

# CVS Demo

Colin Kern  
February 15, 2007

# What is CVS?

- Stands for Concurrent Versions System
- Tracks changes in files
- Allows for collaboration

# History

- CVS was written in 1984 by Dick Grune, a professor at Vrije Universiteit in Amsterdam.
- It was based on an existing tool, RCS.
- CVS was released to the public on June 23, 1986

# How does it work?

- Files are hosted on a server. The location where files are stored on the server is called a “repository”.
- Files are stored in named groups called “modules”
- Clients retrieve files from the server, edit them, and submit the changes back to the server.
- The server and client can be on the same machine, on a LAN, or communicate over the internet.

# Environment

- CVS servers are usually run on a UNIX or Linux system, however CVSNT allows a server to be set up on a Windows machine.
- The CVS client software is available for most systems.

# Common CVS Commands

- Import: Creates a new module on the server
- Checkout: Fetch files from the server for editing.
- Commit: Submit changes to the server
- Update: Make sure files on the client are the most recent version
- Add/Delete: Add or delete files from an existing module.

# Features

- Revision History
- Concurrent editing and merging of simultaneous edits.
- Branches, e.g. Stable and Development
- Anonymous read access

# Limitations

- Files cannot be renamed or moved
- Symbolic links cannot be stored
- Unicode text files and filenames are not supported



# Future Development

- Changes to CVS are only bug fixes
- Other types of changes are encouraged to fork into other projects
- Subversion, OpenCVS, and CVSNT are similar tools that have implemented some additional features.

# Sources

- <http://www.nongnu.org/cvs/>
  - Official CVS Website
- [http://en.wikipedia.org/wiki/Concurrent\\_Versions\\_System](http://en.wikipedia.org/wiki/Concurrent_Versions_System)
  - Wikipedia CVS article
- <http://www.cs.vu.nl/~dick/ CVS.html#History>
  - Some history from the CVS creator
- <http://groups.google.com/group/mod.sources>
  - The original usenet post, releasing CVS to the public