



Lotus on Linux Report -- Technical Edition

An IdoSphere webinar

Presented by: Bill Malchisky Jr.



Session Title

What we will cover in this Webinar

1

Introduction

2

IBM's Commitment to Linux

3

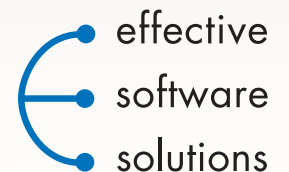
Server-side Goodness with Domino, Sametime, et alia

4

Partitioning

5

Resources



A Little Bit About Your Speaker...



- Working with Notes since 3.0c, in 1993
- Architect, admin, auditor, trainer, process engineer, team lead, "reformed developer"
- Co-authored two IBM Redbooks on Linux; several publications
- Significant regulatory compliance and Domino specialty project experience
- Linux aficionado




effective
software
solutions

How Does IBM Collaboration Software View Linux?



The state of Linux at IBM is:

 **Strong**

 effective
software
solutions

IBM's Linux Timeline – Part I



1999: Linux community involvement

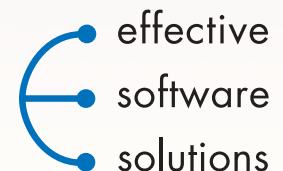
2000: Linux on all IBM hardware pledge

Invested \$1B (£621M) into long-range planning

2001: \$40M (£25M) software donation to form Eclipse organization

1200 developers in 63 countries contribute

2003: Inaugural keynote—Linux Desktop Consortium



IBM's Linux Timeline – The Middle



2003: Kicks-off its internal desktop conversion

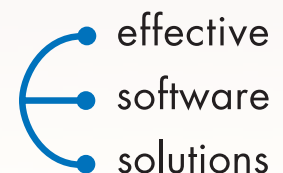
2005: IBM donates intellectual capital

500 Patents to Open-Source Developers

2007: IBM joins OpenOffice Team

Announced IBM Open Collaboration Client solution with Red Hat, Novell

**2008: IBM announced open virtual client with Canonical
and Virtual Bridges (VB)**



IBM's Linux Timeline – Part III



2009: IBM announced IBM Client for Smart Work in Africa and USA

Canonical, Virtual Bridges, and Red Hat

Linux Cloud offerings:<http://tinyurl.com/ykvossk>

zLinux value boost: “Linux saved the mainframe”

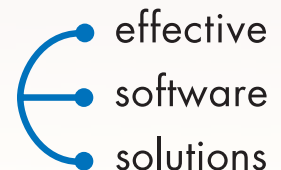
2010: IBM Announces leaving IE for Firefox

145,000 internal users immediately switch

2010: Reaffirms “500 Patent Pledge” from 2005

<http://tinyurl.com/29gt8d5>

2011: Announces Virtual Desktop Initiative with Virtual Bridges, running on SLES11



Beyond Cash Investments and Events...



Major human capital investment too

- ♦ Committed 600+ people, all dedicated to open-source development
- ♦ Actively contributing to Linux and over 150 other open source projects and communities
 - ▶ Apache and Apache projects
 - ▶ Eclipse, Mozilla Firefox
 - ▶ OpenOffice.org, Document Foundation (LibreOffice; project fork)

Source: “IBM & the Linux Community”, <http://www-03.ibm.com/linux/community.html>



IBM Created Two Competency Centers – #1



Linux Technology Center (LTC)

Houses the 600+ people working on open-source initiatives

IBM Technical competency center for Linux

<http://www-03.ibm.com/linux/ltc/index.html>



IBM Created Two Competency Centers – #2



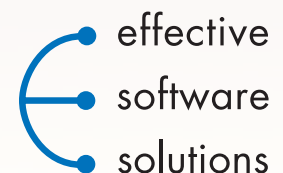
Linux Information Center (LIC)

