

The futexes are evil

RT Summit 2016

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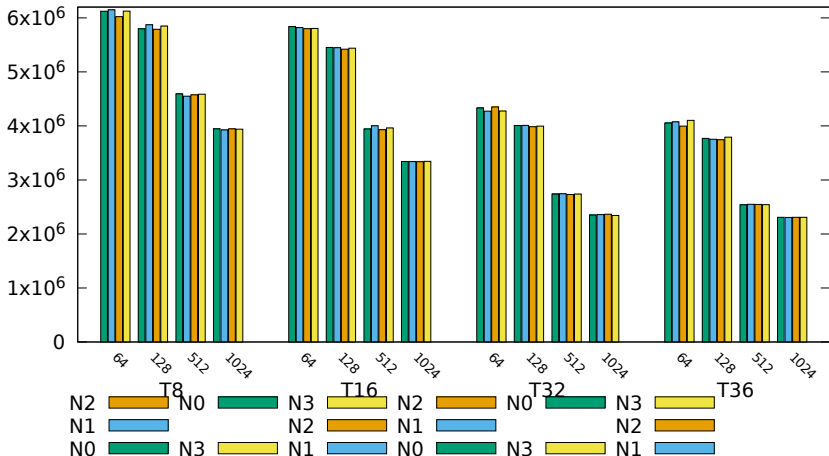
Linutronix GmbH

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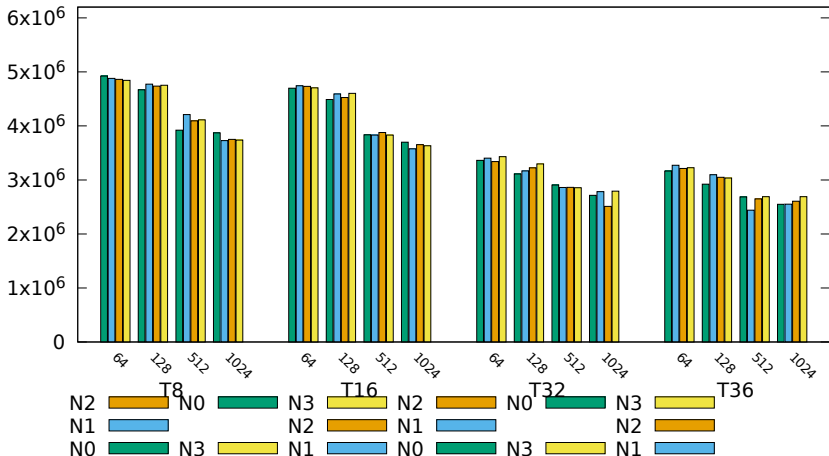
Test box

- ☞ Intel(R) Xeon(R) CPU E7-8890 v3 @ 2.50GHz
- ☞ Four nodes
- ☞ 18 cores dual threaded on each node
- ☞ 144 CPUs in total
- ☞ 64 GiB memory /node
- ☞ <https://git.kernel.org/cgit/linux/kernel/git/bigeasy/linux-futex.git>

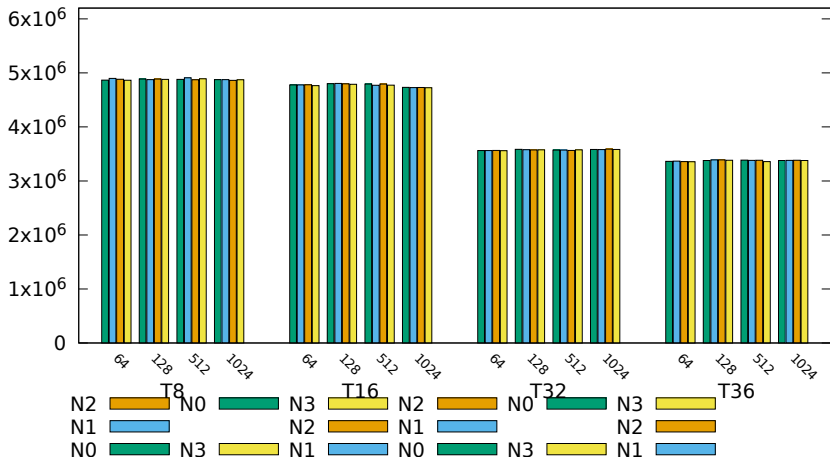
futex v00



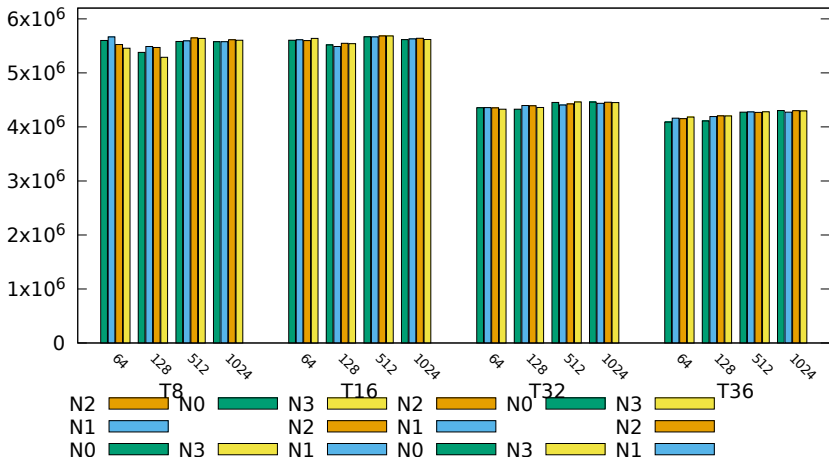
futex v13 rcu tree lookup



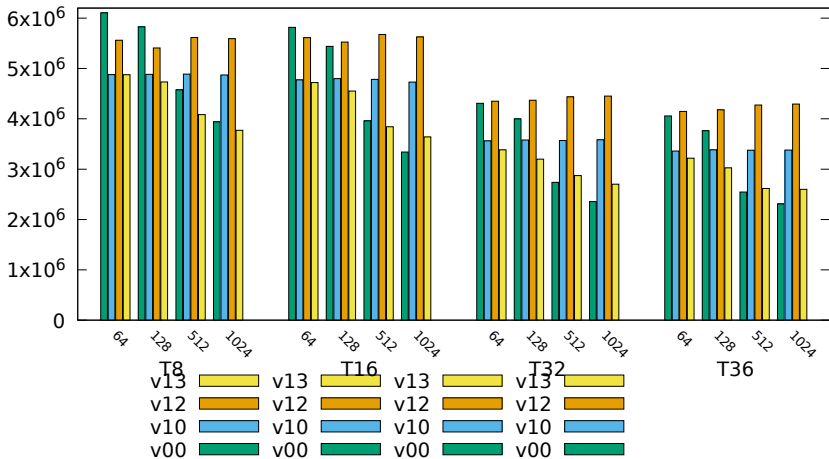
futex v10 per task hash



futex v12 unique ids



Comparison



Thank you for your attention

Contact

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