
Subject: [RFC][PATCH 4/7] VPIDs: vpid macros in non-VPID case
Posted by [Kirill Korotaev](#) on Thu, 02 Feb 2006 16:26:28 GMT
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This patch specifies an "interface" to virtual pids. That is some macros/inlines to obtain pids from tasks, convert pids to vpids and vice versa and set pids.

Kirill

```
--- ./include/linux/pid.h.vpid_macro 2006-01-03 06:21:10.000000000 +0300
+++ ./include/linux/pid.h 2006-02-02 14:32:41.162807472 +0300
@@ -19,6 +19,19 @@ struct pid
    struct list_head pid_list;
};

+#ifndef CONFIG_VIRTUAL_PIDS
+#define __is_virtual_pid(pid) 0
+#define is_virtual_pid(pid) 0
+#define vpid_to_pid(pid) (pid)
+#define __vpid_to_pid(pid) (pid)
+#define pid_type_to_vpid(type, pid) (pid)
+#define __pid_type_to_vpid(type, pid) (pid)
+#define comb_vpid_to_pid(pid) (pid)
+#define comb_pid_to_vpid(pid) (pid)
+#define alloc_vpid(pid, vpid) (pid)
+#define free_vpid(vpid) do { } while (0)
+#endif
+
#define pid_task(elem, type) \
    list_entry(elem, struct task_struct, pids[type].pid_list)

--- ./include/linux/sched.h.vpid_macro 2006-02-02 14:15:55.455698192 +0300
+++ ./include/linux/sched.h 2006-02-02 14:32:41.164807168 +0300
@@ -1257,6 +1257,78 @@ static inline unsigned long *end_of_stac

#endif

+#ifndef CONFIG_VIRTUAL_PIDS
+static inline pid_t virt_pid(struct task_struct *tsk)
+{
+    return tsk->pid;
+}
+
+static inline pid_t virt_tgid(struct task_struct *tsk)
+{
+    return tsk->tgid;
+}
+

```

```

+
+static inline pid_t virt_pgid(struct task_struct *tsk)
+{
+ return tsk->signal->pgrp;
+}
+
+static inline pid_t virt_sid(struct task_struct *tsk)
+{
+ return tsk->signal->session;
+}
+
+static inline pid_t get_task_pid_ve(struct task_struct *tsk,
+ struct task_struct *ve_tsk)
+{
+ return tsk->pid;
+}
+
+static inline pid_t get_task_pid(struct task_struct *tsk)
+{
+ return tsk->pid;
+}
+
+static inline pid_t get_task_tgid(struct task_struct *tsk)
+{
+ return tsk->tgid;
+}
+
+static inline pid_t get_task_pgid(struct task_struct *tsk)
+{
+ return tsk->signal->pgrp;
+}
+
+static inline pid_t get_task_sid(struct task_struct *tsk)
+{
+ return tsk->signal->session;
+}
+
+static inline int set_virt_pid(struct task_struct *tsk, pid_t pid)
+{
+ return 0;
+}
+
+static inline void set_virt_tgid(struct task_struct *tsk, pid_t pid)
+{
+}
+
+static inline void set_virt_pgid(struct task_struct *tsk, pid_t pid)
+{

```

