Mixed protocols: And the winner is ...

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Outline

• The Server and Desktop Market
  – Protocols and market share
• NFS and Alternatives
  – Changes in the wind
• Consumer Solutions
• Where is the Money?
• Summary
The Server Market

Host & Server Installed Base

Source: IDC, 2002
Market Conclusions

• UNIX and Linux are similar
  – So we should add numbers!
  – The number of installed UNIX+Linux servers is just half of the number running MS Windows NT/200X server

• MS Windows NT/200x Server and its network protocols dominate the Server market.
Server Network Protocols

• Fact:
  – Not every UNIX server uses NFS
    – Few have Windows Clients
  – Nearly every MS Windows Server uses SMB/CIFS
    – All have MS Windows network clients
    – Exception is MS Windows NT/200x servers that are used in a NetWare environment.

• Is this representative of reality?
  – How is this changing?
New Server Trends

• What are market trends?
  – How significant is the shift?
  – Is UNIX/Linux making significant progress?

• What conclusions can be drawn?
New Server Shipments

Total Server Shipments

Source: Web/IDC, 2002
Trend Conclusions

• Use of SMB/CIFS protocols is increasing
• UNIX/Linux use of NFS is in decline
  – UNIX/Linux growth will not out-pace SMB/CIFS usage
• We need to identify causes!
Why?

- NFS Client support is missing from Windows NT/200x?
- NFS Clients for MS Windows are costly?
  - SMB/CIFS is built in and “Free”
- Is Samba helping to kill off NFS?
  - Is Samba safe from threat?
- Do we need to take action?
Desktop Protocol Usage

• What about desktop platform trends?
• What about emerging platforms?
  – Is NFS an option for the future?
The Desktop Market

Desktop Client Installed Base

Source: IDC, 2002
Desktop Conclusions

• Optimistic forecasts:
  – Offer little hope for Client NFS usage
  – UNIX/Linux forecasts are small compared with Windows and SMB/CIFS growth

• What threats are on the horizon for NFS using platforms?

• Are there threats for SMB/CIFS?
NFS and Alternatives

• Network file sharing protocols
  - SMB/CIFS most used
  - Netware NCP
  - NFS lagging by a long way

• Alternatives
  - New data storage solutions
    - SQL based technologies
    - Object oriented file systems
  - Possible new proprietary technology?
Risk Factors

• New Proprietary Technology
  – Protected by government legislation
    – Effectively creates a protected monopoly from the market leader
    – Unless government and industry specify open and free protocols
  – Could threaten SMB/CIFS more than NFS
    – And Samba could be at risk
Counter Strategies

• New file sharing and protocol implementations that can be used across all desktop and server platforms

• Must obtain international standardization and adoption

• Must provide cost effective solutions for all users
Action Now

• NFS v4 deployment plan
  – Increase use across all platforms
    – Particularly MS Windows Clients

• SMB/CIFS protocol extensions needed
  – For better UNIX platform support
    – Standardization Essential

• Pro-Active Consumer Drive
Consumer Solutions

• Key focus of alternative file sharing protocol solutions
  – Freedom of Choice
  – Freedom from vendor lock-in
  – Cross-OS Interoperability Assurance

• Key Turn-Offs
  – Add-on drivers: But we must have them!
    – We need interoperability AND an End-to-End Solution!
Making Money

• This is the critical question for everyone!
  – Why did we create this situation?

• Will our industry find a way to cash in on a new mass market?
  – If Yes, then Standardization is mandatory

• Will the future or IT be built on Customer Services?
Summary

- NFS has a long way to go
- SMB/CIFS may get into trouble
- Netware is in decline
- New protocols are needed
  yesterday! Your Choice!