
Subject: [PATCH 2/8] Add container pointer on struct page
Posted by [Pavel Emelianov](#) on Wed, 30 May 2007 15:23:34 GMT
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Each page is supposed to have an owner - the container that touched the page first. The owner stays alive during the page lifetime even if the task that touched the page dies or moves to another container.

This ownership is the forerunner for the "fair" page sharing accounting, in which page has as many owners as it is really used by.

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

```
diff -upr linux-2.6.22-rc2-mm1.orig/include/linux/mm.h linux-2.6.22-rc2-mm1-0/include/linux/mm.h
--- linux-2.6.22-rc2-mm1.orig/include/linux/mm.h 2007-05-30 12:32:35.000000000 +0400
+++ linux-2.6.22-rc2-mm1-0/include/linux/mm.h 2007-05-30 16:13:09.000000000 +0400
@@ -250,6 +250,12 @@ struct vm_operations_struct {
    struct mmu_gather;
    struct inode;
```

```
+#ifdef CONFIG_RSS_CONTAINER
+#define page_container(page) (page->rss_container)
+#else
+#define page_container(page) (NULL)
+#endif
+
+#define page_private(page) ((page)->private)
+#define set_page_private(page, v) ((page)->private = (v))
```

```
diff -upr linux-2.6.22-rc2-mm1.orig/include/linux/mm_types.h
linux-2.6.22-rc2-mm1-0/include/linux/mm_types.h
--- linux-2.6.22-rc2-mm1.orig/include/linux/mm_types.h 2007-05-30 12:32:35.000000000 +0400
+++ linux-2.6.22-rc2-mm1-0/include/linux/mm_types.h 2007-05-30 16:13:09.000000000 +0400
@@ -83,6 +83,9 @@ struct page {
    unsigned int gfp_mask;
    unsigned long trace[8];
    #endif
    #ifdef CONFIG_RSS_CONTAINER
    + struct page_container *rss_container;
    #endif
};

#endif /* _LINUX_MM_TYPES_H */
```

Subject: Re: [PATCH 2/8] Add container pointer on struct page
Posted by [Andrew Morton](#) on Wed, 30 May 2007 21:45:02 GMT
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On Wed, 30 May 2007 19:28:04 +0400
Pavel Emelianov <xemul@openvz.org> wrote:

```
> +#ifdef CONFIG_RSS_CONTAINER  
> +#define page_container(page) (page->rss_container)  
> +#else  
> +#define page_container(page) (NULL)  
> +#endif
```

static inline C functions are nicer.
