

Subversion Release Process

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Creating a Release

- 1 Feature freeze
- 2 Create release branch
- 3 One or more release candidates:
 - 1 Cut release candidate
 - 2 Testing and PGP-signing by committers (3 UNIX, 3 Windows)
 - 3 Soak
- 4 Release
- 5 Post-release maintenance (backports, point releases)

PGP Keys

- Hyrum K. Wright [1024D/4E24517C] with fingerprint:
3324 80DA 0F8C A37D AEE6 D084 0B03 AE6E 4E24 517C
- Stefan Sperling [1024D/F59D25F0] with fingerprint:
B1CF 1060 A1E9 34D1 9E86 D6D6 E5D3 0273 F59D 25F0
- C. Michael Pilato [1024D/1706FD6E] with fingerprint:
20BF 14DC F02F 2730 7EA4 C7BB A241 06A9 1706 FD6E
- Mark Phippard [1024D/035A96A9] with fingerprint:
D315 89DB E1C1 E9BA D218 39FD 265D F8A0 035A 96A9

How Developers Test During Development

- Ad-hoc testing
- “make check”
- Buildbots:
MacOS X i386, WinXP i386, Debian i386, Ubuntu x64

Release Candidate Testing

- Developers: More “make check”
(fsfs, bdb) × (file, svn, neon, serf), and bindings
- Users:
Expected to download, compile, install and use

Test Suite Issues

- Supported testing paradigms
 - ▶ Contrived use cases
 - ▶ Known bugs
- Unsupported testing paradigms
 - ▶ Interrupting execution
 - ▶ Large-scale working copies
 - ▶ High network latency
 - ▶ Integration with end-user environment
 - ▶ ...

Very Few Reports from Users

- Chicken-and-egg problem: Waiting for stabilization
- Many users ...
 - ▶ ... don't want to compile Subversion
 - ▶ ... use third-party Subversion tools only
 - ▶ ... are afraid of buggy code

Results

- Real-world use often **not** tested
- Edge-case bugs not found before release

Examples

- Issue #3242: Subversion demands unnecessary access to parent directories of operations
- Issue #3368: Can't create a single file external referring to a file with properties on it (e.g. binary files)
- Issue #3281: Merge a replacement of a directory that is special (known pre-release but not fixed)
- Issue #3416: Cannot add or commit `dir/@file.txt`
- r38101, r38102: Locking over `ra_neon` fails when the user provides a lock comment that has XML-special characters in it.
- r38015, r38017, r38019: Don't delete unversioned files and directories when calling `svn rm -keep-local file` on them.
- Issue #3382: `svn status` does not show tree conflicts when `svn:ignore=*`
- Issue #3396: `status --quiet` doesn't show tree conflicts

More Real-World Testing of RCs

- Make RCs more accessible to users (provide binaries)
- Encourage users to test RCs in near-production environments
- More real-world testing of trunk (as for RCs)

We Need Your Help!

- Enterprise environments most complex \Rightarrow most fragile
- How do you decide if software is safe to deploy in your organization?
- Would you use existing testing infrastructure to help test Subversion release candidates?
- Provide infrastructure for buildbots
- Improve test suite by providing test cases

Thanks

- We hope to hear from you during the next RC phase!
(which should be Jan/Feb)