

# Migrating From Windows to LINUX

- Introduction
- Very Brief Background of the LINUX O/S
- What LINUX does best
- When to use LINUX
  - Defining Commoditized Services
  - Benefits of using LINUX

# Introduction

- Michael Hodder
  - Owner, Adventis Technology Solutions, LLC
  - 12 years experience in IT and Education
  - Working with LINUX Since RedHat 6.2
  - Working with Windows Servers since NT 4.0
  - Partner with Novell, Microsoft, Endian, and Sonicwall
  - "Use the tool that works"

# What is LINUX

- A rewrite of the UNIX kernel
  - C++
  - Optimized to run on i386 architecture
- Most distributions released under the Gnu Public License (GPL)
- Multiple Vendors

# LINUX Distributions

- RedHat Enterprise LINUX
- Novell's SUSE Enterprise LINUX
- Ubuntu LINUX
- CentOS
- Fedora
- Astaro
- Nitix
- Hundred's more!

# Introduction

- LINUX has changed the paradigm in several ways.
  - It provides viable options
    - Cost
    - Performance
    - Security
    - Community Support

# Cost

- Reduced cost for similar performance.
  - i.e., \$\$\$
  - Licensing costs
    - Approximately 30% - 70%
  - Reduction in Long Term support costs.
  - Ability to break the seemingly endless upgrade cycle for Microsoft Windows based products.

# Performance

- LINUX allows for a reduction in overall computing power while still providing equal or better O/S and application performance.
  - Especially true when using virtualization.
- In other words, it allows for a cost reduction in the purchase of servers.
  - Without loss of performance
  - You're not paying to run gui interfaces when they aren't needed.

# Security

- LINUX Supports Multiple Security Methods
  - SSH – Secure Shell
  - Kerberos Authentication
  - LDAP
  - SSL
  - SEL allows for DoD style Mandatory Access Controls
  - File system is secure and easy to maintain

# What LINUX Does BEST

- Server processes and applications
  - Web Servers
  - Web 2.0 applications such as:
    - Facebook
    - MySpace
    - iGoogle
    - MyYahoo
    - AJAX based Web Applications
  - FTP Servers

# What LINUX Does BEST

- Email Services
  - Sendmail
  - Postfix
  - IMAP
  - POP3
- DNS
- DHCP

# What LINUX Does BEST

- VNC Services
  - Provide Remote Desktop Services to clients and servers for any O/S.
- Most services such as GoToMyPC, GoToAssist, Instant Housecall, WebEX, etc., utilize LINUX servers running VNC and a broker service.
  - Cost effective and reliable.

# What LINUX Does BEST

- Virtualization
  - VMWare
  - Zen
  - Citrix
  - Can host both LINUX and Windows guest operating systems

# What LINUX Does BEST

- Windows File Sharing
  - Samba
    - Utilizes SMB, NMB, and CIFS protocols to provide Windows File Sharing.
    - Simple Configuration file is all that is used to implement the service.

# What LINUX Does BEST

- Exchange Alternatives
  - Kerio Mailserver
  - Novell Groupwise
  - Zimbra Groupware
  - Open-XChange
- Sharepoint Alternatives
  - Alfresco
  - SMF

# What LINUX Does BEST

- Active Directory Alternative:
  - Novell eDirectory

# What LINUX Does BEST

- Small Business Servers
  - SME Services
    - [contribs.org](http://contribs.org)
  - Scalix
    - [Scalix.com](http://Scalix.com)
  - Provide viable alternatives to Microsoft SBS platform at a lower cost.

# When to Use LINUX

- Commoditized Services
  - Web Servers
  - Email Services
  - FTP Services
  - Firewalling
  - DHCP
  - DNS
  - Oracle dB Servers

# When to Use LINUX

- Benefits of Using LINUX
  - Stability
  - Security
  - Re-purposing of otherwise obsolete equipment
  - Ability to break the O/S upgrade cycle
  - Ability to highly customize your computing environment
  - Price

# When to Use LINUX

- If you are considering implementing any web-based application, a LINUX-based solution is definitely worth considering:
  - CRM software
  - ERP software
  - Project Management
  - Content Management
  - XML-based solutions
  - AJAX based solutions

# Issues in Migration

- If your organization is a heavy user of .NET, you may have to rewrite your code.
  - Investigate moving to JAVA, Ruby, Ruby on Rails, php, python, etc.
- If your users make heavy use of Microsoft Exchange Groupware functionality, you may have issues.
  - Can migrate to Novell Groupwise

# Issues in Migration

- Make sure you perform a proof of concept.
- Get outside help!
- Planning will take some time.
- Explore multiple distributions and multiple applications.
  - Make sure your hardware is on the HCL for your potential LINUX vendor!

# Issues in Migration

- Get buy-in from senior management
  - Get numbers showing:
    - Cost savings over the next 5 years.
    - Cost of training staff to support LINUX
    - Migration Costs
    - Total 1<sup>st</sup> year costs
    - Be sure to show how costs will actually go down significantly after you have made the transition.
  - Find Help before you need it!
    - Assume that you will need it!

# Migrating from Windows to LINUX

Questions?

# Migrating from Windows to LINUX

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