

Taming Instrument Development With Version Control Software



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IFD&TC 2007



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What is Version Control Software?

- Keeps track of all changes made to a set of files
- Automates the storing, retrieval, logging, identification, and merging of revisions



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Version Control is a Good Thing

- Creates historical record of changes
- Can roll back to earlier versions of a file



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Version Control is a Good Thing (part II)

- Allows multiple developers to work on the same code base (project) simultaneously
 - Client-server architecture where server houses current project and clients can check it out, work locally, and then submit changes back to server
- Branching, merging, tagging, etc.

Multiple-User Demo

- Keeps programmers working on current version of files
- Minimizes chance of duplicating work
- When conflicts do arise, CVS alerts users

CVS System Requirements

Server

- Free software
- UNIX or Linux preferred
- Windows possible

Client

- Many options
- Free clients for all major OSs
 - TortoiseCVS for Windows
- Support in many IDEs
 - Visual Studio
 - Eclipse



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Other Version Control Systems

- Open Source
 - Git
 - Subversion
 - Monochrome
 - Arch
- Proprietary
 - BitKeeper
 - Perforce
 - Visual SourceSafe

Try one – you won't know how you lived without it!



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