

Samba 4 — Where are we now?

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Agenda

Samba 4 — Where
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Recent releases

Changes in the last
year

Testing and
providing feedback

Recent releases

Changes in the last year

Testing and providing feedback

Samba 4 Alpha 3

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- ▶ Announced to no fanfare whatsoever
 - ▶ The announcement email keeps getting eaten. . .

Samba 4 Alpha releases

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- ▶ More than just a TP:
 - ▶ We are looking for (and getting) real feedback on things people want and need
 - ▶ Ordered list of things stopping administrators from deploying it.
 - ▶ Basic features are complete
 - ▶ Actually usable for some environments
 - ▶ More developers and testers
 - ▶ Starting to see input from developers outside the team

Better development resources

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- ▶ Metze's AD thesis now translated
- ▶ Move from EJS to Python
 - ▶ Should make contributions easier
- ▶ Simpler build system
 - ▶ Rely on GNU Make rather than more perl hacks
 - ▶ Less custom to ease contribution
- ▶ Microsoft Documentation now available under PFIF
- ▶ GIT
 - ▶ Has helped distributed development
 - ▶ Even if Andrew was a skeptic

Code Coverage

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Last year:

41.5%

135817 lines covered

326916 lines total

This year:

39.6%

158559 lines covered

400287 lines total

- ▶ Coverage hampered by generating lots of SWIG wrappers
- ▶ While still keeping ejs wrappers
- ▶ Python coverage ?

LDB Improvements

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- ▶ Linked Attributes
- ▶ Subtree renames
- ▶ Ambiguous Name Resolution
- ▶ Group Policy
 - ▶ Sort of
- ▶ Schema Validation
 - ▶ In part
- ▶ Directory Integrity Enforcement
 - ▶ Ensure all entries must have a parent, etc
- ▶ Replication metadata
 - ▶ Now always calculated

LDAP Backend Improvements

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- ▶ Autoconfiguration of backends
- ▶ OpenLDAP configuration generated to support:
 - ▶ Linked Attributes
 - ▶ Subtree renames
- ▶ Schema Validation
 - ▶ Primary benefit of LDAP backend so far is OpenLDAP doing full schema checks

- ▶ Improvements:
 - ▶ Heimdal 1.1 imported
 - ▶ Kludge ACLs extended
 - ▶ Should cover all 'write' services for now
- ▶ Regressions:
 - ▶ SSL on Fedora 9 won't work
 - ▶ GnuTLS regression, not yet chased down

- ▶ SWAT remained unmaintained
- ▶ The AJAX interface was removed
- ▶ SWAT needs to be reworked in Python
 - ▶ Pending this rework, it has been disabled
 - ▶ Perhaps spin-off as drop-in plugin?
 - ▶ Summer of Code student will work on it this summer

- ▶ Reworked (yet again)
 - ▶ Now relies on GNU Make
 - ▶ Emphasis is on generating as little as possible
 - ▶ Less custom scripts for generating Makefile
 - ▶ Hopefully easier to grasp and contribute to for outsiders
- ▶ Should make it easier to share code with Samba 3

- ▶ Replaces EJS as internal scripting language
- ▶ Python is now a build-dependency
 - ▶ Easy to build from source, no dependencies
 - ▶ Ported to at least as much platforms as Samba
 - ▶ Available as standard package for most platforms
- ▶ The longer we would have waited, the more code we would have to port

Why Python?

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- ▶ Comes with batteries included
 - ▶ No need to reimplement utility functions and bindings for Samba
- ▶ Easy to create bindings
- ▶ Most existing libraries already have Python bindings
 - ▶ GTK+, Qt, HTTP, .ini-parsers...
- ▶ Large existing developer base
 - ▶ Potential contributors
- ▶ Better scripting language
 - ▶ Nested functions
 - ▶ Modularity
- ▶ More development tools available
 - ▶ Debugger, profiler, code coverage analyser, ...

Group Policy and MMC

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- ▶ Microsoft's User and domain management tools work
- ▶ Group Policy
 - ▶ Active Directory clients honour (some) policies
 - ▶ That is, I can hide the recycle bin. . .

Alpha releases

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- ▶ Samba4 alpha3 released late March
 - ▶ First release with new python provision
- ▶ Samba 4 alpha 4 planned for next week (?)
 - ▶ Not bloody likely. . .

Beta release

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- ▶ Samba4 beta1 planned for the end of the year
- ▶ Features
 - ▶ AD DC, with inbound real-time replication
 - ▶ File Server
 - ▶ Domain Member server
- ▶ We need to extend this list with your ordered feedback
 - ▶ What would stop you deploying Samba4 in production

Feedback as a driving force

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- ▶ User feedback over the past few months has driven Samba4 forward
- ▶ We are at the stage where we need to be told what does not work
 - ▶ And in particular, what would stop you using Samba4

Areas that need testing

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► Interactions

- With all windows versions
- With Samba3
- With Unix and MacOS clients
- With 'integration' software such as Likewise and Centrify
- Long installations
 - Only recently found password expiry bugs, for example

Please let us know when you hit bugs:

- ▶ *IRC*: Come talk to us in `#samba-technical` on `irc.freenode.net`.
- ▶ *Bugzilla*: Submit bugs at `https://bugzilla.samba.org/`.
- ▶ *Mailinglist*: Send email to `samba-technical@samba.org`.
- ▶ *SambaXP*: We'll be around until saturday