
Subject: Re: Summary of resource management discussion
Posted by [Paul Jackson](#) on Fri, 16 Mar 2007 21:23:56 GMT
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Herbert wrote:

> looks good to me, except for the potential issue with
> the double indirection introducing too much overhead

It's not the indirection count that I worry about.

It's the scalability of the locking. We must avoid as much as possible adding any global locks on key code paths. This means:

- 1) be reluctant to add them to fork/exit
- 2) just RCU locks on per-job (or finer grain) data when on the normal page allocation path
- 3) nothing outside the current task context for the normal task scheduling code path.

A global lock on the wrong code path is fatal for scaling big NUMA boxes.

... now whether or not that is an issue here, I don't claim to know. I'm just worried that it could be.

Atomic data, such as global counters, is just as bad.

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I won't rest till it's the best ...
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