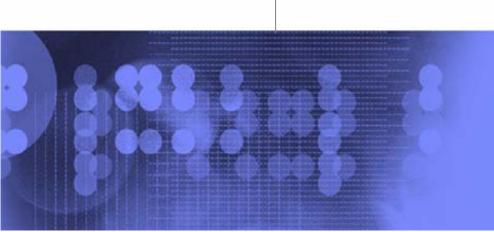


IBM & Red Hat: Selling Linux Desktop Solutions Together

August 25, 2004

Host: Billy Boykin - WW Sales Leader, Linux Desktop





Teleconference Agenda:

- Corporate Linux Strategy Update:
 - Scott Handy IBM Vice President, Worldwide Linux
- Workplace Client Technology Update:
 - Mike Mottola IBM Project Manager, WCT Project Office
- Red Hat Client Solutions:
 - Mike Ferris Red Hat Desktop Director
- Teleconference Summary:
 - Billy Boykin IBM WW Linux Sales Leader, Linux Desktop





IBM Worldwide Linux Strategy

Technology Focus



Infrastructure Simplification

- ✓ Infrastructure Solutions:
 File/Print, Web servers, Security,
 Unix, NT/2000 & Netware migrations
- ✓ Clusters, Blades & Grid
- ✓ Workload Consolidation
- ✓ IBM Virtualization Engine



On Demand Operating Environment



Open Client Strategy

Strategy Drivers

Workloads to Linux

- Unix & Windows workloads
 - Enabled for IBM HW & middleware
- Ecosystem: ISV Applications & Business Partner ValueNets
- Continuous Linux Enhancements

Linux to eServer

- Continue xSeries momentum
- Accelerate Power & zSeries
 - Ecosystem growth
 - Blue Rockhopper
- Establish HV Power traction

IBM to Leadership

- Leadership in customer solutions using IBM HW, SW, & Services
 - Technology Focus (Brands)
 - Industry Focus (Sales and Marketing)
 - Hyper-growth in China, India, Brazil, Russia, Korea

Industry Focus



Banking



Retail



Government



SMB



Telco



Automotive



Current Linux Client Offerings

Key industry focus with references:

- Retail Banking Branch
 Optimized Linux Offering pilots
- Government
- Retail
- Industrial Sector

Services:

 IGS Open Client Assessments and implementation and support services

Hardware:

- IntelliStations pre-loaded with RedHat:
- ISV solutions for Electronic Design Automation
- ISV solutions for Petrochemical

Hardware:

- IBM ThinkPad and ThinkCentre certified offerings
- Thin client Neoware solutions

Software:

- Mozilla browser
- IBM Lotus Workplace for Messaging
- IBM Lotus Workplace for Documents
- IBM Lotus Domino Web Access
- IBM Websphere Portal Server
- Rational tools for development
- Tivoli Management Solutions

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IBM Software Group

IBM Workplace Client Technology (WCT)

Pilot Program Overview

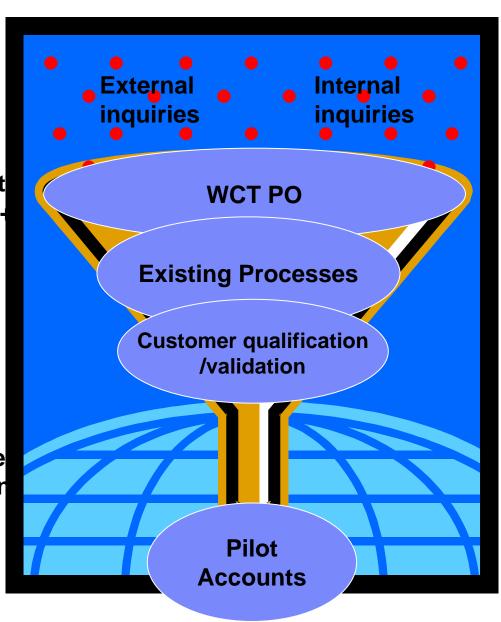
Michael Mottola WW WCT Project Office



Workplace Client Technology Project Office

Objectives

- Answer/Route inquiries and opportunities around WCT
 - PO ID (wctpo@us.ibm.com)
 - http://w3-3.ibm.com/software/sales/salesit e.nsf/salestools/IBM+Workplace-Client+Technology
- Leverage/Link to existing teams/processes to help manage communication and enablement efforts
 - Linux PO, LIC, AIS, ATS/jStart
- Establish and implement prescriptive roadmaps and Customer qualification for WCT
- ✓ Project manage Customer WCT pilots. Account status and msmts and metrics-100 pilots (25 Linux)