Dedicated to bringing Linux technology to the marketplace

Helps new midmarket customers looking to deploy Linux solutions

Assists BPs seeking to develop and deliver Linux-based integrated solutions

<http://www-03.ibm.com/linux/lic.html>



Provides Valuable Legal Support



Software Freedom Law Center

Legal representation and related services to protect and advance Free, Libre and Open Source Software (FLOSS)

Represents the best in well-established free software and open source projects

Open Invention Network

Intellectual property company formed to promote Linux through patent utilization, creating a collaborative ecosystem

Free Software Foundation

Mission is to preserve, protect, and promote the freedom to freely utilize software



effective
software
solutions

Ten Years of Support Prove Rewarding



Focused Linux investment yields

All IBM servers supporting the Linux operating system

500+ IBM software products on Linux – and climbing

A full line of implementation, support, and migration services for Linux

Lotus software brand supports the three major Linux flavors



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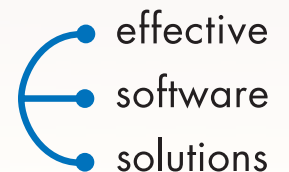
Server-side Goodness with Domino, Sametime, et alia

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Lotus Domino Development Perspectives



x64 Domino for Linux is in the plan, but not in D8.5.x

Mostly testing at this point

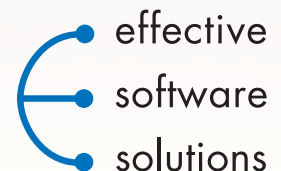
Lotus Development is looking to upgrade their compilers

Been using the same compilers for a long time, want more functionality

Source pack is shared amongst all platforms

Linux, AIX, Windows: take source, dump to the desired platform, and compile

So, typically, one mistake here can impact all builds



Ubuntu and Domino Support



No Ubuntu server till sufficient demand

Really do not see a need for it

Red Hat and SUSE are more than adequate

Canonical needs to improve their build model for Domino consideration

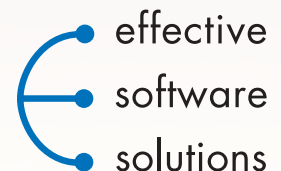
Canonical lacks enterprise support model for Ubuntu server

