The Business Case for
Migrating from Solaris to SUSE® Linux Enterprise Server

Kerry Kim
Product Marketing Manager
Novell, Inc.
kkim@novell.com

Al Gillen
Program Vice President
Systems Software
IDC
agillen@idc.com

Noah Broadwater
Vice President of Information Services
Sesame Workshop
Noah.Broadwater@sesameworkshop.org

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IDC
Analyze the Future

Sesame Workshop
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Sun Is Said to Cancel Big Chip Project
By Ashlee Vance

According to two people briefed on Sun’s plans, the company has canceled its Rock chip project, putting an end to one of its biggest revitalization bets.
Topics

UNIX Trends and Migration Prospects

Why SUSE® Linux Enterprise Server

What Sesame Workshop Learned

Next Steps
UNIX Trends and Migration Prospects
Al Gillen, IDC
UNIX Operating Environments
Trends and Migration Prospects

Al Gillen
Program VP, System Software
agillen@idc.com
732-842-4276

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Introduction

- The State of Major UNIX Players
- Size of UNIX Market
- Migration Potential
- Essential Guidance
Key UNIX Players

IBM
- AIX one of three key operating systems and three architectures

HP
- Committed to Itanium with the HP Integrity line. HP-UX remains a core product.

Sun
- Bold initiative with OpenSolaris and Solaris 10 for x86 helped gain mindshare
- Sale to Oracle creates far more questions than answers – for now

Rest of the Market
- Little future for non-mainstream UNIX distributions.
- Apple is the one exception to that rule.
Observations:

- Solaris (combined) accounts for 45-48% of total
- IBM + HP UNIX combined share has grown from 14% in 1999, projected to reach 29% in 2013
- Overall market is down from 2000/2001 peak of 3.7 million, will fall below 2 million in 2013
- Other players marginalized; falling from 69% in 1999 to 19% in 2008, projected for 7% in 2013
QB3: Within the next three years, what is the likelihood that you will migrate any of the following UNIX based applications to another operating system? Note: The “N” is based on the number of applications running each UNIX variant.

- SCO, HP Tru64 UNIX, and Other UNIX have the greatest potential to migrate somewhere.
- Solaris is among the least likely to migrate – but a large installed base ensures that even a smaller % of “highly likely” leads to bigger numbers.
- This “migration likelihood” data pre-dates the current economic conditions and the Oracle acquisition.
Solaris stands alone as the largest installed base

Solaris customers tend to be different than other UNIX user groups

IBM, HP customers account for the bulk of the market outside of Solaris
Worldwide UNIX Operating Systems
Installed base likelihood to migrate, 2008 (000)

- Probability cross tabbed against installed base shows likelihood for continued migration
- Solaris shops typically are most likely to make a UNIX-to-Linux migration due to overall market penetration
- SCO highly vulnerable, but often is found in niche markets
- The potential for Solaris migrations is likely to change regardless of what Oracle’s plans are for Solaris

Source: IDC, 2009
UNIX Migration Path by UNIX Platform

QB4: To which server operating system are you most likely to migrate...

Note: The “N” is based on the number of applications running each UNIX variant.

- When a migration occurs, the top targets are Windows and Linux.
- Solaris and SCO most frequently replaced by Linux, while other UNIX versions tend to go to Windows.
- We find that Sun shops are typically technically savvy, invest heavily in IT, see IT as a competitive advantage.
- Other UNIX shops tend to be less receptive to Linux, likely related to vendor/ISV influence.
- Applications availability play a role here, too.
Linux is a good alternative for UNIX

- Infrastructure workloads are among the easiest to migrate
- Some non-critical roles may be well-served by free Linux
  - Only if core competency is on staff, and with cost justification
- Include a plan for virtualization into any deployments
- Consider app availability, porting costs and SLA commitments
- Recognize that not every UNIX server needs to go to Linux

Commercial Linux vendors offer a measurable value proposition

- Understand needs for lifecycle support, interop, manageability
- Application support will largely be on commercial distros
Why SUSE® Linux Enterprise Server
Kerry Kim, Novell®
Some Data

7,700 New customers in the last two years

61% CAGR of Novell® Linux business

2/3 Of customers migrating to SUSE® Linux Enterprise Server coming from UNIX

Majority of those migrating are Solaris / SPARC users
Why Migrate

- Better price performance
- High degree of ISV enthusiasm and innovation
- Freedom from vendor lock-in
25% Lower TCO (Cumulative Five Year)

