
Subject: Sun vs PC Linux - Anyone making the shift?
Posted by [Michael Lefsky](#) on Mon, 11 Feb 2002 18:23:19 GMT
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<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
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<META content="MSHTML 5.50.4207.2601" name=GENERATOR>
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<DIV>Well, my grant just through the university's processing and I am already to
purchase my new machine, but I am undecided as to what platform to purchase. My
most&nbsp;computationally intensive work will be in IDL and so I want to
maximize the speed (and stability) that it runs at. I also want to work on a
unix platform. I recently tested a close twin to the machine I want (I want the
Sun Blade 1000 with 2 x 900 processors, the machine I tested is a SB1000 with 2
x 450 processors), on the IDLSPEC2 benchmark (which I know is flawed, but is the
best available), with these results:</DIV>
<DIV>&nbsp;</DIV>
<DIV><A name=IS2_37><B><FONT color=#ff0000>Rank:37&nbsp;<IDLSpecMark:
1.556</FONT></B></A><BR><B><FONT color=#000099>Sun Blade 1000&nbsp;<2x450MHz
2048MB&nbsp;<&nbsp;<none></FONT></B><BR><A
href="mailto:lefsky@fsl.orst.edu">lefsky@fsl.orst.edu</A><BR>Fri Jan 25 08:54:31
2002<BR>Video: &lt;unavail&gt;&nbsp;<FONT color=#b23aee>(DirectColor
24)</FONT><BR>sparc:sunos:unix:5.4:Sep 25 2000<BR>Time_Test3 (no I/O)
=&gt;arith: 0.225s (<FONT color=#009900> 1.936</FONT>) geom: 0.199s (<FONT
color=#009900> 1.854</FONT>)<BR>Graphics_Times3 =====&gt;arith: 0.546s (<FONT
color=#009900> 1.612</FONT>) geom: 0.328s (<FONT color=#009900>
1.974</FONT>)<BR>IO_Test: 0.575s (<FONT color=#009900> 0.797</FONT>)</DIV>
<DIV>&nbsp;</DIV>
<DIV>The fastest PC unix machine :</DIV>
<DIV>&nbsp;</DIV>
<DIV><A name=IS2_7><B><FONT color=#ff0000>Rank: 7&nbsp;<IDLSpecMark:
3.036</FONT></B></A><BR><B><FONT color=#000099>Home-built Athalon&nbsp;<
2x1200MHz 1024MB&nbsp;<&nbsp;<RH Linux 7.2</FONT></B><BR><A
href="mailto:tclement@checont1.ucsd.edu">tclement@checont1.ucsd.edu</A><BR>Wed
Nov&nbsp;<7 18:12:43 2001<BR>Video: ATI Rage 128&nbsp;<FONT
color=#b23aee>(TrueColor 24)</FONT><BR>x86:linux:unix:5.5:Aug 28
2001<BR>Time_Test3 (no I/O) =&gt;arith: 0.126s (<FONT color=#009900>
3.444</FONT>) geom: 0.102s (<FONT color=#009900>
3.625</FONT>)<BR>Graphics_Times3 =====&gt;arith: 0.371s (<FONT color=#009900>
2.377</FONT>) geom: 0.192s (<FONT color=#009900> 3.377</FONT>)<BR>IO_Test:
0.206s (<FONT color=#009900> 2.219</FONT>)</DIV>
<DIV>&nbsp;</DIV>
<DIV>The fastest PC:</DIV>
<DIV>
<DIV><A name=IS2_3><B><FONT color=#ff0000>Rank: 3&nbsp;<IDLSpecMark:
```

3.723
DELL Precision 530 / Pentium Xeon 1700MHz 1000MB & <none>
hwarren@cfa.harvard.edu
Fri Oct 19 13:52:14 2001
Video: NVIDIA Quadro2 Pro (TrueColor 24)
x86:Win32:Windows:5.4:Sep 25 2000
Time_Test3 (no I/O) =>arith: 0.095s (4.606) geom: 0.082s (4.507)
Graphics_Times3 =====>arith: 0.311s (2.836) geom: 0.249s (2.606)
IO_Test: 0.234s (1.957)</DIV></DIV><DIV> </DIV><DIV>My questions are:</DIV><DIV> </DIV><DIV>Why are inexpensive PC architectures beating pants off of Sun machines that cost twice as much (but not alphas)?</DIV><DIV> </DIV><DIV>What are Windows machines ahead of PC linux machines? I would have thought the opposite would be true.</DIV><DIV> </DIV><DIV>Has anyone gone in either direction (Sun to Linux or visa versa) and what were your experiences?</DIV><DIV> </DIV><DIV>If I get enough responses, I will post a IDL Sun vs PC summary.</DIV><DIV> </DIV><DIV>Thanks</DIV><DIV> </DIV><DIV>Michael</DIV></BODY></HTML>

Subject: Re: Sun vs PC Linux - Anyone making the shift?
Posted by [Marc Schellens](#) on Sat, 16 Feb 2002 03:45:09 GMT
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> What are Windows machines ahead of PC linux machines? I would have
> thought the opposite would be true.
>
> Has anyone gone in either direction (Sun to Linux or visa versa) and
> what were your experiences?

As the PC you tested for speed are different, I think the result is not very reliable. Perform the test on the same hardware with Linux and Windows.

We are using here both sun and linux.
Sun is very expensive but also very reliable.
Our servers are sun machines. And till now (knock on wood) never failed in three years.
They manage about 1TB (Raid5). (One hardisk was once broken, but because of raid 5 no data was lost)

As workstations we started with sun but now everybody has a linux box. They work well together with the sun servers.
But are not as stable as the sun machines (which might be due to more 'progressive' applications).

In another new lab we started with linux servers.
Disk capacity is 500GB (Raid5).
Since one year they work also almost without failure.
(One harddisk broke, but no data was lost s.a.).

To me it appears that nowadays, PC have the much better value, at least using IDL. Also as Ken said already, you get a *much* more comfortable environment.
(we had KDE1 under Solaris, but to compile it it took some effort and CDE... - well its a shame that all the big workstation companys couldn't come up with something better - see KDE2).
And usually you do not need 99.9% availability in science.
Provided a powerful backup solution (using DLT), which you should have anyway you are on the save side.

Concerning IDL, the compatibility is very high.
Our IDL programs run both on IDL for linux and Solaris.
This is not true for windows, here the handling of filenames has to be adapted.

HDH,
marc