WCT Pilot engagement

High level Goals

- Provide customers with high value services that facilitates the clear validation of value to their business
- Proves technology integration within customer infrastructure as viable
- Allows customers to give IBM direction on product evolution

How achieved

- Design pilot offering to focus on full set of GA'd features
- Ensure unmistakable result is knowledge that the customer can:
 - Effectively utilize more than one desktop (Linux Redhat & Win32)
 - Seamlessly interoperate with existing technologies (Sametime/SIP, MS Exchange, Notes/Domino, LDAP, SMTP & Security architectures, etc.)
 - Utilize WCT components to reduce cost while improving productivity

The IBM Workplace Client Technology Pilot

- One pilot offering standard to a variety of technical configurations
- Built to highlight key areas where WCT can alleviate customer pains
- A standard set of deliverables built on years of pilot planning & management



Pilot Requirements

- Purchase of WCT software licenses and application licenses for LWM and/or LWD
 - WCT = \$24 per user, per year (support + maint) Plus, one or both of the following:
 - WPM = \$29 per user (lic, supp, & maint for 1st year)
 - WPD = \$29 per user (lic, supp, & maint for 1st year)
- Customer must agree to pilot on Windows or Linux server environment and provide the hardware for the pilot
- Feedback, testing of the document editors, and investment of some staff resources by each customer is required
- Each pilot will consist of no more than 100 users
 - Note: Customers may only purchase the WCT software via approval from the WW Project Office. Customers must participate in the pilot. This will be in effect for R2.0-until next release.

Nomination Process

- Sales team educates customer as to the Value proposition of WCT
- Sales team gains customer executive sponsor commitment to participate
- Sales Team nominates a customer by sending email to "WCT PO/Raleigh/IBM"
- •The Project Office will send a Qualification Questionnaire to account team



Sales Play: Sample Customer Scenario

- Organization with 23K office workers
 - ▶ 18K "overserved" low function requirements- casual user
 - 3-5K "branch mgr" medium user
 - TCO projected savings \$2M First Year (replace casual users only)
- Pilot Objective: Test compatibility via user scenarios (WCT PO scripted) of LWD vs. MS Office. Test cases that encompass approx. 20% of most common functionality of Docs vs. Office.
- "Prove that the user can live if they do not have MS office"- Customer quote
- Pilot Methodology: WCT PO will design users scenarios/test cases and preload 3 laptops w/ server code, travel to the locations and provision the clients. Knowledge transfer, on-going support and deliverable at pilot end that documents findings.
- Customer Objective: Displace MS Office for the 23K office workers

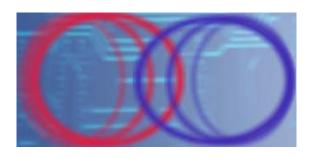
Red Hat Client Solutions - Red Hat Desktop

- Mike Ferris – Red Hat



August 2004

The IBM | Red Hat Alliance



A multi-year alliance, including services and expanded support for software and servers, providing broad Linux support for enterprise customers worldwide.

Two industry leaders working as one to maximize the Linux advantage





Red Hat

Headquarters: Raleigh, NC

Founded 1993

Operates in 22 countries

Cash: \$930 million

Annualized Revenue: \$125 million

86% commercial Linux market share*



What is Driving the Shift to Linux?

Standards. Technology built on true open standards.

Value. Customers pay for what they need. Lower TCO.

Innovation. Unmatched speed of the development model.

Quality. Open source model builds better software.

Flexibility. Full customization capability.

Choice.



