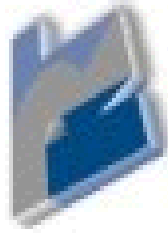


# Linux Integration

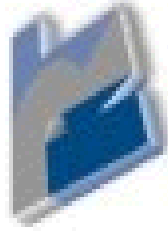
Nate Carlson <natecars@real-time.com>

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Eden Prairie, MN



# Outline

- How can Linux work for you?
- Linux Integration: Server Side
- Linux Integration: Client Side
- Conclusions



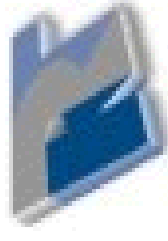
# How can Linux work for you?

- Linux is a very versatile operating system that can fit into just about any situation and add valuable features. It supports most major standards, and if something is not supported yet, there is a good chance it will be supported soon.



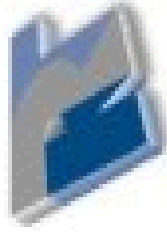
# Server Side Integration

- Linux makes an ideal and cost-effective server for most situations. A few examples of networks it integrates well with:
  - Windows Networks
  - Netware Networks
  - AppleTalk Networks
  - UNIX Networks
  - Linux also makes an ideal Internet server



# Windows Networks

- Samba is an open-source service for Linux that allows it to emulate an NT server
- From the client side, it is very difficult to tell if you are connected to a Linux server or an NT server
- Samba-TNG is under heavy development, and will allow Linux to fully emulate a NT Domain Controller when it is released.



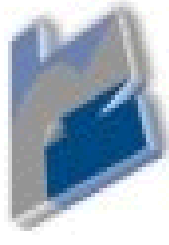
# Netware Networks

- Linux has full support for the IPX/SPX Protocol
- Mars\_NWE (open source) emulates a Netware 3.12 server for file and print sharing
- Caldera Systems offers a commercial product called Netware for Linux which offers full Netware 4.1-compatible file and print services, including a full, Novell-licensed Netware Directory Services (NDS) implementation.



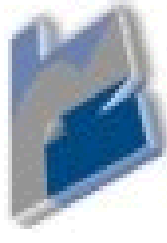
# Apple Networks

- Older Apple networks use the AppleTalk protocol to communicate; newer networks use AppleTalk over IP.
- Netatalk, which is open source, emulates an Apple server over both standard Appletalk and Appletalk-over-IP.



# UNIX Networks

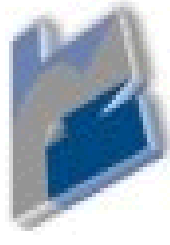
- Linux is a UNIX clone; it offers all of the major UNIX services and is able to communicate over the standard UNIX protocols natively.
- Linux makes an ideal replacement or supplement for commercial UNIX boxes.





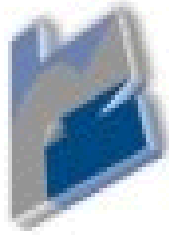
# Internet Services

- Linux is free, so it is easy to build a powerful cluster of Internet servers for a low cost. There are no per-machine license fees for operating system or most major services.
- All open source Internet services (for example, Apache, which powers over half of the web sites in the world) will run on Linux
- Most commercial services have Linux ports



# Client Side Integration

- Linux also makes a very powerful UNIX workstation
  - There are many native applications for Linux that allow you to break away from Windows
  - If you can't find an application you need for Linux, there are also emulators that will allow you to run your favorite applications for Windows and other operating systems under Linux.



# Native Applications

- Desktop Environments
  - Gnome 2.0 & KDE 2.0
- Office Applications
  - Sun StarOffice
  - ApplixWare
  - Corel WordPerfect Office



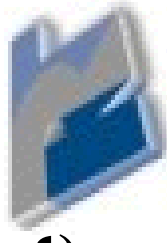
# Desktop Environments

- Desktop Environments (such as Gnome and KDE) give users a comfortable, easy-to-use GUI to perform most tasks, such as launching programs and performing basic system maintenance.
- Gnome demonstration...



# Office Applications

- There are many office applications for Linux that are very easy to use and very familiar to anyone who has used the Microsoft Office suite.
- Sun StarOffice is free and is great for compatibility with Office documents.
- Applix Ware is another office suite similar to StarOffice.
- Corel has also ported the WordPerfect Office Suite to Linux.



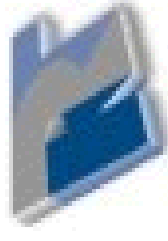
# Emulators

- **Windows Emulators**
  - Wine allows you to run many Windows applications on top of Linux on Intel-compatible machines
- **System Emulators**
  - VMware creates a virtual computer that runs on top of Linux. In this virtual computer, you can install just about any operating system that runs on Intel machines and run simultaneously to Linux.



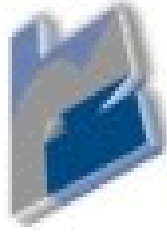
# Windows Emulators

- Wine is an open-source program that translates Windows API's to the UNIX equivalent, and therefore lets you run Windows applications natively on Linux.
- Wine is still under heavy development, but can run more and more applications each day.



# System Emulators

- VMware is a commercial app that lets you to run many various operating system simultaneously.
- VMware is great for running legacy Windows applications that will not run properly under Wine
- Another good use for VMware is to create a test-bed environment; it literally allows you to have unlimited operating systems on one pc.





# Conclusions

- Linux will integrate into just about any situation, no matter how diverse, and will always have something to offer.
- Linux has started in many businesses as a relatively small service, such as backup mail and DNS servers, but as the managers see the stability and reliability of that one service, they will generally slowly start cutting other, more vital services over to Linux.



# Questions and Answers

- Been dying to know something about Linux? Have a question about VMware? It's time to find out the answers!



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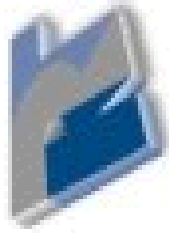
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