
Subject: [PATCH 10/23] slab/slub: struct memcg_params
Posted by [Glauber Costa](#) on Fri, 20 Apr 2012 21:57:18 GMT
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For the kmem slab controller, we need to record some extra information in the kmem_cache structure.

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```
include/linux/slab.h    | 15 ++++++
include/linux/slab_def.h |  4 ++++
include/linux/slub_def.h |  3 +++
3 files changed, 22 insertions(+), 0 deletions(-)
```

```
diff --git a/include/linux/slab.h b/include/linux/slab.h
index a595dce..a5127e1 100644
--- a/include/linux/slab.h
+++ b/include/linux/slab.h
@@ -153,6 +153,21 @@ 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;
+
+ #ifdef CONFIG_SLAB
+ /* Original cache parameters, used when creating a memcg cache */
+ size_t orig_align;
+ atomic_t refcnt;
+
+ #endif
+ struct list_head destroyed_list; /* Used when deleting cpuset cache */
+};
+#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

```
