

Networking & Interoperability: Can Linux Really Do This?

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Agenda

- How did we get here?
 - The Dark Ages of DOS, Windows
 - The Internet
- Cross-Roads of Change
 - IT issues today
 - What Linux can deliver today
- Demonstration

History of Windows

- 1981 – DOS and the IBM PC born
 - The birth of PC networking (mid 1980's)
 - Novell / LANtastic / IBM PCLan
- 1989 – Windows 3.0 redefines the desktop
 - 1990 Birth of Windows for Workgroups
- 1993 – MS Windows NT 3.10
- 1995 – MS Windows NT 3.5x
 - Microsoft announce design to win the “Internet”

The New Windows Generation

- 1996 – MS Windows 9X and MS Windows NT4
- 1999 – MS Windows 2000 (NT5)
- 2002 – MS Windows XP (NT5.1) and .Net^(TM)
 - Vital Changes
 - Redefining the Internet
 - Automatic Update
 - Licensing changes

Unix / Linux Background

- Born 1969 (not 1974 as some have reported)
 - Rapid adoption, very popular
- 1984 – 1990 Unix WARS Era
 - 1984 - (AT&T SVR2) Intel 80286
 - 1987 – InterActive Unix SVR3.2 on Intel 386
- 1991 – Linux is born!
- 1999 – Linux goes BOOM!

Applications and Networking

Year	Applications	Networking
1980s	Dbase, WorkPerfect, MS Word, VisiCalc	Novell (IPX/SPX), LANtastic (NetBIOS), IBM PCLan (NetBIOS)
1989	MS Windows 3.10	NetWare 2.x, LANtastic, Internet Early Adopters
1990	MS Word for Windows, MS Excel for Windows	NetWare and LANtastic
1991	MS Windows for Workgroups 3.10	NetWare and LANtastic sleeping at the wheel!
1992	MS Windows 3.11, MS Windows for Workgroups	WfW 3.11 starts to impact NetWare and LANtastic
1993	MS Windows NT 3.10	Internet Adoption starts, WfW impact significant
1995	MS Windows 95 + MS Office 95 + Internet Web/Email (Note: PowerPoint and Access)	TCP/IP usage goes big time
1996	MS Windows NT4	
1997	MS Windows NT BackOffice	MS Exchange Server becomes significant (part of BackOffice)
1999	MS Windows 2000 Release	Active Directory assault begins
2000	MS Windows Me	Outlook Mail Client and Internet Explorer dominates the desktop

Essential Software

- Office Productivity
 - MS Word, MS Excel, MS Access, MS PowerPoint, MS Outlook, Internet Explorer
 - File and Print Serving, Printer Routing
- Keys to success
 - MS Proxy Server, MS Exchange, MS IIS, MS SQL Server, MS DHCP Server, MS DNS Server, VPNs, Firewall, Virus Scanning
- General Business Applications

What Users Want To Do

- Notebook / PC Mobility
- Email+Web+Multi-Media
- Seamless document interoperability
 - Word/Spreadsheets/Graphics inside each other!
 - Seamless data storage + access
- File Sharing and Storage
- Network Printing

Essential Server Technology

- DHCP to manage IP address space
- Transparent DNS
- Proxy Server for Web/FTP
- File & Print Sharing
- SQL for departmental databases
- Virus Scanning
- Mail / Message / Collaboration work

Uniting Two Worlds

- MS Windows
 - MS Office
 - Word, Excel, PwrPoint
 - MS Outlook
 - Net Neighborhood
 - Internet Explorer
 - MS Access
- Linux / Windows
 - OpenOffice/StarOffice
 - Writer, Calc, Impress
 - Evolution, Mozilla
 - Konqueror
 - Mozilla, Konqueror
 - Pgaccess, pgAdmin-II

Desktop Barriers

- Users Must See NO Change
 - Means that desktops must be equivalent
 - Linux and MS Windows with same look and feel
 - Same core functionality
 - Prefer same applications on BOTH platforms
- Requires Easy Deployment for large installations
- Must have a comprehensive MIXED environment management solution

Can DO Now

- OpenOffice/StarOffice and Mozilla
 - same on MS Windows and on Linux
- Replace MS Access (with Native Windows / Linux tools)
- Replace MS Windows 2000 BackOffice
- Replace Active Directory with OpenLDAP solution
- Use VMWare / Win4Lin / WINE
 - To run essential MS Windows applications on Linux

Not Yet Possible

- Total Replacement of ALL Active Directory functionality
- Provide a 100% equivalent to MS Exchange
- Maintain 100% MS Document format preservation/generation
- Run MS Access applications under Linux

Key Questions

- Is a Linux based Desktop solution adequate to replace MS Windows for some users?
 - Is this a significant enough start?
 - Do we have a communications challenge?
 - How to break through?
- Linux CAN replace the BackOffice today?
 - Will that improve the prospects of gaining more desktops for Linux?
 - How best to communicate this?

Let's See ...

Live Demonstration