

Concurrent Version System (CVS)

CSC532



Outline

- **WHAT is CVS**
- **WHY CVS**
- **WHAT CVS CANNOT Do**
- **HOW part of CVS**
 - **General Steps while using CVS as a client.**
 - **WinCVS client (do a google search)**



WHAT is CVS: Introduction

- System that lets groups of people work simultaneously on groups of files.
- Version control system for keeping track of all modifications to project source code files.
- Client-Server system



WHY CVS

- **Prevents CONFLICT**

The situation when two developers try to commit changes to the same region of the same file

- **Record keeping and change tracking**

- **Collaboration**



WHAT CVS CANNOT DO

- CVS only alerts the developers that there is a conflict; it's up to human beings to actually resolve it.



Terms

- **Repository:** *The master copy where CVS stores a project's full revision history. Each project has exactly one repository*
- **Working copy :** *The copy in which you actually make changes to a project.*
- **Check out :** *To request a working copy from the repository.*
- **Commit :** *To send changes from your working copy into the central repository. Also known as *check-in*.*

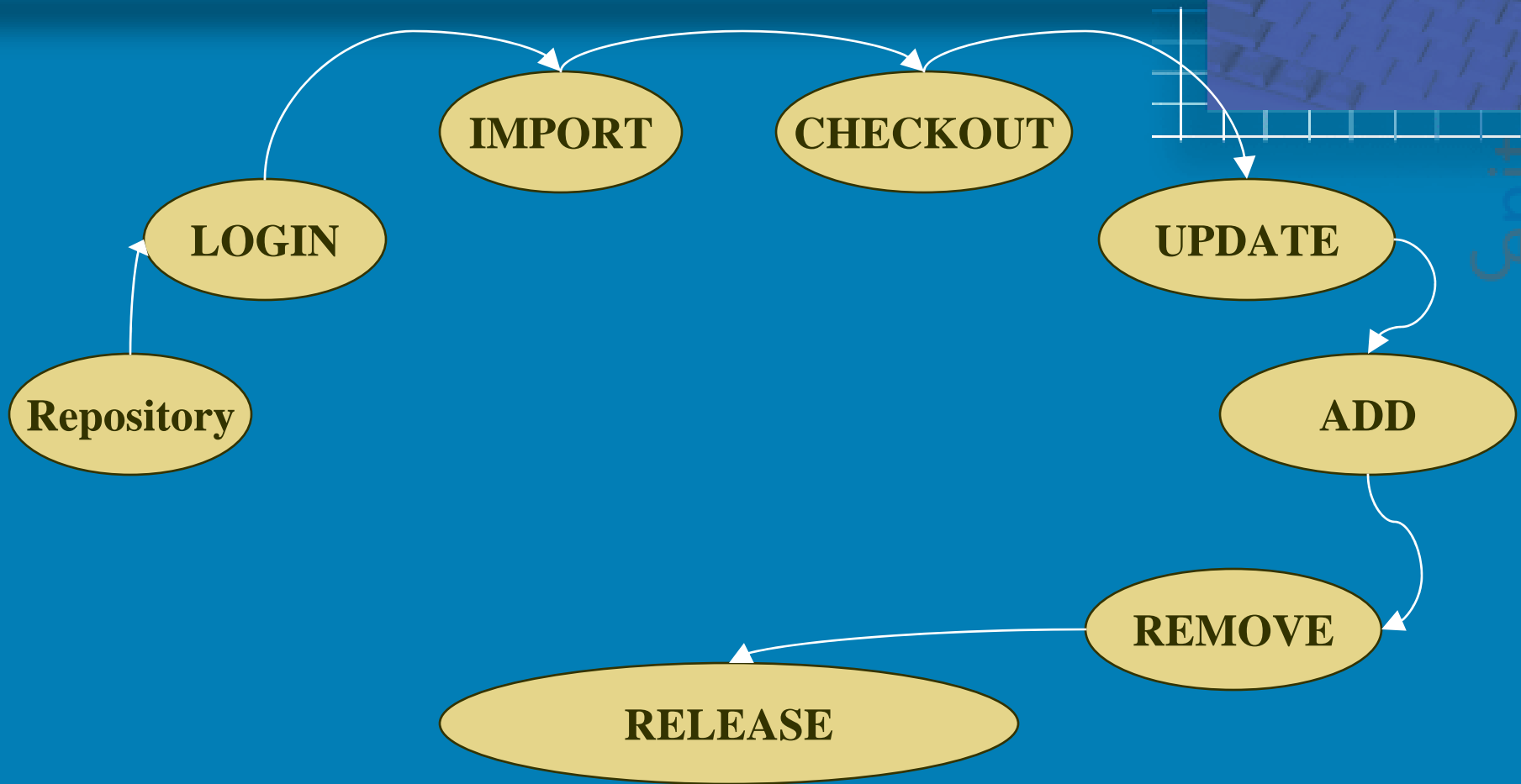


Terms

- ***Log message:*** A comment you attach to a revision when you commit it, describing the changes.
- ***Update:*** To bring others' changes from the repository into your working copy and to show if your working copy has any uncommitted changes.
- ***Conflict :*** The situation when two developers try to commit changes to the same region of the same file.
- ***Release:*** Sign out with the cvs server.



CVS Work Flow



Tutorials (online)

- http://www.cvshome.org/docs/bland_y.html
- <http://www.ahpcc.unm.edu/~rsahu/cvs.html>
- <http://www.csc.calpoly.edu/~dbutler/tutorials/winter96/cvs/>



Assignment: due next Tuesday (Oct 24, 2006)

- Each will add artifacts (sample.tar) in your project in the repository
- Use beta to do your hand on experiment
- Each person will make a powerpoint presentation on an assigned topic (see next page)
- Explain difference CMS and version control
- Select a number between 1-10



Team assignment: presentation topic

- 1 Login and environment variable setting
- 2 create repository
- 3 between CVS and SVN
- 4 import your project
- 5 checkout
- 6 add new
- 7 merge your changes
- 8 examine the changes
- 9 Commit the changes
- 10 Handle conflicts
- 11 bug tracking system vs. CVS/SVN (e.g. mantis)