Desktop Deployment Trends

PC Refresh

- Spring 2004 Fall 2005
- Leased "boom" desktops are coming off lease now

Internet Standard Evolution

- Web Services
- Offers more platform choice

Blade/Server Based Desktop Computing

- Exceptionally thin clients
- Virtualization: Storage, Operating Platform



Why Linux on the Desktop

Choice

Encourage competition through Open Source solutions

Existing Unix Development, Administration Skills

Server Deployments today, desktops in the future

Minimize Costs ---more than just licenses

Management, Security, Maintenance

Flexible Technology

Thick to Thin Clients managed under one infrastructure

Design Workstations

EDA
Oil/Gas
Visual Effects
Development (ISV, Corp)
Web Authoring

Corporate/Gov't Desktops

Transactional
Call Centers
Help Desks
Trading Floors
Fixed Application

General Purpose
Productivity
Communication



Red Hat Desktop

Red Hat Desktop (v. 3) is the second product within Red Hat's enterprise client strategy

Created for enterprise managed desktop deployments

- Where Management and Security are paramount
- Red Hat Enterprise Linux foundation
 - Release Cycles, Maintenance, Support
 - ISV and OEM Ecosystem

Open - freedom, innovation, customer control

Secure - proven server-class security today, SELinux in RHEL4

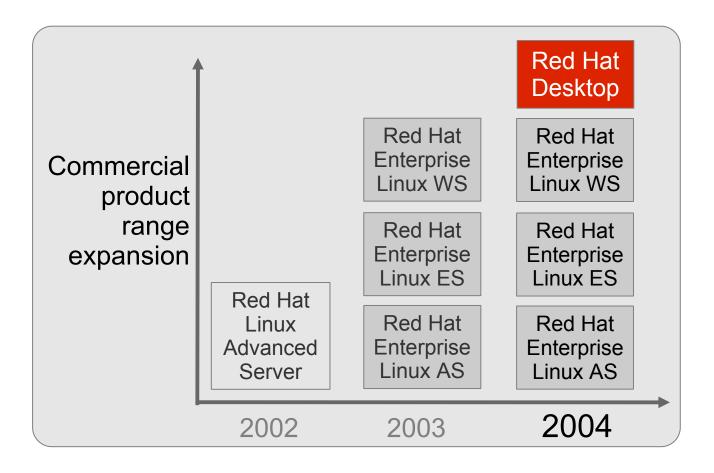
Managed - scalable deployment/admin via Red Hat Network



Red Hat Desktop

Red Hat commercial operating system products developed significantly during 2002 & 2003

Primary focus was on Server and Technical Workstation
 A major initiative for 2004 for is Red Hat Desktop





Client Product Segmentation

Enterprise Linux WS and Red Hat Desktop are segmented by CPU/Memory support

Offered with different pricing, packaging, support

	Max CPUs	Max mem	Target Market	Architectures
Enterprise Linux AS	-	-	Large servers; Database; corporate apps	Intel/AMD x86/x86-64; Itanium 2; IBM z,i,p
Enterprise Linux ES	2	8GB	Entry-mid servers; file/print, web, email	Intel x86
Enterprise Linux WS	2	-	Technical workstation; CAD/CAM apps; HPC; power user	X86; AMD64; EM64T; Itanium 2
Red Hat Desktop	1	4GB	Standard corporate productivity desktop; volume deployments	X86; AMD64; EM64T

Hyperthreaded & multi-cored processor chips are counted as a single CPU



Red Hat Desktop Offerings



Starter Pack bundle includes Red Hat Network Proxy or Satellite Server and 10 Red Hat Desktop entitlements

Additional Red Hat Desktop entitlements available in 50 unit Extension Pack

1 year of Escalation Support provided for customer's IT Help Desk Annual subscription model

	Red Hat Desktop	Annual Subscription		
	10 Red Hat Desktop Entitlements			
Starter Pack	10 Desktop Management Modules (same as Server Management)	\$2,500		
	1 Red Hat Network Proxy Server (includes RHEL 3 AS Premium)	(\$13,500 with RHN Satellite + 50 Desktops)		
	30 days phone Help Desk Escalation Support (Install/Config)			
	1 year web Help Desk Escalation Support (Install/Config)	oo besitops)		
Extension	50 Red Hat Desktop Entitlements			
	50 Desktop Management Modules	\$3,500.00		
	30 days phone Help Desk Escalation Support (Install/Config)			
	1 year web Help Desk Escalation Support (Install/Config)			



Red Hat Client Strategy

The Red Hat client strategy is an extension of Open Source Architecture designed to enable open source in the enterprise by providing breadth and depth of open source and partner-certified solutions.

