State of Samba, A year in the life of the project

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Agenda

» Disclaimer

» What is this talk about

» Some stats

» What have be done since last year

» Samba 4.0 (1/2)

» Samba 4.0 (2/2)

» A year or more to do the integration

» But not only integrating (1/3)

» But not only integrating (2/3)

» But not only integrating (3/3)

» What's next (1/2)

» What's next (2/2)

Disclaimer

The views and opinions in this presentation are my own
and do not necessarily reflect the views and opinions of my present,
past and future employers.

What is this talk about

» It's the classical talk that we usually have about Samba each year

» But oups last year we *forgot* to do it

» So this year you'll have 2 !

Some stats

» We had 4801 commits last year (7286 in 2011, and 10290 in 2010)

» 72 unique contributors

» Metze is the top contributor for a second year in a row, followed by Andrew Bartlett

» 550K lines changed (down from 770K)

» 1602 patches were reviewed

What have be done since last year

» I don't know if you are aware but …

» We released 4.0 in december 2012

» 71 blockings bugs fixed (check https://bugzilla.samba.org/show_bug.cgi?id=8622)

» Managed to "undiverge" the samba3 and the samba4 tree

» And have a fair amount of code in common and even share the file server (smbd)

» Out of major components winbindd is still not common

Samba 4.0 (1/2)

» It's the same file server core that we used to have in the 3.x series

» With more SMB 2.0/2.1 features

» It's also a quite capable AD domain controller

» Quite capable...

>> » *Directory replication from and to Windows works quite reliably*

>> » *But some bugs remain*

>> » *Domain join works, GPO works ...*

>> » *Installing Microsoft Exchange 2010 works (if you enable schema modification)*

>> » *But didn't start (some LDAP controls are still missing)*

» *DFS replication (ie. sysvol/netlogon) don't work (blame me !)*

Samba 4.0 (2/2)

» And as capable NT domain controller as it was

» Winbindd for domain member and NT domain DC hasn't changed much since 3.6.x branches

» But the one for AD domain controller is different (let's call it winbbindd4)

» **Should** be fixed for the next major release

» So if you are using "just" the domain member part, there is no good reason to stay in the 3.x series, the 4.x branch is where new features are implemented and if you are looking for AD implementation, well 4.0 is the only stable one so you should think of moving to this version

A year or more to do the integration ...

» First real mail for "hey let's release Samba 4.0": October 2011

» With the idea that it will be done by the end of 2011, maybe January 2012 if unlucky

» It took us (much?) more time that we expected

» Just the integration of s3fs (samba 3.x smbd file server) as potential replacement took 6 months from "it seems to work for me" to "yeah you can reasonably test it on your environments"

» We have been confident enough to switch it to be the default fileserver for AD DC in September 2012

» In order to make the integration more fun we decided quite lately to move from bind9 to our internal server

» And because we love last minute changes we decided to fix our ACLs handling

» Which is a good thing, but strangely tends to take some time (and commits) to get it really right

But not only integrating (1/3)

Some new feature have been implemented or highly improved

» Late support for RFC 2307 has been added to winbindd4

» Initially to help people migrating from Samba 3.x + LDAP to Samba 4 AD

» *samba-tool domain classicupgrade* was made pretty robust at transfering a Samba 3.x domain to Samba 4 AD

» But it won't make any miracle if your existing is not a fit for AD ...

» Winbindd can now validate the PAC of kerberos ticket obtained outside of Samba (ie. through some SSO):
WBC_AUTH_USER_LEVEL_PAC

» Huge performance improvement in handling schema changes

(see my talk of tomorrow) for more details

But not only integrating (2/3)

» We also spend a fair amount of time testing our implementation of AD with Microsoft testsuites

» 2 IOLab (2011, 2012) and one plugfest have been dedicated to this

» Insured that we passed Microsoft tests for protocols like Netlogon, LSA and LDAP …

» On things we care and support (ie. we might have failed some NT 3.5 features, and we failed cross domain trusts)

» We improved our DRS (Directory Replication Service) implementation by increasing by ~50% the number of test passed

But not only integrating (3/3)

» With the release of 4.0.0beta1, traffic on mailing list have increased

» 40/50% in the Samba users mailing list

» 10/20% in the Samba technical

» Understanding the problems and supporting users take time

What's next (1/2)

» Why feature xxx is not in 4.0 AD DC ?

» Because adding more feature would have delayed the release even more

» Previous slides and previous years presentation have shown that it takes time between having it working for developpers to having it working quite well for the early adopters

» And it takes one more round to make it work for most of the rest

» And because with people already running Samba4 in production we feel that we had already a compeling story for the AD DC

» Support and maybe explore new ideas, have you read Andrew Bartlett presentation at last 2012's SDC ?

What's next (2/2)

» Leads for 4.1, it's not a commitment

» Multi-domain support, because a lot of potential users have more than 1 forest

» Sysvol/Netlogon replication, have the initial replication working in my FRS branch

» Overhaul on Winbindd: merge Winbindd3 and Winbindd4 and also make this new Winbindd using more AD capabilities

» Performance, scaling because supporting multidomain without being able to handle 50K/100K users (at least) is not so useful

Questions

Questions ?

Thank you

Thanks for listenning

A copy of the slides will be at www.matws.net/mat/pres/xp2013_state