Integrating MS Windows Networks using Samba on Linux

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Example Situations

The site has MS Windows Networking and wants to create a seemlessly integrated network while deploying Linux SERVERS

There is a desire to replace MS Windows NT Server or MS Windows NT BackOffice with Linux SERVERS

The site wants to have more than a single vendor solution so Linux is a choice

Task Objectives

To ensure that uses are unaware of network changes
To improve the performance of all network services
To reduce costs while supporting all legacy systems
To leverage IT existing infrastructure

Some Facts

Samba is VERY important

More than Samba is needed to match MS Windows NT BackOffice

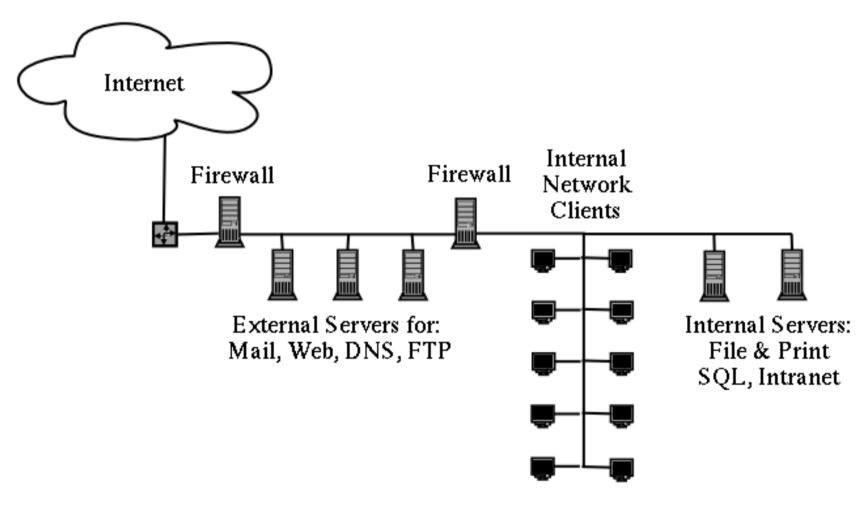
A complete solution requires:

EQUIVALENT Services using Open Source Software

Better DIAGNOSTIC tools

SECURITY and MANAGEMENT tools

A Typical Network



MS Windows NT BackOffice compared with a Linux Server

MS NT BackOffice:

File & Print - SMB, NCP, Atalk, LPR Printing

IIS Web

IISFTP

MS SQL

DNS, DHCP

SMS Server

Exchange Server

SNA Server

MS Proxy

Linux Server:

File & Print - Samba, Mars, NetAtalk, LPRng

Apache with Modules

ProFTPd

PostgreSQL, MySQL

Bind, ISC DHCP

EnlightenDSM

SMTP (sendmail), IMAP/POP

Linux- SNA (coming)

Squid

Network Diagnostic Tools

MS Windows NT BackOffice:

SMS - NetMon

ping, tracert, nslookup, Perfmon, System Monitor

Linux:

ping, traceroute, nslookup, dig, ethereal, nmap, nessus, etc.

Directory Services

MS Windows 2000 provides Active Directory Service

Strategic Importance to Microsoft

Provides:

- Authentication
- Autorization
- Service Access Control
 - Resource Access Control
 - User Controls

Has proprietary extensions to LDAP and Kerberos protocols

Linux Directory Services

OpenLDAP

Light weight Directory Access Protocol

Open Standards compliant

Samba

Can authenticate off MS Windows NT Servers

Can replace MS Windows NT Servers

NIS/NIS+

Network Information Service

The BIG Question

Can you afford to lock up all your data behind proprietary closed systems technology?

What are the long term costs of closed systems?

How important are:

Scalability?

Stability?

Standards compliance?

About the Live Demonstration

Samba for MS Windows File and Print Services

Mars- NWE for legacy NetWare support

NetAtalk for Apple MacIntosh support

PostgreSQL for MS Access data storage

Sendmail for SMTP mail

IMAP / POP for MS Outlook client support

Apache + Modules for eWeb support

Squid for Web/FTP proxy serving

ProFTP for FTP Serving, etc, etc, etc.