
Subject: Re: [PATCH 8/8] Per-container pages reclamation
Posted by [Vaidyanathan Srinivas](#) on Thu, 31 May 2007 08:22:13 GMT
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Andrew Morton wrote:

> On Wed, 30 May 2007 19:42:26 +0400

> Pavel Emelianov <xemul@openvz.org> wrote:

>

[snip]

>>

>> +`#ifdef CONFIG_RSS_CONTAINER`

>> +`unsigned long try_to_free_pages_in_container(struct rss_container *cnt)`

>> +`{`

>> + `struct scan_control sc = {`

>> + `.gfp_mask = GFP_KERNEL,`

>> + `.may_wrotepage = 1,`

>> + `.swap_cluster_max = 1,`

>> + `.may_swap = 1,`

>> + `.swappiness = vm_swappiness,`

>> + `.order = 0, /* in this case we wanted one page only */`

>> + `.cnt = cnt,`

>> + `.isolate_pages = isolate_pages_in_container,`

>> + `};`

>> + `int node;`

>> + `struct zone **zones;`

>> +

>> + `for_each_online_node(node) {`

>> + `#ifdef CONFIG_HIGHMEM`

>> + `zones = NODE_DATA(node)->node_zonelists[ZONE_HIGHMEM].zones;`

>> + `if (do_try_to_free_pages(zones, sc.gfp_mask, &sc))`

>> + `return 1;`

>> + `#endif`

>> + `zones = NODE_DATA(node)->node_zonelists[ZONE_NORMAL].zones;`

>> + `if (do_try_to_free_pages(zones, sc.gfp_mask, &sc))`

>> + `return 1;`

>> + `}`

>

> Definitely need to handle ZONE_DMA32 and ZONE_DMA (some architectures put

> all memory into ZONE_DMA (or they used to))

Can we iterate from MAX_NR_ZONES-1 to automatically choose the right
zone for the system?

```
for_each_online_node(node)
```

```
for (i = MAX_NR_ZONES - 1; i >= 0; i--) {
```

```
    zones = NODE_DATA(node)->node_zonelists[i].zones;
```

```
    if (do_try_to_free_pages(zones, sc.gfp_mask, &sc))
```

```
        return 1;
```

The above code works on my PPC64 box where all memory is in ZONE_DMA.

```
>> + return 0;
>> +}
>> +#endif
>> +
>> unsigned long try_to_free_pages(struct zone **zones, int order, gfp_t gfp_mask)
>> {
>>     struct scan_control sc = {
> -
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```