Delivering secure, manageable alternative for enterprise client environments in phased approach:

- Phase 1: Management and Security, Unified platform
- Phase 2: Productivity, User experience, Interoperability
- Phase 3: Supporting infrastructure



Desktop Management

Flexibility to run in many deployment configurations

- Thick or thin client, Diskless, connected or disconnected laptop
- Tightly controllable, locked down clients

Systems management via Red Hat Network

Updates

- Simple GUI Interface
- RPM Based
- Dependency Checking
- Instant Notification
- Auto Update (Optional)

Provisioning/Configuration

- Provision Bare Metal Boxes
 (Policies, Permissions, Packages)
- On the fly Provisioning
- Scheduled Actions
- Tightly Coupled with Management

Module

Management

- Systems Grouping
- Role-based Systems Permissions
- Systems Search
- Package Profile & Compare
- Rollback (Delta Actions)
- Custom Channels & Errata (Satellite)

Monitoring - Future

- Holistic Threshold Monitoring (Host, OS, Applications, Network, Transactions)
- Agentless Architecture (Easy Change/Install)
- Integrates Easily to MOM (Manager of Managers)
- Historical, Trending, Real Time Reporting



Red Hat Desktop Technology Model



Red Hat Desktop is engineered using the same model as Red Hat Enterprise Linux

- 12-18 month release cycles
- Synchronized with Red Hat Enterprise Linux
 - Shares platform OS, packages, utilities, management tools, & ISV/OEM certifications with RHEL products
- Open source
 - Sources available for free on Red Hat FTP servers
 - Binaries, docs, maint/support, etc. delivered under license
- 5 years support/maintenance (from Enterprise Linux 3 GA)
- All Red Hat Desktop features included in Red Hat Enterprise Linux products



Red Hat Desktop Development

Repeat the successful model of Red Hat Enterprise Linux

Aggressively develop desktop capabilities for delivery in Enterprise Linux 4 and Enterprise Linux 5

Open collaboration with the community

- Fedora Project fedora.redhat.com
- Interoperability Standards freedesktop.org

Work closely with enterprise early adopters

Collaborate with key ISV and OEM hardware partners







Red Hat Desktop Development

Red Hat has been quietly building a world-class desktop development engineering capability:

- More core GNOME developers than any other company
- GNOME usability team lead
- GTK+ maintainer and key lieutenants
- Maintainers of Mozilla/Linux port and Mozilla security components
- OO.org Native Widget Framework developer, MS file import maintainer
- XOrg Core team member
- Additional resources for QA, certification, support, documentation, product management, marketing, etc.

The team is continuing to hire aggressively



Desktop Technologies – version 3

Client summary:

- GNOME, Bluecurve look and feel
- OpenOffice.org, Mozilla, Evolution
- x86, EM64T, AMD64
- Adobe Acrobat, Macromedia Flash, Java, Citrix ICA client, Realplayer
- Graphical Boot
- Agfa Monotype fonts

Server summary:

OpenLDAP, CUPS Samba





Desktop Technologies – version 4

Updates to technology base:

- Kernel 2.6
- GNOME 2.6 +
- OpenOffice.org 1.1 +
- Mozilla 1.7
- Evolution 2.0

Management and security:

- SELinux; Execshield; PIE
- Remote desktop sharing
- Central Configuration
- Red Hat Network Monitoring MOM integration, real-time reporting, historical trending, agentless architecture
- Lockdown/"kiosk" features
- Comprehensive Kerberos support
- Terminal Server and diskless enhancements





Summary

Red Hat is committed to Linux client solutions

Red Hat Desktop now available as a member of

the Red Hat Enterprise Linux family

Future Enterprise Linux technologies will significantly enhance Red Hat Desktop

With a focus on management, security, usability & interoperability

Red Hat is the only provider with a straightforward open source approach

- Fully open source
- Open Source Architecture solutions designed to ensure successful deployments
- From client to server, desktop to mainframe





Teleconference Summary:

Linux Client Sales Kit http://w3.linux.ibm.com/sales/

Linux Client Project Office

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LinuxClientProjectOffice/Raleigh/IBM

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