

# [PATCH 3/9] x86-64 untangle smp.h vs thread\_info

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2005-11/9634.html>

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**Date:** 11/30/05

Date: Tue, 29 Nov 2005 23:21:37 -0500  
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Similar to the include dependency in seccomp.h, an inline function in smp.h introduces messy ordering requirements on thread\_info by way of using an inline function instead of macro. Convert on\_each\_cpu to a macro in order to avoid a big include mess.

```

---
include/linux/smp.h | 25 ++++++-----
1 files changed, 13 insertions(+), 12 deletions(-)
applies-to: a156afeaa4d82cdc6ac938c8c06b35d55a65e7fa
887d01c129bdf271901064625b1a01e5dbfc3e0f
diff --git a/include/linux/smp.h b/include/linux/smp.h
index 9dfa3ee..a341b4d 100644
--- a/include/linux/smp.h
+++ b/include/linux/smp.h
@@ -57,19 +57,20 @@ extern int smp_call_function (void (*fun
                                int retry, int wait);

/*
- * Call a function on all processors
+ * Call a function on all processors.
+ * This needs to be a macro to allow for arch specific dependances on
+ * sched.h in preempt_*.
 */
-static inline int on_each_cpu(void (*func) (void *info), void *info,
-                                int retry, int wait)
-{
-    int ret = 0;
-
-    preempt_disable();
-    ret = smp_call_function(func, info, retry, wait);
-    func(info);
-    preempt_enable();
-    return ret;
-}
+#define on_each_cpu(func, info, retry, wait) \
+({ \
+    int ret = 0; \
+ \
+    preempt_disable(); \
+    ret = smp_call_function(func, info, retry, wait); \
+    func(info); \
+    preempt_enable(); \
+    ret; \
+})

```

## Linux-Kernel: [PATCH 3/9] x86-64 untangle smp.h vs thread\_info

```
#define MSG_ALL_BUT_SELF      0x8000 /* Assume <32768 CPU's */
#define MSG_ALL               0x8001
---
```

0.99.9.GIT

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