
Subject: [PATCH] msr.c: use smp_call_function_single()
Posted by [adobriyan](#) on Wed, 17 Jan 2007 12:52:46 GMT
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It will execute rdmsr and wrmsr only on the cpu we need.

Signed-off-by: Alexey Dobriyan <adobriyan@openvz.org>

arch/i386/kernel/msr.c | 13 +++++-----
1 file changed, 4 insertions(+), 9 deletions(-)

```
--- a/arch/i386/kernel/msr.c
+++ b/arch/i386/kernel/msr.c
@@ -68,7 +68,6 @@ static inline int rdmsr_eio(u32 reg, u32
#endif CONFIG_SMP

struct msr_command {
- int cpu;
 int err;
 u32 reg;
 u32 data[2];
@@ -78,16 +77,14 @@ static void msr_smp_wrmsr(void *cmd_bloc
{
 struct msr_command *cmd = (struct msr_command *)cmd_block;

- if (cmd->cpu == smp_processor_id())
- cmd->err = wrmsr_eio(cmd->reg, cmd->data[0], cmd->data[1]);
+ cmd->err = wrmsr_eio(cmd->reg, cmd->data[0], cmd->data[1]);
}

static void msr_smp_rdmsr(void *cmd_block)
{
 struct msr_command *cmd = (struct msr_command *)cmd_block;

- if (cmd->cpu == smp_processor_id())
- cmd->err = rdmsr_eio(cmd->reg, &cmd->data[0], &cmd->data[1]);
+ cmd->err = rdmsr_eio(cmd->reg, &cmd->data[0], &cmd->data[1]);
}

static inline int do_wrmsr(int cpu, u32 reg, u32 eax, u32 edx)
@@ -99,12 +96,11 @@ static inline int do_wrmsr(int cpu, u32
if (cpu == smp_processor_id()) {
 ret = wrmsr_eio(reg, eax, edx);
} else {
- cmd.cpu = cpu;
 cmd.reg = reg;
 cmd.data[0] = eax;
```

```
cmd.data[1] = edx;  
- smp_call_function(msr_smp_wrmsr, &cmd, 1, 1);  
+ smp_call_function_single(cpu, msr_smp_wrmsr, &cmd, 1, 1);  
    ret = cmd.err;  
}  
preempt_enable();  
@@ -120,10 +116,9 @@ static inline int do_rdmsr(int cpu, u32  
if (cpu == smp_processor_id()) {  
    ret = rdmsr_eio(reg, eax, edx);  
} else {  
- cmd.cpu = cpu;  
    cmd.reg = reg;  
  
- smp_call_function(msr_smp_rdmsr, &cmd, 1, 1);  
+ smp_call_function_single(cpu, msr_smp_rdmsr, &cmd, 1, 1);  
  
*eax = cmd.data[0];  
*edx = cmd.data[1];
```
