

TCO Cost Comparison – IBM/Linux versus Microsoft

This presentation contains a financial comparison of 2 possible solutions for a hypothetical situation

Your specific situation is almost certainly different so your specific results will almost certainly be different

We would be delighted to modify these hypothetical situations and solutions to fit your unique requirements

Please contact us at 800-465-6887
Priority code: 104CBW74

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Hypothetical Situation

- Need to improve collaboration
 - Email
 - Calendaring
 - Instant Messaging
- Need to support 100 end users 24 x 7
 - Microsoft^R Outlook Clients
and / or
 - IBM^R Lotus Notes^R Clients
- Need to increase reliability and reduce total cost of ownership

Overview of 2 Alternatives

(Middleware Required)

- IBM / Linux®-based
 - Linux
 - Lotus®Domino® Server
(Includes Sametime Server)
 - Lotus Notes CAL
- Microsoft-based
 - Windows® XP
 - Exchange Server
 - Exchange CAL
 - Live Comm. Server
 - Live Comm. CAL
 - SQL Server
 - SMS Server
 - SMS CAL

Value Propositions

- **The Value of IBM Lotus Notes and Domino**

- Single point of access to frequently-used resources such as e-mail, calendar, instant messaging and collaborative tools.
- Presence awareness, instant messaging and (optional) Web conferencing integration.
- Security features that can help minimize or eliminate the impact of computer viruses.
- Productivity features designed to help users manage their ever-growing mailboxes more effectively, including full-text search.
- Industry-leading calendar and scheduling capabilities, including centralized management of conference rooms and meeting resources such as audio-visual equipment.
- Advanced replication technology that allows users to be productive and efficient even when they are disconnected from the network
- And it runs on Linux!

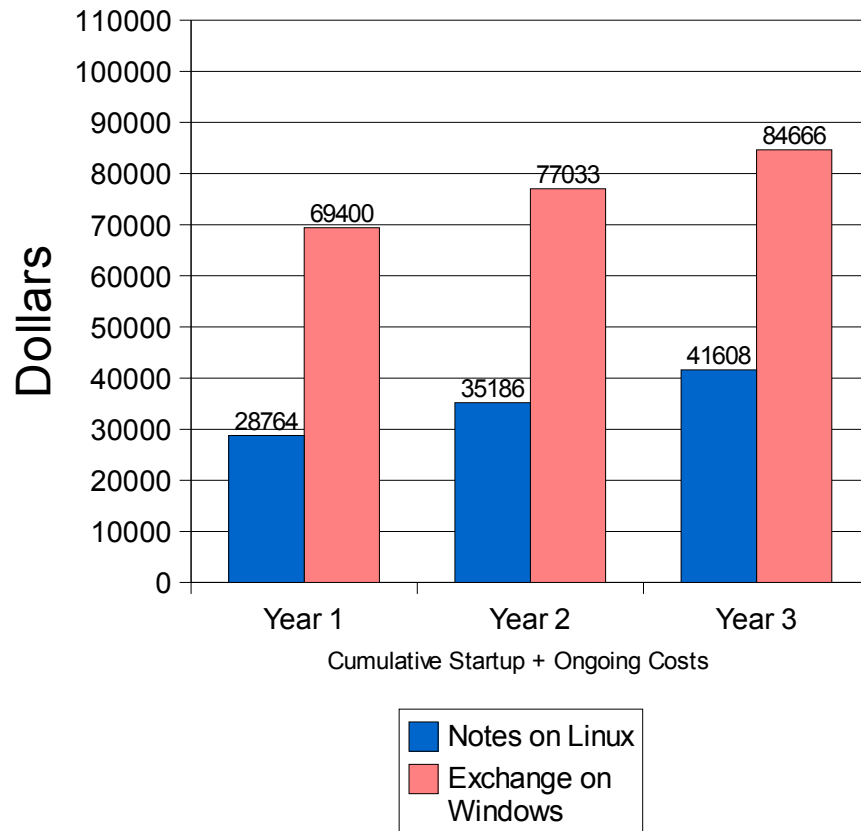
- **The Value of Lotus Notes and Domino on Linux**

- Open standards and J2EE® based middleware help ensure interoperability and leverage flexibility and choice both on the server and now with Lotus Notes on the desktop
- Use money saved by not renewing/signing Microsoft enterprise agreements to fund mission critical initiatives
- Some users of competitive, proprietary products are tired of installing security patches and managing rooms full of servers. Lotus Notes and Domino on Linux offers security features and scalability.
- Linux reliability affords lower unexpected and planned outages providing business continuity without disruption costs

