

Samba 4: Active Directory Servers on Unix

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Sane Free Software Bazaar
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Quick Introduction

- What is Samba?
 - Open Source implementation of various proprietary protocols used by Microsoft Windows
 - SMB
 - MSRPC
 - CLDAP
 - ...
- Who am I?
 - Samba developer, working mostly on Samba 4



Windows Networking: Generations

- '85-'92: Anarchy
 - Simple file sharing
- '93-'98: Simple centralised domains
 - Introduction of Domain Controllers and Domain Members
- '00-Now: Large distributed domains
 - Active Directory, Multiple DC's



Active Directory

- Proprietary extensions to standard protocols:
 - DNS
 - Kerberos
 - DHCP
 - LDAP
- Other (mostly) proprietary protocols:
 - CIFS/SMB
 - DCE/RPC
 - CLDAP
 - WINS
 - WINS replication



Samba 4.0

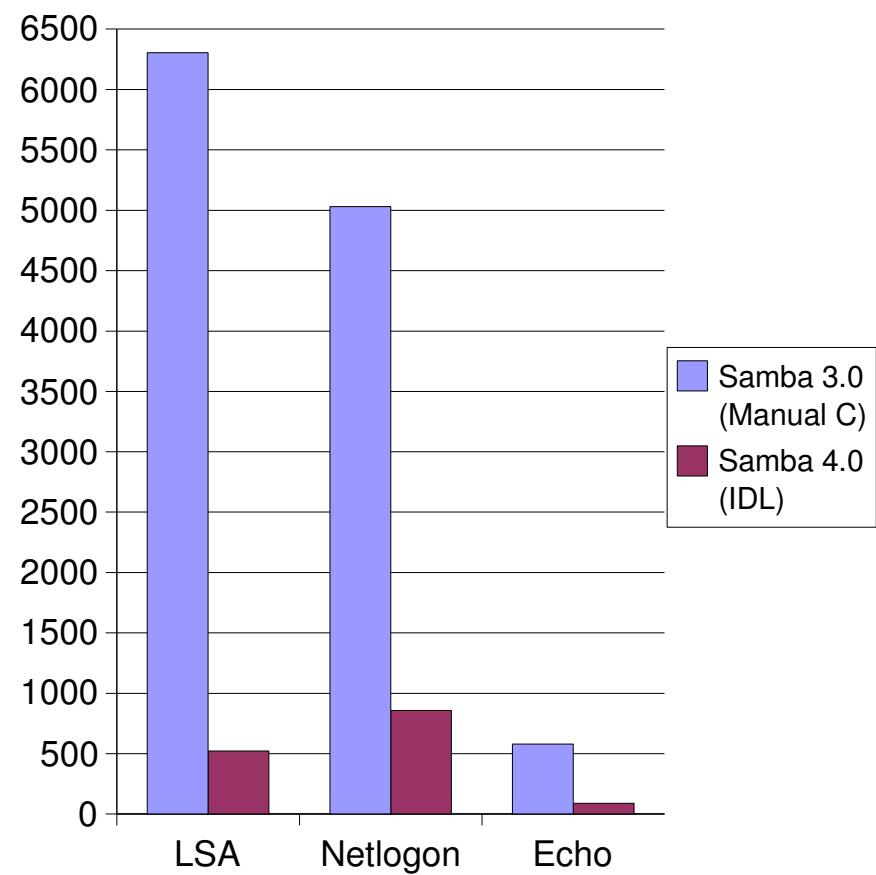
- Started in 2003 as a rewrite of the VFS
- Major infrastructure improvements
 - More than a simple file server now
- Implementations done “right”
- Support for Active Directory
- Full protocol implementation



Switch to IDL

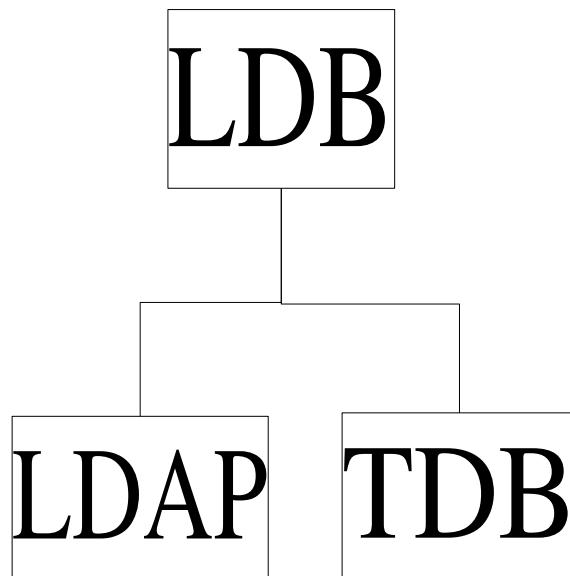
- Easier to debug
- Easier to understand
- Less prone to bugs
- Faster try-analyse loop

