

## Thread 1

FILE: sound/hda/hdac\_regmap.c

```
393. void snd_hdac_regmap_exit(...) {
② 394.   if (codec->regmap) {
③ 396.     .....
       codec->regmap = NULL;
       .....
398.   }
399. }
```

## Thread 2

FILE: sound/hda/hdac\_regmap.c

```
① 599. void snd_hdac_regmap_sync(...) {
600.   if (codec->regmap) {
       // codec->regmap is set to NULL
       // by Thread 1
④ 601.   mutex_lock(&codec->regmap_lock);
⑤ 602.   regcache_sync(codec->regmap);
603.   mutex_unlock(&codec->regmap_lock);
604.   }
605. }
```

FILE: drivers/base/regmap/regcache.c

```
345. int regcache_sync(struct regmap *map) {
       .....
⑥ 354.   // Unsafe dereference
       map->lock(map->lock_arg);
       .....
399. }
```

## Thread 1

FILE: fs/gfs2/super.c

```
982. int gfs2_show_options(...) {
       .....
① 1043.   val = sdp->sd_tune.gt_statfs_quantum;
1044.   if (val != 30)
1045.     seq_printf(s, ",statfs_quantum=%d", val);
1046.   else if (sdp->sd_tune.gt_statfs_slow)
1047.     seq_puts(s, ",statfs_quantum=0");
       // sdp->sd_tune.gt_quota_quantum is
       // changed by Thread 2
⑤ 1048.   val = sdp->sd_tune.gt_quota_quantum;
1049.   if (val != 60)
1050.     seq_printf(s, ",quota_quantum=%d", val);
       .....
1078. }
```

## Thread 2

FILE: fs/gfs2/ops\_fstype.c

```
1541. static int gfs2_reconfigure(...) {
       .....
② 1546.   gt = &sdp->sd_tune; // Alias
       .....
③ 1613.   spin_lock(&gt->gt_spin);
1614.   gt->gt_logd_secs = ...;
④ 1615.   gt->gt_quota_quantum = ...;
       .....
1624.   spin_unlock(&gt->gt_spin);
       .....
1628. }
```

## Thread 1

FILE: drivers/scsi/lpfc/lpfc\_hbadisc.c

```
1859. lpfc_register_fcf(...) {
       .....
① 1864.   spin_lock_irq(&phba->hbalock);
       .....
② 1873.   if (!(phba->fcf.fcf_flag &
       FCF_REGISTERED)) {
       // phba->fcf.fcf_flag is
       // changed by Thread 2
④ 1874.     phba->fcf.fcf_flag |= ...;
       .....
⑤ 1883.   spin_unlock_irq(
       &phba->hbalock);
⑥ 1884.   return;
1885.   }
1886.   spin_unlock_irq(
       &phba->hbalock);
       .....
1908. }
```

## Thread 2

FILE: drivers/scsi/lpfc/lpfc\_hbadisc.c

```
6962. lpfc_unregister_fcf_rescan(...) {
       .....
③ 6979.   phba->fcf.fcf_flag = 0;
       .....
7009. }
```

(a) Null-pointer dereference in the HDA driver

(b) Data inconsistency in the GFS2 file system

(c) Double fetch in the LPFC SCSI driver