

HOW TO CLEAR UP PENDING RESYNC ON RAID ARRAY

I have already wrote a couple of posts about software RAID setup and recovery.

Today I will briefly describe how to switch array to read-write state and begin resync process.

This problem can be identified by inspecting kernel ring buffer and array states.

Notice that background reconstruction started on the `md1` array, but it is in `auto-read-only` state and resynchronization is `pending`.

```
# dmesg

[...]

[ 1.312811] md: md0 stopped.
[ 1.313511] md: bind<sdb1>
[ 1.313601] md: bind<sda1>
[ 1.314335] md: raid1 personality registered for level 1
[ 1.314572] md/raid1:md0: active with 2 out of 2 mirrors

[...]

[ 1.516790] md: md1 stopped.
[ 1.517457] md: bind<sdb2>
[ 1.517545] md: bind<sda2>
[ 1.518947] md/raid1:md1: not clean -- starting background reconstruction
[ 1.518949] md/raid1:md1: active with 2 out of 2 mirrors
```

```
[...]
# cat /proc/mdstat

Personalities : [raid1]

md1 : active (auto-read-only) raid1 sda2[0] sdb2[1]
      4203104 blocks super 1.2 [2/2] [UU]
      resync=PENDING

md0 : active raid1 sda1[0] sdb1[1]
      973524352 blocks super 1.2 [2/2] [UU]

unused devices: <none>
```

Execute following command to switch array to **read-write** state and begin resync process.

```
# mdadm --readwrite /dev/md1
```

Transition will be immediately visible by inspecting array states.

```
# cat /proc/mdstat

Personalities : [raid1]

md1 : active raid1 sda2[0] sdb2[1]
      4203104 blocks super 1.2 [2/2] [UU]
      [=>.....] resync = 8.1% (333952/4203104) finish=1.3min speed=47707K/sec
```

```
md0 : active raid1 sda1[0] sdb1[1]
      973524352 blocks super 1.2 [2/2] [UU]
```

```
unused devices: <none>
```

The end result can be verified after synchronization process finishes.

```
# cat /proc/mdstat
```

```
Personalities : [raid1]
```

```
md1 : active raid1 sda2[0] sdb2[1]
      4203104 blocks super 1.2 [2/2] [UU]
```

```
md0 : active raid1 sda1[0] sdb1[1]
      973524352 blocks super 1.2 [2/2] [UU]
```

```
unused devices: <none>
```

Transition messages will be stored in kernel ring buffer.

```
# dmesg
```

```
[171485.722209] md: md1 switched to read-write mode.
```

```
[171485.722895] md: resync of RAID array md1
```

```
[171485.722898] md: minimum _guaranteed_ speed: 1000 KB/sec/disk.
```

```
[171485.722901] md: using maximum available idle IO bandwidth (but not more than 200000
KB/sec) for resync.
```

```
[171485.722905] md: using 128k window, over a total of 4203104k.
```

```
[171558.652298] md: md1: resync done.  
[171558.764453] RAID1 conf printout:  
[171558.764457] --- wd:2 rd:2  
[171558.764460] disk 0, wo:0, o:1, dev:sda2  
[171558.764463] disk 1, wo:0, o:1, dev:sdb2
```

Source: <https://blog.sleeplessbeastie.eu/2015/03/23/how-to-clear-up-pending-resync-on-raid-array/>