Novell offers eight (8) years for SLES, which Canonical lacks

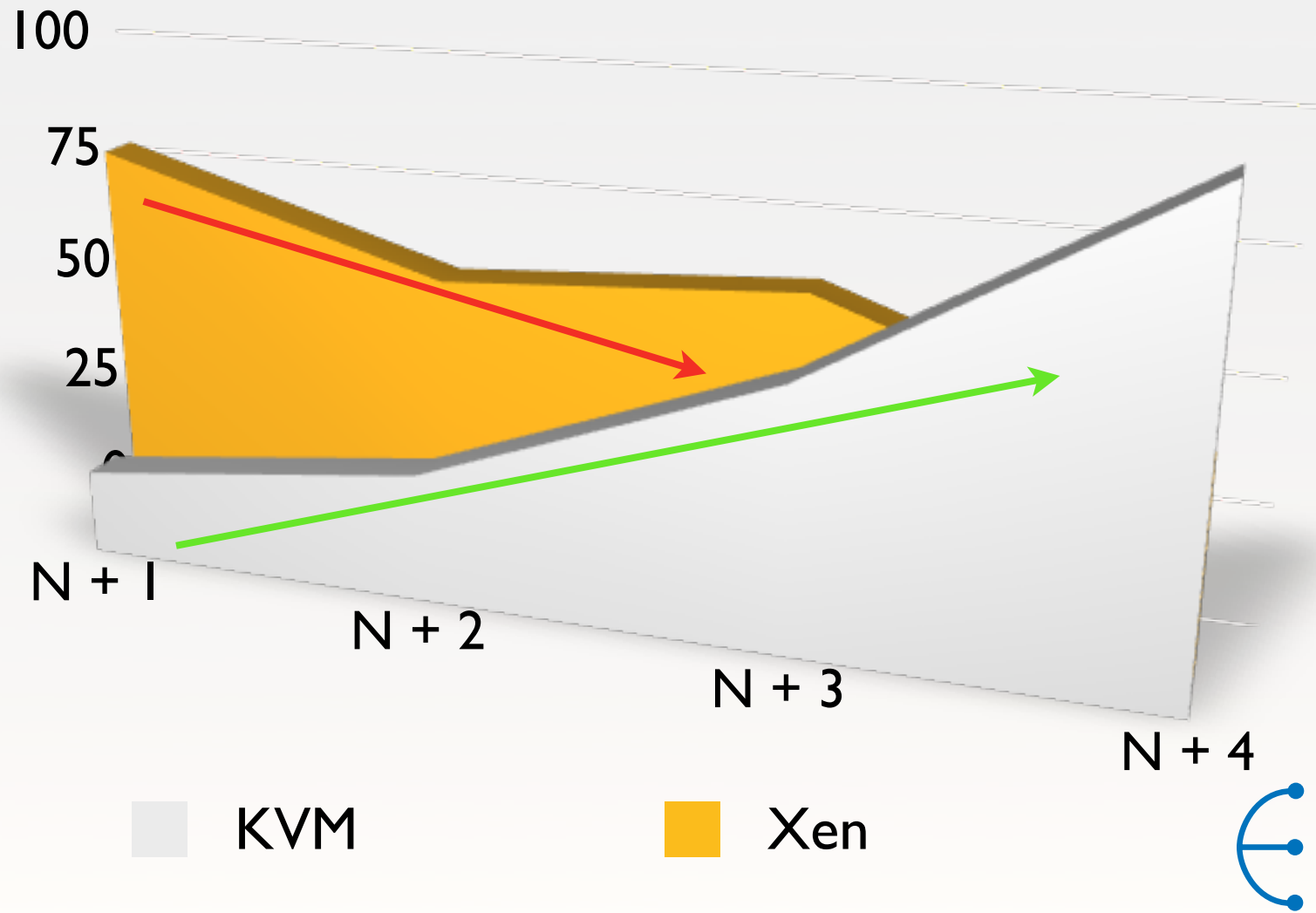
Missing enterprise server-class support model

Need to provide service packs, fixes over the lifespan

Just no major development



Domino and Virtualization Support



Who's Getting New Support?



KVM is definitely in an upward market

Xen's marketshare is lacking

The software group provides the direction on supported products

Domino 8.5.3 technote in the works on which virtualizations supported

Next point release will be mostly core group fixes



Who's Not?



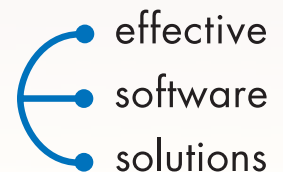
Solaris is still supported on D8.5.x

i386 only

No plans for x64

But it is not needed, as Domino runs great as is

Domino next support is being considered



Domino on Linux: It Just Works!



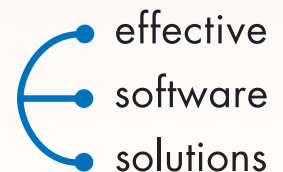
Designed to work out-of-the-box

Just simple tuning is all that is needed

Respective file systems

Operating system

Lotus Development works hard on making that happen well



What About The Service Script?



Have changed my position here...Domino on UNIX/Linux really doesn't need one,

but I understand why people think they want one.

How often do you reboot a Linux server versus a Window server?

People want one as a security blanket, as it makes sense in Windows to have the auto restart option.

“Well, we store a server.ID password.”

Then you definitely do not want a script

Scripts here, would store the password in plain text



Script Suggestions



Use Daniel Nash's version

<http://www.nashcom.de/nshweb/pages/startscript.htm>

Or build your own

Have several clients that create their own script

“We want a console.”

A script---on any platform---won't help much

But Daniel does allow for this with his script





If running Daniel's wonderful script...avoid the "clean" option with Symantec

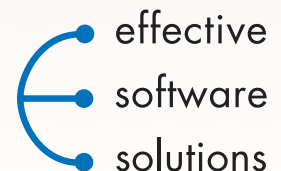
Especially in a multi-server (DPAR) setup

Symantec uses semaphores and links all DPARs back to the first server launching the Symantec instance

Domino does not know of the other DPARs, so running clean will wipe all the semaphores to the other instances with Symantec up and then...

