Subject: Re: [RFC][PATCH 5/7] UBC: kernel memory accounting (core)
Posted by Rohit Seth on Wed, 16 Aug 2006 19:15:29 GMT
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On Wed, 2006-08-16 at 11:47 -0700, Dave Hansen wrote:
> On Wed, 2006-08-16 at 19:40 +0400, Kirill Korotaev wrote:
> > --- ./include/linux/mm.h.kmemcore 2006-08-16 19:10:38.000000000
> > +0400
> > +++ ./include/linux/mm.h 2006-08-16 19:10:51.000000000 +0400
> > @@ -274,8 +274,14 @@ struct page {
> > unsigned int gfp_mask;
> > unsigned long trace[8];
> > #endif
> > +#ifdef CONFIG_USER_RESOURCE
> > + union {
> > + struct user_beancounter *page_ub;
> > + } bc;
> > +#endif
> > };
>
> Is everybody OK with adding this accounting to the 'struct page'?

My preference would be to have container (I keep on saying container, but resource beancounter) pointer embeded in task, mm(not sure), address_space and anon_vma structures. This should allow us to track user land pages optimally. But for tracking kernel usage on behalf of user, we will have to use an additional field (unless we can re-use mapping). Please correct me if I'm wrong, though all the kernel resources will be allocated/freed in context of a user process. And at that time we know if a allocation should succeed or not. So we may actually not need to track kernel pages that closely. We are not going to run reclaim on any of them anyways.

-rohit