
Subject: [PATCH 12/13] BC: numtasks accounting
Posted by [dev](#) on Thu, 09 Nov 2006 17:02:17 GMT
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Beautifull tasks accounting/limiting beancounter control.

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```
include/linux/sched.h | 1 +
kernel/bc/misc.c      | 31 +++++
2 files changed, 32 insertions(+)
```

--- ./include/linux/sched.h.bctasks 2006-11-03 17:47:38.000000000 +0300

+++ ./include/linux/sched.h 2006-11-03 17:51:57.000000000 +0300

```
@@ -1068,6 +1068,7 @@ int copy_beancounter(struct task_struct
#endif
#ifdef CONFIG_BEANCOUNTERS
    struct beancounter *exec_bc;
+ struct beancounter *task_bc;
#endif
};
```

--- ./kernel/bc/misc.c.bctasks 2006-11-03 17:47:38.000000000 +0300

+++ ./kernel/bc/misc.c 2006-11-03 17:51:57.000000000 +0300

```
@@ -17,6 +17,10 @@ int copy_beancounter(struct task_struct
    struct beancounter *bc;
```

```
    bc = parent->exec_bc;
+ if (bc_charge(bc, BC_NUMTASKS, 1, BC_LIMIT))
+ return -ENOMEM;
+
+ tsk->task_bc = bc_get(bc);
+ tsk->exec_bc = bc_get(bc);
    return 0;
}
```

```
@@ -25,6 +29,10 @@ void free_beancounter(struct task_struct
{
    struct beancounter *bc;
```

```
+ bc = tsk->task_bc;
+ bc_uncharge(bc, BC_NUMTASKS, 1);
+ bc_put(bc);
+
    bc = tsk->exec_bc;
    bc_put(bc);
```

```

}
@@ -86,3 +94,26 @@ int bc_task_move(struct task_struct *tsk
    return err;
}
EXPORT_SYMBOL(bc_task_move);
+
+#define BC_NUMTASKS_BARRIER 128
+#define BC_NUMTASKS_LIMIT 128
+
+static int bc_task_init(struct beancounter *bc, int i)
+{
+    bc_init_resource(&bc->bc_parms[BC_NUMTASKS],
+    BC_NUMTASKS_BARRIER, BC_NUMTASKS_LIMIT);
+    return 0;
+}
+
+static struct bc_resource bc_task_resource = {
+    .bcr_name = "numtasks",
+    .bcr_init = bc_task_init,
+};
+
+static int __init bc_misc_init_resource(void)
+{
+    bc_register_resource(BC_NUMTASKS, &bc_task_resource);
+    return 0;
+}
+
+__initcall(bc_misc_init_resource);

```