File sizes



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“LDB”



- Front-end to both LDAP and TDB
- no-schema option
- Used for all non-temporary databases in Samba4

Current Status

- Infrastructure is present
- First “technology previews” out
 - Not full “usable” releases, not even alphas
 - Working towards a very basic Active Directory DC

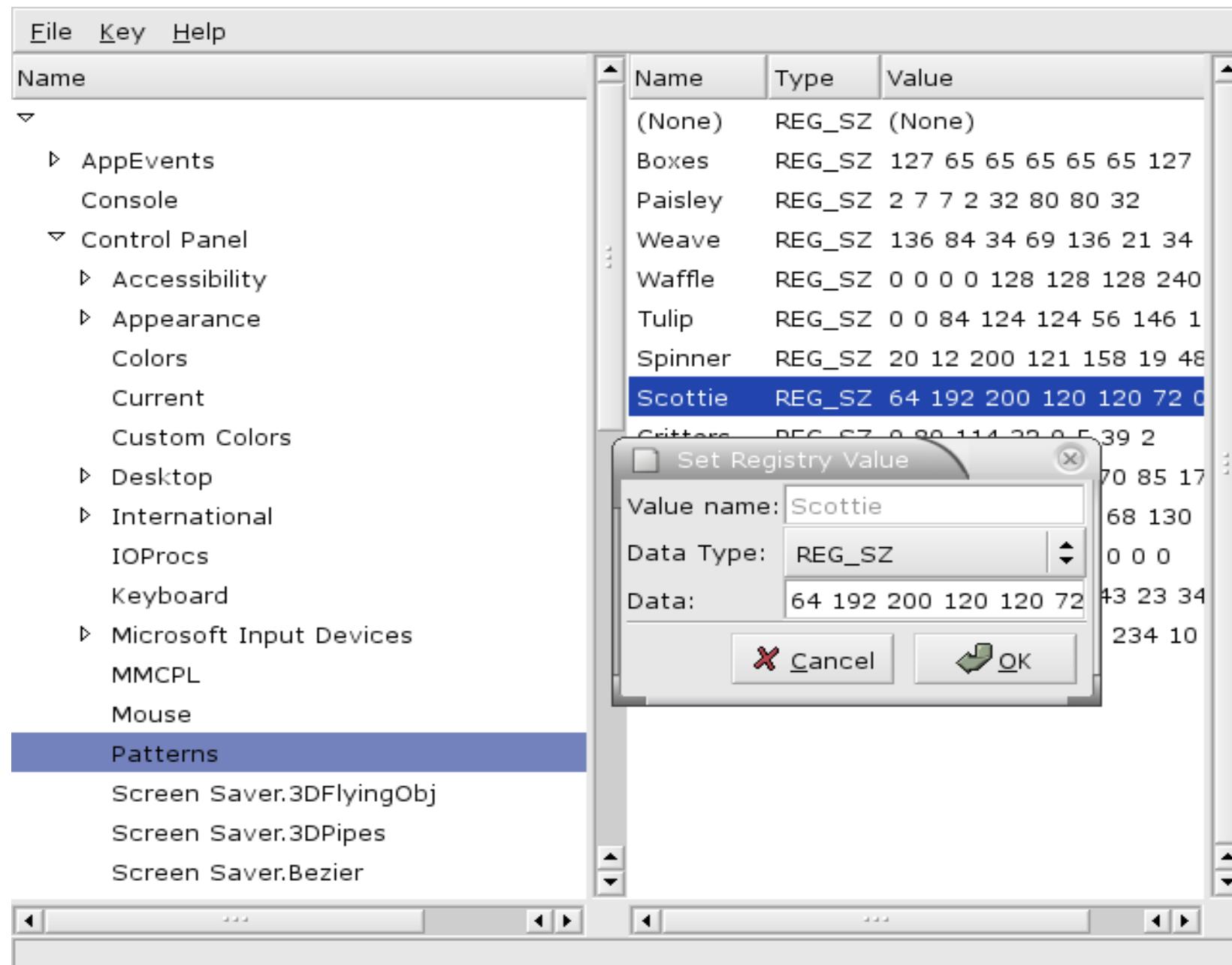


Unreleased but, ...

- Backported “graduated” code to Samba 3
- Testsuite very useful



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Further Resources

- <http://news.samba.org/>
- howto.txt in Samba4 SVN
- Slides available at <http://samba.org/~jelmer/>

