
Subject: Re: [PATCH 8/8] Per-container pages reclamation
Posted by [Balbir Singh](#) on Tue, 24 Apr 2007 11:01:07 GMT
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Pavel Emelianov wrote:

> Balbir Singh wrote:

>> Pavel Emelianov wrote:

>>> Implement `try_to_free_pages_in_container()` to free the
>>> pages in container that has run out of memory.

>>>

>>> The `scan_control->isolate_pages()` function isolates the
>>> container pages only.

>>>

>> Pavel,

>>

>> I've just started playing around with these patches, I preferred
>> the approach of v1. Please see below

>>

```
>>> +static unsigned long isolate_container_pages(unsigned long nr_to_scan,  
>>> +      struct list_head *src, struct list_head *dst,  
>>> +      unsigned long *scanned, struct zone *zone)
```

```
>>> +{
```

```
>>> +   unsigned long nr_taken = 0;
```

```
>>> +   struct page *page;
```

```
>>> +   struct page_container *pc;
```

```
>>> +   unsigned long scan;
```

```
>>> +   LIST_HEAD(pc_list);
```

```
>>> +
```

```
>>> +   for (scan = 0; scan < nr_to_scan && !list_empty(src); scan++) {
```

```
>>> +       pc = list_entry(src->prev, struct page_container, list);
```

```
>>> +       page = pc->page;
```

```
>>> +       if (page_zone(page) != zone)
```

```
>>> +           continue;
```

>> `shrink_zone()` will walk all pages looking for pages belonging to this

>

> No. `shrink_zone()` will walk container pages looking for pages in the desired zone.

> Scann through the full zone is done on global memory shortage.

>

Yes, I see that now. But for each zone in the system, we walk through the
containers list - right?

I have some more fixes, improvements that I want to send across.
I'll start sending them out to you as I test and verify them.

>> container and this slows down the reclaim quite a bit. Although we've
>> reused code, we've ended up walking the entire list of the zone to

```
>> find pages belonging to a particular container, this was the same
>> problem I had with my RSS controller patches.
>>
>>> +
>>> +    list_move(&pc->list, &pc_list);
>>> +
>>
>
```

--

Warm Regards,
Balbir Singh
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