*****CRASH*****

A quick way to drop your entire Domino network.





Make sure you adjust the file descriptors

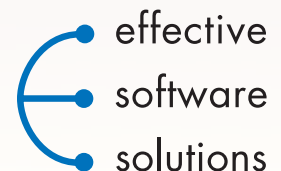
Domino provides a convenient pop-up message on the server console and log when you start your server

“If Lotus knows it needs to be done, why don’t they do it?”

Legacy applications.

Backward compatibility.

They do not know what is sitting on your server.



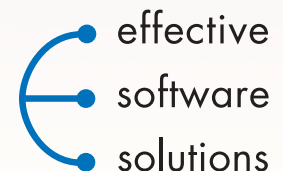


Know that on Windows 2008 server, it does not display the Domino console anymore

There exists a session 0 issue

All services run as session 0, which is not the desktop (session 1)

So, you need the Java console here



What about market share?

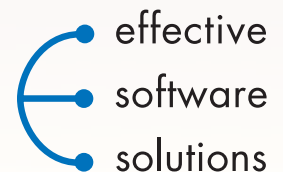


Linux is close to even with Windows now in the enterprise for Domino

People want to cut costs

You can migrate without changing hardware

Extremely attractive option overall



LotusLive Uses Linux?



LotusLive Notes is running x64 Linux on Series x servers to keep costs low

Stated at LS in a session as well

No IMAP, DIIOP available; no C-API or LS Toolkit -- so adjust your test plans

The future is x64 and the cheapest implementations of that are on Intel/AMD



Do I Really Need x64?



Traveler needs x64 OS for heavier workloads

Can exceed the 4GB memory limit in testing with a high number of users

In the mail space x64 is not really needed, outside of Traveler

Mail is very well behaved

But, on application servers, or if running anti-virus like Trend Micro or Symantec, or backup software, you need x64

Running all of the JVM and process all of the I/O demands x64 in production



Lotus Notes: Follows the Lead



Supports all three major Linux distros
Minimal feature lag across all releases

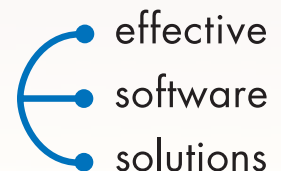
And improving, through hard work by Lotus

New for Linux in 8.5.2 – Modular RSS Feed

Choose to install or not, via a separate file

Awesome new features across all clients

Ubuntu 10.04 LTS officially supported (Nov 2010)



Notes On Linux – Simplified Existence



Installs client in multi-user mode only

Places data in an intuitive location

Allows for easy Domino roaming profile

Separate files for each module: RPM/DEB

lotus_notes852_linux_RI_en.tar

lotus_notes852_linuxUb_en.tar



Notes On Linux – Simplified Existence



Red Hat & SuSE

Ubuntu

ibm_lotus_activities-8.5.2.i586.rpm

ibm_lotus_activities-8.5.2.i586.deb

ibm_lotus_symphony-8.5.2.i586.rpm

ibm_lotus_symphony-8.5.2.i586.deb

ibm_lotus_cae-8.5.2.i586.rpm

ibm_lotus_cae-8.5.2.i586.deb

ibm_lotus_feedreader-8.5.2.i586.rpm

ibm_lotus_feedreader-8.5.2.i586.deb

pub_ibm_lotus_notes.gpg

ibm_lotus_notes-8.5.2.i586.rpm

ibm_lotus_notes-8.5.2.i586.deb

ibm_lotus_sametime-8.5.2.i586.rpm

ibm_lotus_sametime-8.5.2.i586.deb

license.tar

smartupgrade.sh

effective
software
solutions

Lotus iNotes – Did You Know?



