

Version Control Systems

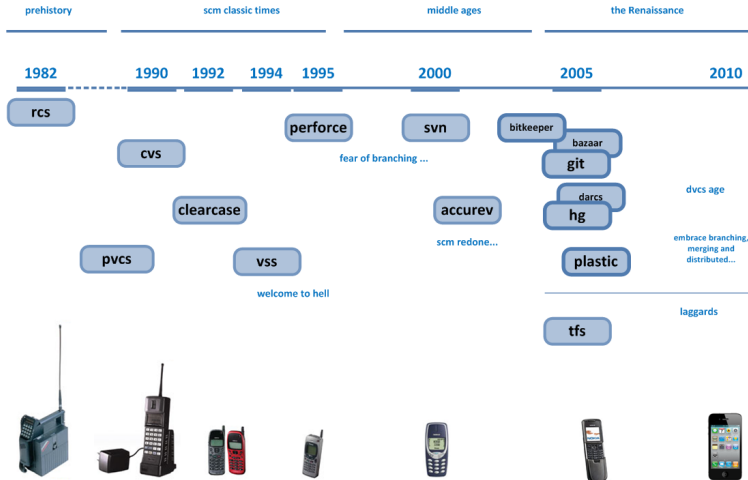
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Version control timeline



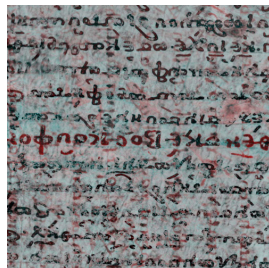
<http://codicesoftware.blogspot.co.uk/2010/11/version-control-timeline.html>

SCCS – “source code control system”

- ▶ 1972 – SNOBOL, IBM OS/MVT
- ▶ 1973 – C, Unix
- ▶ PWB → System V → Solaris
- ▶ Specified by POSIX
- ▶ GNU CSSC
“compatibly stupid source control”
www.gnu.org/software/cssc

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- ▶ www.cam.ac.uk



RCS – “revision control system”

- ▶ 1982 – C, Unix
- ▶ free / open source

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- ▶ Managed Mail Domains
- ▶ Hermes system configuration
- ▶ ~~PWF~~ MCS Linux package lists



CVS – “concurrent versions system”

- ▶ 1986 – shell scripts wrapping RCS
- ▶ 1990 – reimplemented in C
 - ▶ vendor branches
- ▶ 1995 – access repository over network
- ▶ 1996 – cvsweb repository browser

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- ▶ Hermes source code
& package configuration



Subversion / svn – “CVS done right”

- ▶ 2000 – Cross-platform
- ▶ Apache APR, Berkeley DB, WebDAV
- ▶ Multi-file changesets
- ▶ Cheap branches
- ▶ Better authentication & access control

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- ▶ DSpace / Unix Support / Development Group



Early distributed version control systems

- ▶ 1991 – smooSh
Sun WorkShop TeamWare
1999 – BitKeeper
Proprietary popularizer
- ▶ 2001 – GNU Arch / tla
Free but loony
- ▶ 2003 – Monotone
Merkle crypto hash tree
- ▶ 2003 – Darcs
Patch algebra & Haskell
- ▶ 2003 – svk
Distributed Subversion



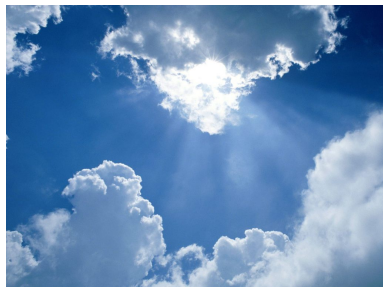
Current popular distributed version control systems

- ▶ git
www.git-scm.com
Swiss-army chainsaw
- ▶ Mercurial / hg
mercurial.selenic.com
- ▶ Bazaar / bzz
bazaar.canonical.com
- ▶ Fossil
www.fossil-scm.org



Code hosting services

- ▶ `github.com`
- ▶ `gitorious.org`
→ `git`
- ▶ `bitbucket.org`
→ `hg`, `git`
- ▶ `code.google.com`
→ `svn`, `hg`, `git`
- ▶ `launchpad.net`
→ `bzr`
- ▶ `savannah.gnu.org`
- ▶ `alioth.debian.org`
- ▶ `sourceforge.net`
→ many

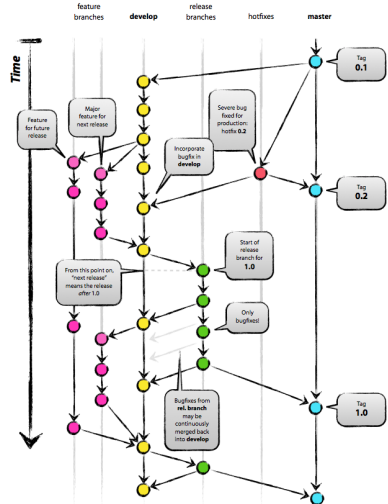


Git in the Computing Service

Speculation...

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- ▶ Repository hosting?
 - ▶ CS internal
 - ▶ Managed service
- ▶ Config. management
 - ▶ Starling





“I’m an egotistical bastard, and I name all my projects after myself. First Linux, now git.” — Linus Torvalds