

Best practices and productivity for software development

Using Bleeding-edge GROMACS code

Before and now

- CVS -> git
- Autoconf -> CMake
- No code review -> gerrit
- No auto-building -> jenkins



GIT

- Distributed version control system
- No real 'central' repository
- Very powerful
- Easy branching, easy merging, easy history changes
- Easy sharing
- **git.gromacs.org**



CMake

CMake

- Cross-platform
- No dependencies (need C++ compiler)
- Generates makefile and projects
- Simple syntax
- Testing framework
- Package builders



Gerrit (code review)

- Better code
- Couples great with git, jenkins
- **gerrit.gromacs.org**



Jenkins

- Building/testing software projects continuously
- Monitoring executions of externally-run jobs
- **jenkins.gromacs.org**