Samba 4.0: Open Source Active Directory Services On The Horizon

CeBIT Open Source Forum 2012

Michael Adam (ma@sernet.de)

SerNet / Samba Team

2012-03-07

about:Samba



- ▶ since 1992
- The Open Source SMB/CIFS/SMB2 file server
- http://www.samba.org/
- production proven and reliable
- performance, scalability
- used in many products/appliances
- ▶ some 15 20 active core developers
- two development streams: Samba3 / Samba4

about:SerNet

- OpenSource/Linux centric company in Germany
- ▶ founded 1996
- ▶ today: 40-50 employees
- Samba department: 5 Samba core team members including the release manager
- Samba development and consulting as a service
- sambaXP : annual samba developer and user conference



Samba3

- stable release, found in the Linux distributions
- current: 3.6.3
- ▶ file server (smbd)
- all-active clustering with CTDB
- windows AD domain member (winbindd)
- windows NT (like) domain controller
- some 10+ active developers
- currently: SMB2: 2.0, 2.1, 2.2 (Windows 8)

Samba4

- development since 2003/2004 (release of Samba 3.0.0)
- started as complete rewrite
- original target: scale-out-clustering (now in samba3)
- target: Active Directory domain controller
- current: alpha 18
- \triangleright some 5 10 active developers

Samba 4.0 ... this year?



- ► Some features of AD are "ready"
- ► Some others are not.... ©
- ▶ 4.0 will be the successor of 3.X
- → file server should work like Samba3's smbd

The Franky-Idea



source: Wikimedia Commons

- mid 2008:
- use the best of both worlds
 - ad-server of Samba4
 - smbd of Samba3
 - rpc-services mix both worlds
- ▶ and stitch them together...

Work done

- ► Combined Code base: source3/ and source4/
- more and more commonly used libraries and subsystems (tdb, talloc, tevent, pidl, librpc (parts), cldap, ...)
- ▶ integration of smbd with samba (s3fs)
- ▶ DNS: started internal DNS server (for ease of use) mature integration with bind 9.8.1

What Does Already Work?

- single domain single DC
- multiple DCs with some hacks (FS replication)
- joining workstations, automatic dns updates
- management with Windows-tools (mmc, active directory users and computers, ...)
- group policies (management via mmc)
- schema extensions: e.g.
 Zarafa-integration
 (open source group ware)

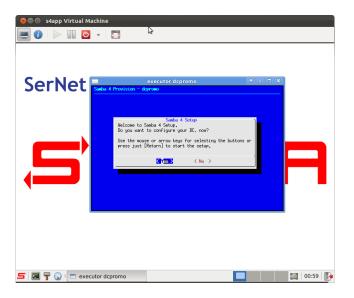


Yin Yang

SerNet Samba4 Appliance

- ► Samba4 AD/DC
- ease pre-release-testing
- soon : http://www.enterprisesamba.org/ vm-images (+ installation-iso)

Demo...





Questions? \Rightarrow E55

