
Subject: [PATCH 05/11] Add a __GFP_KMEMCG flag
Posted by [Glauber Costa](#) on Mon, 25 Jun 2012 14:15:22 GMT
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This flag is used to indicate to the callees that this allocation will be serviced to the kernel. It is not supposed to be passed by the callers of `kmem_cache_alloc`, but rather by the cache core itself.

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include/linux/gfp.h | 8 ++++++-
1 file changed, 7 insertions(+), 1 deletion(-)

```
diff --git a/include/linux/gfp.h b/include/linux/gfp.h
index 1e49be4..8f4079f 100644
--- a/include/linux/gfp.h
+++ b/include/linux/gfp.h
@@ -37,6 +37,9 @@ struct vm_area_struct;
#define __GFP_NO_KSWAPD 0x400000u
#define __GFP_OTHER_NODE 0x800000u
#define __GFP_WRITE 0x1000000u
+#ifdef CONFIG_CGROUP_MEM_RES_CTLR_KMEM
+#define __GFP_KMEMCG 0x2000000u
+#endif

/*
 * GFP bitmasks..
@@ -88,13 +91,16 @@ struct vm_area_struct;
#define __GFP_OTHER_NODE ((__force gfp_t) __GFP_OTHER_NODE) /* On behalf of other
node */
#define __GFP_WRITE ((__force gfp_t) __GFP_WRITE) /* Allocator intends to dirty page */

+#ifdef CONFIG_CGROUP_MEM_RES_CTLR_KMEM
+#define __GFP_KMEMCG ((__force gfp_t) __GFP_KMEMCG) /* Allocation comes from a
memcg-accounted resource */
+#endif
/*
 * This may seem redundant, but it's a way of annotating false positives vs.
 * allocations that simply cannot be supported (e.g. page tables).
 */
#define __GFP_NOTRACK_FALSE_POSITIVE (__GFP_NOTRACK)

-#define __GFP_BITS_SHIFT 25 /* Room for N __GFP_FOO bits */
```

```
+ #define __GFP_BITS_SHIFT 26 /* Room for N __GFP_FOO bits */
# define __GFP_BITS_MASK ((__force gfp_t)((1 << __GFP_BITS_SHIFT) - 1))

/* This equals 0, but use constants in case they ever change */
--
```

1.7.10.2
