
Subject: [PATCH 4/15] Make block layer /proc files use seq_list_xxx helpers

Posted by [xemul](#) on Fri, 18 May 2007 09:27:29 GMT

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The /proc/partitions .show callback checked the *v to be the first element in list to show the header. Now *v is the struct list_head pointer and it is checked for the head of the list.

The comment in /proc/diskstats .show handler is also updated not to forget it in the future.

Signed-off-by: Pavel Emelianov <xemul@openvz.org>

```
diff --git a/block/genhd.c b/block/genhd.c
index 863a8c0..8813c14 100644
--- a/block/genhd.c
+++ b/block/genhd.c
@@ -270,22 +270,13 @@ void __init printk_all_partitions(void)
/* iterator */
static void *part_start(struct seq_file *part, loff_t *pos)
{
- struct list_head *p;
- loff_t l = *pos;
-
- mutex_lock(&block_subsys_lock);
- list_for_each(p, &block_subsys.list)
- if (!l--)
- return list_entry(p, struct gendisk, kobj.entry);
- return NULL;
+ return seq_list_start_head(&block_subsys.list, *pos);
}

static void *part_next(struct seq_file *part, void *v, loff_t *pos)
{
- struct list_head *p = ((struct gendisk *)v)->kobj.entry.next;
- ++*pos;
- return p==&block_subsys.list ? NULL :
- list_entry(p, struct gendisk, kobj.entry);
+ return seq_list_next(v, &block_subsys.list, pos);
}

static void part_stop(struct seq_file *part, void *v)
@@ -295,13 +295,16 @@ static void part_stop(struct seq_file *p

static int show_partition(struct seq_file *part, void *v)
```

```

{
- struct gendisk *sgp = v;
+ struct gendisk *sgp;
  int n;
  char buf[BDEVNAME_SIZE];

- if (&sgp->kobj.entry == block_subsys.list.next)
+ if (v == &block_subsys.list) {
    seq_puts(part, "major minor #blocks name\n\n");
+ return 0;
+ }

+ sgp = list_entry(v, struct gendisk, kobj.entry);
  /* Don't show non-partitionable removeable devices or empty devices */
  if (!get_capacity(sgp) ||
      (sgp->minors == 1 && (sgp->flags & GENHD_FL_REMOVABLE)))
@@ -622,22 +616,13 @@ decl_subsys(block, &ktype_block, &block_
  /* iterator */
  static void *diskstats_start(struct seq_file *part, loff_t *pos)
  {
- loff_t k = *pos;
- struct list_head *p;
-
    mutex_lock(&block_subsys_lock);
- list_for_each(p, &block_subsys.list)
- if (!k--)
- return list_entry(p, struct gendisk, kobj.entry);
- return NULL;
+ return seq_list_start(&block_subsys.list, *pos);
  }

  static void *diskstats_next(struct seq_file *part, void *v, loff_t *pos)
  {
- struct list_head *p = ((struct gendisk *)v)->kobj.entry.next;
- ++*pos;
- return p==&block_subsys.list ? NULL :
- list_entry(p, struct gendisk, kobj.entry);
+ return seq_list_next(v, &block_subsys.list, pos);
  }

  static void diskstats_stop(struct seq_file *part, void *v)
@@ -647,18 +632,21 @@ static void diskstats_stop(struct seq_fi

  static int diskstats_show(struct seq_file *s, void *v)
  {
- struct gendisk *gp = v;
+ struct gendisk *gp;
    char buf[BDEVNAME_SIZE];

```

```
int n = 0;

/*
- if (&sgp->kobj.entry == block_subsys.kset.list.next)
+ if (v == &block_subsys.list) {
    seq_puts(s, "major minor name"
        "    rio rmerge rsect ruse wio wmerge "
        "wsect wuse running use aveq"
        "\n\n");
+ return 0;
+ }
*/

+ gp = list_entry(v, struct gendisk, kobj.entry);
  preempt_disable();
  disk_round_stats(gp);
  preempt_enable();
```
