on
/dev/drbd0      4.8G   10M  4.6G   1% /mnt
```

4. `root@base-dev02:~#` (master `base-dev01`)

```
$> touch 123
$> ls -l 123
-rw-r--r-- 1 root root 0 Apr 29 13:04 123
```

5. `root@base-dev02:~#` DRBD secondary `base-dev01` (master `base-dev01`)

```
$> umount /mnt
$> drbdadm secondary drbd0
$> cat /proc/drbd
version: 8.4.5 (api:1/proto:86-101)
GIT-hash: 1d360bde0e095d495786eaeb2a1ac76888e4db96 build by root@techtx-base-dev02, 2019-04-26 17:54:37
0: cs:Connected ro:Secondary/Secondary ds:UpToDate/UpToDate C r-----
    ns:1235836 nr:0 dw:1235836 dr:1409 al:307 bm:0 lo:0 pe:0 ua:0 ap:0 ep:1 wo:f oos:0
```

6. DRBD Primary `base-dev02` (slave `base-dev01`)

```
$> drbdadm primary drbd0
$> cat /proc/drbd
version: 8.4.5 (api:1/proto:86-101)
GIT-hash: 1d360bde0e095d495786eaeb2a1ac76888e4db96 build by root@techtx-base-dev05, 2019-04-26 17:54:29
0: cs:Connected ro:Primary/Secondary ds:UpToDate/UpToDate C r-----
    ns:4 nr:1235836 dw:1235840 dr:1017 al:1 bm:0 lo:0 pe:0 ua:0 ap:0 ep:1 wo:f oos:0
```

7. `root@base-dev02:~#` master `base-dev01` (slave `base-dev02`)

```
># mount /dev/drbd0 /mnt/
># ls -l /mnt/
total 1000020
-rw-r--r-- 1 root root          0 Apr 29 13:04 123
```

DRBD

1. crm_mon -l Active / Standby
2. Corocync / Pacemaker / DRBD
3. DRBD
4. (Standby)

```
$> drbdadm secondary all
$> drbdadm disconnect all
$> drbdadm -- --discard-my-data connect all
```

5. (Active)

```
$> drbdadm primary all
$> drbdadm disconnect all
$>drbdadm connect all
```

6. ()

```
$> drbdadm invalidate drbd0
```

Revision #5

Created 2022-06-08 03:40:35 KST by artop0420

Updated 2026-02-09 01:14:53 KST by artop0420