Supports Firefox 3.x up to 3.6 in 8.5.2

Increased control through Policy docs

Works with ID Vault

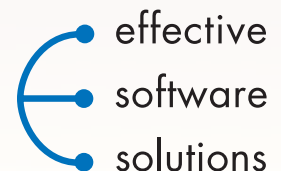
Can force remote desktop data cleanse

Important for regulated companies' users

That iNotes provides separate hot fixes independent of Domino server hot fixes

Each is tied to the Fix Pack

Get rolled-up into the next Fix Pack



Lotus iNotes – Retrieving the Build

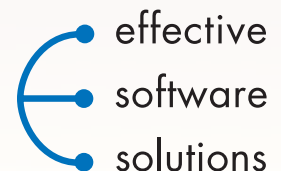


Click here -->

IBM.Lotus.iNotes.

And you'll see a lot of good info, including the iNotes build version

(Fortunately, IBM is now combining the iNotes build with the respective Domino flavor in the filenames, for now)



Lotus iNotes – What You See



Finding Information in the Maze

Lotus. iNotes.



IBM Lotus iNotes 8.5.2

Build 401.3

October 20, 2010

Database title: William Malchisky [REDACTED]

Filename: mail/[REDACTED].nsf

Server: [REDACTED]

Template: StdR85Mail

Language: English

Documents: 7901

Size: 709 MB

Quota size: none

Warning threshold: none

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Getting iNotes Patches



Visit Fix Central: <http://www-933.ibm.com/support/fixcentral/>

See if there are any iNotes patches, after every fix pack is applied

1. Interim fix: dwahf_v8.5.1.4_304.8CHF1
dwahf_v8.5.1.4_304.8CHF1

 More Information

For the server in previous slide, we are fine, as this fix is for 8.5.1 FP4, which runs a different iNotes build (304.8)



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Disk Partitioning



Benefits

- Better control of your environment
- Segmented data and binary access
- Backdoor to back filesystem
- Easier disk management

Areas of Caution

- Takes more time to setup
- Careful with system rebuilds
- Need a plan
- Factor in Growth





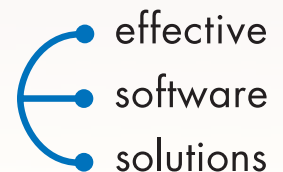
Demo

effective
software
solutions

Sametime Rules on Linux



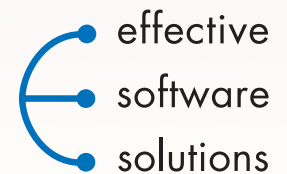
Simply put: every Sametime product and access point they have works well with Linux servers and desktops



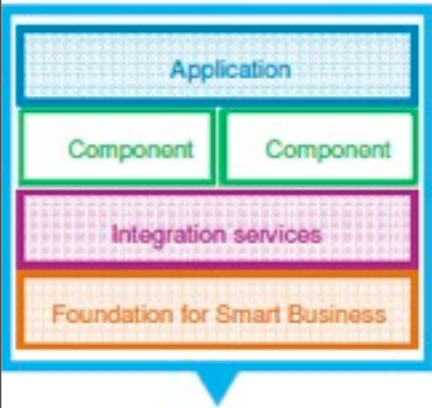
IBM Foundation for Smart Business



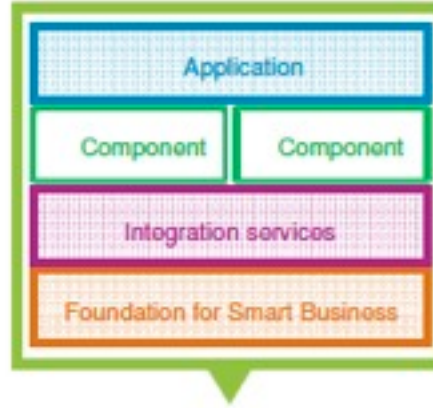
Spoke with the management team at Lotusphere 2011...



