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CPU isolation vs jailbreaking IPIs

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CPU isolation comes with a handful of cpumasks to help determine which CPUs can sanely be interrupted, but those are not always checked when sending an IPI, nor is it always obvious whether a given cross-call could be omitted (or delayed) if targeting an isolated CPU.

1 (with 2 and 3 as required foundations) shows a way to defer cross-call work targeting isolated CPUs to the next kernel entry, but still requires a manual patching of the actual cross-call.

A grep for “`on_each_cpu()`” and “`smp_call()`” on a mainline kernel yields about 350 results. This slot will be about discussing ways to detect and classify those (remote data retrieval, system wide synchronization...), if and how to patch them and where to draw the line(s) on system administrator configuration vs what is expected of the kernel.

I agree to abide by the anti-harassment policy

Yes

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