Total Cost of Ownership (TCO)

Comparison Includes One-time + Ongoing Costs

TCO Comparison (Lower is Better)



These numbers represent a hypothetical situation. See assumptions used in the attached Appendix

- Both Solutions Support:
 - 100 End Users
 - Microsoft® Outlook and / or Lotus Notes Clients
- Costs Compared Include:
 - Hardware
 - Operating System
 - Software (Email, Calendaring, IM)
 - 7 x 24 Support
 - Hardware Warranty and Software Maintenance for 3 Years

Additional TCO Considerations

(these factors were not included in TCO Comparison on previous page)

- **Downtime Costs**

- If Linux availability is 99.95%^{*EMA} and the cost of server downtime is \$100^{**} per hour, then a Linux-based solution could save an additional **\$8,322^{**} per year per server.**
- If Linux availability is 99.95%^{*EMA} and end-user burden rates average \$20^{**} per hour, then a Linux-based solution could save an additional **\$277^{**} per year per end-user.**
- If Linux requires 17 patches/year at 1.0 hours/patch^{*RFG, EMA} and Windows requires 30 patches/year at 1.75 hours/patch, then a Linux-based solution could avoid 9.75 hours of downtime and save an additional **\$975 per year per server.**

- **Administration Costs**

- If a typical administrator can manage either 32 Windows or 68 Linux servers^{*EMA} then a **Linux administrator could at least twice as productive** as a Windows administrator.

*Please see links to studies from Robert Francis Group (RFG) and Enterprise Management Associates (EMA) on page 8

**See Appendix

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**See Appendix

More Information

- If you have any questions, or want to customize the hypothetical situations or solutions, or just want to get started, please contact us at:
 - 800-465-6887, priority code: 104CBW74
- Footnotes / Reference Materials
 - 1) Linux: A Capital Idea by Joe McKendrick, Linux Executive Report:
<http://www-1.ibm.com/linux/industry/capital.shtml>
 - 2) TCO for Application Servers: Comparing Linux with Windows and Solaris by Robert Francis Group:
<http://www.rfgonline.com/studies/linuxtco0805/index.html>
 - 3) Get the Truth on Linux Management by Enterprise Management Associates:
http://www.osdl.org/newsroom/press_releases/2006/2006_02_13_beaverton.html
 - 4) Beyond TCO – The Unanticipated Second Stage Benefits of Linux by PUND-IT, INC.:
<http://www-1.ibm.com/linux/whitepapers/pundITLinuxSecondStageBenefits.pdf>

Data Points for IBM / Linux-based Solution

| <u>Description</u> | <u>Extended Price</u> | <u>Extended Annual Maintenance</u> |
|---|------------------------------|---|
| Number of users = 100 | | |
| Red Hat Enterprise Linux | \$2499 | \$2499 |
| Domino Server, Messaging Only, 2 Processors | \$2390 | \$1236 |
| Lotus Notes CAL, Messaging Only | \$8900 | \$1825 |
| Sametime Server | \$1799 | \$450 |
| Sametime Server CALs | \$1650 | \$413 |
| Intel Hardware (2 Servers Required) | \$11526 | |

Prices used are standard list prices available at the time of this comparison, prices may vary now

Data Points for Microsoft-based Solution

| <u>Description</u> | <u>Extended Price</u> | <u>Extended Annual Maintenance</u> |
|---|------------------------------|---|
| Number of users = 100 | | |
| Windows Server 2003, Enterprise, 5 Servers | \$8995 | \$2449 |
| Exchange Server | \$3099 | \$775 |
| Exchange CAL's | \$5500 | \$1375 |
| Live Communication Server, Enterprise Edition | \$2499 | \$625 |
| Live Communication CAL's | \$2500 | \$625 |
| SQL Server Enterprise, per Processor | \$425 | \$110 |
| SMS Server (for client updates) | \$499 | \$125 |
| SMS CAL's | \$3500 | \$875 |
| Intel Hardware (4 Servers Required) | \$18500 | |
| Storage Server | \$12750 | |

Prices used are standard list prices available at the time of this comparison, prices may vary now

Data Points for Additional TCO Considerations*

- Windows averages 99.00% availability and Linux averages 99.95% availability according to analyst studies. There are 8760 hours in a year, Linux is available 832.2 more hours per year than Windows.
- Downtime costs vary widely by application, industry, company, etc. Most clients tell us unscheduled downtime can cost them anywhere from thousands to millions of dollars per hour. We used \$100 per hour, it's conservative and extrapolates easily.
- End user burden rates vary widely. We used \$20 per hour, it's conservative and extrapolates easily.