

Re: Length of sequence of consecutive primes starting at 2

Source: <http://sci.tech-archive.net/Archive/sci.math/2004-07/5308.html>

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anonymous@mathforum.org (Robert Silverman) writes:

- > *May I ask why you need ALL the primes? As I stated, at one time or*
- > *another all primes up to about 10^{12} have been generated. I doubt if*
- > *ANYONE knows what the largest upper bound truly is. It is at least 10^{12} .*

It's a truly uninteresting factette, but the figure is $>6 \cdot 10^{16}$

Oliveira e Silva's performed a distributed brute-force GC verifier which I believe generates all primes. I suspect that the large prime gaps hunters has reached a similar level.

I don't know of any other projects that have any cause to go as far as that, let alone further. (Nicely's twins/Brun project doesn't need to generate all primes, only $0+/-1$, $12+/-1$, $18+/-1 \pmod{30}$, and my GFN sieving only generates a tiny sliver of the primes up to and beyond 10^{17} .)

Phil

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1st bug in MS win2k source code found after 20 minutes: scanline.cpp
2nd and 3rd bug found after 10 more minutes: gethost.c
Both non-exploitable. (The 2nd/3rd ones might be, depending on the CRTL)