Re: Poll: Are PCs Turing Machines?

Source: http://sci.tech−archive.net/Archive/sci.math/2004−12/4969.html

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From: Luis A. Rodriguez (*luiroto_at_yahoo.com*)
Date: 12/04/04

Date: 4 Dec 2004 14:58:43 −0800

"Mark Nudelman" <markn@greenwoodsoftware.com> wrote in message
news:<aWnsd.612508$mD.332631@attbi_s02>...
> Luis A. Rodriguez wrote:
> > examachine@gmail.com (Eray Ozkural exa) wrote in message
> > news:<320e992a.0412030247.375f672a@posting.google.com>...
> >> "Mark Nudelman" <markn@greenwoodsoftware.com> wrote in message
> >> news:<BCKrd.600129$mD.87873@attbi_s02>...
> >>> Eray Ozkural exa wrote:
>
> >>> A TM can perform a calculation that requires 10^1000 storage cells,
> >>> but no PC or any other physical computer could do that.
> >
> > Absurd!! This is the same wrong concept that many people has of what
> > a TM is.
> > The TM dont'n "perform calculations", is the mathematician who
> > decides what a TM will do if it receives the input X = 10^10000, and
> > this can be easily simulated by a PC that can handle powers and
> > logarithms.
>
> I didn't say that a PC couldn't handle an input of X=10^1000. I said that
> it couldn't perform a calculation that requires 10^1000 _storage cells_.
> (For example, multiplying two numbers, each of which has 10^1000 digits.)
> There isn't enough matter in the universe to even begin to build a computer
> that could hold a 10^1000 digit number.
>
> −−Mark

When a conceptual machine has calculated two numbers of 10^1000
digits or handled a matrix of 10^500 x 10^500 ?
Ludovicus