Subject: [-mm PATCH 0/7] Memory controller introduction
Posted by Balbir Singh on Wed, 04 Jul 2007 22:21:08 GMT
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Resending with the patch numbering fixed and linux-mm copied

This patchset implements another version of the memory controller. These patches have been through a big churn, the first set of patches were posted last year and earlier this year at
http://lkml.org/lkml/2007/2/19/10

Ever since, the RSS controller has been through four revisions, the latest one being
http://lwn.net/Articles/236817/

This patchset draws from the patches listed above and from some of the contents of the patches posted by Vaidyanathan for page cache control.
http://lkml.org/lkml/2007/6/20/92

Pavel, Vaidy could you look at the patches and add your signed off by where relevant?

At OLS, the resource management BOF, it was discussed that we need to manage RSS and unmapped page cache together. This patchset is a step towards that

TODO's

1. Add memory controller water mark support. Reclaim on high water mark
2. Add support for shrinking on limit change
3. Add per zone per container LRU lists
4. Make page_referenced() container aware
5. Figure out a better CLUI for the controller

In case you have been using/testing the RSS controller, you'll find that this controller works slower than the RSS controller. The reason being that both swap cache and page cache is accounted for, so pages do go out to swap upon reclaim (they cannot live in the swap cache).

I've test compiled the framework without the controller enabled, tested the code on UML and minimally on a power box.

Any test output, feedback, comments, suggestions are welcome!

series

res_counters_infra.patch
mem-control-setup.patch
mem-control-accounting-setup.patch

mem-control-accounting.patch
mem-control-task-migration.patch
mem-control-lru-and-reclaim.patch
mem-control-out-of-memory.patch

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Warm Regards,
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