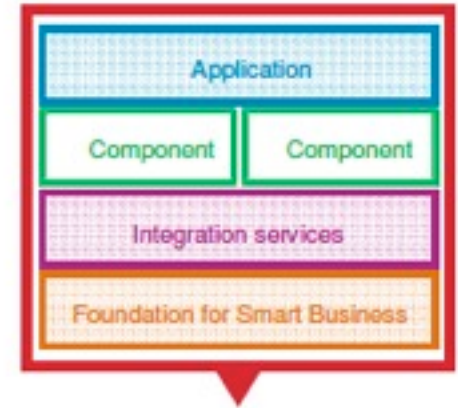
The New Foundations Offerings



Software product



Solution, server and storage bundles



Hosted environment
(Managed service provider)

effective
software
solutions

Casual



Office



Power



Information in the Maze

Virtual Windows or Linux desktop Gold Masters








Components: TDI, DB2 Express

Integration Layer: Install, Configure, Admin.

IBM Foundation for Smart Business
SLES 11 with KVM

Server Hardware

DAS or NAS Storage

- effective
- software
- solutions

Lotus Traveler – Drives Well with Penguins



Lotus ND8.5.2 – Traveler Linux build

Supports a multitude of devices

Android (Beta is live)

Apple iPhone/iPad/iPod

Nokia Symbian & MS Windows Mobile devices

Unofficially supports

Palm Pre

Any phone supporting an EAS connection



Lotus Quickr 8.5: Linux Ready – Finally!



But what a different one release makes

Version 8.5 runs on Domino Linux and Websphere Portal

Officially Supports SLES/SLED

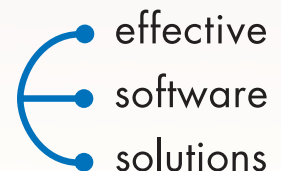
Unofficially supports Red Hat

Note: Websphere Portal Supports RHEL

Domino 8.5.1 Support

Memory 4GB in production

Firefox 3.5+ with patches for access



Lotus Quickr – Vital Fix Pack Data



For the Domino 8.5.1, use FP3 with IF2

Technote: 1445648

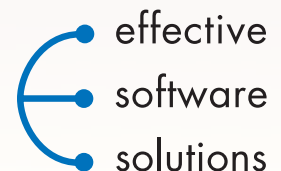
Required for Enterprise Content Management (ECM)

Addresses three key SPRs:

DDUT832R22: proxy server mishandles cookies sent to the browser

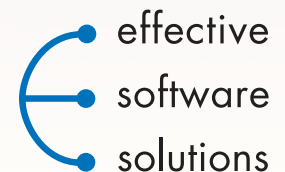
DDUT832M9K: Socket read timeout after uploading large file through proxy

FCDL7X492R: ECM Integration. Existing login fails to the ECM server with library connector as configured





Review Tuesday's excellent session on Lotus Quickr on Linux by Jerald Mahurin of SNAPPS



Lotus Symphony: It Plays Well For A Large Audience



Eclipse-based office productivity suite

90-95% of enterprise end-users can utilize

Runs stand-alone or Notes embedded

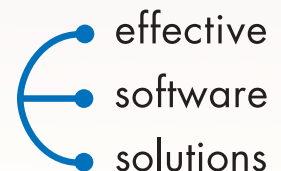
Supports all Lotus Notes builds

Ubuntu, RHEL, SLED package support

Canonical Announces Dedicated Support

Enterprise support for \$5.50/month/user (£3.41)

<http://tinyurl.com/2968ms7>

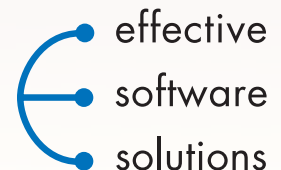


Symphony 3: Enterprise Friendly



Provides significant enhancements

New sidebars to save editing time	Based on OpenOffice 3 codestream	Customizable toolbar
One-click PDF export icon	Nested tables support	File encryption and password protection with Word and Excel files
Microsoft Office 2007 OLE and VBA scripts support	Support VML images in OOXML files	New chart engine
ODF 1.2 standard support	Embedded audio/video	LotusLive plugin – full cloud support Store and retrieve



