
Subject: [PATCH v4 05/14] Add a __GFP_KMEMCG flag
Posted by [Glauber Costa](#) on Mon, 08 Oct 2012 10:06:11 GMT
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This flag is used to indicate to the callees that this allocation is a kernel allocation in process context, and should be accounted to current's memcg. It takes numerical place of the of the recently removed __GFP_NO_KSWAPD.

[v4: make flag unconditional, also declare it in trace code]

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```
include/linux/gfp.h          | 3 ++-
include/trace/events/gfpflags.h | 1 +
2 files changed, 3 insertions(+), 1 deletion(-)
```

```
diff --git a/include/linux/gfp.h b/include/linux/gfp.h
```

```
index 02c1c97..9289d46 100644
```

```
--- a/include/linux/gfp.h
```

```
+++ b/include/linux/gfp.h
```

```
@@ -31,6 +31,7 @@ struct vm_area_struct;
#define __GFP_THISNODE 0x40000u
#define __GFP_RECLAIMABLE 0x80000u
#define __GFP_NOTRACK 0x200000u
+#define __GFP_KMEMCG 0x400000u
#define __GFP_OTHER_NODE 0x800000u
#define __GFP_WRITE 0x1000000u
```

```
@@ -87,7 +88,7 @@ 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 */
```

```
-
+#define __GFP_KMEMCG ((__force gfp_t) __GFP_KMEMCG) /* Allocation comes from a
memcg-accounted resource */
/*
```

```
/*
```

```
 * This may seem redundant, but it's a way of annotating false positives vs.
 * allocations that simply cannot be supported (e.g. page tables).
```

```
diff --git a/include/trace/events/gfpflags.h b/include/trace/events/gfpflags.h
index 9391706..730df12 100644
--- a/include/trace/events/gfpflags.h
+++ b/include/trace/events/gfpflags.h
@@ -36,6 +36,7 @@
  {(unsigned long)__GFP_RECLAIMABLE, "GFP_RECLAIMABLE"}, \
  {(unsigned long)__GFP_MOVABLE, "GFP_MOVABLE"}, \
  {(unsigned long)__GFP_NOTRACK, "GFP_NOTRACK"}, \
+ {(unsigned long)__GFP_KMEMCG, "GFP_KMEMCG"}, \
  {(unsigned long)__GFP_OTHER_NODE, "GFP_OTHER_NODE"} \
) : "GFP_NOWAIT"
```

--
1.7.11.4