<table>
<thead>
<tr>
<th></th>
<th>SAP 64-bit on Sun SPARC and Solaris</th>
<th>SAP 64-bit on HP x86 and SLES</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Server Hardware</td>
<td>183,872</td>
<td>71,520</td>
<td>112,352</td>
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<tr>
<td>Server Software</td>
<td>48,000</td>
<td>20,272</td>
<td>27,728</td>
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<td>Systems Management</td>
<td>95,275</td>
<td>67,835</td>
<td>27,440</td>
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<td>Facilities</td>
<td>81,470</td>
<td>29,435</td>
<td>52,035</td>
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<td>Change Costs</td>
<td>5,825</td>
<td>59,421</td>
<td>-53,596</td>
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<tr>
<td>HW and SW Support and Maintenance</td>
<td>182,980</td>
<td>51,750</td>
<td>131,230</td>
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<tr>
<td>Total IT Costs</td>
<td>597,422</td>
<td>300,233</td>
<td>297,189</td>
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<tr>
<td>Business Costs</td>
<td></td>
<td></td>
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<tr>
<td>Unplanned Downtime</td>
<td>35,560</td>
<td>27,460</td>
<td>8,100</td>
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<tr>
<td>Planned Downtime</td>
<td>31,515</td>
<td>31,515</td>
<td>0</td>
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<tr>
<td>Security Related Downtime</td>
<td>96,780</td>
<td>107,580</td>
<td>-10,800</td>
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<tr>
<td>Opportunity Costs</td>
<td>481,848</td>
<td>458,768</td>
<td>23,080</td>
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<tr>
<td>Total Business Costs</td>
<td>645,703</td>
<td>625,323</td>
<td>20,380</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>1,243,125</strong></td>
<td><strong>925,556</strong></td>
<td><strong>317,569</strong></td>
</tr>
</tbody>
</table>

Source: Alinean, August 2009
Why SUSE® Linux Enterprise Server

- Reliable, scalable, secure infrastructure platform
- Designed for your mission critical workloads – both physical and virtual
- Recommended by leading ISVs, like SAP
- Flexible and interoperable – endorsed by Microsoft
What Sesame Workshop Learned
Noah Broadwater, Sesame Workshop
Where we were

• Heterogeneous Primary Data Center
  – 20 Sparc/Solaris
  – 15 NetWare® (HP Proliant DL series)
  – 10 Windows (HP Proliant DL series)
  – 5 Linux (HP Proliant DL series)

• Linux only Co-location Facility
  – 60 Linux Servers mixed versions from Debian to SUSE®
  Linux Enterprise Server

• 4 Engineers/Admins
  – 1 UNIX, 2 Windows, 2 NetWare®, all 4 Linux
Strategy

• Standardize hardware to reduce maintenance costs
  – Chose HP Blade technology

• Change all Co-located servers to SUSE® Linux Enterprise Server with Virtualization
  – Reduced capacity to 20 servers

• Transition NetWare® over to SUSE Linux Enterprise Server

• Transition Solaris applications to SUSE Linux Enterprise Server

• Virtualize Windows Servers on SUSE Linux Enterprise Server and migrate windows apps where possible to Linux
Solaris to SLES

• Migrated Dev and Test servers
  – To reduce expensive Sparc maintenance
  – To increase internal Engineering support

• Migrated BI systems in 2008 and found a 5% increase in performance on SUSE® Linux Enterprise Server 10 over Solaris 9. Migrating last system in Spring 2010

• Consolidated Web servers and reduced hardware costs by 30%

• TCO reduced by 8%
What We Learned

• Significantly lowered hardware maintenance by having single hardware solution (no longer contract third party for parts – keep spares onsite)

• Significantly lowered licensing by using single OS and purchasing in quantity

• Reduced maintenance on both hardware and OS

• Increased internal engineering support and lowered training costs by reducing platforms

• Working with the right partners helps – ITAM Services and Novell®
Next Steps
For More Information

- Download self-help resources at www.novell.com/solaris
- Estimate your own migration costs and benefits using the TCO tool on www.novell.com/solaris
- See which other customers have migrated their Solaris workloads to SUSE Linux Enterprise Server at www.novell.com/success
- Get more market research at www.novell.com/idc
- Find out more about our limited time zero risk migration assessment offer at www.novell.com/promo/100/solaris.html
- Register for technical Webcast -“Best Practices in Migrating from Solaris to SUSE Linux Enterprise Server” at go.eseminarslive.com/solaris
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