Linux Fixes Specific to Version 3



Key Usability Annoyance Addressed

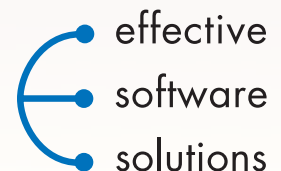
Floating windows in Lotus Symphony go behind main window when user moves cursor focus to main window

Pre-beta preference settings don't migrate

`$USER/.lotus/symphony`

Backup and delete before upgrade

No multiple Symphony release installations



Lotus Middleware on Linux



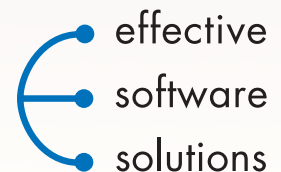
IBM offers 500 middleware products

All Linux ready

Across all six brands and five platforms

Source: IBM Middleware Available on Linux, Mar 2010 edition

<http://www.ibm.com/linux/matrix>



Linux Battles Microsoft In Mobile Market



**“Linux to eclipse Microsoft's 'all-in' tablet enthusiasm”
by 2015**

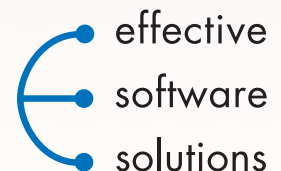
**Linux-powered non-smartphone mobile devices will
comprise 62% market**

Google's Android and Chrome OS will lead

Followed by:

Intel and Nokia MeeGo joint effort

“Windows just does not scale down”



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Virtual Desktops via VERDE & Virtual Bridges

<http://vbridges.com/wp/>

<http://www.kalarisys.com>

<http://midasnetworks.com/desktop.shtml>

TCO Calculators

ICSW on Ubuntu (on premise, on cloud, with appliance):

<http://www.compariv.com/icsw>

ICSW on Red Hat:

<http://compariv.com/lotuslonredhat>



Resources – IBM Linux Relevant



IBM's Open source project list

<http://tinyurl.com/2b9nsx>

IBM's Linux Site

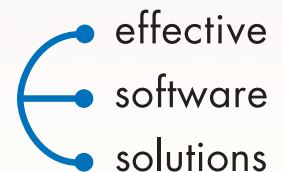
<http://www.ibm.com/linux>

IBM's LTC public bloggers' assemblage

<http://www.planet-ltc.org/>

IBM Client for Smart Work

<http://www.ibm.com/lotus/openclient>





Project Liberate

<http://www.ibm.com/software/info/liberate>

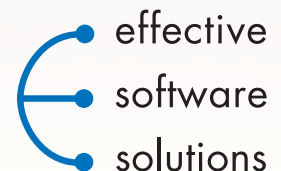
http://blogs.forrester.com/duncan_jones/09-02-25-should_i_renew_my_microsoft_enterprise_agreement

”Should I renew my Microsoft enterprise agreement?”

Turning Data into Insight with IBM and Linux Webcast

<http://tinyurl.com/255yz2h>

Smarter collaboration **Cost Reduction Strategy** Podcast



Resources – Community Focused



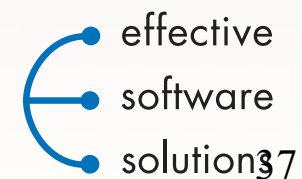
IBM Linux Twitter accounts

http://www.twitter.com/linux_at_ibm

<http://www.twitter.com/developerworks/>

IBM's Smart Work Initiative, Taking Notes Podcast

<http://tinyurl.com/yeue5k2>



THANK YOU!

Any Questions?



SkiLUG Is Almost Here!

25-27 Feb

Sunday River Resort

Join us!

<http://SkiLUG.org>

Bill Malchisky Jr.

How to contact me:

- E-mail: bill@billmal.com
- Skype: [fairtaxbill](#)
- Twitter: [billmalchisky](#)

- My Website: <http://www.effectivesoftware.com>
- My Blog: <http://www.BillMal.com>



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The Consultant in your Pocket webcast series: find us at <http://consultantinyourpocket.com>