
Subject: [PATCH v3 10/28] slab/slub: struct memcg_params
Posted by [Glauber Costa](#) on Fri, 25 May 2012 13:03:30 GMT
[View Forum Message](#) <> [Reply to Message](#)

For the kmem slab controller, we need to record some extra information in the kmem_cache structure.

Signed-off-by: Glauber Costa <glommer@parallels.com>
Signed-off-by: Suleiman Souhlal <suleiman@google.com>
CC: Christoph Lameter <cl@linux.com>
CC: Pekka Enberg <penberg@cs.helsinki.fi>
CC: Michal Hocko <mhocko@suse.cz>
CC: Kamezawa Hiroyuki <kamezawa.hiroyu@jp.fujitsu.com>
CC: Johannes Weiner <hannes@cmpxchg.org>

```
include/linux/slab.h    | 14 ++++++++
include/linux/slab_def.h |  4 ++++
include/linux/slub_def.h |  3 +++
3 files changed, 21 insertions(+), 0 deletions(-)
```

diff --git a/include/linux/slab.h b/include/linux/slab.h

index a595dce..dbf36b5 100644

--- a/include/linux/slab.h

+++ b/include/linux/slab.h

```
@@ -153,6 +153,20 @@ unsigned int kmem_cache_size(struct kmem_cache *);
#define ARCH_SLAB_MINALIGN __alignof__(unsigned long long)
#endif
```

```
+#ifdef CONFIG_CGROUP_MEM_RES_CTLR_KMEM
```

```
+struct mem_cgroup_cache_params {
```

```
+ struct mem_cgroup *memcg;
```

```
+ int id;
```

```
+ atomic_t refcnt;
```

```
+
```

```
+#ifdef CONFIG_SLAB
```

```
+ /* Original cache parameters, used when creating a memcg cache */
```

```
+ size_t orig_align;
```

```
+
```

```
+#endif
```

```
+};
```

```
+#endif
```

```
+
```

```
/*
```

```
 * Common kmalloc functions provided by all allocators
```

```
 */
```

diff --git a/include/linux/slab_def.h b/include/linux/slab_def.h

index cba3139..06e4a3e 100644

--- a/include/linux/slab_def.h

```

+++ b/include/linux/slab_def.h
@@ -83,6 +83,10 @@ struct kmem_cache {
    int obj_size;
#endif

#ifdef CONFIG_CGROUP_MEM_RES_CTLR_KMEM
+ struct mem_cgroup_cache_params memcg_params;
#endif
+
/* 6) per-cpu/per-node data, touched during every alloc/free */
/*
 * We put array[] at the end of kmem_cache, because we want to size
diff --git a/include/linux/slub_def.h b/include/linux/slub_def.h
index c2f8c8b..5f5e942 100644
--- a/include/linux/slub_def.h
+++ b/include/linux/slub_def.h
@@ -102,6 +102,9 @@ struct kmem_cache {
#ifdef CONFIG_SYSFS
    struct kobject kobj; /* For sysfs */
#endif
#ifdef CONFIG_CGROUP_MEM_RES_CTLR_KMEM
+ struct mem_cgroup_cache_params memcg_params;
#endif

#ifdef CONFIG_NUMA
/*
--
1.7.7.6

```
