# Samba4 Status

Andrew Tridgell
Samba Team

A great year!

- Highlights from the last year
  - RODC support
  - bind9 intergation
  - autobuild commit system
  - wintest
  - lots of build system changes
  - expansion of production deployments
- Very active development
  - The Samba Team has committed over 10000 changes in the last year
  - In that time 830k lines of code have changed in 6300 source files
  - December 2011 will mark 20 years of Samba development!

AD plugfest September 2010
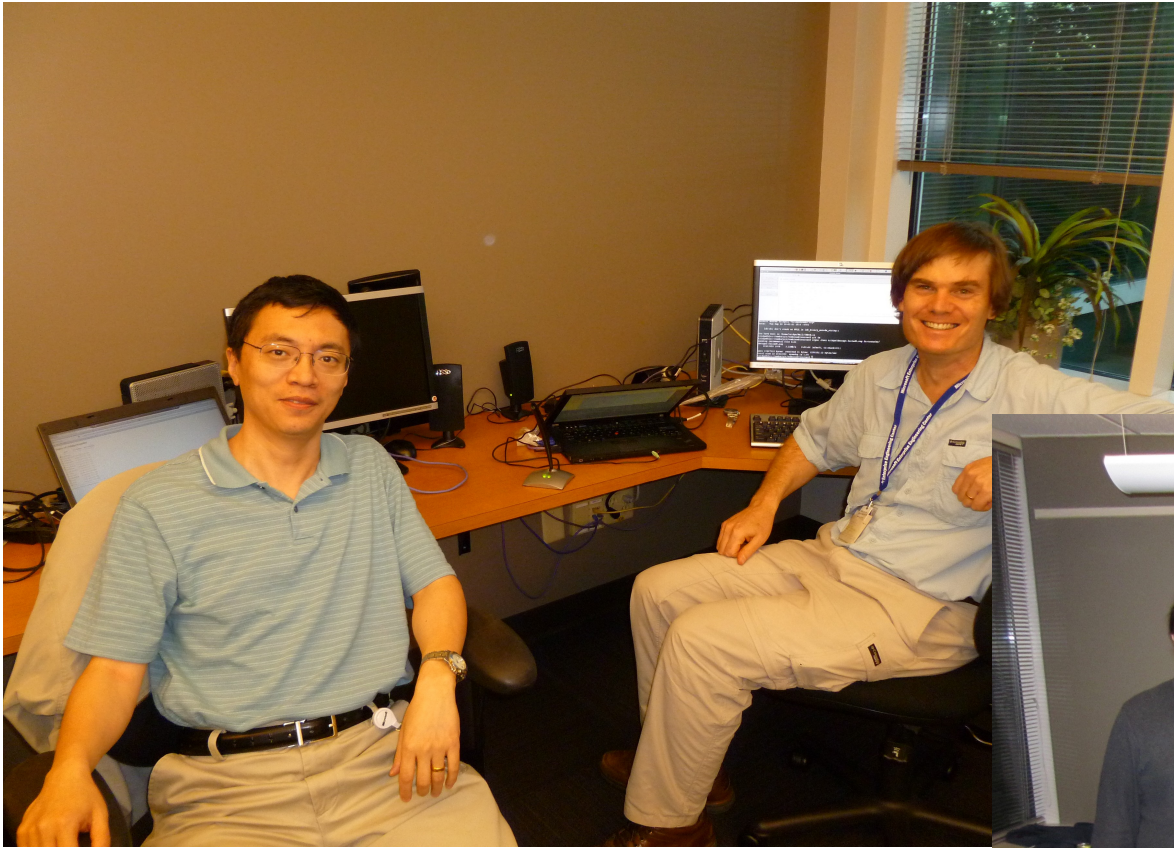
RODC support

- Read-Only Domain Controller

  - major effort in last year to add RODC support

  - support both Samba as an RODC, and having Windows RODCs in a Samba domain

- Branch office

  - RODCs are perfect for branch offices

  - provides AD services when link to central office is down

bind9 integration

- DNS was the most reported problem

  - Lots of users had problems configuring kerberos dynamic DNS updates

  - Worked closely with bind9 team to develop solutions

  - bind 9.8.0 includes over 40 patches from Samba team

- New bind9 DLZ system

  - added support for read-write loadable backends in bind9

  - built Samba bind9 module, storing DNS directly in AD format

  - new DLZ system decouples release of bind9 modules and bind9 itself

wintest

- Automated testing against windows

  - up to now, testing against Windows has been manual

  - new 'wintest' system developed allowing for scripted testing againt a wide range of windows systems

  - based on 'pexpect' python scripting system

- Testing the S4 howto

  - wintest script to test the steps of the Samba4 howto

  - includes DC, RODC, join, dynamic DNS and other key features

autobuild

- Saving developers sanity
  - building and testing Samba takes a long time
  - complexity of code base led to many breakages of master git tree
- autobuild commits
  - all commits to Samba now go via autobuild
  - commits are automatically delayed until they pass all tests on all development branches
  - makes life much easier for developers!

build system

- Advanced build features

    - automatic library version handling

    - automatic symbol versioning of libraries

    - detection of duplicate and conflicting symbols

- new top level build

    - All of Samba now built at top level

    - builds on top of s3 waf build

    - large effort to remove duplicate symbols and merge between s3 and s4 code

Production users

- Lots more production users in the last year!

  - Great for finding serious production bugs

  - Good feedback on priority of new features

  - great motivation for developers!

- What does production usage find?

  - subtle bugs that don't happen in standard testing

  - for example, disconnected DCs causing record conflicts

    - added support for AD 'conflict records' as a result of production feedback

What's next?

- pre-release:
  - need to choose S3 file/print server integration method
  - documentation, howtos etc

- release!
  - we missed our target for releasing at this SambaXP
  - but should be able to release in next 6 months …

- post-release:
  - multi-domain support (real AD forests)
  - sysvol replication (currently need to use rsync)
  - scaling to large numbers of users and DCs

More information

- Useful links

    - Samba4 HOWTO: http://wiki.samba.org/index.php/Samba4/HOWTO

    - Demo Videos: http://wiki.samba.org/index.php/Samba4/videos

questions?