Subject: Re: [PATCH (resubmit)][BRIDGE] Properly dereference the br_should_route_hook
Posted by Herbert Xu on Thu, 29 Nov 2007 23:49:00 GMT
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On Thu, Nov 29, 2007 at 06:36:50AM -0800, Paul E. McKenney wrote:

>

- > That certainly is an interesting tradeoff... Save a memory barrier
- > when assigning NULL, but pay an extra test and branch in all cases.
- > Though it does make for a simpler rule -- just use rcu assign pointer()
- > in all cases. Of course, if almost all rcu_assign_pointer() executions
- > assign non-NULL pointers, the optimal strategy would be to leave the
- > implementation of rcu_assign_pointer() alone, and simply enforce use
- > of rcu_assign_pointer(), even if the pointer being assigned is NULL.

I was thinking of something much simpler. If the second argument is constant and NULL, then skip the barrier. No run-time slow-down at all.

- > Although rcu_dereference() does a memory barrier only on Alpha, that of
- > rcu_assign_pointer() is needed on any machine that does not preserve store
- > order (Itanium, POWER, ARM, some MIPS boxes according to rumor, ...).

Good point!

Thanks,

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